ICIMET 2022

30th July 2022

1st International Conference on Innovation, Management, Education and Technology

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MESSAGE from Conference Manager

As the host of the International Conference on Innovation, Management, Education, and Technology 2022, I am happy to welcome all of you to join us at the conference. I would like to take this opportunity to thank our co-hosts: Association of Global Management Studies, United States of America, College of Politics and Government, Suan Sunandha Rajabhat University (SSRU), Thailand, International Education Center IEC (SSRU), Qilu Institute of Technology, China; Zhejiang International Maritime College, China; School of Management Hebei Geo University, China; Haikou University of Economics, China; Zhejiang Tourism and Health College, China and Daungkamol School, Thailand. We have also invited some representatives of our co-hosts to give us short speeches. We are excited to hear keynote speeches from Professor Dr. Mukesh Srivastava, Asst.Prof. Dr. Lt.Gen.Sunthan Chayanon, Dr. Lili Feng, Dr. Mengyi Xu, Asst. Prof. Dr Faryal Salman Subzwari, Asst. Prof. Dr. Nazim Hussain, Asst. Prof. Dr. Muhammad Usman, Dr. Muhammad Farrukh Iqbal, Dr. Mahmad Hasan H. Nama Alhilo, and conference chairs Dr. Muhammad Shahid Khan, Dr. Sirinbhattra Sathabhornwong. Thank you for all your contributions and please take care!

Assistant Professor Dr. Muhammad Shahid Khan

Suan Sunandha Rajabhat University, Bangkok

Thailand

Message from Keynote Speaker, Professor Dr. Mukesh Srivastava, University of Mary Washington,Virginia, USA

I am highly obliged to be part of this knowledge-sharing platform, an initiative to discuss global management and technological issues aroused recently due to COVID-19. On behalf of the International Conference on Innovation, management, education, and Technology (ICIMET 2022), I would like to welcome all participants and congratulate the organizer of ICIMET for managing this conference successfully. Now I will discuss the current global issues in the era of a worldwide pandemic.

- First, COVID-19 has underscored the realty of non-ergodic change, or of what some might call 'Knightian' uncertainty, whereby periods of relative stability are punctuated with radical, transformational change or even periods of constant, unpredictable, and therefore, difficult-to-prepare for change.
- Second, COVID-19 intersects with the growing debate around the future of work by, as discussed above, accelerating existing trends whilst halting or perhaps even reversing others.
- Indeed, a lot of writing on COVID-19 is inevitably future projected and concerned with the balance between change and continuity, with some predicting a return to normality whilst others emphasizing the dawn of a 'new normal'.
- Finally, COVID-19 has drawn further attention to – and has brought into clear focus – the need for management scholars to address bigger, bolder, and broader questions.
- Indeed, management scholars have been challenging the management research community to tackle what are increasingly termed 'grand challenges', those complex, multi-level, multi-actor issues such as climate change, inequality, implications of mass migrations, and health crises.
- These realities underscore the necessity that management scholars think beyond traditional conceptualizations and consider more integrative and holistic topics and approaches in order to ensure that management research is fully engaged with the pressing global issues that COVID-19 has helped to illuminate.

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Abstract

The 2022 1st International Conference on Innovation, Management, Education, and Technology (ICIMET) held on July 30, 2022, at Palace Hotel, Suan Sunandha Rajabhat University, Bangkok, Thailand. The conference is hosted by the Association of Global Management Studies USA, and it would be an online and on-site hybrid conference.

The purpose of ICIMET is to provide a platform for the exchange of ideas and collaborations. This platform aims to promote new research ideas and solve global business and educational issues. International Conference on Innovation, Management, Education, and Technology to welcome academicians, students, and industry practitioners to share their conceptual, theoretical, applied and, empirical research in multidisciplinary areas of innovation management, COVID-19 impact on global economies and businesses, artificial intelligence, digital human resource management, business finance, digital marketing, digital supply chain management, accounting, business practices for environmental sustainably and related fields.

Opening Ceremony Schedule
"1st International Conference on Innovation, Management, Education & Technology (ICIMET) 2022"
July 30, 2022
At Palace Hotel, Suan Sunandha Rajabhat University, Bangkok, Thailand
Time 08:00 A.M -6:00 P.M.
Online Via Zoom Application
ID: 890 6790 9415 Password: ICIMET01

Date	Time	Activites	Place
30 July 2022	**08:00 – 08:30 a.m.**	**Registration**	**Zoom** ID: 890 6790 9415 Password: ICIMET01
	08:30- 08:45 a.m.	**Opening speeches by** -Prof. Dr. Mukesh Srivastana *University of Mary Washington, USA*	
	08:45 – 09:00 a.m.	**Keynote speeches by** -Asst.Prof.Lt.Gen.Sunthan Chayanon (PhD) *Dean College of Politics and Government* *Suan Sunandha Rajabhat University, Thailand*	
	09:45 – 09:15 a.m.	-Dr Lili Feng *Dean of School of Management, Hebei University of Geosciences, in charge of scientific research, international Exchange, MPAcc and MBA, China*	
	09:15 – 09:30 a.m.	-Dr Farrukh Iqbal *Department of Economics, Shenzhen MSU-BIT China*	
	09:30 – 09:40 a.m.	-Dr Muhammad Usman *National University of Science and Technology, Pakistan*	
	09:40 – 09:47 a.m.	-Dr Mengyi Xu *Cranfield University, United Kingdom*	
	09:48 – 09:51 a.m.	- Assist.Prof.Dr. Faryal Salman Subzwari *Associate Professor, Dow Univesity of Health Sciences, Karachi, Pakistan*	
	09:52 – 10:00 a.m.	-Dr. Mahmad Hasan H. Nama Alhilo, *Head of design and decorative architecture department/ Applied Arts Institute/ Middle Technical University*	
	15:00 – 15:15	-Assist.Prof.Dr. Nazim Hussain *Assistant Professor of Accounting, University of Groningen, Netherland*	
	10:00 – 15:30	**Online presentation sessions** **Zoom International Conference, 2022** 1. Session 1 (Dr. Muhammad Shahid Khan) 2. Session 2 (Dr. Sirinbhattra Sathabhornwong) 3. Session 3 (Dr. Ali Raza) 4. Session 4 (Dr. Duangkamol Chongcharoen)	Online presentation sessions
	16:00 – 18:00	**Conference Workshop on Smart Research Tools:** Speaker: Asst. Prof. Dr. Muhammad Shahid Khan (Ph.D.) NVIVO SMAR-PLS AMOS Auto Citations	

TABLE OF CONTENTS

INNOVATIVE INFLUENCE OF BUSINESS MODEL AND DYNAMIC CAPABILITY ON ENTERPRISE PERFORMANCE IN ZHEJIANG PROVINCE, CHINA

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ABSTRACT

Based on the iceberg theory of business model and the dynamic ability theory of business model, the theoretical model that promotes the improvement of enterprise performance of business model through dynamic ability is constructed, and the regulating role of environmental dynamic on the relationship between dynamic ability and enterprise performance is clarified. The empirical analysis of the survey data of 111 sample enterprises covering various industries in Zhejiang Province, which found that the two dimensions of novelty and efficiency of business model have a significant positive impact on the financial performance and market performance of enterprises. Dynamic capability plays an intermediary role in the relationship between business model and enterprise performance. Environmental dynamics does not regulate the relationship between dynamic ability and financial performance, but it negatively regulates the relationship between dynamic ability and market performance. The research conclusion reveals the internal mechanism of business model affecting enterprise performance, and also provides a reference for enterprises to carry out the cultivation and improvement of business model innovation and dynamic ability.

Key words: business model, dynamic capability, environmental dynamics, enterprise performance

INTRODUCTION

With the rapid development of network technology and the continuous emergence of various emerging technologies, the environment of enterprise operation is becoming more and more complex. With competitive strategies such as technology, goods or services, it is difficult for enterprises to maintain an advantage in the fierce market competition. Business model has gradually become the focus of enterprise research, which is an important way to create core competitiveness and improve enterprise performance.

1.1 Background of the study

In recent years, the research results on business model have increased rapidly, which also makes the research on the definition and components of business model change from highly scattered and contradictory to basically consistent (Morris et al., 2013). The business model describes how to do the business, which includes the description of stakeholder value claims (Baden et al., 2010) and the basic logic of value creation at the organizational and network levels (Fielt E, 2013), value exchange, and value capture (Zott, 2011). However, at present, both the theoretical and practical circles of the understanding, research scope and depth of the business model are still limited, especially the understanding of the sources that can constitute the core competitiveness contained in the business model is not deep enough. For example, some companies have failed despite their market opportunities, novel business ideas, sufficient resources and talented entrepreneurs. It is difficult to explain why some disruptive business models succeed while others fail in the competition (Yang Jun et al., 2018). On the other hand, it is also difficult to explain why most scholars believe that business models can positively affect performance based on theoretical interpretation and literature review, but the empirical results are always difficult to get consistent support. One possible reason for this is the lack of a deep understanding of the nature of the business model and its mechanism of enterprise performance. Therefore, based on the iceberg theory and the dynamic ability theory of business model, this paper discusses the relationship between the key attributes of business model and business performance, and tries to expand and promote the relevant research on the relationship between business model and business performance.

1.2 Problem statement

At present, both the theoretical and practical circles of the understanding, research scope and depth of the business model is still limited, especially the understanding of the sources that can constitute the core competitiveness contained in the business model is not deep enough. For example, some companies have failed despite their market opportunities, novel business ideas, sufficient resources and talented entrepreneurs. It is difficult to explain why some disruptive business models succeed while others fail in the competition (Yang Jun et al., 2018). On the other hand, it is also difficult to explain why most scholars believe that business models can positively affect performance based on theoretical interpretation and literature review, but the empirical results are always difficult to get consistent support. One possible reason for this is the lack of a deep understanding of the nature of the business model and its mechanism of enterprise performance. Therefore, based on the iceberg theory and the dynamic ability theory of business model, this paper discusses the relationship between the key attributes of business model and business performance, and tries to expand and promote the relevant research on the relationship between business model and business performance.

1.3 Research questions

What impact does the business model have on business performance?

What impact does dynamic capabilities have on enterprise performance?

1.4 Research objectives

To define the impact of business models on business performance.

To clarify the intermediary role of dynamic capabilities in the impact of business model on enterprise performance.

1.5 Scope of the study

Empirical analysis of the survey data of 111 sample enterprises covering various industries in Zhejiang Province, China.

1.6 Research hypotheses

H1a. The novelty had a significant positive impact on the financial performance.

H1b. Efficiency has a significant positive impact on financial performance.

H1c. novelty has a significant positive impact on market performance.

H1d. Efficiency has a significant positive impact on market performance.

H2a. Dynamic power plays a mediating role in the impact of novelty on financial performance.

H2b. Dynamic capacity plays a mediating role in the impact of efficiency on financial performance.

H2c. Dynamic power plays a mediator in the impact of novelty on market performance.

H2d. Dynamic capacity plays a mediating role in the impact of efficiency on market performance.

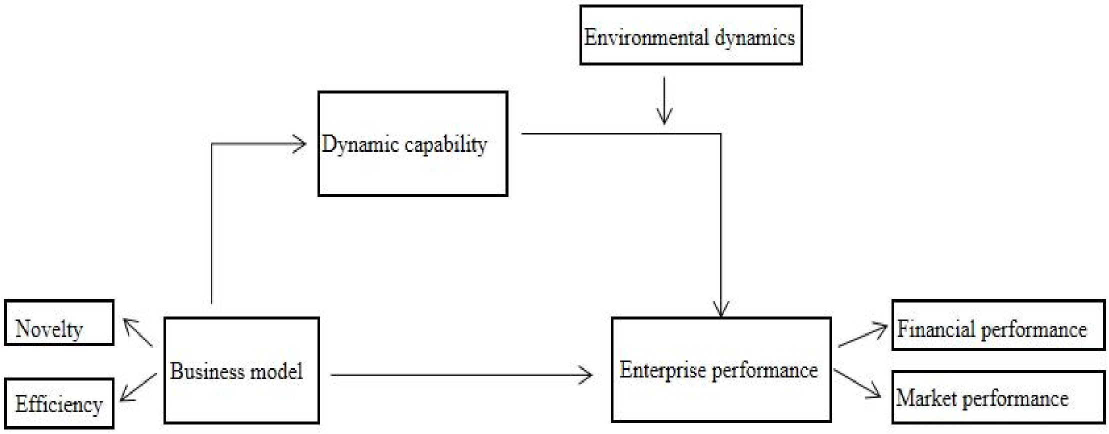
H3a. Environmental dynamics plays a positively regulating the relationship between dynamic ability and financial performance.

H3b. Environmental dynamics can positively regulate the relationship between dynamic capacity and market performance.

1.7 Theoretical framework

The theoretical model constructed in this paper is shown in Figure 1, and the relationship between the expressed variables is a direct and positive influence of the business model on the enterprise performance. A business model can promote dynamic capabilities, and then improve business performance.Environmental dynamics plays a regulatory role in the influence of dynamic ability on enterprise performance.

Figure 1: Theory Model



LITERATURE REVIEW

2.1 Underpinning theory.

2.1.1 Iceberg theory.

In 1895, the psychologist Freede and Broyle jointly published the "Studies in Hysteria", Freud's famous "iceberg theory" was also spread to the world. Freud thought that the person's personality conscious level is the tip of the iceberg, actually most of the psychological behavior is the iceberg under the bottom of the huge triangle, it is invisible, but it is the invisible part determines the human behavior, including war, fascism, bad fight between people and people, and so on. In 1932, in his documentary work, Death in the afternoon, Hemingway first compared literary creation to an iceberg floating on the ocean. He said: "The iceberg movement is magnificent because only one-eighth of it is on the water. "In literature, words and images are the so-called "one-eighth", while emotion and thought are the so-called" seven-eighths". The first two are specifically visible, while the latter two are embodied in the first two.Later, when studying any literary work, we always need to first figure out the "seven-eighths" of the underwater work, because this part is the foundation of the iceberg.

2.1.2 Dynamic capability theory.

Until the 1940s, scholars used enterprises as a "black box", studying their growth from macroeconomic aspects such as social division of labor, market trading system or industrial structure. But since Joseph Schumpeter (1942) and Edith Penrose (1959) emphasized enterprise capability, more and more scholars are committed to the study of enterprise capability theory.Penrose (1959) attributes enterprise capability to the optimal allocation and use of resources, believing that enterprise capability determines the direction and limit of enterprise growth. Mahoney and Pandian (1992) also believes that the potential transformation of enterprise resources into activities is capability. In the 1970s, after formally proposing the concept of enterprise competence, Richardson (1972) used "competence" (Capabilities) to describe the knowledge, experience and skills of enterprises.Richard Nelson and Sidney Winter

(1982) draws on the ability theory of enterprises and classifies enterprises with their intellectual capital. Since 1984, the enterprise ability theory has been divided into two independent and complementary schools. One is the resource-based theory, which is marked by the Enterprise Resource Theory published by Wernerfelt (1984), proposing the significance of internal resources to the company's vitality and the maintenance of competitive advantage. Jay B. Barney (1986) put forward the concept of strategic factor market, believing that whether an enterprise can obtain excess returns depends on whether to make an accurate evaluation of strategic value, and emphasized that an accurate understanding of strategic value can be obtained through enterprise internal analysis, so as to achieve excess returns. Another school is Prahalad. C. K. and Gary Hamel (1990) published in the Harvard business review "enterprise core ability" mark, that the enterprise is a collection of ability system or ability, enterprise ability will eventually determine the enterprise's competitive advantage and business performance, and clearly put forward the core ability is " organization of enterprise has resources, skills, knowledge integration, namely organization learning ability, the existence of a strong core ability is the source of enterprise growth."Although the theory emphasizes the importance of core internal capabilities, such as resources, core technologies and skills, to the growth of the enterprise, it ignores the impact of the changing external environment on its growth. With the further deepening of enterprise ability theory research, Teece, Pisano and Shuen (1997) put forward the "dynamic ability view", they believe that the information age market change and technology progress rapidly changing the whole economic structure, the environment forced enterprises to the ability stock constantly qualitative change, ability constitute the driving force of industry dynamic. Dynamic core capability can no longer be limited to any kind of core capability, but is at the highest level of the enterprise capability structure, with a more abstract nature. It enables enterprises to quickly integrate, establish and reconstruct their internal and external resources, skills and capabilities in the face of the changing market environment, and quickly form new competitive advantages.However, there is a lack of systematic research on the ability of enterprise dynamics.

2.2Literature review and research hypotheses.

2.2.1Business model and Corporate Performance.

Existing research shows that business model has long been a key factor affecting enterprise performance (Kim, 2007), and even to some extent determines enterprise performance (Wen Wenliang, 2011). Only business models with specific value attributes can have "value-driven ability" and will bring performance improvement to enterprises. Currently, scholars widely recognize the key attributes of business models proposed by Zott and Amit, namely novelty and efficiency (Zott C & Amit R, 2007). Therefore, this paper draws on Zott and Amit's division of the business model attributes, trying to further reveal the key attributes of the business model and the influence mechanism of business performance. In addition, the financial performance reflects the value of the business model creates into the level of economic benefit, and the market performance can reflect the business model to create value for the enterprise potential and be recognized degree, the combination can reflect the business model value creation and value conversion to the overall performance level of the enterprise, so this paper makes the measurement from these two dimensions of the enterprise performance. Specifically, the novelty of the business model can be achieved by developing and improving the value creation process and expand the scope of value realization application to promote enterprise value creation, or by developing new trading relationship or innovative trading channels to promote higher levels of value creation ability and trading volume, in order to save transaction costs, and increase profits.In addition, the novelty of the business model can enable enterprises to focus on meeting consumer needs by launching new products or services, and use the new market space to win more potential customers, partners and suppliers, and strengthen the relationship between enterprises and relevant parties. The more people or organizations who establish relations with the enterprise, the stronger the position of the enterprise in the value network, and the more dependent other relevant parties are on the company in the transaction process, the more conducive to increase the conversion cost of partners, enhance the bargaining power of the enterprise, expand the competitive advantage of the enterprise and improve the enterprise performance. New transactions can also help companies identify potential customers and customer needs, and even create a whole new market. The efficiency attribute of business model is mainly to add value to enterprises by reducing transaction costs and improving transaction efficiency. The business model with improving efficiency as the core can help enterprises to promote the exchange of information between all parties in the business. The increasing speed of information sharing and the gradual reduction of information asymmetry of partners can improve the partners' understanding of products and related needs information, thus greatly reducing transaction costs and promoting enterprise performance improvement (Wei Z L, 2017). Based on the above analysis, the following assumptions regarding the relationship between business model and business performance:

H1a. Novelty has a significant positive impact on financial performance.

H1b. Efficiency has a significant positive impact on financial performance.

H1c. novelty has a significant positive impact on market performance.

H1d. Efficiency has a significant positive impact on market performance.

2.2.2 Mediator of dynamic capabilities.

There are still a lot of unexplained parts in the mechanism by which business models directly affect performance.According to the business model iceberg theory, the composition of the business model is just the explicit knowledge on the iceberg, and the enterprise internal environment and external environment is under the iceberg of hidden knowledge, only fully consider the business model of explicit and implicit knowledge, can fully explain why an enterprise business model is successful or difficult to copy. The attributes and characteristics of business models also need to maximize the effect through the application of proper implicit knowledge.Between the relationship between business model and enterprise performance, there must still be factors affecting the efficiency of business model. Dynamic ability, as the high-order ability of enterprises, can help business model to improve the influence degree of enterprise performance.According to the theory of dynamic capability, dynamic capability can help enterprises to dynamically adjust their resources and capabilities in the changing internal and external environment to match the business model (Wei Zilong et al., 2019).The construction, refinement, practice and improvement of the business model are the concrete embodiment of the role of advanced capability (dynamic capability) (Jiang Jie et al., 2019).The utility of a business model is achieved through dynamic capabilities, where organizations with strong dynamic capabilities will be able to quickly implement, test, and refine existing business models. The success of a business model also depends on organizational structure design, asset arrangement and learning ability, so dynamic ability can improve the implementation effect of a business model, and ensure that enterprise performance is always maintained at a high level from multiple links.Further, business models can also have a positive impact on corporate performance through dynamic capabilities. In conclusion, the following assumptions are made:

H2a. Dynamic power plays a mediating role in the impact of novelty on financial performance.

H2b. Dynamic capacity plays a mediating role in the impact of efficiency on financial performance.

H2c. Dynamic power plays a mediator in the impact of novelty on market performance.

H2d. Dynamic power plays a mediating role in the impact of efficiency on market performance.

2.2.3 Regulation of environmental dynamics.

While discussing the relationship between dynamic capability on business model and enterprise performance, it is also necessary to consider the dynamic nature of enterprise external environment, because environmental dynamics may affect the implementation of enterprise dynamic capability on enterprise performance (CAI Junya & Dang Xinghua, 2015).Environmental dynamics can affect the way companies compete with other companies and how they respond to customer needs (Drnevich, 2011). Therefore, in the highly dynamic environment with rapid market demand, rapid technology development and fierce competition, enterprises with better dynamic capabilities will benefit more. Environmental dynamic degree, the higher the dynamic ability, the stronger the enterprise brings the greater the enterprise performance, the reason is that when the environment is particularly volatile, extremely fierce competition, fast technology update speed, customer demand change fast, enterprises need strong dynamic ability technology to adjust enterprise resources, and obtain competitive advantage (Li Dayuan et al., 2009). When the environmental dynamic degree is low, the enterprise does not need to have higher dynamic ability can also get better performance, the reason is that the competitive environment is not too fierce, technology update speed is relatively slow, customer demand change is not obvious, enterprises do not need higher dynamic ability, even dynamic ability to maintain the cost will increase the burden of the enterprise, hinder the improvement of performance (Drnevich, 2011). Therefore, this paper proposes the following assumptions:

H3a. Environmental dynamics plays a positively regulating the relationship between dynamic ability and financial performance.

H3b. Environmental dynamics plays a positive role in regulating the relationship between dynamic capacity and market performance.

RESEARCH METHODOLOGY

3.1 Study design.

3.1.1 Measurement tool.

In order to better ensure the reliability and validity of the measurement, this study referred to the more mature domestic and foreign scales for measuring the various variables. All the latent variables were measured using the Liket7 point scale, 1-7 which represents the degree of recognition of the respondents with the item description from "complete disagreement" to "complete consent".

Business model. According to Zott and Amit's business model measurement method and the current business operation situation, 10 questions are selected to measure the business model from the two dimensions of novelty and efficiency (Zott C & Amit R, 2007). Classic questions such as "enterprise business model provides a combination of products, services and information in a new way", "enterprise business model introduces new operation processes, practices and norms", "enterprise business model simplifies the transaction process", "enterprise business model accelerates the transaction speed" and so on.

Dynamic capability. Considering the main role of the dynamic capability in the relationship between the business model and the enterprise performance, the dynamic capability is measured from the environmental perception ability, learning ability, integration ability and reconstruction ability (Liu Gang & Liu Jing, 2013). A total of 16 items are used, such as "enterprises often examine the changes in the external environment to find new business opportunities", "enterprises can effectively identify, evaluate and apply new information and knowledge", "enterprises can improve work efficiency by integrating resources" and "enterprises can redesign existing products or services".

Environmental dynamics. A total of 6 questions were measured from three aspects: market environment, technological change and competition intensity (Ren Yizhong, 2020). For example, "the customer demand changes faster and becomes increasingly diversified and personalized", "the products or services manufactured with new technologies are more attractive to customers", and "the price competition degree of the existing products or services of enterprises in the market is greater".

Corporate performance. Financial performance is measured from four measures of sales growth and net profit return on investment and total revenue, and from four measures of market share, market expansion, customer satisfaction and the number of new products and services (Wang zhe et al., 2019).

Control variables. This paper will control the variables related to enterprise characteristics that have a great influence on enterprise performance, including the years of the enterprise, the property right nature of the enterprise and the enterprise scale.

3.2 Distribution and selection of samples.

In order to better test the scientificity and rationality of the questionnaire design scheme, the questionnaire was pre-tested before the formal survey. Based on the results of the reliability, validity, and exploratory factor analysis of the pretest data, the three items from the business model scale were removed, and the remaining measured items were retained and used for formal investigation.

The formal questionnaire of this paper was commissioned to well-known domestic research companies. A total of 178 questionnaires were distributed, and 131 questionnaires were recovered, with a recovery rate of 73.6%. The collected questionnaires are screened according to the following principles of eliminating invalid questionnaires:

1.The respondents who have worked in the current enterprise for less than one year, will not fully understand the business operation and business situation of the enterprise, and will be eliminated.

2.Those with the same large-area scores in the questionnaire answers will be removed.

3.If the survey objects are from government enterprises or monopolistic industry enterprises, they think that they do not conform to the characteristics of the business model under the market environment, and they will be eliminated.After screening, 20 invalid questionnaires were removed, with 111 valid questionnaires remaining, and the effective recovery rate was 62.4%. The survey results of the valid questionnaire show that 98.9% of the surveyed enterprises have been established for more than 3 years, indicating that the business model of the enterprise has been basically mature and stable. The proportion of enterprise scale represented by the number of employees is uniform and involves a wide range of industries, indicating that the sample has a certain representativeness. In 87.6% of the questionnaire-filling participants had a bachelor and master degree, indicating that the respondents could understand the contents of the questionnaire very well.In addition, all the subjects who have worked in the surveyed enterprise for more than 1 year and worked as middle and senior managers, which proved that they could fully understand the business model and the actual situation of the enterprise operation, and helped to improve the reliability and accuracy of the survey content.

DATA ANALYSIS

4.1 Test and Related Analysis of Common Method Deviation In the process of research design and measurement.

The paper reduces the impact of common method deviation by taking various measures, such as anonymous survey, disrupting the logical order of scale items, clarifying the points of no right and wrong questions, and a wide range of questionnaire distribution areas.Also, the Harman's one-factor test was used to test the problem of common method bias. The specific method is to put all the variables into an exploratory factor analysis, and the contribution rate of the first factor is 25.723% less than the critical value, not the majority, within the acceptable range, indicating that there is no serious common method deviation (Shi Songqi, 2019). Correlation analysis is the preliminary test of model studies, and the Pearson coefficient is widely used by scholars. As shown in *Table 1,* the correlation coefficients between the four variables presented in this paper were all significantly correlated at the p <0.01 level.

Table 1 Variable Descriptive Statistics and Correlation Coefficient (N=111)

	Mean	Std. Deviation	Enterprise age	Industry field	Enterprise nature	Scale	Novelty	Productiveness	Dynamic ability	Environmental dynamics	Financial performance	Market performance
Enterprise age	3.802	1.055	1									
Industry field	2.879	2.234	-0.162**	1								
Enterprise property	1.955	0.728	-0.03	-0.109*	1							
Enterprise scale	3.418	1.066	0.490**	-0.135**	-0.045	1						
Novelty	5.467	0.812	-0.04	0.004	-0.081	0.053	1					
Productiveness	5.42	1.045	0.074	-0.02	-0.045	0.099*	0.315**	1				
Dynamic ability	5.452	0.713	0.022	-0.09	-0.081	0.095*	0.458**	0.400**	1			
Environmental dynamics	5.659	0.738	-0.01	-0.06	-0.004	0.046	0.281**	0.197**	0.409**	1		
Financial performance	5.019	1.082	-0.04	0.015	-0.079	0.088	0.388**	0.281**	0.512**	0.199**	1	
Market performance	5.254	0.96	-0.03	-0.03	-0.051	0.081	0.383**	0.438**	0.631**	0.296**	0.684**	1

*Note. *p <0.05, **P= < 0.01*

4.2 Analysis of reliability and validity.

First, the reliability of the scale was tested (as shown in Table 2), and the Cronbach's of each variable (dimension) was between 0.726 and 0.861, all greater than 0.7, indicating that the scale has good reliability.Secondly, the validity of the scale is divided into structure validity and content validity.According to Table 2, the KMO values of each variable are found between 0.717 and 0.919, all being above 0.7.AVE values were greater than 0.5 and CR values were greater than 0.7, indicating that the scale has good structural validity.In addition, the survey items of the questionnaire all refer to the classic scale at home and abroad, and scholars in relevant fields and senior executives of the enterprise were invited to modify it, and the survey items were simplified through pre-research to ensure the content validity of the scale.

Table 2 Reliability and Validity Analysis (N=111)

Variables	Dimensions	Cronhach's α	KMO	AVE	CR
Business model	Novelty	0.805	0.798	0.508	0.805
	Productiveness	0.820	0.717	0.606	0.822
Dynamic ability	Dynamic ability	0.861	0.919	0.586	0.863
Environmental dynamics	Environmental dynamics	0.726	0.744	0.551	0.764
Enterprise performance	Financial performance	0.835	0.806	0.547	0.828
	Market performance	0.741	0.724	0.592	0.715

4.3 Hypothesis test.

4.3.1 Direct effect test.

This paper uses regression analysis to test the assumptions related to the direct effect of business model and business performance.As shown in Table 3, model 1 is a regression model for novelty, efficiency and financial performance, and model 4 is a regression model for novelty, efficiency and market performance.After controlling for the influencing factors such as enterprise age, the corresponding standardized regression coefficients were 0.426,0.182,0.311, and 0.325, respectively, and they all were significant at 0.001, assuming that H1a, H1b, H1c, and H1d passed the test.

4.3.2 Test of the intermediary effect.

In this paper, the mediation effects were tested by the Bootstrap method with the SPSS plugin PROCESS3.4, and the analysis results are shown in Table 3.All the dimensions of the business model in Model 2 had significant effects on the dynamic capability (=0.319, p <0.001; =0.190, p <0.001), the independent variable business model dimensions and the dynamic capabilities of the intermediary variables in model 3 are constructed together with the financial performance of the dependent variable.
A regression model was built, and the dynamic ability had a significant impact on the financial performance (=0.612, p <0.001).Dynamic power in Model 5 had significant effects on market performance (=0.685, p <0.001).Then tested using the Bootstrap method (test results are shown in Table 4), after 5 000 self-help sampling: **(1)** the indirect effect of novelty on financial performance is in the 95% confidence interval excluding 0[0.098,0.200], and the mediation effect is significant, assuming H2a passes the test.

Table 3 Analysis Results of Direct Effects and Mediation Effects (N=111)

Variables	Model 1	Model 2	Model 3	Model 4	Model 5
Enterprise age	-0.090	-0.016	-0.080	-0.083	-0.072
Industry field	0.006	-0.027*	0.022	-0.015	0.004
Enterprise property	-0.066	-0.046	-0.038	-0.025	0.007
Enterprise scale	0.098	0.031	0.079	0.065	0.044
Novelty	0.426***	0.319***	0.231***	0.311***	0.092
Productiveness	0.182***	0.190***	0.066	0.325***	0.195***
Dynamic ability			0.612***		0.685***
R Square	0.189	0.478	0.32	0.266	0.499
Adjusted R Square	0.178	0.467	0.3	0.256	0.488
F	17.039***	30.263***	27.315***	26.522***	50.991***

*Note. *p <0.05, **P= < 0.01, ***P= < 0.001*

(2) The indirect effect of efficiency on financial performance is found in the 95% confidence interval, excluding 0[0.067,0.163]. The mediation effect was significant, assuming that H2b passed the test. (3)The indirect effect of novelty on market performance in the 95% confidence interval excluded 0[0.129,0.244], and the mediation effect is significant, assuming that H2c passed the test. (4)The indirect effect of efficiency on market performance is included in the 95% confidence interval, excluding 0[0.095,0.193], and the mediation effect is significant, assuming that H2d passes the test.

Table 4 Summary of Mediation Test Results (N=111)

Items	c Total effect	a	b	a*b Mediation effect	a*b(95% BootCI)	c' direct effect	Test result
Novelty → Dynamic ability→Financial performance	0.426***	0.319***	0.612***	0.195	0.098~ 0.200	0.231***	Part mediation
Productiveness → Dynamic ability→ Financial performance	0.182***	0.190***	0.612***	0.116	0.067~ 0.163	0.066***	Perfect mediation
Novelty → Dynamic ability → Market performance	0.311***	0.319***	0.685***	0.219	0.129~ 0.244	0.092***	Perfect mediation
Productiveness → Dynamic ability → Market performance	0.325***	0.190***	0.685***	0.130	0.095~ 0.193	0.195***	Part mediation

*Note. *p <0.05, **P= < 0.01, ***P= < 0.001*

4.3.3 Adjustment effect test.

The hierarchical regression method has examined the regulation of environmental dynamics, and the regression results are shown in Table 5.The regression coefficient of dynamic power on financial performance in model 2 was 0.506 (P <0.001), indicating a significant positive effect.The regression coefficient of the interaction term between independent variables and regulatory variables in model 3 was-0.060 (P <0.05), indicating that the interaction term had no significant effect on financial performance, and R 2 was 0.281 in model 2 and R2 was 0.284 in model 3, without much change.We proved that the effect of regulatory variable environmental dynamics on the relationship between dynamic ability and financial performance is not significant, assuming that H3a passed the test.

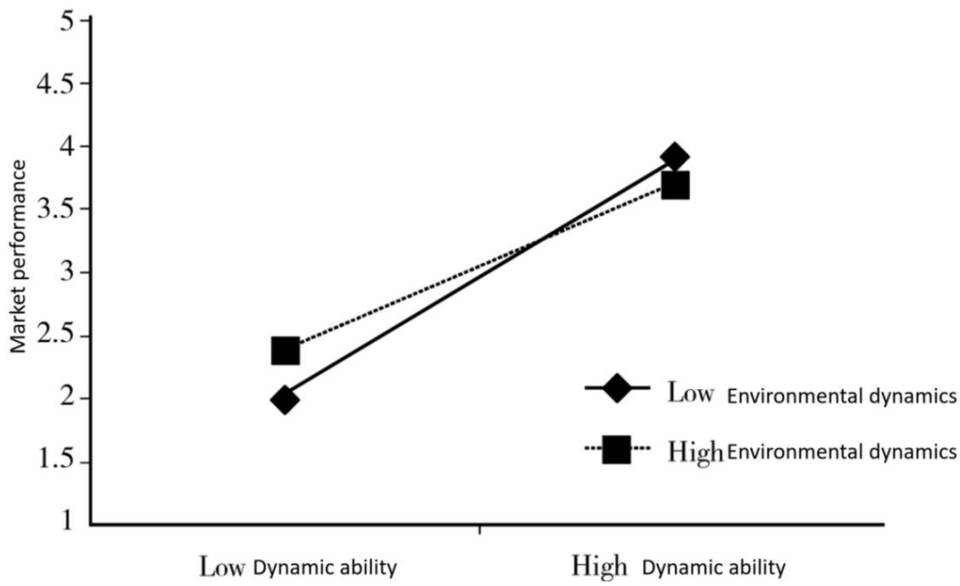
Table 5 Moderating Effect Regression Results (N=111)

	Variables	1	2	3	4	5	6
Control variables	Enterprise age	-0.097	-0.072	-0.071	-0.099	-0.066	-0.064
	Industry field	-0.001	0.047	0.046	-0.043	0.017	0.016
	Enterprise property	-0.083	-0.034	-0.035	-0.066	-0.006	-0.007
	Enterprise scale	0.120*	0.074	0.075	0.118*	0.060	0.062
Independent variable	Dynamic ability		0.506***	0.505***		0.605***	0.603***
Mediating variable	Environmental dynamics		-0.005	-0.010		0.041	0.035
Interactive items	Dynamic ability X Environmental dynamics			-0.060			-0.081*
	R Square	0.038	0.281	0.284	0.036	0.408	0.414
	Adjusted R Square	0.020	0.264	0.266	0.019	0.394	0.399
	ΔR Square	0.038	0.243	0.004	0.036	0.371	0.006
	ΔF	2.131*	73.390***	2.125	2.061*	135.988***	4.684*
	F	2.131*	16.948***	15.641***	2.061*	29.867***	27.808***

*Note. Latent variables have been centralized processing.*p <0.05, **P= < 0.01, ***P= < 0.001*

The regression coefficient of dynamic power on market performance in model 5 was 0.605 (P <0.001), with a significant positive effect.The regression coefficient of the interaction term of the independent variable and the regulatory variable in model 6 was-0.081 (P <0.05), indicating that the interaction term had a significant negative effect on market performance, and the R2 of model 5 was 0.408, and the R2 of model 6 was 0.44, indicating that the model interpretation was improved.We prove that there are significant negative regulation effect between regulatory variable environmental dynamics in dynamic ability and market performance.In addition, according to Figure 2, when the environmental dynamics is high, the slope of dynamic capacity is small, and the market performance is less affected. When the environmental dynamics is low, the slope of dynamic capability is large, and the market performance is also greatly affected.We prove that environmental dynamics has a significant negative regulation between dynamic capacity and market performance, in the opposite direction of regulation as expected by H5b, so assuming H5b failed the test.

Figure 2: Moderating effect



CONCLUSION

5.1 Conclusion.

In this paper, through the empirical analysis of the data of 111 sample enterprises and tests the hypothesis, the research results show that:

The novelty and efficiency of the business model have a significant positive impact on financial performance and market performance.

The novelty and efficiency of business model show a significant positive correlation on dynamic capabilities, indicating that the construction of key attributes of business model can promote the improvement of dynamic capabilities.Dynamic capability also showed a significant positive correlation between financial performance and market performance.At the 95% confidence interval, dynamic power has mediating effects in the impact of novelty, efficiency on financial performance and market performance.

In the relationship between dynamic capability and market performance, environmental dynamics plays a negative regulating role. The more reasonable explanation is that the improvement of dynamic capability is characterized by path dependence and inertia, and it is difficult for dynamic capability to play a role in a highly dynamic environment, so the phenomenon of negative regulation will occur.

5.2 Theoretical contribution.

This paper enriches the empirical research results on the relationship between business model and enterprise performance.A brand-new research framework is proposed by comprehensively considering the attributes of business model value appreciation, the dynamic capability of influencing business model implementation, and the environmental factors subject to external influence.The research conclusions can be used to guide enterprises in how to improve their performance level and gain a competitive advantage.2. This paper integrates the explicit and implicit knowledge of the business model affecting business performance.The impact on enterprise performance under different environmental conditions is verified.It is demonstrated that even if the enterprise adopts a similar business model, that is, the same key attributes, the performance difference will also occur due to the influence of the implicit knowledge such as the internal and external environment.

5.3 Implication.

Enterprises should attach importance to the construction of key attributes of business model, and can start from the construction of key attributes of a business model to improve the competitiveness of enterprises.Through the construction of the key attributes of the business model, such as providing customers with novel products /services or convenient and efficient shopping experience to enhance the core competitiveness of the enterprise, it can realize the organic unity of various elements of the enterprise operation, and bring lasting competitive advantage and excellent enterprise performance to the enterprise.Enterprises should also pay attention to the improvement of dynamic capabilities.From the perspective of management practice, improving the dynamic ability of the enterprise can help the value creation of the enterprise business model to transform into the enterprise performance to the maximum extent.Dynamic capabilities can guide enterprises to timely perceive the changes of customer needs and technology updates, integrate or reconstruct their own resources and capabilities, seize the market opportunities, and realize the improvement of enterprise performance. Therefore, enterprises need to seek new opportunities in complex and dynamic environments, matching their resources and capabilities with the dynamic map of the environment, in order to adapt to the dynamic environment and obtain competitive advantages and excess economic returns.

5.4 Research Limitations and Outlook.

The key attributes of business model that can improve enterprise performance considered and verified in this paper are not detailed, and many other business model attributes can also bring competitive advantage and excellent performance to enterprises, such as the locking, complementarity and difficult to imitate of business model.Alternatively, the data in this paper were collected from a single informant, although this potential bias was handled cautiously, with some pre-and ex-post hoc measures that may also lead to common methodological bias.Although common method bias does not appear to be a serious threat, its presence and possible impact cannot be ruled out.According to the research ideas of this paper, it is hope that in the future research, from the following aspects.First, the improvement of the business model measurement scale.Measure business models in a more scientific, objective, and accurate way.Secondly, the study on the factors influencing the business model can be expanded.For example, future studies can compare the effectiveness of possible antecedents, such as leadership, motivation, or team composition, and the identification from an internal enterprise environment that are important to the implementation of the business model.Finally, based on the business model itself is a continuous iterative process, the impact of time and longitudinal (rather than horizontal) research of business models can be considered in subsequent studies, so as to more accurately understand the nature and degree of changes in business model attributes and the impact on business performance in a specific environment.

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EXPLORE THE EDUCATION AND MANAGEMENT OF STUDENTS IN HIGHER VOCATIONAL COLLEGES FROM THE PERSPECTIVE OF COUNSELORS

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ABSTRACT

With the development of the society, China's demand for professional talents has been significantly improved. In this context, the country has increased the importance to the development of vocational colleges, and has actively taken various measures to help vocational colleges achieve high-quality development. The high-quality development of vocational colleges cannot be separated from the strict education and management of students, so that they can improve themselves based on their own actual situation, so as to go to work smoothly. Nowadays, most of the students in vocational colleges are "post-95" and "post-00" ", and these students have their own characteristics. When managing them, schools should actively change their management concept and adopt new management methods to achieve the expected management results. As the front-line managers, the counselors should also keep pace with The Times, so as to meet the requirements of the student education management work in vocational colleges, and make the student education management work better help the development of the school education work. This paper mainly analyzes the characteristics of higher vocational students, discusses the strategy of counselors in higher vocational colleges, hoping to have certain reference significance for relevant personnel.

Keywords: Counselor; Higher vocational colleges; Student education management; Problem; Strategy

INTRODUCTION

In recent years, China's economy has developed rapidly and gradually become the world's second largest economy. In this context, China's higher vocational colleges have a greater space for development, but also brings certain challenges to the education and management of students in higher vocational colleges. In order to promote the healthy and sustainable development of higher vocational colleges and cultivate more high-quality technical personnel for the society, schools should strengthen the education and management of students, so that they can study and live better in school. Based on this, the counselors in higher vocational colleges should conduct an in-depth analysis of the problems existing in the current student education management, formulate targeted management strategies, improve their management level, so that students can receive more effective education management services.

1. An Analysis of the Characteristics of Students in Higher Vocational Colleges

At present, students in higher vocational colleges have their own obvious characteristics. In order for college counselors to do a good job in students 'education and management, they need to clarify the characteristics of today's higher vocational students and maximize teaching students in accordance with their aptitude. Counselors should fully realize that there are many common points and many differences between the students of higher vocational colleges and the students of other nature colleges. Based on their own work experience, the author makes the characteristics of higher vocational students summarized as follows.

1.1 Students have a public personality, and there is also a sense of inferiority in their heart.

Most of the current higher vocational students grew up with the company of the Internet. The Internet era has a great impact on them, such as having a strong desire to express and unwilling to surrender personality. Higher vocational college students, on the surface, are lively, positive, especially hope to attract the attention of others. Some higher vocational students like to show their own unique style by being alone, while some students like to gain attention from the outside world by trying things that others dare not try. Some of the student characteristics listed above are advantages, which can be appropriately guided to achieve better development; some characteristics with obvious defects, if not managed will have a great adverse impact on the healthy development of students. Counselors should realize the advantages and disadvantages of higher vocational college students' personality publicity, take effective management measures to give play to the favorable side of personality publicity, and take some restrictive measures to avoid the excessive indulgence of personality resulting in the result. In addition, in-depth analysis of the hearts of higher vocational college students we can also see that they more or less have some inferiority sense, this inferiority sense mainly comes from the unsatisfactory results of the college entrance examination and enter higher vocational schools. Most of them think that learning in higher vocational colleges has no development future, and it is not at the same level as ordinary universities. This kind of ideological understanding makes them carry a heavy psychological burden, and then makes them have a sense of fear and helplessness, which is not conducive to their normal life and learning in higher vocational colleges and (Nie Chaojuan, 2020).

1.2 Under the appearance of self-esteem and vanity lies a childish and fragile heart.

Having self-esteem for anyone is a fundamental quality that a sound person has. We usually say that self-esteem means that everyone respects their own personality and their reputation is not infringed upon by the outside world, and they are not allowed to be discriminated against by others. Self-respecting people do not bow to others for some personal benefit, self-respecting people have a positive attitude, want to be recognized by others through their own efforts. Self-respecting people are more likely to be respected by others, which will give people a sense of achievement. Now the higher vocational students are mostly very self-esteem, but these self-esteem under certain conditions will turn into vanity, we usually become an excuse to say to want to face. In fact, a person's real self-esteem mainly comes from their self-confidence, and vanity is essentially not enough confidence, or even caused by inferiority. Based on the survey of some higher vocational students, the author found that many students 'self-esteem is often vulnerable, which is also a reflection of many students' inferiority complex. We see that higher vocational students have a strong self-esteem and vanity at the same time, but also to see that the students' inner childish and fragile, this inner childish and fragile is a certain reason. Most students leave home and are psychologically in a transitional period. At this time, they have a strong sense of loneliness, hoping to communicate with others to solve this sense of loneliness, but they do not completely trust others, resulting leads to the inability to communicate with others. In this case, students can only struggle in their hearts, and can not be good at using the outside world to grow together with other students, and eventually make their own hearts become sensitive and fragile.

1.3 The complexity of students and the differentiation of cultural basis in higher vocational colleges.

Higher vocational counselors should be good at classifying students in student education management, and adopt differentiated educational management strategies based on different students' characteristics. Among them, it is a common classification method to classify students, because the students of higher vocational colleges are more complex. In general higher vocational colleges, there are high school students, middle school students, secondary school students, and social personnel, from which we can see that the complexity of students also increases the difficulty to the education management of counselors. Different students are obviously differentiated in different aspects. The one-size-fits-all approach can obviously not meet the requirements of education management, and it will not play a good education management effect. The complexity of students in higher vocational colleges is mainly reflected in their cultural differences. First, although the cultural foundation of students from high school is weak, it has certain advantages compared with secondary school students and junior high school students; Secondly, different students have different levels of cultural knowledge and social knowledge, some students have a high level of cultural knowledge, and some students have more social knowledge. This dislocation of knowledge under different cultural backgrounds will lead to a growing gap between students from different students, which will ultimately affect the better development of each other. Thirdly, the large differences in the age of higher vocational students will lead to their large differences in their problem cognition and moral behavior, which will increase the conflict of different students, which is not conducive to the construction of a harmonious relationship between students. Finally, the counselor of student education management a large part of the content is discipline management, the complexity of students can also lead to students' self-discipline ability is poor, all kinds of the phenomenon of the discipline, some students will make illegal behavior, will not only cause bad effects to others, but also is not responsible for their own growth (Yang Yiyi, 2020).

1.4 Quality level and psychological problems have a certain complexity.

The quality of higher vocational students has great differences, most of the students have a higher level of quality, and there is also a low quality level. The higher quality level of higher vocational students is mainly reflected in the more active thinking, and various ideas can keep pace with The Times. The low level of quality is mainly reflected in the value orientation, individualism and egoism tendency is more serious. At the same time, the sense of group and integrity consciousness is low, and the lack of spiritual support of ideals and beliefs. In addition, the psychology of higher vocational students also has a certain complexity, which is mainly reflected in the inferiority complex of their own higher vocational students. Some students lack of positioning for their own careers, and feel vague about the future development, which leads to emotional anxiety. Some students think that higher vocational school study is to get a diploma, and thus muddled by.

PROBLEMS EXISTING IN THE EDUCATION MANAGEMENT OF COUNSELORS IN HIGHER VOCATIONAL COLLEGES

Based on the rapid development of higher vocational colleges, the student education management of counselors also needs to be actively changed to change the management strategy and improve the management quality. However, from the actual student education management of many higher vocational school counselors, there are certain problems. The existence of these problems largely shows that the student education management of many higher vocational school counselors has a certain lag in nature, and it cannot fully meet the needs of students' education management.

2.1 Management concepts and management methods have failed to keep

pace with The Times.

At present, the management concept and management methods of many higher vocational college counselors are still in the traditional education management stage, and fail to keep pace with The Times, which seriously affects the improvement of the education management level of higher vocational schools. The traditional work of higher vocational college counselors mainly focuses on the management of various disciplines of students. If any student is found to violate the school discipline, in many cases, punitive measures are taken to warn students. This kind of management method will play a certain negative effect on the students with more serious reverse psychology, and greatly reduces the efficiency of students' education and management. The main reason for this situation is that the counselors failed to fully understand their own student education management work, did not play an active role in the management work, only unilateral punishment, is not conducive to the students to really realize the mistakes from the heart. These traditional management concepts and management methods deviate from the original intention of education to a large extent, which is easy to make students have a greater rebellion under this backward educational management, thus forming a vicious circle with the management of counselors.

2.2 There is no perfect mechanism to guarantee the education and management of counselors.

The student education management of counselors in higher vocational colleges is a whole and inseparable, but at present, the education management of many students in higher vocational colleges is specifically implemented by two separate departments, respectively, the teaching management department and the student management department. These two management departments in the actual work of less contact, each perform their own duties, the students 'education management work to be artificially separated, which is not in line with the needs of students' education management work. At the same time, the separation of student education management in higher vocational colleges is not conducive to the realization of the goal of education. In this management mode, the education management department focuses on the teaching of the teachers, and asks less about the students' ideological dynamics and life, while the student management department focuses on conveying the various rules and regulations of the school to the students, with little energy on the management of the students. From this, we can see that the separation of student education management restricts the improvement of education quality to a large extent, and also causes more problems in the education of higher vocational colleges (Tang Xiaotao, 2020).

2.3 Lack of talents for counselors in higher vocational colleges.

The education and management of the students in higher vocational colleges is a major work of the school. This work involves many departments, such as the student management department and the management departments of each department, etc., but the specific work is carried out by the counselors. However, through some investigation, we find that many counselors in higher vocational colleges are faced with the problem of lack of talents, which will seriously restrict the normal and orderly development of student education and management in higher vocational colleges, and then affect the teaching quality of schools. There are several main reasons for this problem. First, the salary level of higher vocational college counselors is relatively low. Without reliable material guarantee, many counselors cannot concentrate on various education and management work. Many counselors seek better jobs based on their current jobs, so they lack motivation to conduct education management. Secondly, most counselors are held by recent graduates. Such counselors not only lack management experience, but also have a low matching degree of their majors, which greatly affects the high-quality development of counselors' student education and management work. Finally, many higher vocational college counselors do not have the corresponding person, there are empty post situation. This situation directly shows that the lack of relevant talents, which seriously hinders the normal progress of the education management of students in higher vocational colleges, and makes it difficult for the education management of students in higher vocational colleges (Zhao Tao, 2019).

STRATEGIES TO IMPROVE THE QUALITY OF STUDENT EDUCATION MANAGEMENT IN HIGHER VOCATIONAL COLLEGES

From the above content, we can see the main problems existing in the student education management of counselors in higher vocational colleges. What strategies should be adopted to improve the quality of student education management in facing these problems? That is the crux of the problem. Based on my own work experience and the investigation and research of relevant data, the author thinks that we can start from the following aspects.

3.1 Use advanced ideas to guide students' education and management work.

The continuous development of society, the demand for professional talents is more and more vigorous, so higher vocational colleges have a lot of space for development, which is also an indispensable part of China's higher education. In order to promote the better development of the education and management of students in higher vocational colleges, the role of the counselor should be used to use the advanced concept to guide the work, and the management work should be repositioned, that is, to provide more comprehensive services for students. In order to achieve any work with good results, it must be guided by advanced ideas, which shows the importance of ideas. The update of the education management concept of the counselors in higher vocational colleges should first have the courage to break the shackles of the traditional management concept, no longer follow the order of the school to implement the old way of managing the students, but to follow the principle of people-oriented to implement the organic integration of management and education, and realize the situation that both hands should be hard. Secondly, the counselors should recognize the differences between individual students when carrying out the education management of students, and adopt different education management methods for different students to maximize the effectiveness of education management. Thirdly, the counselors should establish a sense of service, and provide the targeted education and management services to the students on the basis of the in-depth analysis of the students 'needs, so as to meet the needs of the students' normal life and study.Finally, the relevant departments of higher vocational colleges should gradually establish a perfect modern education management system, improve the effectiveness of students' education management work, to create greater development space for students, so that higher vocational students can achieve better development (Wang Fengfeng, Yang Min, 2018).

3.2 Establish a mechanism of integrating teaching and management to jointly help cultivate talents.

In order to do a good job in the teaching management of students, colleges and universities need to fully realize that the teaching and management of higher vocational students are closely linked and cannot be divided. Only with such an understanding, the relevant personnel of the school can lay a good foundation for the education and management work of the counselors in higher vocational colleges, and can also give full play to the value of the students' education and management work. In order to promote the better development of the education and management of counselors and students, the school should consider various factors to establish a modern teaching and management mechanism, and effectively integrate the teaching and management, so that the two can promote each other and improve together. Through this teaching and management mechanism, the responsibilities of teachers and counselors based on their own posts should be further clarified, that is, teachers should organize teaching activities according to the optimal teaching objectives, and teach students according to their students' characteristics, so as to realize the development of each student. In the teaching process, teachers should not only impart knowledge to students, but also cultivate students' correct world outlook and outlook on life based on the same knowledge that they have learned, so that they can better deal with the problems encountered in life and study. As a counselor, we should clarify the work content, not only carry out the daily management of students, but also pay attention to the students 'ideological construction, and improve the students' ideological and political level. In addition, in order to better provide services for students' study and life, teachers and counselors should also strengthen communication, which is conducive to mastering more information, so as to form a joint force to better achieve the educational goal of moral education.

3.3 To provide sufficient talent support for college student education and management.

The effective development of any management work cannot be separated from the specific implementation of the management personnel, so talent is the most important and basic factor of the whole management work. Counselors of higher vocational colleges shoulder double responsibilities. On the one hand, they need to do a good job in ideological and political education for students, and on the other hand, they need to do a good job in administrative management. Higher vocational colleges should attach importance to the work of counselors, and provide sufficient talent support for this post. Higher vocational colleges should improve the treatment of counselors in all aspects, so that they have material security, so that they can work at ease. In addition, the work of a counselor seems simple, but in fact, it requires high ability. Schools should do a good job in the selection and training of counselors, and constantly improve their professional ability and professional quality. Based on the very different number of students in different majors, the number of counselors should also be determined according to the actual situation. Only the optimal allocation of the number of counselors can ensure the high-quality and efficient development of student education management (Sun Yingjun, 2018).

3.4 Actively make use of advanced science and technology to build a student education and management platform.

The present society is an information society, and the education and management of students in higher vocational colleges should also make full use of information technology to improve work efficiency and work quality. Counselors can make full use of wechat, QQ and other ways to strengthen communication with students to improve the effectiveness of communication. In addition, the use of these communication methods can also better carry out ideological and political education for students, enrich the cultural construction of the school, create a more colorful campus life for students, and promote students' education management to a new level.

Epilogue: Under the development background of the new era, higher vocational colleges should reform the work of counselors to make them better help students' education management. Relevant personnel should have an in-depth understanding of the characteristics of higher vocational students, and clarify the problems existing in the current education management of students in our school, and then take effective measures to improve the quality of student education management, and lay a good foundation for the long-term development of students.

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TAKE NETFLIX AS AN EXAMPLE TO STUDY THE INNOVATION OF STREAMING NEDIA BUSINESS MODEL

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ABSTRACT

This paper takes Netflix as the research object, summarizes the disruptive innovation of Netflix in software, hardware and industrial chain through literature review, and analyzes the impact of these innovations on the industry. The development process of Netflix is divided into four different stages: DVD-mail, streaming media, original content and new cultural trends. With industry-leading insight, Netflix has accurately controlled the development of technology in different periods and the needs of users, and based on this, it has brought a new streaming media business model to the industry. Finally, it summarizes the business innovation strategy of Netflix, which plays a positive role and new development direction for the development of global streaming media and traditional film and television industry.

Keywords: Netflix; Business Innovation; Streaming media

INTRODCTION

1.1 Background of the study

Since 2020, Hollywood has had to postpone a large number of filming activities due to COVID-19, resulting in a significant loss of competitive advantage. But Netflix uses its global brand of innovation to work remotely around the world. In the process of fighting for the market share of streaming media, Netflix has improved its global competitiveness and localized service experience with brand thinking. Relying on streaming technology and content recommendation systems, Netflix's overseas expansion has upended the traditional movie-watching model, enabling its 190 million paying subscribers from more than 190 countries to watch great stories anytime and anywhere, create emotional resonance and enhance cultural understanding. (He, 2020) In terms of content construction, Netflix adopts diversified and inclusive cultural policies and determines the program types preferred by users by mining customer data, making Netflix "the window of world culture".

1.2 Problem statement

Through literature review, it is found that most of the research results take Netflix as a case, simply sort out its development process and show its success; Or a brief statement of strategy; It doesn't explain how Netflix has affected the industry as a whole. Therefore, this paper mainly discusses the subversive innovation in software and hardware in the development process of Netflix, as well as the innovation in the industry chain such as screening, distribution and production. For the specific operation of its subversive innovation in each aspect, different strategies in different periods are combined to comprehensively explore, in order to provide some new ideas for the study of Netflix.com from a new perspective.

1.3 Research Question

Netflix went online with （Stranger Things）, （Love, Death & Robot), (Margin), (13 Reasons Why), (The Umbrella Academy), (Money Heist), (You), (Unbelievable,). (When They See Us), (Elite) and a large number of high-quality series, Netflix has always maintained a leading edge in content output and media consumption, leading and quickly adapting to the unpredictable video ecological environment.（Liao， 2018）Netflix's success has been driven by innovation in its business model, but how did Netflix break through in the streaming space? How to subvert the traditional film and television industry step by step?

1.4 Research objective

Founded in 1997 as a DVD rental service, California-based Netflix has grown into the world's largest streaming service, offering subscriptions to movies, documentaries and TV shows worldwide. It now has more than 190 million paid subscribers in more than 190 countries. Netflix added 37 million subscribers through the fourth quarter of 2020, hitting $25 billion in revenue and a 76% increase in operating profit to $4.6 billion. (Huang, 2020)The main research objective of this paper is to analyze the business model innovation of Netflix in the process of transforming from DVD-mail company to the world's largest streaming media company, and the impact of these innovations on the industry and the development trend of streaming media in the future

1.5 Significance of Research

With the advent of the 5G era, streaming media has become the first choice for most people to use the Internet to watch film and television works. Especially during the COVID-19 epidemic that has swept the world in 2020, audiences' time at home has greatly increased, and movie theaters have had to suspend business. Under such circumstances, streaming media has undoubtedly become the best choice for audiences in film and television entertainment. Even The once-controversial Oscars ceremony is also being streamed. (Kim, 2019) The COVID-19 pandemic, which has not yet completely ended, has also changed people's attitudes towards streaming media. But even if there is no epidemic, streaming media becomes the choice of more people is an irreversible trend under the progress of science and technology.

It studies the different strategies adopted by Netflix, the current leader in the field of global streaming media, in the face of different environments and competitors, as well as the disruptive innovation in the difficult situation to defeat the defense of rivals, and at the same time to consolidate its competitive advantage ahead of the industry speed; These measures have had a subversive impact on the construction of the software and hardware of the film and television industry, the way of film and television production and distribution, and the audience's experience of watching films. This has reference significance for the construction and improvement of China's streaming media industry and even film and television industry.

LITERATURE REVIEW

2.1 DVD-mail

Before Netflix was founded, founder Mark Randolph had a vision for logistics and already had the idea of a central warehouse. Randolph believes the advantage of e-commerce over brick-and-mortar stores is inventory. Physical stores have small space, large number and scattered distribution. Even if the total number of physical stores is as large as a cow's tail, the distribution to each physical store will always fail to fully meet the market demand of local areas, and the shortage of goods has become an inevitable problem. In blockbuster, for example, many customers don't know what they want to see until they see the movie they want to see in the store. But if they don't find the movie they want to see in the store, the staff has to recommend another similar movie, which is known as "controlled dissatisfaction". (Zhou; Fan, 2015) However, if the negative impression is accumulated for a long time, when the number and frequency reach a certain degree, the audience will complain. While Netflix to set up the central warehouse to subvert the traditional offline store warehouse model, avoids the discontent "controlled", all of the film would have a central warehouse, a large warehouse is smaller than a single species more full, more inventory, blockbuster customer can only from the local store limited inventory search like the film, Netflix users, on the other hand, can look for movies in a relatively large inventory. Customer orders are shipped directly from this central warehouse, mailed to the customer's home, and sent back to the central warehouse when the customer is finished. In this way, the disconnection between inventory and market demand, as in brick-and-mortar stores, would not be so severe.

A fundamental and necessary innovation to help deliver these DVDS safely and quickly through the logistics cycle is a mailing envelope tailored for Netflix. (Su; Zhang, 2014), after multiple tests, the team devised a consists of three separate parts, made of hard and light paper mail envelope, the inner sleeve to protect the DVD scratches, and in this place with also include the content and address information of bar code, and the outer envelope convenient to manipulate the hollow out of the window style to show the barcode scanning. The outermost package features a bold bright red as an easily recognizable brand logo to enhance the user's impression. The envelope holds three disks at a time and can be used as a return envelope after the original address has been removed. Not only does the envelope meet the needs of the USPS for first-class mail, but Netflix also uses specialized equipment to automate disc sorting at its Central DVD distribution center in SAN Jose. The packaging overturns the old system of only sending and receiving information. The tough, lightweight material and unique seating design make it easier and faster, allowing the central sorting facility to handle up to five million DVD orders a day. (Wang, 2014)

Even though Netflix has excelled in logistics and inventory management, it has realized that to stay ahead, it's not enough to be good at it. One of the most important assets of an Internet company is user identity information and behavior record data. To get more valuable data, Netflix needs to create a recommendation engine to recommend exactly what users might be interested in. In the data-driven aspect, Netflix is well-known in the industry, which makes the recommendation system to the extreme and uses data to make business decisions. (Wang, 2021)

2.2 Streaming media

In order to continue to attract users' attention, Netflix carefully selects every poster that appears on its home page. To this end, Netflix uses a method called "aesthetic visual analysis" to create the cover by selecting the one from the video of the film and television series that best fits the user's taste. (Ren, 2016) First of all, the algorithm will analyze the image of each frame in the video and extract metadata from it, which stores the unique features of the image for classification and database establishment. Then, the algorithm will extract the metadata of the image classification, in terms of visual information, will be from brightness, color, contrast, and dynamic blur dimension classification; In terms of situational information, it mainly records face, object recognition, scheduling and Angle. Combined information is investigated in the aspects of photography and design; The process of quantifying and classifying these variables is called view annotation. After the view is annotated, the algorithm will sort the images and select clear, sporty, distinctive images that do not contain sensitive or unauthorized brand information as alternatives. Finally, A/B test will be carried out on users. The covers of users are constantly changing based on their past choices. When a user's viewing history is full of shows starring the same actor, a search for other shows starring the same actor is likely to bring up a cover featuring the same actor. Netflix also found that users' preferences for cover posters varied by region, with Germans preferring abstract images and Americans preferring covers showing the main character. (Zhang; Fang, 2019)

In addition to building on user-driven movie recommendations, Netflix is also introducing mathematical models to make big decisions. (Gao, 2021) Netflix has developed a sophisticated spreadsheet program called Netflix Docs, which tracks a particular AD for up to a week and extrapolates predictions for a month, a quarter and a year, as well as analyzing all the marketing channels through which Netflix is delivering ads: Radio, TV, billboard, web, etc., to predict their cost per purchase, lifetime user value, and number of purchases, you can calculate revenue and cancellations, as well as the number of subscribers Netflix gets through a particular AD configuration. Using this tool, Netflix has been able to accurately predict Netflix's marketing costs and subscriber numbers for 16 consecutive quarters, leading the industry in marketing planning decisions.

2.3 Original content

The four major radio networks ABC, NBC, CBS and FOX, as well as cable networks such as HBO, Lifetime and Showtime, are the major TV shows in the United States. These TV networks mainly adopt the production and broadcasting mode of "shooting while broadcasting" and the broadcasting frequency of "weekly broadcasting". (Chen, 2020) when determining whether the TV broadcast, the creator will provide outline to network first, and then through the network to select the most satisfactory show originality, commissioned to TV production company, in the season, each studio production companies tend to complete 4-5 sets as backup , 2 sets has finalized the completion of the script, The rest were filmed during the broadcast. These time-honored traditions can ensure that content is produced and broadcast in a timely manner according to the feedback of ratings, but they are not without drawbacks. Abandoning these shows, while catering to the taste of most people, will also make some viewers feel extremely painful for missing out. In addition, various reasons for the decline of audience rating may also lead to the loss of a high-quality TV series by mistake. "Ratings only" is not the best choice. (Zhu, 2021)

Netflix, broke the pattern, with the major platform for the "house of CARDS", is a one-time investment two season 26 sets, and at the time of streaming media broadcast platform, "" house of CARDS directly to an entire season of all, there is no pilot, gave the creators are full of trust and degree of freedom, without consideration as traditional television network broadcast a short span of a few set after the fate of the" cut ". Kevin Spacey, the executive producer and co-star of House of Cards, has said that he doesn't want viewers to jump to conclusions based on just watching a few episodes. Netflix is the only well-known platform that can meet this demand, which is one of the main reasons he chose Netflix. (Le; Qie, 2015).

One reason Netflix has the audacity to do this is the on-demand nature of streaming. The traditional TV network's broadcast schedule is not controlled by the audience, and the audience has to wait passively for the broadcast, but in order to improve the ratings, the network will match the rest time of the majority of the audience. (Liu; ANN,2020) But streaming media is different. Users can watch episodes at any time and place, so there is no need to consider the time schedule of users. Users can freely arrange watching time, which is the prerequisite for Netflix to launch a full season. Netflix's confidence in the popularity of its original series comes from collecting and analyzing user behavior, and after big data analysis of user behavior, it believes the political thriller, directed by David Fincher and starring Kevin Spacey, will be a hit. Because there is technology to choose what to invest in filming support. (Zhou, 2019)

2.4 New cultural trend

Compared with the number of traditional TV programs, Netflix's massive content has given viewers the right to choose what to watch. Streaming media and full-season streaming have combined to give viewers the right to choose when to watch, while the rapid development of mobile Internet has given viewers the right to choose where to watch. (Liu, 2020) Netflix software can be applied to a variety of hardware devices, this can let the audience in the smart TV, game consoles, set-top boxes, seamless switching between tablets and smartphones, the rapid development of mobile Internet to mobile devices into at the same time, more can improve the speed, let the user in any place, as long as the connection to the Internet, don't even need to download, They can use mobile devices to watch online content in time, which satisfies users' demand for "space transfer" on the basis of "time transfer" and liberates audiences from cinemas and living rooms. Streaming has made content available faster, cheaper and more widely than ever before. Such services allow viewers to find refuge in an unpleasant environment. Over time, users will be accustomed to streaming media slowly into every corner of life, and then evolved into a high reliance on streaming media, Hastings also said: "Netflix struggles with sleep." (Nicole et al., 2017)

These formats give viewers greater freedom, and Netflix's chief content officer has branded the company neoliberal and billed it as "the future of television". This unbridled freedom also leads users to watch a lot of content in a row. Los Angeles Times culture critic Mary McNamara officially defined binge-watching as more than three one-hour episodes or more than six half-hour episodes at a time in January 2012. Oxford Dictionaries named "binge-watching" the second most popular word of 2013, behind "selfie," and Collins Dictionaries named it word of the Year in 2015. (Li, 2020) According to the survey, in 2015, two thirds of the audience had the experience of "binge-watching". Obviously, "binge-watching" has become a new normal. Research shows that viewers tend to binge-watch more when they are more neurotic, and the more they binge-watch, the more immersive experience they get as motivation to binge-watch. The more focused you are, the less likely you are to regret binge-watching for immersive experiences. In other words, the more viewers "binge-watch", the more immersive experience they will get, and the immersive experience will give positive feedback to "binge-watch", and continue to promote the audience to keep "binge-watch" behavior. (du; Wang, 2021) "binge-watching" is a way to escape from reality. It's a pleasant escape to focus on a tiny screen without worrying about real life.

CONCLUSION

In the history of business development, countless powerful enterprises because of complacency and the development of The Times. These enterprises devote all their manpower and resources to build up their competitive advantages based on existing competitors, and concentrate all their efforts to reinforce the protection, just like the "Maginot Line", they are not knocked down by rivals, but encircled by rivals. Kodak film had to go out of business in the digital age, Nokia collapsed in the smartphone age, and so on. Kodak and Nokia were defeated not by similar FuJifilm and MOTOROLA, but by new technologies that were more convenient and faster.

No business model lasts forever, and no competitiveness lasts forever. Throughout the changes of The Times and the development of Netflix, it is not only The Times created the "hero" of Netflix, but also the Development of The Times promoted by Netflix. The reason why Netflix can grasp the pulse of The Times and clear the direction of the future in the business sea is due to the insight and overall picture of the leader. Can be selected from the beginning of the creation is not small DVD format, and insight into industry trends, to "online subscription queue system + + fine for delaying payment" business model we overthrow tradition, created the "central warehouse" and "satellite hub" mode of logistics, to speed up the delivery, and the recommended algorithm increases the user viscosity. Business in sales of

DVDS are flawed, netflix to foresee the future strong competitors, thus by dongfeng early layout of Internet streaming media, gain a foothold in the field of streaming netflix to just do a distributors, once again to the original content business transformation, and the unique high quality original content, just be impregnable netflix now, Is complying with The Times "content is king" trend.

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RESEARCH ON THE METHOD FOR DEVELOPING INNOVATION AND ENTREPRENEURSHIP AMONG VOCATIONAL COLLEGE STUDENTS

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ABSTRACT

Mostly as result of China's shift to a more innovative economy, the country has begun implementing an education program focused on fostering innovation and entrepreneurship. Real-world practical IAE education is still in its infancy as a management process. This study will investigate the connection between students' creative entrepreneurial talents and characteristics connected to the nurturing process. Mix method will be conducted for this research, the data will be gathered from Chinese vocational institutions. During the qualitative study phase, the unit of analysis will recruit from vocational colleges and commercial businesses. In the quantitative phase, candidates will come from academic administrators, teachers, vocational college students, and business employers.

Keywords: Entrepreneurial, Innovation, Education, Competencies

INTRODUCTION

In recent decades, China has become an innovation-oriented country, resulting in the implementation of innovation and entrepreneurship (IAE) education in the Chinese educational system (W. Li & Li, 2015). Despite several studies, the effective management process for developing real-world practical IAE education is still in its early stages (Zhang, Zhang, & Guan, 2018). A number of reformed management processes, such as cultivation mode, teaching quality, and curriculum pattern, have been investigated. Graduates' or students' products and ideas are not suitable for practical marketing. The lack of "gold creative products" remains an unsolvable problem (Shen et al., 2021), most likely caused by a lack of entrepreneurial intentions. Students' incubators are established to provide a benefit policy, adequate financial support, and a specific environment for students to transfer their knowledge to economic fruits. This research will look into the relationship between students' innovative entrepreneurial skills and factors related to the cultivation mechanism. Previous research has focused on policies, financial aid, and institutional routines. This study will create an organic combination of all elements for cultivating the innovative ability of vocational college students.

Research Objective

1)To investigate the key perceptions of students' innovative and entrepreneurial competencies based on IAE education.

2)To explore a model of a relationship between cultivation mechanism and students' innovative and entrepreneurial competencies.

Expected Benefits

This research regarding the cultivation mechanism of innovative and entrepreneurial competencies of students might provide benefits for academy, policy maker, and practice. In terms of academy, it will provide a database for interested researchers to further expand the contents of students' innovative and entrepreneurial competencies based on the development of society. For policy maker, the consequence might provide reliable source for the government to make policy, resulting in improving cultivation of students' innovative and entrepreneurial competencies based on IAE education in vocational colleges. For operation, educators in Chinese vocational colleges could apply the results of current study to be a guideline for cultivation of students' innovative and entrepreneurial competencies.

LITERATURE REVIEW

2.1 Innovation and entrepreneurship (IAE) education in China

Innovation and entrepreneurship have been known as a necessary ability for improving the social and economic development in society (Han, Yang, & Bai, 2021; W. Li & Li, 2015). Certainly, education institutions take major responsibility to cultivate the students with innovation and entrepreneurship. Based on this requirement, a new education system, called "widespread entrepreneurship and innovation", is advocated by Premier Li Keqiang in September 2014 by (Long & Bai, 2017) indicating that Chinese education system officially progressed into Innovative and Entrepreneurship (IAE) education era. Construction of IAE education ecosystem in higher vocational colleges is considered as an effective way for cultivation of students' innovative and entrepreneurial ability. Therefore, they proposed a model for teaching to assist transformation of knowledge to skill that is shown in Figure 1 (Diao & Li, 2020).

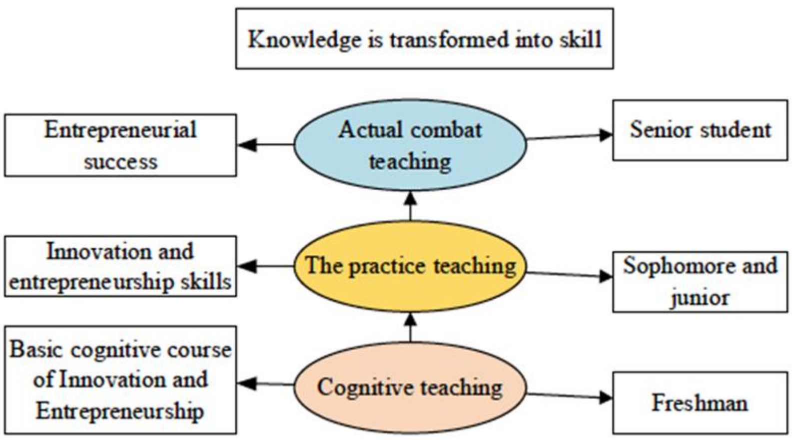

Figure 1 Integration model of innovation and entrepreneurship education and practice teaching. Source: Diao (2020)

Multiple disciplines, including law, finance, management, business ethics, economics, sociology, urban planning, psychology, and public policy, have been involved in studies on the cultivation of entrepreneurship ability (Han et al., 2021). However, compared to affluent nations such as Canada, a number of things remained to be improved. Curriculum, risk education, and social assistance, for instance, might be updated further (Han et al., 2021). Zheng et al. have recently compiled and assessed the existing main studies on the IAE education ecosystem, concentrating on four aspects: power, boundary, movement, and status. The researchers noted that this ecosystem is complex and open, referring to the multifaceted collaboration between government, universities, businesses, and society (Zheng et al., 2022).

In addition to the IAE education ecosystem, the creative goods exhibit a second bottleneck that is likely related to a lack of practice (Shen et al., 2021). To address this deficiency, it was proposed to create an incubator park to test creative ventures. In recent decades, the student incubator has been recognized as an innovation engine that has grown substantially (Liu, 2022). In 2018, a Chinese report highlighted that student incubators had been formed in nearly every institution of higher education, reaching a total of 4,069. (Zhang et al., 2018). Regarding foreign experiences, the effects of student incubators in higher education institutions on the unemployment rate are clear (Stal, Andreassi, & Fujino, 2016). China has the graduate job load as well as unfulfilled innovative and entrepreneurial skills, making university incubators an unavoidable trend. In addition, a study compared student incubators in China and France, concluding that Chinese and French incubators share similar characteristics in certain aspects, such as governance and the complexity of funding systems, but that the incubation process is likely different due to the different outcomes (Matt & Tang, 2010). Therefore, it appears that there was a correlation between the outcomes of incubators and their consequences.

2.2 The cultivation mechanism

Entrepreneurship education and cultivation mechanisms of innovative and entrepreneurial talents are still in infant age in Chinese higher education institutions (Ustyuzhina & Mikhaylova, 2019). Studies about the effective culture mechanism for implementing IAE education also draw attentions by educational researchers (Xiu,2017). The author suggests course system including adaption of curriculum content, diversity of students and teachers, applied teaching methods, integrated education mode, and personnel training (Sun, 2019).

According to a prior study, innovation and entrepreneurship education in Taiwan is more advanced and successful than in mainland China (Xiu, 2017). Further, the author evaluated creative entrepreneurial talent cultivation mechanisms in the field of marketing (Xiu, 2017). The author suggests that the most important factor in implementing IAE education is the course system, which includes curriculum content adaptation, diversity of students and teachers, applicable teaching methods, integrated education mode, and personnel training (Xiu, 2017). In addition, a literature review highlighted the most recent published research on IAE education in terms of model, cognitive value, and development approaches (Sun, 2019). The author noted that current cultivation methods are sufficient to nurture students' innovative thinking and entrepreneurial spirit;

however, reform of cultivation mechanisms is important to promote students' innovative entrepreneurial skills (Sun, 2019).

2.3 Students' innovative entrepreneurial competencies

Several young graduates complained about lacks of enough knowledge and ability for starting their business (Draksler & Širec, 2018). Draksler et al. carried out theoretical research to interpret a hierarchical linking regarding entrepreneurship education and entrepreneurial intentions. Students' innovative entrepreneurial competencies might be a necessary player for cultivation of entrepreneurial intentions via IAE education.

Chandler and Jansen have questioned the specifics of entrepreneurial competencies since 1992 (Draksler & irec, 2018). After that, an increasing number of research were conducted to investigate entrepreneurial environments centered on individual traits such as knowledge and talent (Kiggundu, 2002). In addition to traits, entrepreneurial abilities were added to competences as constituents. In a prior study conducted in Indonesia, the talents and traits required to be a successful entrepreneur were analyzed. The results indicated that achievement was viewed as the most significant aspect for traits, while market awareness and originality were viewed as essential qualities for abilities (Ismail, Zain, & Zulihar, 2015).

Recently, it has been common knowledge that entrepreneurial qualities are essential for establishing a successful business. Therefore, the scope of entrepreneurial competencies should be expanded to include more dimensions. Kyndt and Baret sent a questionnaire to 34,968 entrepreneurs to determine their perspectives on entrepreneurial competencies (Kyndt & Baert, 2015). This study identified 12 competencies, including 1) planning for the future, 2) perseverance, 3) orientation toward learning, 4) market insight, 5) awareness of potential returns on investment, 6) seeing opportunities, 7) the ability to persuade, 8) independence, 9) decisiveness, 10) socially and environmentally responsible conduct, 11) building networks, and 12) self-awareness. In the meantime, Draksler and colleagues (Draksler & irec, 2018) revised the entrepreneurial competencies depicted in Figure 3 that were examined based on prior models indicating that seventeen characteristics should be incorporated into IAE education to increase entrepreneurial ambitions.

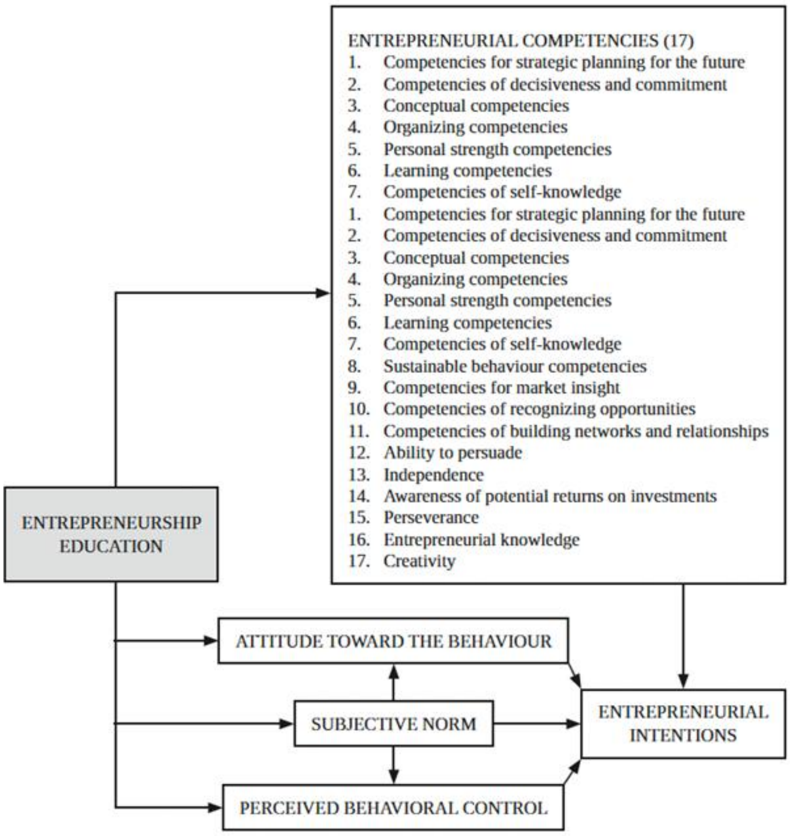

Figure 3 Updated Conceptual Research Model for Studying the Impact of Entrepreneurship (Draklser, 2018)

CONCLUSION

IAE education has exerted some effect on reducing the stress of work and encouraged the cultivation of entrepreneurship but little influence on innovative capacity. The innovation concepts from pupils indicated the dissociation from the real practical world. Their items faced failure in the marketing. Although student incubators give useful platform for practice, the existing management models are still not developed for Chinese society shown delayed traits. Sometimes, the successful students' projects are not equivalent to the wider market.

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THE PERFORMANCE MANAGEMENT THAT AFFECTS KNOWLEDGE WORKERS

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ABSTRACT

In recent years, with the rapid development of the knowledge economy, a series of innovation activities led by knowledge have rapidly become the most important activities in society, and knowledge innovation has become an important driving force for social development. As the core part of modern enterprise human resources, knowledge-based employees play a major role in promoting the innovation and development of enterprises. Therefore, the human resource management of modern enterprises needs to be effectively managed according to the work characteristics of knowledge-based employees. However, the problems of short-sighted performance management and neglect of the growth of knowledge-based employees in most enterprises need to be solved urgently. Reasonable performance management for knowledge-based employees plays an important role in improving the performance management efficiency of knowledge workers, improving the job satisfaction of knowledge workers, improving work efficiency and enhancing corporate identity.

Keywords: knowledge workers, performance appraisal, performance management

INTRODCTION

In a knowledge-based economy society, knowledge replaces capital, land and other materialized capital, and becomes the main driving force for economic and social development, while knowledge workers who rely on knowledge and skills to create wealth and value have become the key force to promote enterprise development. With the rapid development of the global knowledge economy, knowledge and talents are the core guarantee for enterprises to occupy the market and obtain profits. In order to further improve the development strength of the enterprise and improve the economic benefits, it is necessary to pay attention to the implementation of the human resource management mechanism. How to attract and retain the knowledge workers in short supply, how to fully stimulate the potential of employees, improve their enthusiasm for work, and create more benefits for the enterprise have become the key issues that enterprise managers must pay attention to.

This paper sorts out the relevant research results of knowledge workers and performance management, and takes the performance management of knowledge workers in the R&D department of the author's company as the research object, using questionnaires and interviews to study the implementation and satisfaction of their performance management plans. The survey found that the current performance management scheme of enterprises still adopts a relatively traditional short-term performance management model based on results. For knowledge workers, this method has problems such as insufficient pertinence in performance management and neglect of employee growth. According to the survey results, the idea of optimizing performance management is put forward. Enterprises need to carry out performance management according to the work characteristics of knowledge workers, and combine the development concept of "people-oriented" to continuously motivate employees to learn and develop, improve the performance management efficiency of knowledge workers, and enhance knowledge. Improve employee job satisfaction, improve work efficiency and enhance corporate identity. In order to achieve more efficient and scientific human resource management, improve the enthusiasm and efficiency of knowledge workers, and promote enterprises to win better development space and prospects.

LITERATURE REVIEW

2.1 Knowledge workers

2.1.1 The concept of knowledge workers

The famous management scientist Peter F. Drucker put forward the concept of knowledge workers for the first time in the world. Drucker believes that knowledge workers refer to those who master concepts and symbols and use knowledge and information to complete work. In 1996, scholar Davenport believed that knowledge workers prefer more developmental and challenging work content, and will continue to pursue their own knowledge and career progress. Knowledge workers have a strong creative spirit and have a strong ability to use knowledge; in 2000, Francis Heriot proposed that the core difference between knowledge workers and other employees is the difference in the level of brain use; the internationally renowned consulting company AXA through the staff After a large number of analysis, it is believed that the so-called knowledge workers need to complete their work through intellectual dedication and active creativity, usually covering professionals who are proficient in a certain field, senior technicians and middle-level executives, etc., and have creative Spiritual, authoritative and other characteristics;

In China, researchers have done a lot of research on knowledge workers. Currently, there are three main ways to define knowledge workers. a. Position definition method, this method is based on the characteristics of the job position, and believes that the core of knowledge workers is that their job position has a specific knowledge, that is, employees in positions engaged in mental work and positions that require creative work are knowledgeable. type employees. b. Educational qualification method, this method determines the primary prerequisite for knowledge workers is to have knowledge and education level. c. Job characteristic definition method. Starting from the analysis of the characteristics of the work content of the employees of the enterprise, considering the continuity and integrity of the employee's work process, whether the work requires a strong knowledge reserve and basic creative ability to determine the knowledge-based employee. The above definition methods are all one-sided, and no consensus has been given so far. After a comprehensive analysis, I believe that knowledge workers are mental workers with professional skills, management skills and higher education levels. In addition to using their own innovative thinking and knowledge reserves to work, knowledge workers pay special attention to the organization and Enterprises create material and immaterial value, which is a talent resource that can be continuously optimized in practice (Ye Wentao, 2021).

2.1.2 Characteristics of knowledge-based employees

After sorting out, analyzing and summarizing the research results of previous scholars, it can be roughly concluded that the more typical characteristics of knowledge workers are mainly reflected in:

a. Possess strong professional basic knowledge, strong work autonomy, self-guidance and self-management. Knowledge workers often have a good educational background, and have developed a strong self-learning ability. They have relatively professional business skills and theoretical foundations in one or some fields, and can handle related business work at a relatively high level. In the work, the goal is clear, the thinking is clear, the subjective initiative can be fully exerted, and the business skills can be used to continuously create more impressive performance. When encountering problems, knowledge workers are often better at active learning and thinking, are good at coping with new challenges, have a strong sense of responsibility, and can realize their own value through their constantly improving business literacy.

b. Ability to create high-value innovative labor outcomes. The work engaged in by knowledge workers is often not something that can be done by mechanical labor. They need to put more creativity into coping and solving work problems. Knowledge workers are often able to discover more creative achievements, and it is precisely these labors. The accumulation of achievements constitutes a very important core competitiveness of enterprises in the market.

c. Pay attention to career development, skill improvement and innovation, and dare to try creative and challenging work. Knowledge workers tend to maintain a good habit of continuous learning and active self-improvement. This makes knowledge workers more expecting to realize their own value through continuous efforts at work. They are not satisfied with long-term repetitive work and are not afraid of complex work, but take the initiative to accept new challenges and look forward to continuous self-improvement through challenges and learning, thereby creating more value. It can be seen from this that knowledge workers are usually strong in the realization of self-worth. They can create more value for the enterprise, and at the same time, they also put forward higher requirements for the recognition of personal contribution by the enterprise.

d. Diversified levels of needs. Knowledge workers have great differences in organizational value contribution, and have relatively high expectations for value return. The internal demand model of knowledge workers is not simply from low-level to high-level needs, but not only has traditional low-level needs, but also has high-level needs that are different from general groups, that is, mixed needs. Material treatment seems to be a low-level need, but as a synonym for personal achievement and prestige, it actually helps to meet personal achievement needs, and thus is transformed into the content of high-level self-realization needs. Therefore, when the positions provided by the organization lack sufficient attractiveness and flexibility, they often lack the motivation to innovate, and even have the willingness to leave, which will cause a large brain drain and affect the formation and availability of the organization's core competitiveness. continuous development.

e. It is impossible to monitor the work process and it is difficult to quantify the results of labor. The traditional "mechanical" work results can be quantitatively assessed, but the work done by knowledge workers is often mental work, and the results of labor are usually the collective results of the team. The work process is often a process of analysis, thinking, and creation, and there is no fixed work process, so the results of labor are difficult to quantify, and the evaluation is difficult (Tang Yuqun, 2021).

2.2 Related concepts of performance management

2.2.1 Performance

Performance, a management concept, is a relatively broad definition. Based on different dimensions, scholars engaged in performance theory research have formed different understandings of this concept: some scholars believe that performance lies in the process. Process, emphasizing the guiding role of work behavior and process on performance, that is, performance is the performance of work behavior: some scholars believe that performance should be result-oriented, focusing on the final output of the work rather than emphasizing the work process; some scholars believe that the focus of performance In examining the quality of employees, we should pay more attention to the potential and comprehensive quality of employees, which cover skills, accomplishments, achievements and many other aspects. Different people or units have different understandings of performance. Experts in relevant fields in my country believe that performance refers to the labor and results obtained by organizational employees with corresponding work ability or potential in the process of working and taking responsibility for their positions. In essence, the so-called performance refers to the efficiency, benefit, effectiveness, achievement and other results obtained by an organization or an individual in an organization by taking certain actions around the organization's goals within a specific period of time.

2.2.2 Performance appraisal

The so-called performance appraisal refers to an evaluation of the corresponding work performed by employees in different positions. The performance appraisal of employees is an important part of the human resources management of enterprises, and it is also an important means for enterprises to manage and motivate employees. Enterprise managers usually hope that performance appraisal can better motivate employees' work initiative and enthusiasm, thereby contributing to the smooth realization of enterprise business goals.

Well-known expert Robert B. Maddur believes that performance appraisal actually creates an opportunity for task assigners and implementers to communicate and communicate with each other, and promotes the close relationship between two individuals with common goals. Experts and scholars in our country believe that performance appraisal can effectively and objectively evaluate the extent to which employees of an organization actually complete tasks in their jobs, and provide it to the organization's human resources department as a basis, so as to regularly, transparently and scientifically judge the work of organizational employees’ ability.

The process and standards of performance appraisal should be as scientific and reasonable as possible, and a reasonable evaluation should be made for the labor paid by employees and the results obtained. It can be seen from this that the process of performance appraisal is systematic to a certain extent, and the contents involved include business objectives, work responsibilities, evaluation indicators, evaluation methods and many other aspects. The ultimate purpose of performance appraisal is to promote the enterprise to achieve more operating profits, thereby enhancing the comprehensive competitiveness of the enterprise, so that the working ability of employees can be better reflected and reasonably evaluated.

2.2.3 Performance Management

Performance management belongs to the main core content of the human resources management system. It is an important content for improving the daily work efficiency and guaranteeing work ability of enterprise personnel. It is also a guarantee for promoting the achievement of work goals, motivating personnel and promoting growth. Performance management is the gradual evolution of performance evaluation, and performance appraisal is a key link in the process of performance management. In the 1880s, performance management was applied by foreign companies. It was initially based on the overall operating conditions of the company, and the focus of performance management was the operating cost of the company. In the 1980s, the focus of performance management gradually shifted to non-financial data, such as: strategic indicators, customer satisfaction, innovation capabilities, etc.

The so-called performance management refers to the formulation of performance plans, performance communication, performance appraisal and evaluation, and the application of performance results that managers and employees at all levels participate in in order to achieve organizational goals. Refactoring the closed-loop loop boost of this process. Among them, the performance plan is the basic starting point of management work. Through the performance plan, clear management goals are formulated, work guidance is determined, and a performance guidance plan with job adaptability is formed, and the goal plan is used to drive job selection and job content guarantee. Performance management process supervision and process control are the main body of performance management work. In the performance management process, according to the working status of employees, under the guidance of planned goals, immediate communication and coordination are conducted to supervise work content and work results. Performance management finally needs to feedback and apply the results of performance appraisal, use incentives to stimulate employees' enthusiasm for work, adjust their work status, form work optimization plans, and continuously improve the performance of individuals, departments and organizations (Li Jingmei, 2020).

RESEARCH METHODS

The current situation of knowledge-based employee performance management in the author's company

The company I work for is a high-tech company that provides software and information services. Under the background of the development of the era of big data, it is currently in an important development period. In order to keep up with the development of the times in the increasingly fierce market competition environment, only by striving to improve the company's performance level and further refining the company's R&D capabilities and output efficiency, can we succeed in the current state of coexistence of risks and opportunities. At present, the positions of the company's knowledge workers are concentrated in management positions, design and R&D positions. This paper takes employees in design and R&D positions (design and R&D department) as the main research object. Fully demonstrate its leading and key role in the enterprise.

3.1 Basic information of R&D personnel

The R&D center personnel are mainly responsible for the development, design and new business incubation of the company's main business products. The team currently has 67 people, including 24 women and 43 men. More than 90% of the staff have a bachelor's degree or above, and 62% 12% of them have a master's degree, and 12% have a doctorate degree. The age of these people and their working years in the company are as follows:

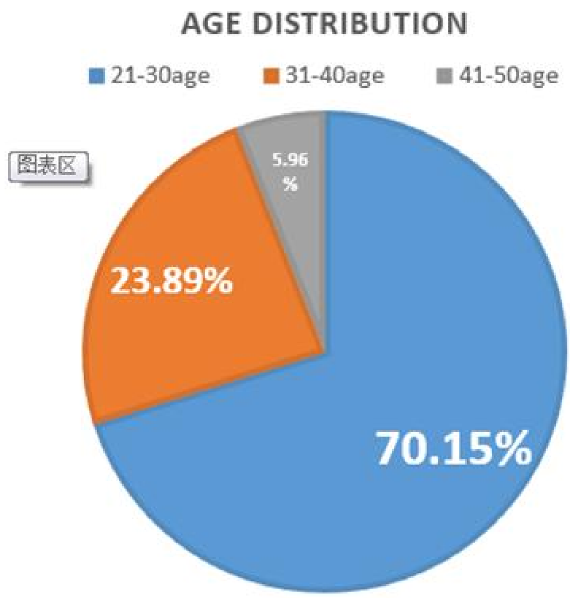

Figure 1. Age distribution of employees

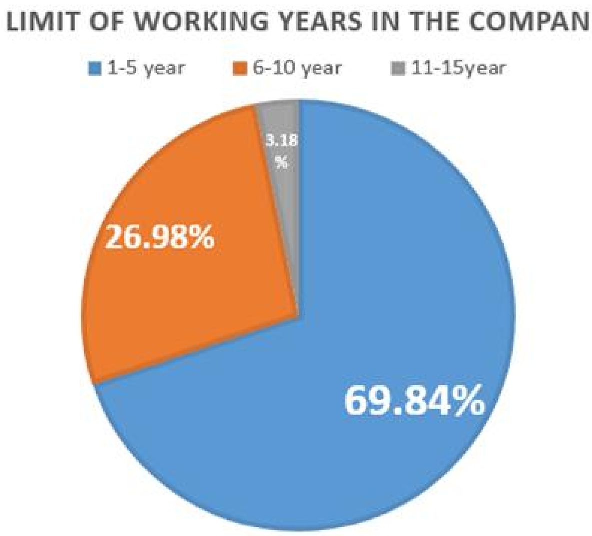

Figure 2. Limit of working years in the company

3.2 Survey results for R&D personnel

The company's current performance appraisal is a task-oriented appraisal system, and all employees are assessed on a monthly basis. The design and R&D department obtains the annual performance plan issued by the company, and then the head of the department checks the indicators to formulate the employee's performance plan mainly based on the employee's job responsibilities and key work tasks, including the content and standards of performance management. Employee performance appraisal results are used to calculate monthly performance pay and annual performance pay for employees. The author conducted a questionnaire survey on the employees of the design and development department, and obtained the following survey results based on the results of the employee interviews.

	Question	Recognized	Disagree
Overall recognition of performance management	Your understanding of the company's performance management regulations:	40.30%	59.70%
	Your agree with the integrity of the company's performance management system	32.80%	67.20%
	Your recognition of the implementation of the performance management system	37.30%	62.70%
	Your satisfaction with your company's performance management work	44.80%	55.20%
Performance Plan Recognition	How reasonable do you think the content and formation process of the performance plan are	25.40%	74.60%
	How well the performance plan aligns with the company's development goals	29.90%	70.10%
Performance appraisal indicators Acceptance	How clear are you about your assessment indicators?	65.70%	34.30%
	What do you think is the reasonableness of the assessment indicators set for your position?	52.20%	47.80%
Recognition of performance appraisal implementation	Do you think the form of performance appraisal is in line with the current work practice?	55.20%	44.80%
	Do you think performance appraisals reflect actual job performance or ability	47.80%	52.20%
Performance Incentive Recognition	Do you think the incentive results are in line with your actual work?	31.30%	68.70%
	Do you think the incentive results are as expected?	22.40%	77.60%
performance feedback recognitio	Your acceptance of management's communication on performance issues	14.90%	85.10%
	The extent to which you are involved in the development of your own performance indicators	38.80%	61.20%

Figure 3. Questionnaire survey and interview results

3.3 Problems existing in company performance management

3.3.1 The formulation of the performance plan did not follow the principle of full participation, and the assessment objectives lacked comprehensiveness

At present, the performance plan of R&D personnel is determined solely by their immediate superiors according to the organization's performance objectives. The formulation of assessment objectives ignores the differences in the work of R&D personnel, resulting in different work saturation of R&D personnel. On the other hand, the assessment objectives only include the level of R&D tasks, which cannot comprehensively reflect the entire work situation of R&D personnel, and lack evaluation of their work ability and work attitude. The lack of this part of the assessment objectives has led many R&D personnel to have great opinions on the fairness of the performance assessment, which will gradually lead to the loss of creativity and initiative of the R&D personnel, which will directly affect the improvement of the R&D personnel's work ability and the cultivation of work enthusiasm. To a certain extent, it affects the company's sense of belonging and loyalty of R&D personnel, and also causes a certain degree of personnel loss.

3.3.2 The objectivity of performance appraisal evaluation is not strong, and the comprehensiveness is insufficient.

At present, the performance appraisal plan for R&D personnel is completely determined by their immediate superiors, and the appraisal results are based on a rating system. The assessment and rating results of R&D personnel are subjectively assessed by their immediate superiors. This overly subjective performance assessment method directly affects the objectivity and authenticity of the performance assessment results. At present, after the performance appraisal work for R&D personnel is over, the results of the appraisal are simply notified, and there is no in-depth communication with the R&D personnel based on the performance appraisal results. Therefore, the company's performance appraisal work is a mere formality and loses its proper meaning.

3.3.3 Lack of performance coaching

At present, in the performance coaching for R&D personnel, managers simply follow up the progress of their work tasks, and lack help and guidance for R&D personnel when they encounter problems. At present, when R&D personnel encounter problems in the work process, most of them solve them through self-learning or mutual assistance, which is less efficient.

3.3.4 The scope of use of performance appraisal results is single

At present, the company's performance appraisal results are mainly related to salary. The performance appraisal results of each R&D personnel will directly affect the salary payment amount of the R&D personnel for the month and year-end bonuses. There is no correlation between the assessment and human resources management. The purpose is to honor the year-end performance award, without paying attention to their own personal development and training effects, which has a negative effect on the overall performance improvement of the company. The reality is that every knowledge worker has different needs and concerns, and so will motivational needs. Incentive programs linked to compensation alone cannot meet people's diverse needs. The company currently lacks relevant systems and regulations for employee job promotion, and has not formulated a training plan in line with the company's strategic goals. Therefore, on the basis of recognizing and respecting individual differences, it is necessary to effectively meet the needs of employees, select appropriate incentive mechanisms and methods according to individual preferences, and implement differentiated incentive plans.

FINDINGS

Knowledge-based employee performance management optimization ideas

4.1 Participate in all staff and formulate scientific performance appraisal goals

The management department should arrange for management personnel to conduct in-depth research on employees, and verify and inspect the work content and workload of each R&D personnel. According to the actual situation and the work content of the assessment object, comprehensively and reasonably formulate performance assessment objectives, determine the assessment basis for performance assessment objectives, and select a reasonable performance assessment cycle to ensure the fairness and scientificity of the assessment system. Avoid conflicts among employees due to uneven performance distribution. In the process of setting assessment goals, the department head and all employees of the department should conduct comprehensive communication on performance-related issues. Through communication, employees can clarify performance goals and reach consensus on performance plans.

4.2 Apply the results of performance appraisal in an all-round way to improve the incentive effect

Knowledge workers have obvious and diverse growth needs. Enterprises should combine performance management with personnel training and development, promotion, rewards and punishments and other related work, and apply performance management results to specific employee incentive plans. For different types of performance appraisal results, set different incentive methods, including performance salary, cash incentives, training plans, benefits and other methods. In particular, a corresponding training plan should be set according to the results of the performance appraisal, and targeted staff training should be carried out. The training plan should not only consider the ability improvement of employees, but also consider the personal long-term development plan, improve the work ability and quality level of employees, and realize the all-round growth of employees.

4.3 Strengthen performance coaching

From the perspective of the process of enterprise performance management, any part of it is inseparable from performance communication; from the perspective of the performance management system as a whole, performance coaching is the lifeline of the system, conveying managers' expectations and attitudes towards employee performance.

Performance coaching is a process in which managers continuously give evaluation, feedback and guidance to employees in the process of implementing performance plans. The performance indicator system should be the core content of performance coaching. Relevant managers should also conduct performance coaching and communication on the achievement of performance appraisal goals, which can not only achieve the purpose of checking the progress of work, but also avoid the risk of failing to achieve performance goals. In addition, it should help employees discover their own problems in time through continuous feedback, and then help employees to make improvements in a timely manner, and continuously help the assessment objects to improve their performance levels and achieve high performance goals.

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THE INFLUENCE OF EDUCATIONAL LOYALTY ON EDUCATORS IN EDUCATIONAL MANAGEMENT

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ABSTRACT

Honesty, honesty and trust. "Shuowen" says: "people believe what they say." Confucius listed "trust" as one of the "four major subjects" (literature, behavior, loyalty and faith) and "five norms" (courtesy, generosity, trust, sensitivity and benefit) in educating students, emphasizing that "people should be faithful to their words" and "people should be faithful to their words".

Loyalty, as a moral code, originally means being sincere and kind, doing our best, and then being loyal to others, monarchs and countries. For teaching scholars, they should be loyal to criticism, faith and theory.

As early as 5000 years before the development of China's history, the ancestors of the Chinese people were loyal and there were many allusions and legends about loyalty. In fact, it is nothing but to show the world the importance of loyalty in life. It shows that loyalty is not only for a person or an industry, but also a bottom line and root of a cultural belief of the whole China and even the Chinese nation at that time.

Why do we study educational loyalty science? Because we find in our life that because subjective thoughts exist in science and humanities education, we give many educated people the wrong guidance, making them more and more lost in the field of an established model. It is because some educators, who have no loyalty, no responsibility to mankind and society, have caused serious adverse consequences.

This paper uses the independent variable module research method to understand whether teachers have partly understood loyalty theory in education, and also uses traditional methodology and statistical applications to confirm that students are indeed the most trusted scientific content through teacher teaching.

In our study, we found that in many cities in China, especially small and medium-sized cities, few teachers from primary school to university had any understanding and involvement of loyalty to education. Students can always only learn about science from the teacher's mouth and from general books. They think that the teacher's professor is the most important and the most real, but, the teacher often violates the education process of some science and knowledge taught to the students, which is a disaster in a sense!

Educational practice produces truth and dialectics produces sincerity, which is also the basic principle of educators.

Keywords: Educational loyalty, Materialistic dialectics,Benefit by mutual discussion,work and pull together，Loyalty practice.

INTRODUCTION

Love and dedication is a kind of virtue, self-cultivation, cultivation and realm. Love and dedication are the basic requirements of the society for people engaged in various professions, and also the fundamental requirements for teachers. Whether there is a persistent spirit and whether they can be dedicated and love students reflects a teacher's ideological level, mental state, ambition and personality.

1.1 Current situation analysis

There are many professions in the society. The profession of teacher is the most sacred and respected. It is regrettable that many teachers in real life lack this kind of mind and dedication:

Some teachers only think about their own small world all day, blindly compare, and do not fundamentally focus on students and teaching; Some teachers muddle along, when a monk bumps the clock one day, sending off a batch of students is a batch; There are also teachers who are ambitious and always want to make achievements, but are not willing to do something down-to-earth... These teachers are not only deplorable, exasperating, but also pathetic and pathetic!

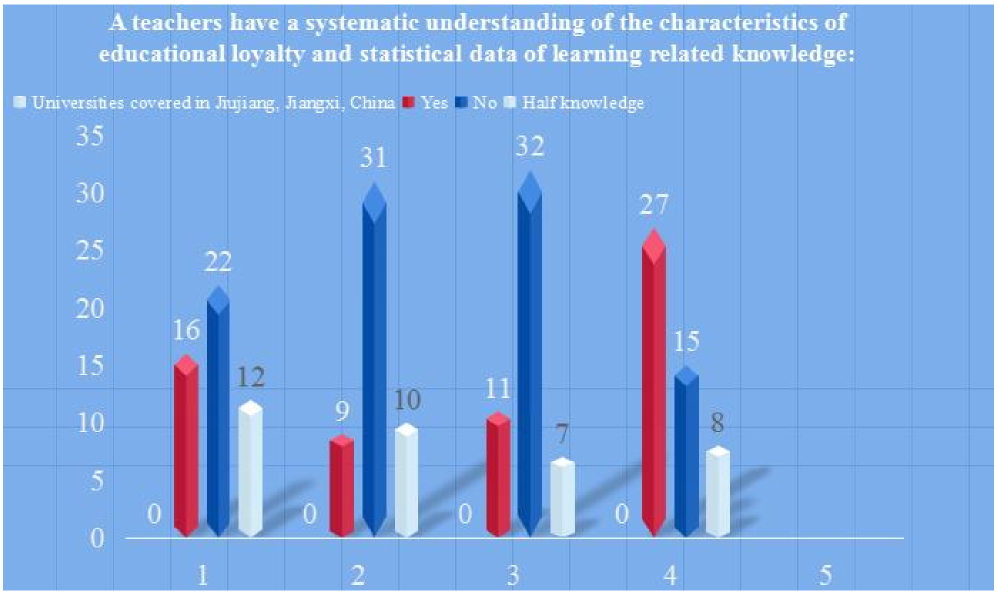
1.1.1 Loyalty to education is the premise of work

Just think how can you do a good job if you don't work hard and enjoy teaching, lose your motivation and enthusiasm, and even regard your efforts as a painful burden? As teachers, first, they should be loyal to their current posts and their schools. At the same time, he should also be loyal to his subjects, students and parents. Based on their own work, they should work hard in a down-to-earth manner. In their own work practice, they should combine initiative with solid work, and combine work enthusiasm with scientific attitude.

A teacher who loves and devotes himself to education must have a deep understanding of the importance of the profession of teacher. A teacher with a sense of occupation will first associate his profession with the development of the country and the revitalization of the nation. Realize that their profession is not only teaching, but also cultivating new people for the country. The sense of occupation makes teachers clear that they are a person who accepts social trust and exerts specific influence on students' body and mind. In the eyes of contemporary students, the image of teachers is characterized by "love and dedication". The simple words "love and dedication" should not only be understood as a high sounding fashionable slogan, but also a requirement.Now that we have become teachers and engaged in educating people, this should be the minimum code of conduct for each of us.

Whether teachers have a systematic understanding of the characteristics of educational loyalty and statistical data of learning related knowledge:

Note: the total number of people collecting data is 200, with an average of 50 people per college forming a data table.



From the above data, we can see that local institutions of higher learning or teaching stakeholders have never known or heard of the relevant theories or concepts of educational loyalty, which has cast an unpredictable barrier to educational loyalty. How can our educators have a materialistic and dialectical point of view to teach what they teach? Or will teachers do academic teaching with personal colors or individualism or ideology when teaching? This is unknown!

HOW TO BE LOYAL TO EDUCATION

Teachers' professionalism and professional ability determine the quality of education and teaching. So, how can we love our posts and work hard?

2.1.1 Establish a lofty sense of enterprise

In order to exert the influence of education, teachers should first pour love into students and win their respect and trust. In traditional education, teachers only regard students as the object of "shaping", and students accept them passively, which obviously violates the objective law. This requires teachers to create a harmonious and loose educational atmosphere for students as much as possible, respect students' personality and differences, and make every student get equal, healthy and active development.

A、Unswerving determination and hard work；

A strong sense of enterprise will help teachers have clear goals and firm beliefs, and will also enable us to overcome various difficulties. In many places, teachers are compared to "Gardeners". Their loyal protection and painstaking irrigation are like the sunshine, which is a piece of bright hope.

B、Work hard and conscientiously；

Irish poet Yeats said that "education is not filling a bucket of water, but lighting a fire". This requires teachers to work hard in the face of complicated work, work hard, not afraid of fatigue, do a good job wholeheartedly, and never give up until they reach their goals. We should not only teach children knowledge, but also use hard work and sweat to ignite the fire of children's wisdom.

C、Keep forging ahead and be willing to be a ladder；

With the continuous change of work conditions, new problems continue to emerge, which need to be studied, overcome and explored, especially for the situation of the incoming students. We need to find better solutions, so that the students can continue to grow in our hard work. After a few years, the new people needed by a generation of society will enter the society.

2.1.2 High sense of responsibility

A strong sense of responsibility for educational work is a noble emotion of professional ethics, as well as a concrete embodiment of the principle of teachers' morality and style of work. Only when a person feels that his profession has unshirkable responsibilities to the society and the people will he go all out to fight. The author believes that the responsibility of teachers has three aspects.

A. Social responsibility；

Mr. Tao Xingzhi, a famous educator, said that "if teachers control the destiny of young people, they will control the destiny of the nation and mankind". We are cultivating useful talents for the country and the society. At present, the national modernization drive is in full swing. We need to use our hard work to continuously transfer talents. A survey conducted by the social investigation center of China Youth Daily and Sohu Education Channel shows that 79% of the public believe that teachers should have more moral responsibilities than people of other professions.

B.Responsible to parents；

Parents give their children to schools and teachers in the hope that school teachers can cultivate their children into talents and help them learn all kinds of knowledge. Parents hope that teachers can do things they can't do. Every child is a little angel in the family, not some students with uneven intelligence. Parents have high hopes for their children. As a teacher, we should discover the potential of each student and cultivate them into the people needed by the society.

C. Responsible to students；

C、Mr. Yeshengtao once said, "whoever does not love students cannot educate them well." At the time of the great disaster, teachers in Wenchuan, such as tanqianqiu, wuzhonghong and zhangmiya, did not choose to escape or retreat: they did not hesitate to use their own flesh and blood to block the collapsed concrete slab and protect the students in their arms; With their open arms, firmly protect the students under the desk; Some teachers have died in the ruins, but still cling to their students.They show great love for teachers in their ordinary posts and interpret the connotation of teachers in the new era to the world. They used their own lives to compose the heroic songs of triumph of the people's teachers.

A young female teacher who graduated from a normal university told the reporter: "When I became a teacher, I found that the children's thirst for knowledge and the parents' trust can easily make people feel sacred and noble, which I can't understand in other jobs. ."At first, I couldn't understand their enthusiasm. Later, I slowly realized that parents' expectations for me were no less than their children. Children are their hope, and we are their hope (Speech by the president of Jiujiang Vocational University at the Symposium of all faculty and workers, October 20, 2021).

2.1.3 The enterprising spirit of pursuing success

We should constantly improve ourselves through learning, so that we can work skillfully, strive to be the first to create excellence and produce achievements in our own posts, so as to be full of a sense of achievement. You can't be a monk every day. You should always bear in mind the great responsibility of teaching and educating people.

2.1.4 Assiduous research

As for a teacher, to respect education, he should devote himself to business research, not be impetuous, not eager for quick success and instant benefit, endure loneliness and withstand temptation. We should not only have the ambition of "sharpening a sword in ten years", but also have the inside story of "sitting on the bench for ten years without writing an empty article". Today's society is a knowledge society, a learning society, and knowledge updating is accelerating.They should have profound professional knowledge, high humanistic quality, rich and diverse teaching methods and innovative teaching consciousness.

Therefore, teachers should establish the concept of lifelong students, and really master the ability of teaching and educating people with broad and solid professional knowledge and professional skills, especially the necessary modern educational means. Actively participate in educational research, discover problems, analyze problems, and explore new ways and methods to solve problems in teaching practice, so as to achieve the goal of cultivating students with innovative spirit and practical ability through teachers' creative work.

2.1.5 Loyalty to the country’s educational

What is loyalty to national education？ Loyalty to the country's educational cause should not be talked about, but should be put into practice. Dedication - it will make you consciously aware of your professional moral responsibility at any time, at any place and in any state: it will make you dutifully and meticulously treat any matter and any student in education by virtue of hidden conscious activities; It will also let you stay away from the mediocrity and become a successful educator![Ms. Yun XIA (2020) Written in The Book Of *"Education industrialization"* Some people in the education sector will instill their ideas into students without thinking, thus harming others and themselves (p. 1152).

In a great era, we must practice our internal skills, improve our self-cultivation, be firm in faith, loyal to education, pay attention to reality, seek truth from facts, have the courage to take on responsibilities, be good at doing things, strictly abide by the rules, do not exceed the bottom line, study hard, practice hard, enhance our skills, strive to become a loyal, disciplined and diligent teacher, and live up to the expectations and great trust of the country and the people in education.

2.1.6 Firm faith and loyalty to educantion

He has not regretted his death. Young teachers must be firm in faith, loyal to the country and loyal to the essence of education.

Whether they can be loyal to the country depends on whether they can establish a patriotic and professional attitude, and consciously keep a high degree of consistency with the belief of the national educational foundation in ideology and action. Ideals and beliefs are lifelong issues, and loyalty to education is the quality of teachers.

To believe and keep faith for a lifetime, it is not a one-time event, but a lifetime. We must be single-minded, consistent, consistent, and consistent. We must not change our mind, change our will, or destroy our integrity at any time and under any circumstances.Young teachers should consciously strengthen their political education experience, constantly improve their academic comprehensive judgment, educational understanding and educational execution, constantly build a solid foundation of faith, supplement the spiritual calcium, stabilize the rudder of thought, temper their sincere loyalty to the country and education itself with firm ideals and beliefs, and contribute to the country's education.

We should proceed from the reality of schools, students and teachers, keep our eyes down and our feet down, and often dive into the front line of teaching. We should not only "enter" the teachers and students, but also "reach" the teachers and students.

2.1.7 Have the courage to take on responsibilities

Have the courage to take on responsibilities and be good at doing things, "set up a mind for the world and a life for the people". Young cadres must have the courage to take on responsibilities and be good at doing things.

The people's teachers of the country put everyone in various posts to act as officers, not enjoy happiness. There is so much work to do in reform, development and stability that we must act as if we want to do a good job.

Bearing and acting are one body. Inaction is not bearing. If there is an act, there must be a bearing. There are always risks in doing things. It is precisely because there are risks that we need to take on. We must not seek refuge or shirk responsibility for anything that is beneficial to the country and the people, but do it boldly and resolutely. [Mr. Sheng yuan Zhang (2018) Written in The Book Of <<The Chinese talents in bondage education>>Some teachers can not change the students' thoughts, do not impose, to use wisdom and theoretical foundation to persuade the students.(p. 372).]We should have the courage to take responsibility and the wisdom to solve problems. We should be brave to take responsibility and good at acting with practical actions, so as to truly lay a solid foundation for students' lifelong development.

CONCLUSION

Strictly abide by discipline and do not exceed the bottom line "knowing awe and keeping fear". If young cadres want to "be able to be of great use and shoulder heavy responsibilities", they must strictly observe discipline and not exceed the bottom line. Only when you have fear in your heart can you say something and stop doing something.

3.1.1 Conclusion of educational loyalty

To be loyal to educational scholarship, we must resolutely and strictly abide by the discipline of education and stand up to the rules. Whether they can be loyal to educational scholarship depends on whether they can strictly abide by materialistic education and Dialectical Views, and be "understanding people" and "honest people" in educational undertakings.

If you can't go to school, ask questions if you don't understand. Academically, you should have the spirit of hard study. Young teachers must know how to be awed, guard against fear, keep to the bottom line, learn from higher education as teachers, and behave properly. Young teachers should consciously carry out academic integrity, not for their own point of view, not for their own academic theory, to "stand up" teachers' ethics and style, and not touch the "electrified high-voltage line" of teachers' ethics and style.

3.1.2 Philosophical reasoning

Learn and practice hard to improve your skills.[Chinese ancient books (The year is unknown)say "You can make diamond and specialize in porcelain.".] If the young teachers want to be able to be of great use and shoulder heavy responsibilities, they must study hard and improve their skills.

On the new journey, young cadres should not only have a broad shoulder to shoulder, but also have the real ability to accomplish things. They should have a sense of crisis that their skills are not enough. They should show their actions with excellent skills and live up to their mission.

Only by never being complacent and never slacking off, can we strengthen our study, make up lessons and improve our ability. When the severe situation and struggle tasks are in front of us, can we achieve the goal of coming at the call, being able to fight and winning the battle. Unremittingly strengthen theoretical cultivation, persist in reading original works, learning original texts, understanding principles, go deep, go real, go to the heart, and build a solid theoretical foundation;

Consciously make up for the lack of knowledge, especially the Party member teachers who "can't do porcelain work without diamond"; Teachers should practice basic skills hard to improve their teaching level; Be able to make solid use of the deep integration of information technology and subject teaching; Vigorously carry forward the spirit of "squeezing" and "drilling", develop the habit of persistent learning, and adapt to the requirements of new courses and new examination contents.

3.1.3 Education and philosophy are insparable

Under the new situation, the young teachers should strengthen the training of academic faith, constantly improve the ability of materialism and dialectics, make up for their shortcomings, expand their skills, improve their internal skills, improve their self-cultivation, stimulate their energy, aggressiveness and passion, take their loyalty to academia and the benefit of the people as the fundamental task, always maintain the true colors of young educators, and be a loyal educational successor of the glorious tradition and fine style of China, In the new era and new journey, we should live up to our youth, seize the day, work hard, and make contributions.

Only when a teacher loves his post and works hard, can he have a lofty dedication and a high sense of responsibility, and infect the students with a diligent attitude and meticulous spirit; Only when we love our posts and work hard, can we pursue new knowledge with indomitable perseverance, so as to conquer students with our own knowledge and wisdom; Only when we love our posts and work hard, can we "always care and pay attention step by step".

In the process of education, we will use a highly serious and responsible attitude, teach by example, and use the power of an example to regulate students. That is, the so-called "close to their teachers and believe in their Tao".

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INNOVATIVE MANAGEMENT OF ONLINE EDUCATION DEVELOPMENT BASED ON STUDENTS' PERCEPTIONS OF ONLINE EDUCATION

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ABSTRACT

Due to various factors, it is always difficult for schools to carry out teaching on the right track. The biggest factor is COVID-19, but this does not stop students from learning, so the development of online teaching is getting stronger and stronger. Since online education is faced with students and parents, their opinions and opinions are particularly important. These opinions can help correct the shortcomings of online education, develop the advantages, and make the system more and more complete. This article is an extension of the innovative management of online education based on some suggestions and opinions of students and parents.

Keywords: Online education; objective view; system extension

INTRODUCTION

1.1 Research Background

In primitive society, the mainstream of education is small and personalized education. After the industrial society, the teaching content was divided into different subjects, and different courses were offered according to the class, and then unified teaching was carried out. This teaching method greatly improves the coverage of education, but loses the advantages of personalized teaching (Zhang Dongmin1 et al, 2019). It can be said that the internetization of education, to a certain extent, has realized the individuation and high coverage of education. The development of online education in China can be divided into the following stages :1. The development of online education in China. Early stages: From the late 1990s to 2005, when the Internet was in its infancy in China, the online education experience was very poor.

The second is to explore the survival stage. From 2006 to 2012, network bandwidth services were improved, online education video courseware became the mainstream, and the enterprise model was being explored (Jiang Huifeng et al.2021). Third, rapid growth stage: From 2013 to 2017, the technological upgrading of the Internet and mobile Internet provided space for the development of online education. Since 2018, the integration of market resources, technological progress and service upgrading have driven the continuous innovation of service mode. At the same time, the market competition is fierce and the product system is mature. In addition, the epidemic has forced the teaching scene from offline to online, which has changed users' learning habits to some extent. The rapid growth of industry penetration rate has greatly promoted the development of online education industry. It is reported that the number of online MOOCs has increased to 32,000, with nearly 500 million students taking MOOCs and 140 million students receiving MOOCs credits. "Internet + Education" and "cloud classroom" have more and more obvious educational and teaching advantages in terms of crossing time and space and education equity. Modern information technology has been fully introduced into the teaching-learning process, enriching new educational formats and services(Zhang Dongmin1 et al, 2019).

Compared with traditional offline education, online education is no longer constrained by time and place, making learning ubiquitous. In the wake of the COVID-19 outbreak, online learning has ensured the health of teachers and students while keeping students of all ages in school across the country, which is unprecedented in the history of education in our country. However, while making breakthrough progress, online education also exposed many problems.

1.2 Potential Problem

2.1 Question of Reality

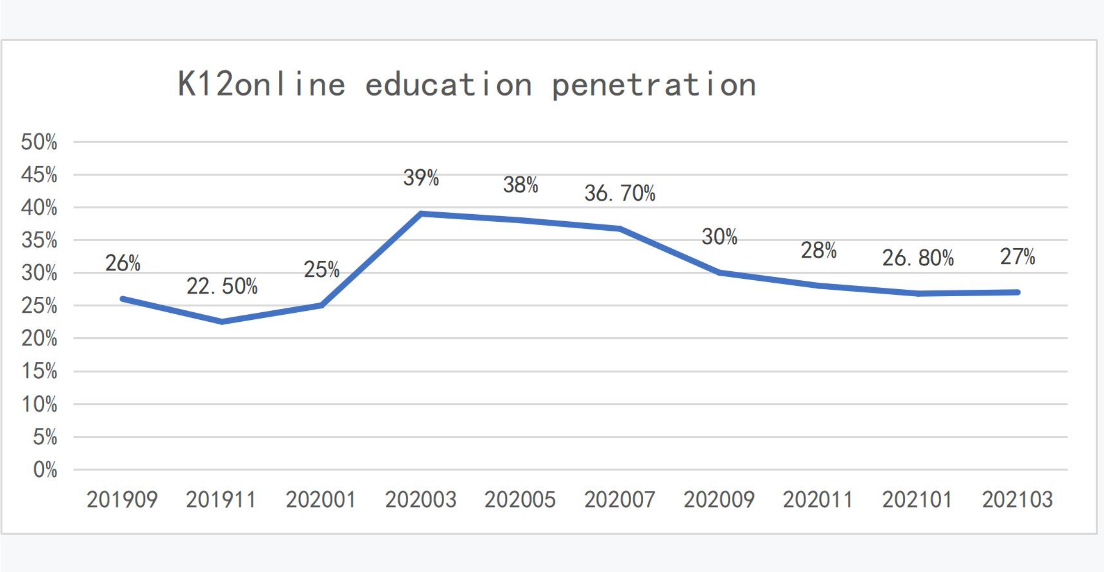
First of all, online education has put forward new demands on the comprehensive abilities of both students and teachers. For individual students, in the face-to-face online education system, teachers play a more dominant role, and students are more passive to receive knowledge, so the differences of individual students' abilities are not so obvious. However, online education places students in a brand new education environment, which is more able to test students' comprehensive ability and their real learning level (Chen Zongwen et al,2020). In order to adapt to this new education system, students need to be able to control themselves and learn independently. However, in practice, many students are easily distracted and lack self-control in the learning process because teachers in online education cannot fully supervise students and it is not as interactive as offline education. In addition, the shift from offline education to online education is actually a shift in the focus of education, which requires each student to adjust and adjust timely according to their own learning situation. However, there are still many students whose cognitive system has not been completely constructed, unable to recognize their own goals and needs, and it is difficult to achieve independent learning. Digital control for individual teacher of online education in our country, the online education form of education, the separation of teaching and learning how to use the information technology teaching platform, how to make use of network resources to design good teaching plan, in a timely manner after completion of teaching how to understand the students' learning situation, continue to provide different levels of students of different degree of deep content, In this way, all students can achieve balanced development. All of the above problems are new problems put forward by online education for teachers.

Network education has fundamentally changed the level and structure of education with its brand-new teaching space-time environment and educational concept. Distance online education has long been seen as a friendly alternative to traditional education. Through online learning, young scholars can easily find learning opportunities and resources. Network education is a new teaching technology and cognitive science field produced by computer interaction. With the support of 5G technology, online education can achieve multi-directional, non-linear communication and diversified information expression (Guo Jiyao,2022).

For domestic students, primary and middle school students face great pressure to enter high school. On the one hand, school choice is not allowed during compulsory education, which reduces the burden on schools. On the other hand, after compulsory education, nearly half of the students are unable to enter ordinary high schools due to family reasons, resulting in a large gap in education level among students. In this case, online education plays a very important role (Li Han,2020).

Students are like aborigines living on the Internet. For those who practice the concept of "The Web is life", online courses are like returning to the familiar world of visual culture. Suddenly, smartphones, tablets and computers are legally learning and entertaining each other. There is no doubt that the abundance of online time gives students more opportunities to get a full range of video courses, and those courses that meet students' preferences and needs also greatly improve students' initiative and enthusiasm in online learning. Under the special circumstances of the epidemic, the coverage of online education in various fields has been increasing, and will be significantly increased in 2020.

Figure 1:K12 online education industry coverage penetration rate



2.2 Advantage

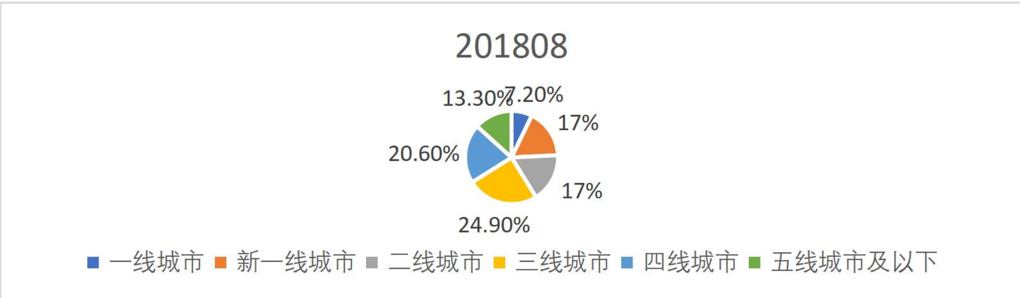
With the development of education informationization, our country is also pursuing more high-quality and equitable education. Providing online education learners with services in line with their own conditions is the due meaning of fair education or substantial equity. Under the influence of the Americans with Disabilities Act, almost all colleges and universities in the United States have set up special offices to provide learning resources for all kinds of people, especially those with special needs. Online education should strike a balance between public welfare and profitability. From the development of online education in foreign countries, online education has different emphases. Japan's online education emphasizes the government as the leading, focusing on the public welfare of online education, so it has a very systematic top-level design, which ensures that Japan's online education can concentrate a large number of high-quality resources, from students to teachers to platforms are subject to government supervision.

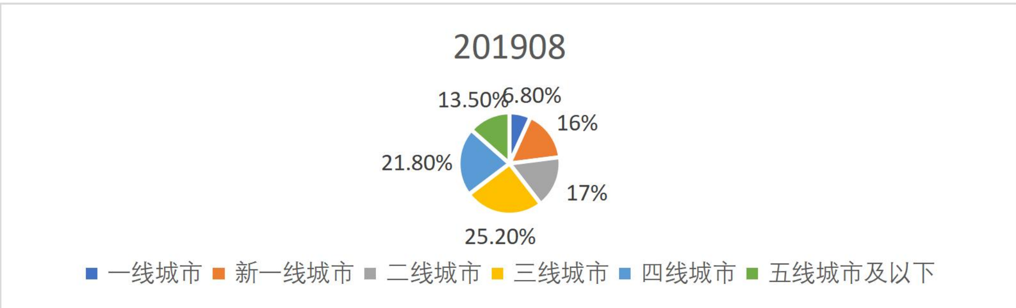
In general, the mode of government and market acting together is more conducive to the overall development of online education (Yan Wei,2020). From the perspective of cost effectiveness and resource utilization, the market has spontaneity, which can respond to the needs of the public more quickly and has higher efficiency. From the perspective of resource allocation and society as a whole, the government can play a role to avoid excessive concentration and inclination of educational resources and make online education more open and shared.

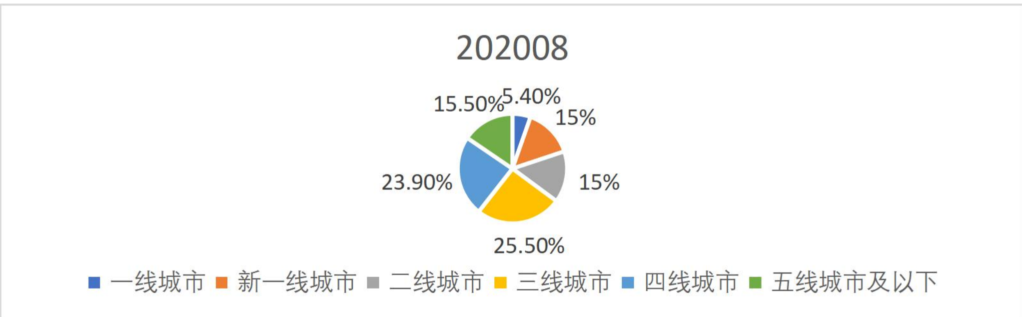
2.3 State of Development

In terms of the distribution of K12 online education industry users in cities in the past three years, the proportion of second-tier cities and above decreased from 41.2% in 2018 to 35.1% in 2020, while the proportion of third-tier cities and below rose by 6.1%, among which the proportion of fourth-tier cities increased the most, reaching 3.3%. The data reflect a clear downward trend in K12 online education. Low-tier cities with huge market potential provide great development space for K12 online education industry. The following is the distribution of K12 education in major cities in the past three years:

Figure 2: the distribution of K12 education in major cities in the past three years







In the whole network environment, China's major domestic network companies play a leading role, on the basis of the original traditional education, active reform, to deal with special situations. Online education companies, represented by New Oriental, have developed many new ways for students to learn easily.

RESEARCH METHODOLOGY

3.1Questions

According to the opinions of the respondents on online education, the following questions are mainly investigated :(1) how much time they spend on computers (2) how they think about online education nowadays. (3) What suggestions do you have for the future development of online education? Based on the answers to the above questions, specific suggestions can be put forward for online education.

About 250 questionnaires were designed and randomly distributed after links and qr codes were generated.

3.2Problem feedback

3.2.1 Daily computer time

Figure 3:Daily computer time

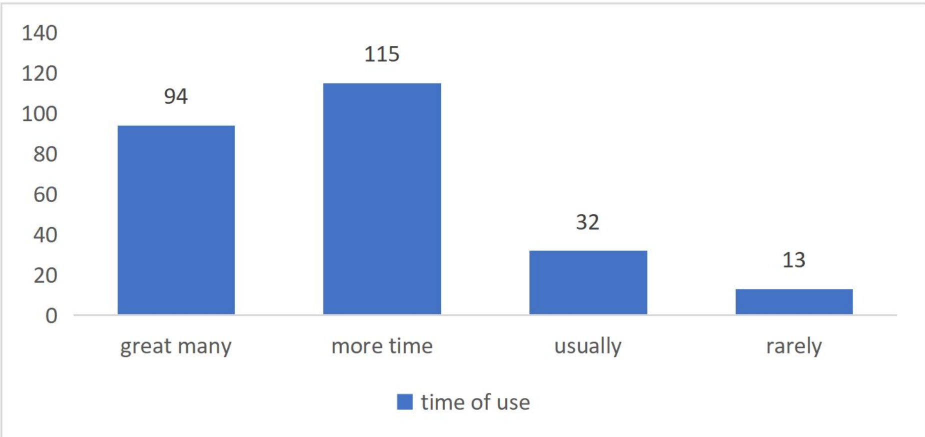


Table 1: Daily computer time

	Amount	percentage
Great many	94	37.01%
More time	115	45.28%
usually	32	12.6%
rarely	13	5.12%

According to the above data analysis, "Great many" and "More time" account for the most, with 94 people accounting for 37.01%, 115 people accounting for 45.28%, followed by "usually", 32 people accounting for 12.6%, and "Rarely", 13 people accounting for 5.12%.

According to the data analysis, almost all people use computers every day, and most of them use computers for a long time.

3.2.2Whether to support the change of education style

Figure 4: Whether to support the change of education style

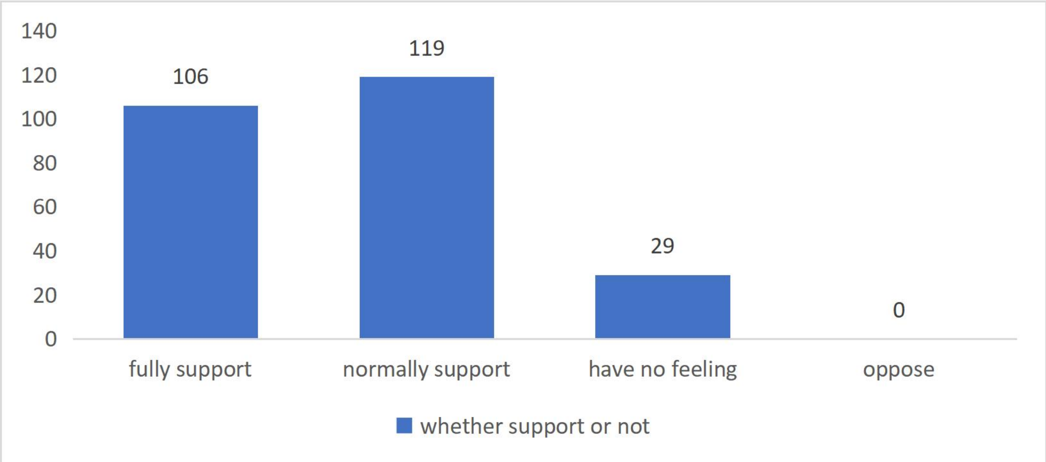


Table 2: Whether to support the change of education style

	Amount	percentage
fully support	106	41.73%
normally support	119	46.85%
have no feeling	29	11.42%
oppose	0	0

As for whether they support it or not, 106 people (41.73 percent) fully support it, 119 people (46.85 percent) normally support it, and 29 people (11.42 percent) did not feel it. The number of people against is 0. It is not hard to see that the vast majority of parents are very supportive of their children's online learning, because online learning can not only save time and money, but also make full use of resources.

No parent is against online learning. Online teaching, a new way of learning, is very satisfying to the majority of parents.

3.3.3View on Online Education

Figure 5: View on Online Education

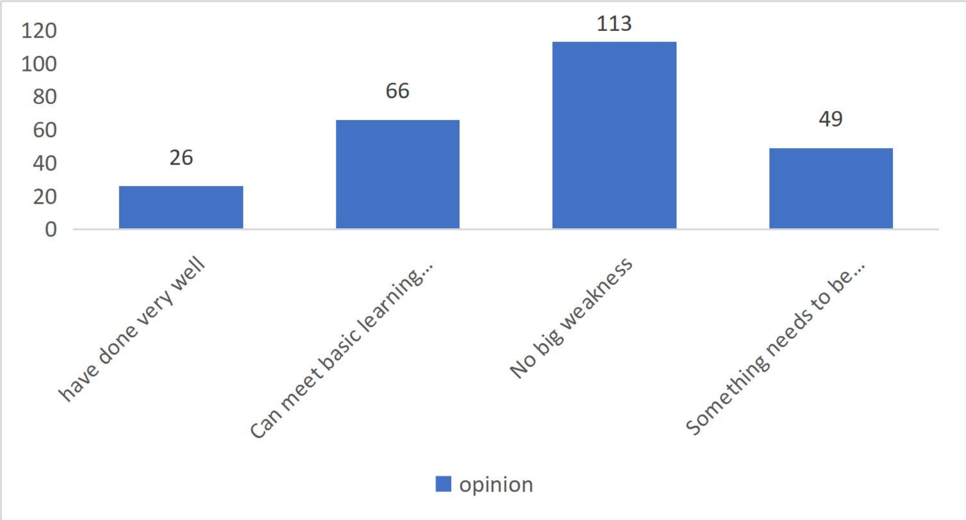


Table 2: View on Online Education

	Amount	percentage
have done very well	26	10.24%
Can meet basic learning needs	66	25.98%
No big weakness	113	44.49%
Something needs to be improved	49	19.29%

According to the data analysis in the above table, there are 26 people who have done very well, accounting for 10.24%, 66 people who Can meet basic learning needs, accounting for 25.98%, and most people who are No big weakness. There are 113 people (44.49%) and 49 people (19.92%) who think Something needs to be improved. Nearly half of parents think there are no major drawbacks to online learning, a quarter think it is adequate for their children's daily learning, nearly a fifth think there is a lot to be improved and a tenth think online learning is going very well.

SUGGESTIONS FOR IMPROVING ONLINE EDUCATION

4.1 The foundation of online education governance: the promotion of information technology ability of teachers and students

Improving the ability of teachers and students to use information technology is the foundation of achieving the goal of online governance. One of the outstanding problems of online education is that teachers are hard to choose when facing numerous network resources and are at a loss when facing emerging technologies. Therefore, the educational administrative department should assume the responsibility of improving the information technology level of teachers(Zheng Yanlin,2020). First, we should examine the qualifications of teachers in off-campus online education institutions, and stipulate that only teachers who have obtained teacher certificates and have a certain number of years of teaching experience can conduct online teaching(Li Xia,2022). Second, the education administrative department should regularly conduct in information technology training for teachers in the school activities, to strengthen teacher's information consciousness, improve their for online education, to sexual knowledge and use of emerging technologies integrating education resources, the ability of innovation education mode, to promote the development of the interdisciplinary teaching, developing online course lay the foundation. Third, teachers who need to use network teaching can set up teacher help community, through resource sharing, mutual help to improve information technology ability, improve online education management level(Fu Weidong1, Zhou Hongyu2,2021). In addition, students should also pay attention to the level of information technology. Schools can unite with parents to carry out parents' meetings or various educational activities to promote scientific and reasonable use of the Internet awareness, improve students' ability to solve problems and prevent problems when accepting network teaching.

4.2Securing online education governance: Building critical information Infrastructure

Perfect accord with the characteristics of online education are the key information infrastructure is the guarantee of online education to get effective governance. The smooth running of key information infrastructure is the national education industry information base of smooth running, is the basis of citizens' personal information risk prevention(Gao Song1, Sun Yansong2,2022). Critical information infrastructure construction to promote high quality online education development, promote social governance is of great significance. One is to continue to improve the network coverage, especially to strengthen the early stages of the rural information infrastructure construction and late perfect, make local teachers and students to enjoy the digital education bring bonuses(Zheng Yanlin,2022). The second is the future use of online education to improve their own ability, enrich their knowledge more and more people will only individual online education platform to the user as the center, continuously improve its own platform service ability. Three is to make good use of our 5 G network construction, using big data technology to provide better service for online education, using artificial intelligence technology to enrich the teaching scenario, for the students, build more immersive learning experience(Zhang Xu,2021). It is important to note that in the process of promoting the integration of technology and education, should pay attention to standardize data management, data security mechanism is established

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KEY COMPETENCIES OF PROFESSIONAL GROUP LEADERS: CONSTITUENT ELEMENTS, DEVELOPMENT DIFFICULTIES AND IMPROVEMENT STRATEGIES

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ABSTRACT

Purpose—This paper aims to take Chinese higher vocational colleges professional group leaders as the research objects to analyze the components of their key capabilities, development difficulties and improvement strategies.

Design/methodology/approach—According to the theory of key competencies and training needs of professional group leaders, this paper uses the method of event interviews, a model of key competency factors of professional group leaders in higher vocational colleges is established. Data are collected with the help of self-administrated questionnaire and a semi-structured interview data are analyzed with the help of Nvivo software.

Findings—The model includes 4 first-level indicators, including cross-border adaptability, resource integration capability, innovation and development capability, and management leadership capability, as well as 11 related second-level indicators. Through NvivoV20.0 qualitative text coding, 186 reference points were compared and summarized, 11 sub-nodes of the spindle category were developed, and finally the four parent nodes were aggregated to form the core category of key competency elements of professional group leaders.

By analyzing the current situation of the development of key abilities of leaders of professional groups, it is found that there are deficiencies in defining standards, selection conditions, classification training methods, and college management systems. This paper proposes improvement measures such as strengthening the participation of multiple subjects, building a community with a shared future for school administration, administration and enterprises, strengthening vocational education research and modern management systems, so as to improve the key capabilities of professional group leaders and help improve the construction of high-level professional groups in higher vocational colleges.

Practical implications—To improve key competencies of leaders of professional groups in higher vocational colleges, it is suggested to build a comprehensive training system for higher vocational colleges professional group leaders, strengthen their cross-border adaptability of multidisciplinary participation, resource integration ability of school-enterprise destiny community, innovation and development ability of vocational education research, and management leadership ability of modern governance system. Cultivation of resource integration force based on school-enterprise destiny community.

Originality/value—This empirical survey of the key competencies of the leaders of professional groups in China's higher vocational colleges can provide scholars with a deeper understanding of the actual development of the leaders of professional groups in China's higher vocational colleges.

Keywords: professional group leaders; key abilities; elements; development difficulties; improvement strategies

INTRODUCTION

The leader of the professional group is the core of the construction of the professional group's teaching staff, and the "navigator" of the construction of the high-level professional group in higher vocational colleges. In March 2019, the *"Opinions on Implementing High-level Vocational Schools and Professional Construction Plans with Chinese Characteristics"* clearly stated in the task of "building a high-level double-qualified group": Cultivate and introduce a group of leaders of the professional group of industry-authoritative and international influences. It can be seen that in the context of high-quality development of vocational education, the effectiveness of professional group construction in higher vocational colleges is closely related to whether there is an authoritative and influential professional group leader group. The leader of the professional group will become an important demonstration leading the growth of the teaching staff in higher vocational colleges and an important figure in promoting the high-quality development of the high-level professional group.

1.1 **Background of the study**

At present, based on the actual needs of industry iterative upgrading, the connotation construction of high-level professional groups, and the advancement of the personal identity of professional group leaders, higher vocational colleges have never stopped "seeking talents" for cultivating and introducing high-level professional group leaders. However, this desire is only on the surface of the construction of the teaching staff. Looking at the research evolution of the construction of professional group teachers in recent years, many achievements have been made in the "dual-qualified" teaching group, the backbone teacher group, the technical skill master group, and the part-time teacher group. However, there is no theoretical research on it, and Liu Y (2022) involves the definition of the connotation of professional group leaders, Wang Y (2021) defines the construction of professional group teacher groups and Ren JQ (2019) defines the path of high-level dual-qualified groups. However, they rarely take professional group leaders as research objects, discuss their ability standards, plan their training paths, and help them grow Liu (2019). This status quo is in stark contrast with the important position of professional group leaders in the construction of professional groups and the actual needs of higher vocational colleges.

The study starts with the key capabilities of professional group leaders, analyzes the components of the key capabilities of professional group leaders, explores the practical deficiencies in the development of key capabilities, and attempts to propose countermeasures and suggestions for improving the key capabilities of professional group leaders to help improve the construction of high-level professional groups in higher vocational colleges.

1.2 Research questions

How to provide construction ideas for the construction of professional group leaders in higher vocational colleges in China?

How to summarize constituent elements, difficulties, and propose solutions under the background of key competencies of professional group leaders?

1.3 Research objectives

To provide construction ideas for the construction of professional group leaders in higher vocational colleges in China.

To summarize constituent elements, difficulties, and propose solutions under the background of key competencies of professional group leaders.

1.4 Scope of the study

In this study, 12 professional group leaders, 6 functional department heads of "double high school curriculum" and 3 key professional group teachers from 12 national "double high school" vocational schools in Fujian Province, China, were given in-depth interviews.

LIERATURE REVIEW

2.1 Related concepts.

The term "key competence" Ji, Q (2016) originated from the study of occupational sociology in Germany. In 1974, Mertens who is a German sociologist put forward the concept of "key competence" for the first time, which refers to the knowledge, skills and abilities not directly related to a specific, including the ability to make judgments and choices in different situations and responsibilities Ismayilova (2019), and the ability to cope with the unpredictable changes in life. It mainly includes basic ability, career development factor, information acquisition and processing ability, and time-related factor Xu(2006). After the 1980s, the research on "key competence" in German vocational education gradually evolved into the discussion on "occupational action competence", believing that occupational action competence includes all the elements of key competence and is mainly composed of four elements: professional competence, methodological competence, social competence and individual competence Xing(2012).

LITERATURE REVIEWS

With the establishment of the fundamental task of "cultivating talents through moral cultivation" in China's vocational education, in order to more accurately answer the fundamental question of "who to cultivate, how to cultivate and for whom to cultivate", China first focuses on the cultivation of students, and successively carries out "key competence" research on the premise of core accomplishment. There are three main research paths: research on the connotation of "discipline ability" based on the "ability" theory, research on the composition of specific "discipline key ability" based on the "discipline ability" theory, and research on the "discipline key ability" based on the "ability" theory Xing(2021). Later, the research was extended to the cultivation of teachers. Chang Lei (2019) proposed that the characteristics of teachers 'key abilities specifically include teachers' leadership role, knowledge ability, learning ability, as well as their professionalism and sense of The Times in terms of knowledge and ability. In order to cultivate the key abilities of professional leaders, Wang Yanan (2022) constructed the capacity model of professional leaders in seven functional areas, including professional development foresight, professional resource development, professional team building and strategic execution. Lv Shufang (2016)proposed the competency model of professional leaders consisting of five dimensions, including professional ability, leadership ability and general ability.

To sum up, although there are traces of research on "key competencies", and there are many branches of research evolution, there is a lack of interpretation of the connotation of the characteristics of professional groups. Various research conclusions lack exploration and suggestions on the composition and improvement of key capabilities of professional group leaders.

A professional group is an aggregation of multiple related majors based on a certain major category or industry chain post group Sudha p (2022). It is not only to build a certain profession by connecting with a certain industry, a certain occupation or a certain position, but more emphasis on the cluster development of connecting with the ever-changing industries or positions. Relying on the talents cultivated by professional groups, from single skills to composite skills, they have the composite ability to integrate professional skills within the group, are closer to the needs of the industry, have more whole-person qualities, and are more able to achieve sustainable development. Under this goal, the leader of the professional group should undertake the responsibilities of planning and design, resource scheduling, technology development, as well as the coordination and contact between the majors in the professional group. This not only requires professional group leaders to have solid professional knowledge and keen industry insight Wang, Y.N. (2019), but also strong leadership, communication and coordination skills to support the cultivation of high-level technical and skilled personnel.

Therefore, the researcher believes that the key capabilities of professional group leaders can be understood as their advantages such as a keen sense of industry smell, superb technical ability and noble personality. It can be understood as forming an interrelated and interdependent integration of various majors led by core majors within the professional group, establishing a close connection with the development of the industrial chain and the needs of the job group outside the professional group, and then promoting the teaching reform within the professional group, and it is different from the sum of all kinds of abilities of ordinary teachers' post competency characteristics.

RESERACH METHODOLOGY

The research design of the paper is qualitative method.

3.1 Construction of the key competency model of professional group leaders

According to the conclusions of the existing research on the key competencies of professional leaders, this study uses event interviews and expert interviews to build a model of key competencies for professional group leaders. Behavioral Event Interview (BEI) is the main tool for revealing competency characteristics by using open-ended behavioral retrospective exploration techniques. It can obtain interview information more comprehensively, and can provide first-hand information for the construction of key competency models in the later stage. The reliability and fit are relatively high.

First, this study selected 12 professional group leaders, 6 heads of functional departments of the "Double High Program" and 3 key teachers of the professional group from 12 national "Double-High Program" vocational colleges in Fujian Province, China, and In-depth interviews were conducted. The professional groups Judge.(2019) of the respondents' schools involve education, finance, economics and trade, e-commerce, textile and clothing, logistics, road transportation, construction engineering management, mechanical design and manufacturing and other professional directions. Focusing on the respondents' perception of the professional group leader, open interviews and telephone interviews were used to allow the respondents to describe the three most successful typical events completed by the professional group leader in the process of building a professional group, and the 3 least successful typical events.

Secondly, the interview data were analyzed and coded with the help of Nvivo V20.0 software.

Step1: form a textual electronic document through the post-organization of the interview data.

Step2: according to the previous research results, complete the "Code Table of Key Capabilities of Professional group Leaders in Higher Vocational Colleges", and code the electronic documents of the interview accordingly, and extract open coding and spindle coding from the text data according to the level of abstraction and tertiary coding of selective coding.

Step3: using Nvivo qualitative text coding, 186 reference points were compared and summarized, 11 sub-nodes of the main axis category were developed, and finally 4 parent nodes were aggregated to form the core category of key competency elements of professional group leaders. So far, a model of key competency elements of professional group leaders in higher vocational colleges has been initially constructed and completed.

Finally, in order to ensure the reliability and validity of the key competency model of professional group leaders, this paper adopts the expert interview method, and invites experts in teacher development in higher vocational colleges to conduct the model from the aspects of data coding, category comparison, node induction, etc. Revised and perfected, forming 4 first-level indicators and 11 second-level indicators (Table 1) of cross-border adaptability, resource integration, innovation and development, and management leadership (Table 1), which constitute the key competency element model of professional group leaders in higher vocational colleges.

Table 1 Composition of key competencies of leaders of professional groups in higher vocational colleges

First-level indicators	Second-level indicators	Reference point	Coverage ratio
Cross-border adaptability	Real-time perception of the direction of industrial development	67	36%
	In-depth analysis of the demand quality of talent supply		
	A realistic path for the construction of precise design professional groups		
Resource integration capabilities	Effectively allocate multi-platform resources for intra-campus collaboration	36	19%
	Co-construction and sharing of school, government, industry and enterprise resources		
	Give full play to the overall advantages of structural integration of resources		
Innovation and development capabilities	Research to explore the logical starting point of technical knowledge development	54	29%
	Internal Structure of System Reconstruction Technology Knowledge Development		
	Implementation carrier of long-term construction technical knowledge development		
Management leadership skills	Demonstration leads the cooperative development of the teacher group	29	16%
	Gradually strengthen the hierarchical empowerment of organizational management		

Data source: based on event interviews and expert interviews.

RESULTS AND FINDINGS

4.1 Analysis of key competencies of professional group leaders

4.1.1 Cross-border adaptability from a single major to a professional cluster

Vocational education is a kind of cross-border education, which is not only reflected in the cross-border between different learning places between schools and enterprises, but also in the cross-border between industry and education, and even more in the cross-border between work and study space. When the grassroots teaching organization changes from a single major to a professional cluster, the leaders of the professional group need to have the ability to adapt across technologies, majors, and disciplines in the modern industrial development environment.

The first one is to instantly perceive the direction of industrial development.

Vocational education takes the integration of industry and education as the main line, emphasizing the seamless connection between schools and enterprises, and the leaders of professional groups should be those who know the most about the entire industry. The leader of the professional group should be able to conduct investigation and research, data mining, summary analysis, judgment and decision-making on the overall development trend of the industrial development scale, direction, nature, technical skills and difficulties in the new era. In addition to using the industry development reports and statistical reports issued by authoritative organizations to be familiar with the industry, it is also necessary to regularly participate in important domestic and foreign conferences and activities, become an industry authority, and participate in the core circle of industry development.

The second one is to deeply analyze the demand quality of talent supply.

Through the perception of the industry, the leader of the professional group deeply analyzes the scale of demand for talent supply and the span of professional and technical skills for industrial development, and judges the key links of the talent chain, the direction of job migration, and the volume of professional and technical skills and knowledge, thereby determining the way of formation, the direction of development and the degree of talent supply. The leader of the professional group not only needs to understand the difference between the talents cultivated by the professional group of the school and the talent group cultivated by the same kind of colleges and universities, but also needs to improve the gold content of the technical skills threshold and improve the core competitiveness of the talent training of the professional group of the school. The in-depth analysis of talent supply and demand by professional group leaders is based on an accurate understanding of the positioning and role of the professional group in the development of the industry. It implies in-depth thinking on the quantity, structure, level and supply of industrial talents, it is a qualitative exploration of the demand for industrial talents, and it is also a prerequisite for improving the competitiveness of talent supply.

The third one is the realistic path for the construction of precise design professional groups.

Affected by the ambiguity and conflict between the logic of professional groups and the action logic of higher vocational colleges, at present, the construction of professional groups in higher vocational colleges mostly faces the risk of "suspending". That is to say, the behavioral logic of professional groups is outside the school governance and operation system, and it is difficult to integrate and match in terms of management and operation. The one who has the ability to defuse this risk must be the leader of the professional group. The core professional construction of the professional group is carried out with the leader of the professional group as the core, the unique logic and construction path of the professional group is designed, the resources within the professional group are integrated with the concept of clustering, and the industry development trend is paid attention to from a forward-looking perspective, and timely It is necessary to adjust the content of professional construction and cultivate compound technical and technical talents. At the same time, the leader of the professional group should play a role as a link, handle the professional relationship within the group well across the border, and clarify the talent training system, curriculum system, knowledge structure, etc. of each major. Based on the group logic, the connection mechanism of various majors in the group is constructed, and the professional group construction effect of "flowering on the spot, advancing on the surface, and improving the quality" has been realized.

4.1.2 Resource integration with both intra-campus collaboration and extra-campus integration.

In the context of the characteristic development of vocational education types, the resources of professional groups involve many aspects of social resource allocation, including the resource allocation of multi-stakeholders in schools, government, business, and enterprises. In terms of integrating the resources of all parties and the overall development of the professional group, the leader of the professional group needs to demonstrate a strong ability to integrate resources.

The first is to effectively allocate multi-platform resources for intra-campus collaboration.

"Intra-school synergy" emphasizes the importance of the relationship characteristics and connection strength of each unit within the school. The construction of professional groups mainly involves the mutual coordination between the majors in the group, the allocation of existing resources in the professional group, and the effective allocation of the multi-platform resources in the school to the professional group as a whole. The leader of the professional group should integrate the existing resources of each major in the group, including tangible and intangible resources such as textbooks, courses, talent training programs, professional construction programs, practical training resources, teaching resource banks, and front-line teachers. The leader of the professional group evaluates various resources, selects the internal resources that can promote the development of the professional group, and builds the internal resource sharing mechanism of the professional group. The leader of the professional group also needs to tap the resources of other departments and platforms within the school, and take the construction of the professional group as an opportunity to strive for more on-campus resources to be allocated to the professional group.

The second is to build and share off-campus integration of school, government, industry, and enterprise resources.

Resource dependence theory states that organizations need to acquire resources from outside in order to survive and thrive. The professional nature of vocational education determines that higher vocational colleges need to cooperate with industries and enterprises to obtain external resources to promote their own development. "Off-campus integration" emphasizes the depth and breadth of the integration of government, industry and enterprises into the construction of professional groups. This not only requires all majors in the professional group to connect with various resources of the government, industry and enterprises, but also requires the professional group to connect with the resources of the whole industry chain. Professional group leaders need to absorb resources such as enterprise facilities and equipment, front-line technical talents, industry experts, new trends in industry development, and new technical skills into the construction of professional groups. The acquisition of these off-campus resources requires the leaders of the professional group to have rich practical experience in the industry and enterprises, and to be able to open up the acquisition channels of related industry and enterprise resources for the professional group, so as to connect with external high-quality resources to help the construction of the professional group.

The third is to give full play to the overall advantages of structural integration of resources.

"Structural integration" emphasizes the degree to which an organization is systematically connected through internal structuring and external chaining. The construction of professional groups should give full play to the resource overflow advantages of core professions, and build professional groups with core professions as the focus, and all professions in the group coexist harmoniously and develop together. This requires the leader of the professional group to clearly define the positioning of the core professional, analyze the characteristics of the industry chain and the position group, firmly grasp the advantages of the core professional, and give priority to the use of high-quality resources inside and outside the school to develop the core professional. In addition, it is necessary to build an internal governance mechanism. On the premise of the inclination of core professional resources, the construction of other majors in the group should be promoted through the rational allocation of internal resources and the standard adaptation of external resources. It is also necessary to maximize the integration of internal and external resources, to promote the aggregation effect of various majors in the professional group to form a construction synergy, and to promote the overall development of the professional group.

4.1.3 The innovation and development power from subject knowledge to technical knowledge.

In addition to coming from the subject knowledge, the professional knowledge in higher vocational colleges, but also comes more from the practical operation, and more of the professional group knowledge system is set up based on the vocational positions or technical skills. Based on this, the leaders of the professional group of higher vocational colleges with the ability to make technical knowledge innovation and development can explore the knowledge system development mode suitable for the construction of the professional group from the logical starting point, internal structure and realization carrier of technical knowledge development, and then reconstruct the professional group knowledge system with technical knowledge as the core (Xu, 2020).

Work tasks can be roughly divided into regular tasks and irregular tasks according to different work properties.

The focus of the knowledge development of regular tasks is to transform the practical knowledge in the workplace into the text knowledge of education and teaching, systematically develop the explicit technical knowledge in the actual workplace, deeply develop the tacit technical knowledge hidden in practice, and update the new industrial knowledge in time. The key point of irregular task knowledge development lies in acquiring technical theoretical knowledge with discipline construction as the logic. Technical theoretical knowledge is difficult to form from work practice, and it needs to be produced through systematic scientific research.

1st is to explore the logical starting point of technical knowledge development.

It mainly refers to the analysis of the task composition of the career field as the starting point, for the work task after each link of the dismantling, to find the corresponding knowledge and skills. Through the in-depth understanding of the work tasks and the characteristics of the professional group, the professional group leaders carry out the separation of work links, refine the steps, key points, elements and standards of technical knowledge, and distinguish the time order and difficulty according to the rules of students' learning. Reflect the main role of professional group leaders in the logical starting point of technical knowledge development.

2nd is the internal structure of the system reconstruction technology knowledge development. The internal structure of technical knowledge development can be hierarchically divided by distinguishing between the types of knowledge developed. Bunger and Kapinter divide technical knowledge into four levels: perceptual action skills, technical motto, descriptive law and technical theoretical knowledge (Xu, 2020). Most perceptual action skills are silent knowledge and are learned from words and deeds. Technical aphorism refers to technical knowledge, and is a generalization of skills. Descriptive law is a code of conduct that transforms practical experience into generalization through attempt and observation. Technical theoretical knowledge is composed of a large number of laws, with the technical knowledge supported by scientific theory. To reconstruct the technical knowledge of the professional group, we should not only consider whether the knowledge structure within each major is reasonable, but also pay attention to the knowledge connection between the majors within the professional group. This requires the leaders of the professional group to know enough about the technical knowledge system of each major in the professional group, so as to build a knowledge system connecting the internal professional knowledge and the external and industrial chain, so as to build a professional group curriculum system of "low-level sharing, middle-level integration and high-level mutual selection”. Technical theoretical knowledge consists of a large number of laws, technical knowledge supported by scientific theories. Reconstructing the technical knowledge of professional groups should not only consider whether the knowledge structure of each specialty is reasonable, but also pay attention to the knowledge connection between the various specialties in the professional group. In this way, we can build a knowledge system in which the professional knowledge within the professional group is connected to each other and the outside is connected with the industrial chain, and a professional group curriculum system of "bottom sharing, middle-level integration and high-level mutual selection" can be created.

3rd is the implementation carrier of long-term construction technical knowledge development. There are many ways to acquire knowledge. In traditional ideas, knowledge often exists in the form of text. Technical knowledge is different. Technical knowledge because of the diversification of its types determines the diversification of implementation carriers, and the objects in workplaces such as tools and equipment also carry the knowledge with practical value. Therefore, technical knowledge can be obtained by people in the form of various carriers, such as text records, practical objects and practical actions. The technical knowledge required to be developed by the professional group knowledge system is mainly operational technical knowledge, whose main carrier involves operators, applied technology, practical behavior, the use of tools and technical manuals, etc. Professional group leaders need to have the ability to innovate and excavate different types of knowledge points from various carriers, and convert them into technical theoretical knowledge, so as to build a professional group knowledge system with technical theoretical knowledge as the core, and then carry out technical practice teaching.

4.1.4 Empowering management leadership at the level of mutual development.

Under the background of high-quality development of vocational education, the professional group leaders are required to be the leaders of an organization and lead the whole professional group construction team to achieve the development goals of the professional group.

First, the demonstration leads the cooperative development of the teacher team. In order to ensure the real implementation of the construction of professional group, a team of teachers are reasonable, complementary skills and good teaching. As the main force of professional group construction, under the leadership of professional group leaders, to cultivate high-quality technical and skilled personnel. First of all, professional group leaders must be able to scientifically plan the structure of the teacher group, reasonably set the age, educational background and ability structure of the teachers’ teaching group, and formulate teaching group construction plans according to the teachers’ abilities, specialties and development willingness, so that they can give full play to their advantages in their respective positions. Secondly, the leader of the professional group should be able to lead the development of the teaching group of teachers. It not only requires the leaders of professional groups to play an exemplary and leading role in teaching and scientific research, technology research and development and social services, but also requires them to organize and guide teachers' groups to actively participate in the construction of professional groups and strengthen their own teaching and scientific research capabilities. It is also necessary to strengthen the connection between the professional group and the industrial chain, capture the development trend of the industry, tap the talent demand of industry enterprises, and drive the development of the entire professional group.

Secondly, professional group leaders should be able to lead the development of teachers' teaching teams. This not only requires professional group leader in teaching and research, technology research and development and social services demonstration leading role, more required to organize and guide teachers team to actively participate in professional group construction, strengthen their teaching ability and scientific research ability, strengthen the connection between professional group and industrial chain, timely capture industry development dynamics, mining industry enterprise talent demand, drive the development of the whole professional group. The leader of the professional group needs to exert the necessary management and organizational power in the hierarchical professional group management system built in advance by the higher vocational college, and obtain and exercise the rights in the specific affairs of the professional group, such as the construction of the professional group's teaching staff, the management of the professional group, construction goals, construction tasks of professional groups, etc.

Vocational colleges also need to recognize and give professional group leaders a higher status than other professional leaders, so that professional group leaders have the real power to coordinate internal and external resources, plan the direction of professional group construction, manage all majors in the group, and give full play to their majors. The organizational management ability of the group leader. And then make it a real planner and leader of professional group construction.

4.2 The development dilemma of the key ability training of professional group leaders in higher vocational colleges.

Based on the analysis of the key competencies of the leaders of professional groups, the current situation of the cultivation of leaders of professional groups in higher vocational colleges is reviewed through investigation. The key competencies of the training mainly have the following four deficiencies.

4.2.1 The fuzzy standard definition hinders the cultivation of cross-boundary adaptability.

With the continuous emergence of new technologies, new models, and new business formats in all walks of life, the need for cross-border integration of positions, professions, technologies, and skills is increasingly urgent. The leader of the professional group should not only be familiar with the development of the industry, grasp the development trend of new technologies, but also have high professional attainments and possess the cross-border ability required to lead the development of the professional group. However, professional group leaders generally lack the recognition standards and job competencies that can be recognized by the industry. At present, the identification of professional group leaders follows the standards of the past, and implements similar work ability assessment requirements as professional leaders. This is very easy to mislead professional group leaders to simply apply previous professional construction experience in their work, which is prone to the dilemma of "solving new problems with old methods".

4.2.2 One-sided selection conditions, ignoring the ability to improve resource integration.

In order to select the best, strict selection, openness and fairness, whether it is external introduction or on-campus training, higher vocational colleges usually formulate selection indicators for professional group leaders. However, the selection conditions for professional group leaders in many vocational colleges are general conditions such as the appointment conditions for teachers with senior professional titles and the standards for double-qualified teachers formulated from the management level. Judging from the content of the selection conditions, there are often more conditions reflecting scientific research achievements and teaching ability, and less conditions reflecting industry technical ability and industry authority leadership. Even some higher vocational colleges use horizontal projects to quantify social services as a substitute for industry technology, thereby confusing skill level conditions. From the expression of selection conditions, qualitative and descriptive texts are the main ones. In the selection process, differences in individual subjective cognition can easily lead to differences in selection results. The general selection conditions lack qualitative and quantitative index conditions for industry characteristics, and ignore the ability of professional group leaders to integrate resources in the construction of professional groups through industry linkage, school-government-enterprise linkage, etc. This is temporary and utilitarian and limited.

4.2.3 The lagging classification training measures to curb the development of knowledge innovation and development capabilities.

The construction of professional group requires the professional group leaders not only to possess solid professional basic knowledge and rich enterprise practical experience, but also to break the traditional knowledge frame and develop new theoretical knowledge system and technical skill training system based on industrial demand. However, the training of professional group leaders in higher vocational colleges is similar to that of ordinary teachers, and measurable indicators such as scientific research achievements, teaching achievements and social service achievements are usually assessed, but a targeted training system of stratification and classification has not been established. In practice, the professional group leader may have other identities before him, such as backbone teachers, professional leaders, or even administrative leaders of functional departments, etc. These groups differ in the logic of the formation of professional groups, the breadth of understanding of different positions and the research level of vocational education. The "one-size-fits-all" training and assessment method cannot take into account the diverse growth needs of professional group leaders from different types and hierarchies, and cannot guide them to improve their ability of knowledge innovation and development.

4.2.4 The traditional college management system affects the performance of management leadership.

The secondary management system of most higher vocational colleges is not perfect and the modern management system needs to be established and perfected. Professional group leaders are limited by the hierarchical mode of traditional administrative management in higher vocational colleges, and their organizational authority is not matched with their responsibilities, which seriously affects their management ability. First, due to the lack of effective separation of administrative power and academic power, professional group leaders tend to submit to higher administrative leaders and lose their independent academic judgment and decision-making power when it comes to major matters of professional group construction such as talent cultivation, teaching reform and team building. Second, senior managers in higher vocational colleges tend to have idealized expectations on the job responsibilities of professional group leaders, who have to perform the administrative responsibilities of "top-level design" and "unified planning" in a wrong way, resulting in a passive situation of management cohesion fault.

4.3 The strategies for improving the key capabilities of leaders of professional groups in higher vocational colleges.

The key capability should be the acquisition of "action-oriented", which should be conducted based on the role of action with the external environment, and learned in "doing" (Xu, 2006). Therefore, the key competencies of professional group leaders should be obtained after the training objectives are linked to the learning objectives of specific work scenarios, and improved through practice and learning. Based on the research conclusions of the key competency element model of professional group leaders and the development dilemma, higher vocational colleges urgently need to promote the key competencies of professional group leaders from four aspects.

4.3.1 Cross-boundary adaptability training based on the participation of multiple subjects.

By exploring and building a training mechanism for the participation of multiple subjects, professional group leaders can quickly integrate into the working environment of the industry and cultivate their cross-border adaptability.

First, strengthen the top-level design, establish and improve the policy cultivation system. The training subjects of professional group leaders involve government agencies, higher vocational colleges, industrial enterprises and scientific research institutions. Government agencies should clearly define the connotation of professional group leaders, define the scope of responsibility of professional group leaders from the policy level, and emphasize the important role and status of professional group leaders in the process of building professional groups. Higher vocational colleges should collaborate with industry enterprises, scientific research Institutions jointly formulate a professional group leader training plan, establish a professional group leader training mechanism, and formulate a training system according to the characteristics of the professional group. So that the professional group leader training mechanism can truly be implemented.

Secondly, strengthen diversified coordination, establish and improve the school, government, bank and enterprise co-education mechanism. Higher vocational colleges should cooperate with industrial enterprises to participate in the whole process of the training of professional group leaders, and jointly formulate the selection and assessment standards of professional group leaders. Regularly organize professional group leaders to practice, study and exercise in vocational colleges, industries and related enterprises. Encourage professional group leaders to build cross-school-enterprise, cross-college and cross-professional teaching groups. Promote the exchange and cooperation between schools, enterprises and the group, and effectively cultivate their cross-border ability.

4.3.2 Cultivation of resource integration force based on school-enterprise destiny community.

Promoting the cooperation between higher vocational colleges and leading enterprises to form a school-enterprise destiny community is a new path of industry-education integration and school-enterprise cooperation. Professional group leaders integrate resources in teaching and education, technology research and development, social service and other aspects, so as to improve the integration force of resources under the premise of the same goal of talent training, the identity of interests and coexistence of development. First of all, we should deepen the integration of "technological resources" between universities and enterprises. The professional group led by the leader is equipped with technical theoretical knowledge and teaching innovation team of teachers. Can bring technical innovation and talent support for the enterprise, the enterprise has advanced equipment and practical skills master. To make up for the technical lag and outdated equipment and facilities of higher vocational colleges, so as to deepen the integration of industry and education between schools and enterprises. The feasibility of the integration of technical resources provides an effective practical path for the leaders of professional groups to bring into full play the ability of resource integration of on-campus resource coordination and off-campus resource integration. Secondly, to deepen the integration of school-enterprise "interest resources". In addition to the exchange of tangible resources such as site, equipment, software and human resources, school-enterprise cooperation aims to meet the interests as far as possible and realize the value pursuit of both sides, so as to form the benefit sharing mechanism and resource distribution mechanism of in-depth cooperation, and finally form the school-enterprise community of destiny. Under the operation mechanism of school-enterprise destiny community, professional group leaders play the role of the link of school-enterprise resource integration, and gradually improve the resource integration through project cooperation.

4.3.3 Cultivation of innovative development capabilities based on vocational education research.

Innovation is the driving force of the development of higher vocational education. Professional group leaders can develop original professional group technical skills and knowledge only by constantly analyzing work tasks and professional abilities in the workplace. In the ability of knowledge innovation and development, higher vocational colleges should start from the research of vocational education, cultivate the rigorous and practical research spirit, positive and enterprising personality of professional leaders, pursue scientific methods and skills, and strengthen their ability of technical skills and knowledge development. First, the construction of vocational education research platform. Research platform is an important carrier of technical knowledge production for vocational education. Higher vocational colleges often exist in the form of educational research institutes, collaborative innovation centers, and school-enterprise community laboratories. Specifically, it can be composed of professional group leaders and professional researchers, whose main functions are to condense technical practical knowledge, jointly develop technical theoretical knowledge and share technical knowledge achievements. Secondly, the educational research focusing on vocational ability analysis should be promoted. Analysis of vocational ability weak awareness and low accuracy restrain the effect of technological knowledge development, professional ability analysis is much more complicated than job task analysis, professional group of leaders need to accurately grasp the professional responsibility, the depth of the decomposition post professional ability, and the traditional form of the induction, refining, systematic technical knowledge.

4.3.4 Management leadership training based on modern governance system.

The modern governance system of higher vocational colleges is an extremely complex project, the core of which is the exercise and operation of power within the school. From the perspective of modern governance, higher vocational colleges need to rationally allocate various powers within the school and continuously optimize the internal governance system in order to facilitate the high-quality development of higher vocational colleges.

First, reconstruct and optimize the management level of professional groups. Vocational colleges should explore and create a professional group management system suitable for their own development by reforming the management system of secondary colleges and departments, separate the professional group management system from the secondary college, or establish entity professional group organizations, or establish virtual professional groups. Thereby, the hierarchical system within the group is reconstructed and optimized.

Secondly, the implementation of the classification and training system of professional group leaders. Categorized training is to formulate different training paths according to the type of the original position of the selected professional group leader, and cultivate their leadership ability, resource integration ability and overall cognition of the professional group according to full-time teachers; According to the concept of cultivating professional leaders in clusters, help professional leaders realize their identity transformation; for administrative management personnel, cultivate their knowledge and understanding of various majors in the professional group, and strengthen their links with industry enterprises.

Thirdly, promote the hierarchical training system of professional group teachers. Hierarchical training is to form an internal hierarchical training system for professional groups, formulate corresponding training paths for young teachers, key teachers, professional leaders and professional group leaders, establish a training mechanism for old teachers to lead new teachers, and guide young teachers to backbone teachers, and train some key teachers to be promoted to professional leaders, focus on training some professional leaders as quasi-professional group leaders, and form a hierarchical "pyramid" cultivation mechanism.

CONCLUSIONS

By introducing the theory of key competencies and training needs of professional group leaders, a model of key competency factors of professional group leaders in higher vocational colleges is established. Factors that influence key competency factors of professional group leaders in higher vocational colleges can be divided into: cross-border adaptability, Resource integration capabilities, and Innovation and development capabilities management leadership skills. Data analysis is performed on the impact of these four factors on key competency factors of professional group leaders in higher vocational colleges and the following conclusions:

1.Cross-border adaptability from a single major to a professional cluster can be divided into three dimensions: The first is to instantly perceive the direction of industrial development. The second is to deeply analyze the demand quality of talent supply. The third is the realistic path for the construction of precise design professional groups.

2.Resource integration with both intra-campus collaboration and extra-campus integration can be divided into three dimensions: The first is to effectively allocate multi-platform resources for intra-campus collaboration. The second is to build and share off-campus integration of school, government, industry, and enterprise resources. The third is to give full play to the overall advantages of structural integration of resources.

3.Innovation ability from subject knowledge to technical knowledge can be divided into three dimensions: The first is to research and explore the logical starting point for the development of technical knowledge. The second is the reconstruction of the internal structure of the technical knowledge development system. The third is the long-term effective construction of the implementation carrier of technical knowledge development.

4.Empowering management leadership at the level of mutual development can be divided into two dimensions: The first is to demonstrate and lead the cooperative development of the teacher group. The second is to gradually strengthen the hierarchical empowerment of organizational management.

5.The key competencies of the training mainly have the following four deficiencies: Fuzzy standard definitions hinder the cultivation of cross-border adaptability. One-sided selection conditions, ignoring the ability to improve resource integration. The delayed classification training measures curb the development of knowledge innovation and development capabilities. The traditional management system of colleges and universities affects the exertion of management leadership.

6.According to the proposed dilemma, the corresponding improvement strategy is proposed. The first is cross-border adaptability training based on the participation of multiple subjects. The second is cultivation of resource integration force based on school-enterprise destiny community. The third is Cultivation of innovative development capabilities based on vocational education research. The fourth is Management leadership training based on modern governance system.

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INNOVATION OF IMPROVING TOURISM SERVICE QUALITY IN SHENYANG, CHINA

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ABSTRACT

The With the rapid development of tourism industry, tourism services become tourists on tourism, Shenyang as famous metropolis of northeast area and even the whole country, with a large number of visitors every year, and the tourists travel service evaluation to the Shenyang mixed reviews, this article is against this background, through methods such as documentary reference, questionnaire survey, field visits, Investigation of Shenyang travel service quality present situation, Shenyang tourism service quality links and system, to learn Shenyang travel service satisfaction of tourists, and to analyze the problems existing in the tourism services, Shenyang finally put forward the corresponding solution Suggestions, hoping to promote Shenyang tourism service quality improvement, to help the development of tourism industry better and faster in Shenyang.

Keywords: Tourism service quality, The status quo, Problem, countermeasures

INTRODUCTION

The significance of service quality innovation

1.1 Theoretical significance

In this paper, the research of tourism service quality in Shenyang, through the analysis of the related theoretical knowledge learning to the problems existing in the present travel service industry of Shenyang, and Suggestions to these problems put forward the corresponding theory, it can not only help provide theoretical direction of tourism industry development in Shenyang, but also for other tourism scholars study this problem to make some reference.

1.2 Practical significance

In this paper, the research on the quality of tourism service in Shenyang can help Shenyang tourism industry recognize the deficiencies and reasons, and the proposed solutions can improve the tourism service industry in Shenyang, promote the development of Shenyang tourism industry better.

LITERATURE REVIEW

2.1 Tourism services

Travel the word comes from Latin and Greek, its original intention is to point to around a center or axis movement, refers to the visitors to leave their fixed lived, go to another place after the return to live action, our country ancient times some scholars have put forward to travel the word, at present, with the rapid development of tourism industry, tourism appeared a variety of categories, including: Ecological tourism, rural tourism, sports tourism, forest tourism, health tourism, smart tourism, etc.

2.2 The quality of service

Service quality refers to the sum of features that can meet customer needs and requirements, and the satisfaction degree of customers for the services provided by service providers. It is the lowest level of service that enterprises provide to target customers.

RESEARCH METHODS

In order to study the problem of tourism service in Shenyang, this paper searched some relevant literature materials in the DATABASES of CNKI, Wanfang and VIP to find theoretical basis and support for the research of this paper. At the same time with the interview method to Shenyang tourists and operators made a certain interview dialogue, from which to understand their views on Shenyang tourism service quality. Finally, the questionnaire survey method is used to study the quality of tourism service in Shenyang, and the tourists in Shenyang scenic spots are randomly surveyed to understand people's satisfaction with the quality of tourism service in Shenyang.

RESULTS AND SUGGESTIONS

4.1 Innovative countermeasures to the common problems in shenyang tourism service

4.1.1 Tourism practitioners improve their quality and service level and quality

Tourism service quality is to rely on tourism practitioners travel tourists in comparison to see one of the problems in the tourism practitioners' own quality closes nevertheless, will not be able to make the tourists with good service experience, so the tourism practitioners should improve their own quality, a boost from professional ability quality aspect, tourism practitioners need to constantly learning and cultural knowledge, Secondly, tourism practitioners need to improve their own quality from the aspect of attitude, keep smiling in the face of tourists, and have good habits of explaining patiently and carefully to tourists. Three, under the condition of the present network media developed, tourism practitioners can make full use of network to understand the demand of mass media, such as well quickly, trill, etc., through the analysis of today's public needs and values, so as to locate the public favorite tourism practitioners category, then through continuous efforts to learn and meet the requirements of mass tourists to travel service personnel.

4.1.2 Tourism enterprises reasonably deal with complaints and improve the tourism service system

For tourism service quality problems, enterprises should properly handle tourist complaints, because the causes of dissatisfaction with visitors is not only a tourism practitioners on the other hand, also is closely related to tourist cognition of tourism services, tourism enterprises to meet the service quality complaint is therefore issues need to deal with the dialectical, but whether it is caused by various reasons visitors, First of all need to express our sincere apologies to visitors, and then according to the specific analysis, to determine is caused by practitioners service attitude, professional ability of tourists complain experience, must be serious criticism of the staff, and to strengthen the professional ability training of tourism professionals and service skills training. For complaints caused by tourists' perception of tourism, tourism enterprises need to apologize to them and comfort the staff involved, so that excellent staff cannot be hit or punished due to tourists' own reasons. For example, in the process of a tourist service, tourists throw garbage, damage the scenic area environment, cultural relics, the guide to stop this, but the tourists are dissatisfied, so as to complain about the guide, this situation requires the relevant departments of tourism enterprises to appease the guide, can not be biased in favor of tourists.

4.1.3 The competent tourism departments standardize and issue relevant laws and regulations to guide the direction of tourism services

Tourism services need the guidance of the national government and relevant departments. In today's era of the accumulation of individual tourists, government public tourism services also play an important role. National tourism departments and local tourism departments need to improve relevant laws and regulations to regulate the service of the tourism industry. The scope of service, object of service and service level involved in the tourism industry should be standardized, and the implementation of the standards should be supervised by tourism enterprises and tourism practitioners. Strict investigation should be carried out for enterprises with many complaints from tourists, and certain economic punishment should be given to them, and serious cases can be ordered to suspend business for rectification. The competent tourism departments can also call on the public to supervise the quality of tourism services in Shenyang, encourage the public to find bad tourism service quality problems and report them to the relevant departments in time, so as to urge the improvement of the quality of tourism services in Shenyang from the social perspective.

4.2 Passengers themselves change their ideas, transposition thinking

Visitors also need to change their ideas, tourism is a happy thing, if the service personnel's quality level is not enough, must learn to understand, if you feel the service personnel have not been able to solve their own problems, is in a service personnel to ask, everyone in the society of different positions, different nature of work, work ability is different, but everyone is very hard to live, Tourism practitioners are working hard to serve tourists at the same time, but also working hard to struggle for their own life and improve their own ability. When tourists are not satisfied with the service provided by tourism practitioners, they can think about that the staff need to deal with the problems of many tourists and deliver the history and culture of a scenic spot to many tourists, and the staff do not have enough time, energy and ability to serve every tourist.

CONCLUSION

As a metropolis, Shenyang has a sound tourism service link and service system. However, due to the number of tourists received, the different abilities and qualities of tourism practitioners, and the different cognition of tourism, tourists have mixed opinions on the service quality of Shenyang. The tourists who are satisfied with the tourism service quality of Shenyang think that the tourism service of Shenyang has brought them a good tourism experience, while the tourists who are not satisfied with the tourism service of Shenyang think that there are problems in the quality, ability and even service attitude of the tourism service practitioners in Shenyang. The reasons are analyzed and the following conclusions are drawn: Due to the lack of training and quality of tourism enterprises and practitioners in Shenyang, tourists are dissatisfied. Meanwhile, tourists' understanding of tourism and the large number of tourists in Shenyang make tourism enterprises and practitioners unable to provide comprehensive services to tourists, leading to tourists' dissatisfaction. It is suggested that the Shenyang municipal government standardize the tourism service, the tourism enterprises strengthen training, and reasonably deal with the complaints of tourists, tourism practitioners continue to learn, improve their own quality, tourists also try to change their ideas, so as to improve the quality of tourism service in Shenyang.

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THE FEASIBILITY OF CONSTRUCTING THE CENTRALIZED FUND MANAGEMENT MODE OF CHINESE ENTERPRISE GROUPS

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ABSTRACT

In recent years, with the realization of enterprise expansion such as asset restructuring, industry alliances and mergers and acquisitions, China's enterprise groups have developed rapidly. In order to construct a powerful enterprise group according to the assumption of joint-stock, collectivization and internationalization, we must strengthen the internal financial control of the group, and improve the internal financial control system is an inevitable choice. Modern enterprise groups mainly take capital as the main link between member enterprises, with huge assets and multi-level organizational structure. It is different from a single enterprise in terms of organizational form and capital structure, business scale and management procedures. . Because China is currently in the primary stage of socialism, there are still some differences between Chinese enterprise groups and those in western countries, which have their own unique characteristics. This paper will accurately analyze the characteristics of Chinese enterprise groups and evaluate the current situation of their capital management; The main purpose of this paper is to put forward management concepts, models, methods and technical tools to build an operable and scientific centralized management system of enterprise group funds.
Keywords: Characteristics of Chinese Enterprises; Centralized management of funds; centralized management system

INTRODUCTION

1.1 Research Question

In the process of collecting data, it is found that the research problems of researchers specializing in centralized fund management in China mainly revolve around the failure of timely management of the company's internal accounts. Here's the literature:

Zhang (2006) noted that the internal and external intelligence factors (from large to small) affecting the success of centralized fund management are as follows: system implementation, organizational structure design, personnel quality, degree of fund concentration, software platform management and bank relationship management. This empirical result can serve practice well, that is to say, in order to better implement the centralized management of funds, enterprises can take measures such as increasing the implementation of the system, improving the governance structure of enterprises, and improving the quality of employees.(p. 12)

Lai (2007) noted that the characteristics of the financial management system of enterprise groups are mainly as follows: first, in the scope of research, the contents of the group management system include not only financial management, but also business management, general affairs and personnel management. Second, in terms of management objectives, the group management system aims to maximize the overall value of the group through the reasonable definition and effective treatment of the relationship between responsibilities and rights in all aspects. This value includes not only economic value but also non economic value. Third, the centralization or decentralization of management system is more based on the consideration of development strategy. Fourth, if the headquarters or its core enterprises have strong core industry advantages, market network advantages, technical information advantages and their composite advantages, and the above advantages are enough to attract the member enterprises to have a high degree of dependence on them, even if there is no property right control relationship between them, the headquarters can fully implement the centralized decision-making system in operation. However, if there is no equity control relationship, it is usually difficult for the headquarters to implement centralized control over member enterprises financially. Fifthly, due to the large space span of the member enterprises and the complex transient and different market environment and different market entry barriers, in order to stimulate the enthusiasm and creativity of the member enterprises, enhance the ability to respond to the market and grasp the market opportunities in time, the operation will be more and more inclined to the decentralization system under the integration strategy.(p. 5)

Xie (2009) noted that the difficulties in the centralized management of funds in enterprise groups include the scope and extent of capital concentration, the contradiction with the flexibility of business operation of subsidiaries, the enthusiasm of member enterprises, the handling of relations with banks, and the trade-off with risk concentration. In addition, he believes that the measures to improve the centralized management of funds are to improve the company's authorization system and implement the responsibility of group governance and management;Effectively balance the surplus and shortage of funds and optimize the capital structure of the group; Improve the budget system and strictly manage the process; Establish an internal control and risk management system for centralized fund management and implement risk responsibility.(p. 17)

Because the funds can not be effectively concentrated, some member units with surplus funds can invest the funds, the parent company has not made a unified plan for the capital expenditure of fixed assets, infrastructure projects and foreign investment of member enterprises, and the investment of member units is arbitrary, and often lacks feasibility certification, which will inevitably lead to the inability of enterprise groups to really use the funds on the "blade", It can not maximize the value-added benefits of enterprise group funds.

To sum up, the main problems in the fund management of enterprise groups are that the authority of fund management is too decentralized, each member unit is divided into its own politics, and the headquarters of the group has poor supervision of the funds of each member unit, which can not give full play to the advantages of resource allocation, integration and management synergy of enterprise groups, resulting in low efficiency, high cost and high risk in the use of funds in enterprise groups, Centralized fund management is to make full use of the overall advantages of enterprise groups, which can effectively solve many problems of fund management. It is the general trend for enterprise groups to implement centralized fund management.

1.2 Research Objective

Fund management is the core of financial management, coupled with the particularity of funds and the support of external conditions such as online banking technology and financial products, more and more large international enterprise groups have separated fund management from financial management, transformed it into networking and integration, and implemented more professional fund management - centralized management of enterprise group funds, Gradually developed into mature technology and management means. In China, with the increase of international exchanges among enterprise groups, especially the promotion of commercial banks in financial products, in recent years, some enterprise groups have begun to implement centralized fund management in practice, and gradually formed an operation mode suitable for their own characteristics; However, there are still relatively few special studies on theoretical research and methodological system. The purpose of this research is to build a timely, scientific and effective centralized fund management model in line with the characteristics of Chinese enterprise groups.

The significance of centralized fund management of enterprise groups mainly lies in:

Ensure the quality of financial information, so as to improve the accuracy of the whole group's business decisions;

Make the internal resources of the group and its member units complementary and optimize the allocation, and reduce the cost of capital;

Give full play to the advantages of endogenous financing and become a new profit center. Through the construction of centralized fund management of enterprise groups, it is conducive to the effective control of parent companies over subsidiaries, the implementation of scientific management, the optimization of resource allocation, and the improvement of the overall economic operation quality and efficiency of the group. The above is the significance of this research.

In recent years, with the realization of enterprise expansion such as asset restructuring, industry alliances and mergers and acquisitions, China's enterprise groups have developed rapidly. In order to construct a powerful enterprise group according to the assumption of joint-stock, collectivization and internationalization, we must strengthen the internal financial control of the group, and improve the internal financial control system is an inevitable choice. Modern enterprise groups mainly take capital as the main link between member enterprises, with huge assets and multi-level organizational structure. It is different from a single enterprise in terms of organizational form and capital structure, business scale and management procedures.

Because China is currently in the primary stage of socialism, there are still some differences between Chinese enterprise groups and those in western countries, which have their own unique characteristics. This paper will accurately analyze the characteristics of Chinese enterprise groups and evaluate the current situation of their capital management; The main purpose of this paper is to put forward management concepts, models, methods and technical tools to build an operable and scientific centralized management system of enterprise group funds.

1.3 Research Background

A company adopts multi-level legal person system, with complex geographical distribution and organizational level, and long management chain. In this environment, it is difficult to effectively monitor the business activities of member enterprises within the group, especially the capital operation, which has not been well solved by enterprise a. In particular, the phenomenon of high deposits and high loans in enterprise groups is widespread, and a large amount of funds are deposited in business outlets, which is difficult to collect. The group is difficult to control the capital status of the subsidiary company, and there may be problems in the operation of the whole group due to the improper operation of the capital of a subsidiary company. Therefore, for a company, there is an urgent need to solve the problems of capital decentralization, capital security, inadequate supervision and low efficiency of capital utilization.At this stage, the centralized management of funds in company a is still in the primary stage, and it is still necessary to constantly improve professional skills and professional judgment, especially in risk control, strategic decision-making support, company process optimization and daily budget and regulation of cash. The specific performance is as follows:

Company a's fund management is irregular or disorderly. Although a company has a budget system, the budget has not become the legal basis for a company to organize production and operation activities. There are rules to follow and changes at will, and the budget system is in vain. The revenue and expenditure of funds lack unified planning and control, and cash flow is unbalanced; Some enterprises have unreasonable budget index design, lack of strict measurement standards and assessment basis, and lose the restrictive role of budget; As a result, the accounting flow of a company is divorced from the capital flow, the profit on the accounting statements is very high, but the enterprise capital is seriously scarce.

Inadequate capital monitoring and assessment. The lack of control over the capital flow of company a, especially prior control, coupled with the lack of feasible ex post assessment methods, has led to a large number of enterprise funds in extracorporeal circulation; A company is even difficult to grasp the major financial conditions such as investment and financing, external guarantees and profit distribution of a small number of subsidiary companies, and financial monitoring is weak and lagging behind.

Company a's funds are scattered and occupied, and the efficiency is low. The phenomenon of capital dispersion and multi account opening formed by the multi-level legal person system in company a has led to capital out of control and serious precipitation, and the capital efficiency of company a is low. Statistics show that some subsidiaries of company a set up accounts ranging from hundreds to more than 1000. In this case, if one account occupies 10000 yuan, hundreds of accounts are millions of yuan. Each account can not play a role because of the small amount of funds. If these funds are concentrated in one account, they can play a huge financial advantage; In addition, due to the imbalance of the development of group enterprises, there must be a large number of idle and precipitated funds in some enterprises, while another part of enterprises are struggling to raise much-needed funds and have to pay high interest to obtain bank loans. This "double high" phenomenon of high deposits and high loans makes the financial expenses of a company remain high.

The way and means of fund management are backward and inefficient. The internal subsidiaries of a company still use the form of submitting financial statements and oral reports to reflect the operation and financial situation of enterprises. Due to the randomness of accounting, the false preparation of financial statements, and the influence of non-standard human factors, financial accounting information is easy to be distorted and lagging behind, which is difficult to meet the needs of daily management of a company, It can not achieve the purpose of dynamic control; Although company a has also formulated fund management measures, it is unable to turn them into reality due to the lack of effective management means.

LITERATURE REVIEW

2.1 The origins of internal capital markets

The concept of "internal capital market" was first put forward by Alchian and willimason, American scholars, in 1960 and 1975 respectively. When they studied the diversification of enterprises, they found that various departments (or member enterprises) within enterprises would compete fiercely around capital. They called this phenomenon "internal capital market". In the internal capital market, when resources are allocated by price mechanism, internal investors are encouraged to choose stricter supervision, because the group headquarters have residual control over assets and can get more returns from supervision. Department managers have no residual control, and headquarters opportunistic behavior is easy to infringe on them, so the internal capital market reduces the incentive of department managers. After the 1990s, the research of internal capital market has been further deepened, and many scholars at home and abroad have supplemented and improved the concept and related theories of "internal capital market", which promote enterprises to invest effectively. More realistically, these theories have been gradually applied in the development of emerging market countries. Among them, the theory of "internal capital market" put forward by Shin and Stulz in 1998 is the most representative. They believe that the internal capital market refers to the fact that in the process of allocating resources, the headquarters tend to prefer the departments with the best investment opportunities. For the internal capital market theory, different scholars use different analytical frameworks and theoretical models to draw different conclusions, but its core content can be roughly divided into two kinds of internal capital market efficiency theory and ineffectiveness theory.

2.2The development history of centralized capital management

Karen m.k (2006) put forward the management principles of capital platform in her book, including: sharing principle. Give full play to the scale advantage of centralized funds to realize the sharing and allocation of financial resources; The principle of economic interest. Centralized management of funds will produce greater economic benefits than decentralized management to attract subsidiaries to participate in centralized management voluntarily, rather than forcing them to participate entirely by administrative means.(p. 6)

Norris L. larrymore, Javier Rodriguez (2007) said in the study that all subsidiaries in North and South America have been incorporated into the internal settlement system, and Eurasia is also trying to find effective capital concentration solutions. In the past two years, the effectiveness of centralized fund management has emerged with the reduction of interest expenditure in regional financial centers, which fully shows the importance and feasibility of centralized fund management for enterprise groups.(p. 33)

Andres Ramirez, Solomon Tadesse (2009) mentioned in the research that the cash flow formed by the internal capital market can be reasonably distributed within the enterprise group, promote the efficiency of resource allocation, and avoid the negative ideas of fund managers to develop enterprises independently and obtain personal benefits.(p. 25)

Richards, Keith a, Jones and Eli (2009) mentioned in their research that the appointment system of chief financial officer is one of the main ways for group companies to control the financial affairs of their subsidiaries, and its main responsibility is supervision and service. Supervise the establishment and improvement of financial system, abide by various financial laws and regulations, participate in the formulation of company budget, participate in the formulation of major business decision-making activities such as capital flow, transfer of property rights, investment and financing, reorganization of assets and risk management of group enterprises.(p. 31)

Michael Blume, Stefan Luckner and Christof weinhardt (2010) have concluded through research that enterprise groups ignore the time value of funds and the capital structure of enterprises, and fail to predict the demand for funds; Financing channels are single, mainly bank loans; Financing can not be well combined with future returns to consider financing risks, and there is a lack of risk prediction mechanism; The structure of capital utilization is unreasonable.(p. 15)

Baily m, Campbell J and Cochrane J (2011) said that after the centralized management of the group, it has enhanced its economic strength, sufficient cash flow, improved its credit and income level, so it can obtain more financing opportunities in the external market. With the increasing scale, the cost of independent financing of enterprise groups has also decreased.(p.4)

Zhang (2012) mentioned in his research that the changing financial management of power grid enterprises needs innovative financial management models, selects appropriate capital intensive management models for the financial management of power grid enterprises, and promotes the financial reform of power system.(p. 8)

Li (2012) believes that capital is an important guarantee for the survival of enterprises, generally in physical or monetary form. The special capital structure of listed companies leads to diversified investors and financing methods, which requires special consideration in capital management.(p. 11)

Yang, Zhang (2012) and others have concluded through research that the practice of centralized fund management is different in practice. Enterprises need to select a certain model through the investigation of various fund management models to explore the space reform and range improvement in fund management.(p. 23)

The new theory doesn't really replace the old one. With the development of the times, the research on the centralized management of enterprise funds is emerging in endlessly, of course, it is also keeping pace with the times, so some new theories can better meet the requirements of modern enterprises, but some old classical theories on the centralized management of enterprise funds can not be replaced, so it can not be said that the new theory replaces the old theory, But the new theory is more perfect and contemporary on the basis of the old theory.

2.3 Theoretical Findings in Recent Years

In order to solve the problems in the process of centralized management of funds, we can use the methods of straightening out the corporate governance structure, implementing comprehensive budget management, using "direct connection between banks and enterprises", and using modern information means; Yin (2013) believes that in order to realize the centralized management of funds, we must optimize the position of the parent company in the group, establish the awareness of capital cost and risk, and strengthen the cooperation between banks and enterprises.

Xie (2015) proposed that the management of enterprise funds should be optimized from the aspects of strengthening the status of the group, optimizing the centralized management system of funds, improving the defense mechanism of capital risks, and establishing an information platform;(p. 15)

Ji (2015) proposed several problems in the implementation of "two lines of revenue and expenditure" management in enterprises when discussing the application of "two lines of revenue and expenditure" management in Enterprises: strengthening bank account management; Strengthen the construction of financial system, especially standardize the process of fund management; Serious financial discipline, emphasizing the concept of income and expenditure account management; Control cash flow and improve the efficiency of capital use. (p. 4)

Gao (2015) believes that by using the "bank enterprise direct link", enterprises can form multi-level settlement centers while strengthening management, forming an organic whole of commercial banks, member enterprises and group headquarters.(p. 22)

2.4 Limitation of Previous Theories

Information platform security group fund centralized management information platform is developed by UFIDA software company according to the actual situation and needs of group fund management. This means that the information platform is not market-oriented commercial software certified by authoritative departments. When a group operated the information platform, based on the consideration of time schedule, it did not invite authoritative departments to assess the security and stability of the information platform. Therefore, it is not clear whether the information platform itself has inherent defects that may lead to system paralysis or collapse.

Imperfect structure of group information department as a modern large-scale group enterprise with informatization as its main management means, building a perfect information management department responsible for the management and maintenance of information system is the basis for realizing enterprise informatization management. Limited by the number of employees, group A has not set up a special information department at present, but outsources the management and maintenance of the information system to a third-party company, which sends fixed system managers to the company to implement system management and maintenance.

RESEARCH METHODOLOGY

3.1 Research Setting

China,Group a.

3.2 Research Object

Taking the centralized management of funds of A group company as the research object.

3.3 Process and Tools of Data Collection

First of all, the relevant managers of a group company were contacted, and then the relevant staff of fund management of a group company were specifically contacted. During the interview, the recording facilities were used for recording, which provided information for later research.

3.4 Data Analysis

First of all, The management system affects the effect of centralized management of funds.

Due to the particularity of the management background of a company, at present, the company adopts a hybrid parent subsidiary management system, and the enterprise generally focuses on property rights and administrative management. Such a management system makes a company highly decentralized in the management of member enterprises in order to improve the enthusiasm of member enterprises, so it mainly uses indirect management mode for funds. At the same time, The subsidiaries of company a are independent legal persons, with independent accounting, self financing and broad geographical distribution, which also forces company a to adopt a decentralized management system. How to carry out and optimize the centralized management of funds without affecting the enthusiasm of member enterprises is one of the key points of a company, and it is also the focus of this paper.

Secondly, Large capital flow and wide business scope.

At present, the company's business area spans many provinces, and there are overseas service projects at the same time. The flow of funds is large, the internal transactions of funds are less, but the external transactions are frequent, which makes the data of fund management complex and the transmission efficiency of fund management information low. These situations not only deepen the difficulty of fund management, but also aggravate the risk of fund management to a certain extent.

RESEARCH FINDINGS

4.1 Result Discussion

After a period of implementation, the centralized financial management of a company has achieved certain results, which are reflected in the increasingly perfect process and more standardized financial accounting. However, in the face of the new situation, challenges and requirements, there is still room for improvement in some aspects of the centralized financial management of a company.

4.1.1. Centralized financial management leads to the disconnection between grass-roots financial management function and accounting function

After the implementation of centralized financial management in company a, the financial accounting work of the branch company was stripped out, and the financial accounting center of the provincial company completed the financial accounting work such as regular accounting and month end accounting processing, unified the accounting standards and operating procedures, and transformed the financial functions of the branch company from accounting to management. However, this centralized management mode has caused the disconnection between the grass-roots financial management function and the accounting function to a certain extent, which hinders the progress of financial management.

Financial analysis data mainly comes from ERP system, but due to the lack of data uniformity and integration, it can not effectively support decision-making, so we can only use the method of issuing questionnaires to collect data for financial analysis, which weakens the ability to support business decision-making.

4.1.2. There are many system platforms and lack of data sharing

At present, the systems built throughout the province include boss system, reimbursement platform system, budget management platform, contract management system, asset management system, business analysis system, etc., but the statistical caliber of these systems is inconsistent, resulting in data sharing between systems, which can not provide effective support for managers' decision-making. At present, accounting internal horizontal and vertical repeated accounting, resulting in accounting information can not be fully shared within the company, can only be used independently by each layer, in this case, although each layer has a lot of data, but producers and operators can not use it. Financial information circulating in a single business system only has use value for individual departments, even if it can improve the work efficiency of individual departments in the short term, but because it can not provide effective information accurately, timely and all-round, it can not effectively improve the overall operation efficiency of enterprises, resulting in the invisible swallowing of enterprise profits due to inefficient overall operation.

At present, in the process of managing the network access fees and service fees of channel agents, a company has encountered obstacles caused by the inability to share data between systems. At present, social channel agents undertake 86% of the new customers and 65% of the terminal sales of a company's whole network, which is an important channel for the company's customer development and service, and a company needs to pay corresponding handling fees and service fees for its development business, so it is necessary to analyze a large amount of basic data, and then find the best incentive policy to maximize the potential of agents, At the same time, the cost to enterprises is the lowest. However, in the process of collecting basic data, company a found that there are great differences between financial data and business data. The network access fee confirmed by boss system is much smaller than the data reflected in financial books, while there are also differences in other aspects such as telephone fees, terminal sales, value-added business, group business and other business service fees. When the financial data in ERP and the business data in BOSS system do not match, the company's management can not obtain the correct data, so as to predict the market situation and formulate targeted marketing policies to seize the market.

4.1.3. Financial management is far from the front end of the business, resulting in reduced data reliability

At present, the financial management of a company is far from the front end of the business, which makes the data flow hierarchical, so it is necessary to integrate the process of obtaining data. On the one hand, as the production department of the provincial company, the financial accounting center is far from the front end of the branch's business, and the financial accounting personnel sometimes can not fully understand the content of economic business only according to the reimbursement documents. Therefore, it is necessary to communicate with the front end business personnel to ensure the accuracy of accounting, so as to further understand the economic business. But this approach will increase the time cost of communication, and if accountants are not willing to spend this part of the time cost, it will affect the accuracy of accounting; On the other hand, because the data of the system platform can not be effectively integrated at present, branches need to cooperate in filling in a large amount of data in business analysis.

In the process of analyzing the maintenance fee of the branch company, it is found that the financial department only has the amount of reimbursement of the branch company, and there is no data such as personnel, vehicles and equipment invested by the maintenance company, nor can the system directly extract relevant data. The financial department needs to obtain these data by issuing spreadsheets to the branch companyPaper approval forms need to be transferred from the business department to the financial department of the branch company, and then manually submitted by the financial personnel of the branch company to the financial department of the provincial company. Many levels of data circulation, coupled with the uneven quality of managers and other reasons, reduce the reliability of data in the process of circulation.

4.2 Factor Analysis

4.2.1. weak awareness of centralized management of funds

First of all, The leadership of member enterprises does not have a strong awareness of centralized management of funds. The general managers, chief financial officers and chief financial officers of most units attribute the work of centralized management of funds to the staff of funds or exchange posts. They do not care much about the working process of centralized management of funds, and do not pay attention to the preparation, reporting and implementation of budgets and capital plans. In the process of operation and management, Violations of centralized management rules are common.In the centralized management of funds, most units lack the overall awareness, usually only consider the interests of their own units, delay the transfer of funds stored in the general settlement account after the delay of fund collection, and believe that it is difficult to withdraw funds after they are transferred to the centralized account, resulting in a large number of precipitation and idleness of funds.At present, the assessment method of a company for member enterprises is mainly based on income and profit indicators, coupled with the lack of risk awareness of individual member enterprises, while realizing book profits, the amount of accounts receivable is huge and the actual cash flow is less, which affects the capital situation of enterprises. For example, the book operating income of a member enterprise in 2014 was 342.5877 million yuan, while the average accounts receivable reached 230.6903 million yuan. Excessive accounts receivable makes enterprise funds tight, and accounts receivable funds occupy the cost while there is more risk of bad debts.Cost management is the source of enterprise benefits, and cost management awareness is the key to improve the level of enterprise cost management. With the arrival of the era of high cost and the intensification of market competition, cost control has become an important issue facing the company. Correspondingly, the connotation of cost management should be expanded from material cost control to human resources cost, capital cost, management environment cost, property rights cost, service cost and other aspects. Most of the member enterprises of company a's understanding of cost management is only limited to the basic level of reducing the production cost of products, ignoring the expenses incurred in the process of capital raising and the expenses paid for obtaining funds in the process of production and operation.

4.2.2. lack of flexibility in fund plan management

Through the understanding of the management mode of capital plan and the implementation data of capital plan of a company, combined with the questionnaire survey, we can see that the management and capital managers of the company generally believe that the management effect of capital plan of the company is poor, and it is difficult to achieve the effect of cost control and comprehensive budget management. There are the following problems:the assessment method of capital plan is simple, and the capital plan is out of line with the implementation.The assessment method of company a for capital plan is the total execution quota assessment method, and the total quota of capital inflow and capital expenditure is higher than 80%. In practice, the implementation rate of the total amount of capital revenue and expenditure of some member enterprises is higher than 80%, but there is a phenomenon of confusion in the use of three funds, namely, operation, investment and financing.

In terms of capital inflow, the implementation rate of the capital inflow plan for selling goods and providing services in that year was 73.83%, while the implementation rate of other cash received related to operating activities was 629.70%. In terms of capital expenditure, the implementation rate of fuel capital outflow is 0.01%, while the cash implementation rate of other operating activities expenditure is 260.96%. The budgeted labor protection expenditure of 180000 yuan at the beginning of the year has not been implemented, indicating that in the actual use of funds, there are some expenses or costs occupying other expenses, which is not conducive to the analysis of project capital flow, It also failed to achieve the purpose of controlling expenses through the capital plan, and the statistics of the implementation of the company's capital plan were distorted.

4.3 Proof of Research Results

To begin with, the information communication between the group and its member enterprises is not timely, and there is information asymmetry. Because the member enterprises of G group generally report the capital situation to the capital management department of the group at the end of each month, and the usual capital flow is transferred through local bank accounts, so the group can not timely understand the capital situation of member enterprises, and there is information asymmetry, Thus, it is easy to cause the group to be unable to timely monitor the fund management activities of member enterprises.

Secondly, the deposit loan ratio among member enterprises is differentiated. The circulation and allocation of funds within the group are not smooth, the utilization rate of funds is low, and the financial expenses incurred by the group increase, which increases the financial risks of enterprises with capital shortage. Due to the different operating conditions and businesses of each member enterprise, some units have abundant cash, high deposit rate, some units have insufficient cash and more loans, which leads to low efficiency in the use of group funds, poor circulation and reallocation, but also increases the financial expenses and financial risks of the group, and reduces the yield of group funds.

Thirdly,the failure of unified payment of funds affects the activities of the group. The group's funds are dispersed, the settlement efficiency is low, and unnecessary expenditure is increased, which affects the unified development of the group's business. According to the characteristics of G group's business, the group is generally responsible for the unified purchase of major raw materials in the group, and then allocate them according to the needs of member enterprises, which often leads to the transfer of materials between enterprises in the form of material purchase and sale. Therefore, on the one hand, the frequency of capital settlement between enterprises is higher, and the cost of capital settlement increases; On the other hand, the group is unable to make unified payments to suppliers, affecting the business of the whole group.

4.4 Discussion

The paper agrees with the previous research conclusions, and on this basis, supplements the research views of Xie Yangchun and Ji Chunhua that enterprise fund management should establish an information platform. It is believed that the centralized management of funds should pay attention to the security of information platform and improve the structure of group information department.In addition, as in the past, the results of this paper also confirm that the main factors affecting the centralized management of funds are mainly subjective and objective.

Based on the analysis of the current situation of the centralized management of funds in a company, combined with the actual situation of the company, this paper analyzes the problems and reasons of the centralized management of funds in a group company, and puts forward optimization plans and supporting measures. The design of the plans should be practical and feasible to ensure the quality of optimization, but also to avoid problems, so as to ensure that the optimization can continue to advance. Although Chuanqing drilling company has implemented the more scientific centralized management mode of "treasurer" in 2012, due to the special nature of company a, the centralized management mode of funds can not be changed for a long time, and the optimization scheme needs to be designed on the basis of not changing the management mode of revenue and expenditure.

The specific contents of this optimization plan are as follows:

4.4.1 Improve the fund management system

Improve the fund management system, refine the fund management system and establish a risk prevention system to make the company's Fund activities have rules to follow; By expanding the scope of "bank enterprise direct link" cooperative banks, standardizing the management process of revenue and expenditure in the two lines of revenue and expenditure, and improving the efficiency of capital use; By implementing dynamic capital budget management, increasing quarterly capital plans and simplifying weekly capital plans, we can optimize the management of capital plans, improve the predictability of funds and optimize the allocation of resources.

4.4.2 Improve the centralized fund management platform

We will improve the centralized fund management platform, promote the coordinated operation of contract management, fund management and bill management, and promote the construction of information technology through the safe connection between the fund module and the banking system of the production and operation management information system.

4.4.3 Improving the internal governance structure

By improving the internal governance structure, enhancing the ability of the financial team, and strengthening supervision and assessment to ensure the implementation of the optimization plan.The contents of the optimization plan complement each other and affect each other. From the implementation process, improving the fund management system is the foundation, standardizing the business process of the two lines of revenue and expenditure is the core of the plan, optimizing the management of the fund plan is the focus, improving the fund management platform is the management means, and supporting measures are a strong guarantee.

CONCLUSION

5.1 Summary

In the process of implementing centralized financial management, company a has built a centralized financial management platform, realized a closed-loop management mechanism of integration of strategy, budget, assessment and salary, adhered to the core of efficiency and value, promoted the process of standardization and transparency of business, and played a positive role in the development of enterprises. However, with the rapid development of mobile communication business and market, the internal and external environment of enterprises has changed greatly, the penetration rate of mobile users has continued to rise, the process of industrial integration has accelerated, and the market competition has become fierce. These environmental changes have brought great impact and severe challenges to the traditional communication industry, A company has encountered the dual pressure of significantly slowing revenue growth and high cost operation. Under the new situation, a company needs to actively promote "transformation and development" and pay more attention to operational efficiency. In the process of implementing strategic transformation, the centralized financial management needs to change according to time and situation, timely find problems affecting the operation of enterprises, and timely carry out optimization work to better serve the operation of enterprises.

5.2 Limitation of Research

This research has limitation in two aspects:

First of all, the interviewees of this study are only limited to the relevant staff of fund management in group a company, which only represents their own views and has certain limitations;

Secondly, although this paper comprehensively analyzes and studies the financial centralized management mode of a company, due to the limitations of personal theoretical level and practical experience, the depth, breadth and pertinence of the research need to be strengthened, and some studies still have room for further improvement: such as cross departmental coordination research. Compared with the previous centralized financial management, which pays more attention to the centralized financial process, the research on Mode Optimization in this paper pays more attention to the coordination between the financial department and other departments. Due to the different resource conditions, working methods and key demands of various departments, in order to make the optimization plan more reasonable, scientific and convenient to operate, we must give full play to the collective wisdom, organize cross departmental special working groups, and rationally evaluate and optimize various plans. Another example is more forward-looking research. Due to the rapid development of mobile Internet and communication technology, the centralized financial management model needs to change according to the situation, rather than difficult for non professional personnel to predict. Therefore, there is still great research value on how to better grasp its development direction and law, forward-looking optimize its organizational structure, management structure and platform structure, and with the help of technological progress, make the realization of centralized financial management mobile, whole process and real-time.

5.3 Target Group and Beneficiaries of the Research

The results of this study provide some theoretical help for a group company and even the national company to carry out scientific and reasonable fund management, so as to promote the healthy development of the group company. The management of the group company takes charge of the overall situation through the centralized management center of funds, grasps the overall effect of capital operation, financing ability and investment ability, provides a basis for major decisions such as expanding the scale of the group, adjusting the industrial structure and reasonable investment, and realizes the optimal allocation of resources from the whole group level. Centralized management of funds can also enable multinational companies to maximize the use of transfer pricing within the scope permitted by law, enhance their profitability, and promote the implementation of their globalization strategy.

5.4 Suggestions

In the future, relevant researchers on fund management should strengthen their research on the importance and measures of fund management in the internal audit of group companies.

Internal audit is the evaluation of various businesses in the organization by audit institutions, an important link to supervise and assess whether the financial management of enterprises meets the regulations and standards, and a guarantee to strengthen supervision and restraint and make the budget effective. At present, company a has not established an internal audit institution, and the internal audit of member enterprises is still organized by the personnel of the financial assets department, and the internal audit is not strong enough. Therefore, company a should improve its internal audit control institution as soon as possible, introduce internal auditors with strong professional knowledge and high professional quality, and carry out regular fund management system review when conducting internal audit: such as the use of funds invested by the group, the financial indicators of member enterprises, the implementation of fund budget, etcSpecial audit of accounts receivable. For the problems found in the audit, a special audit report shall be formed and reported directly to the management of the headquarters in a timely manner. The problems found shall be implemented, corrected and rectified within a time limit. The company should change the traditional practice of supervision after the event, move the checkpoint of supervision and audit forward, conduct real-time supervision in combination with the centralized management platform of funds, realize the whole process control before, during and after the event, ensure the seriousness of the enterprise system and the rigor of the budget, and promote the timely realization of the enterprise development goals.

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THE RELATION AND INFLUENCE OF TRANSPORT INDUSTRY AND ECONOMIC DEVELOPMENT

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ABSTRACT

Through the correlation analysis of transportation industry and economic development, this paper puts forward how to deal with the relationship between transportation and economic development, especially the use of economic principles to explain the relationship between China's transportation and economic development.

Keywords: transport, development, economic, transport economics

INTRODUCTION

With the rapid development of economy and the progress of economic theory research, the study of transportation industry and economic development has become increasingly important. After nearly 60 years of development since the founding of the People's Republic of China, The construction of China's transportation system has made great progress, but compared with developed countries, the overall state is still lagging behind. How to formulate effective transportation development strategy according to the internal law of economic development is a big problem concerned by the state. Transportation plays an extremely important role in economic development. It is the important foundation of national economy and social development, the prerequisite of social development, and the leading industry of national economy. During the past 20 years of reform and opening up, China's transportation industry has undergone profound changes. The transportation industry has changed from closed and monopolized to open and competitive. But because the transportation lags behind the economic development for a long time, the transportation market still cannot meet the needs of economic construction and socialist market economic development. In the new stage of economic development, to put the sustainable development of the economy and society in an important position, it is necessary to put the sustainable development of the transportation industry in an important position, seriously study and formulate the transportation development strategy in line with the national conditions, in order to achieve the development of the transportation industry and the whole social economy.

Research significant.

this article adoption on the transport and economic development of the relationship between the transportation and economic development, and hand in how to deal with them, in particular the application of economic principles explain my transport and development of economic

LITERATURE REVIEW

The change of social economy type and development of transportation industry.

Investigation and analysis of the history of economic and transportation development in various countries can also see the internal transport with regular development stages. Before industrialization, it was the period of the development of agricultural productivity and the development of manual workshops to the direction of socialized large-scale production. Originally rely on manpower, livestock, natural means of transport, has been difficult to adapt to the needs of social and economic development. With the development of production, the change of economic structure and industrial structure, labor force is transferred from the primary industry to the secondary industry (that is, the processing industry field). In the process of industrialization and massive expansion of the market, the volume of raw materials such as media, ore, steel and other bulk goods increased sharply, and the average growth rate of freight volume was close to or exceeded the economic growth rate. Due to the changes in production structure and product structure, the high requirements of rapid, convenient and safe transportation quality have been put forward, and the higher requirements of high speed, safety, comfort and convenience have been put forward in passenger transportation. At the same time, with economic development and the improvement of people's living standards, the demand for passenger transport has increased sharply. When traveling, people have higher and higher requirements for speed, safety, comfort and convenience. These transport requirements not only promote the continuous improvement of railway and water transport equipment and transport management methods, but also enable the rapid development of automobile transport and air transport. Which can be

It can be seen that the development of various modes of transportation and social and economic development in the transportation industry has put forward new demands and higher requirements.

RESEARCH FINDINGS

In China, transportation investment is not only an important means to promote the development of transportation industry, but also regarded as one of the effective measures to stimulate domestic demand, promote regional development and national economic growth. Transportation infrastructure is a necessary condition for economic growth, but we should be cautious when implementing the policy of promoting economic growth with transportation investment. The ultimate goal of economic theory exposition and analysis is to explain realistic problems and find corresponding solutions. At present, China's overall transport infrastructure construction compared with developed countries there is still a gap, from the perspective of economic development, transport is still restricted by the "bottleneck", the overall transport capacity is insufficient for a long time, restricted transport situation is more serious; In addition, transportation infrastructure construction has a long industrial chain, involving steel, cement, construction, machinery, power, information, computer, precision instruments and many other related industries, and its investment drive has far-reaching significance for promoting China's economic development. Therefore, as a key industry related to economic development and a long industrial chain, transportation is an indispensable industry for social and economic development and revitalization.

First, the overall scale of transport infrastructure should be further expanded to meet the needs of economic development and the improvement of people's living standards. We will develop transport economic belts with transport as the main line. Give full play to the aggregation effect of transportation. Each economic region has its economic center, and a series of economic zones are established along the economic center through transportation. In this way, transportation costs will be reduced, economic individual capacity will be improved, and there will be more space for the development of economic center and economic belt along the transportation line. Although China's transportation industry has developed rapidly, the overall scale of China's existing transportation infrastructure is still very small, which cannot meet the growing demand of economic and social development for transportation. At the same time, China's transportation industry can not fully meet the new requirements put forward by the improvement of people's living standards, the proportion of expressways is not large, high-speed railway has just started, civil aviation industry is not developed, the quality of transportation service needs to be improved. The lack of transportation infrastructure, especially the serious shortage of passenger and cargo transport capacity on major transportation corridors, will have a negative impact on the healthy development of the national economy.

Second, speed up the regional layout of transport facilities and coordinate the development between regions, give priority to the development of transport systems, transport has a leading and leading role in economic development has leverage. If the characteristics of the transport industry are ignored, it will lead to transport "bottleneck" and economic "distortion". At present, the traffic in the eastern part of China is relatively developed, while the traffic in the central and western regions, especially the western regions, is relatively backward. The development of the central and western regions has been seriously hampered by backward transportation. The central and western regions are vast in area and rich in resources. Therefore, making full use of resources to develop economy and let the central and western regions develop plays a key role in shaping an effective transportation system.

Third, improve the level of transportation technology and equipment, and ultimately improve transportation efficiency. Generally speaking, China's transportation technology and equipment level is still a big gap with developed countries. The development of transportation industry lags behind the development speed of national economy, and the investment in transportation construction is seriously insufficient. The pace of China's transportation construction lags behind the needs of social and economic development, and the long-term underinvestment makes it in the economic systemIn the early stage of economic system reform, the long-term investment shortage caused serious structural imbalance. Transportation equipment in addition to oceangoing ships, electric locomotives, large aircraft and other advanced technical level, the overall technical level of transportation equipment is only equivalent to the level of developed countries in the 1950s to 1960s. For example, the railway is still in its infancy in freight heavy loading, high-speed passenger transport and automatic management. Mixed traffic is still serious in many important sections of highways; Inland waterways are basically in a natural state; Most of the port loading and unloading equipment and technology backward, low efficiency; Civil aviation aviation control, communication and navigation technology and equipment backward to adapt to the development of civil aviation. Uneven technical status and unreasonable structure of transport capacity, both seriously affect the improvement of transport efficiency, and wasteA lot of energy, but also caused serious environmental pollution.

Fourthly, further reasonable division of various modes of transportation, standardize market competition to facilitate the play of comprehensive advantages. Assuming that the existing transportation infrastructure in region A and B is in good condition, region B can choose to divide the labor and use the transportation infrastructure in region A to carry out economic connection and rebuild the transportation infrastructure. The free competition of transportation market has its reasonable side, but the waste of resources caused by it is also inevitable. China's current transport structure is formed under the condition of serious shortage of transport capacity, and various modes of transport can only be realized by "going" in the division of labor. Road transport because of the poor road condition, vehicle technology level is not high, can only bear a large number of ultra short distance transport. The transportation division of labor is not reasonable. Under the condition of market economy, the market competition is not to improve the service to occupy the market share, but to meet a large number ofBy improving the service to occupy the market share, but to meet a large number of transportation demand is not suitable for the reasonableness of its transportation economy, the cross of the market scope is serious, blind competition on the same source of customers and goods, so that the reasonable division of labor of various modes of transportation can not be really realized. At the same time, the unclear division of labor also prevents various modes of transport from cooperating by learning from each other. As a result, on the one hand, there is a shortage of transport, which cannot well adapt to the needs of economic and social development for transport; On the other hand, various modes of transport can not give full play to their potential and advantages in the comprehensive transport system. In general, it is very difficult to promote a reasonable division of labor. In order to form a truly reasonable division of labor mechanism, it is necessary to clearly distinguish the position and role of governments at all levels in the regional transportation system according to the objective requirements of transportation and regional economic development. On the premise of ensuring the sustainable development of regional economy through the arrangement and utilization of transportation resources, a benign inter-regional transportation infrastructure division mechanism should be established.

CONCLUSION

Through the above series of improvement, the government can reasonably estimate the social and economic benefits of the transportation industry, formulate the macro-strategic decision of the development of transportation, and determine the reasonable investment proportion of the transportation industry in the national economy, which will surely achieve mutual promotion of China's transportation industry and economic growth. It can be seen that the transportation system is an important part of the national economy, which promotes and restricts each other. Therefore, in the process of economic development, it is very important to coordinate their relations.

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INNOVATIVE METHODS FOR CHINA'S EDUCATIONAL REFORM AND DEVELOPMENT

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ABSTRACT

Background:

Education is the cornerstone of national development. The development of society puts forward a series of new topics for the sociology of education, and also provides many new opportunities and requirements for the discipline development of the sociology of education. Education is the inevitable choice of social development, and it is also the bridge and ladder between social development and human progress. Education, as a social subsystem, is bound to be influenced by social development. Therefore, education should be adjusted accordingly to meet the challenges brought by modernization.(Department of Degree Management and Graduate Education, Ministry of Education, 2022-06-14)

In 2021, the Ministry of Education put forward the policy of double reduction of compulsory education. Under the background of the policy of further reducing students' homework burden and off-campus training burden in compulsory education, schools should strengthen the classroom "main position" effect, improve teaching quality, improve classroom efficiency, adjust teaching strategies, improve teaching methods, develop school-based curriculum and pay attention to teaching students in accordance with their aptitude. At the same time, scientifically arrange homework to realize the real "burden reduction". Strengthen homework research, give full play to local characteristics, standardize homework correction, improve homework management mechanism, pay attention to innovating after-school service activities, and develop the integrated education mode of home-school linkage.(Chen Xianzhe, 2021).

Based on problem research, focusing on subject development and devoting to practical service are the three major missions of sociology of education in the period of social development.

Social development has been one of the hot topics concerned by the CPC Central Committee and the State Council since the 18th National Congress of the Communist Party of China. Some entrepreneurs asked, where is Jobs in China? In fact, at least equally important questions should also include: What fundamental changes have taken place in the learning needs and educational needs of Chinese people in the economic and social development? Can the educational idea, system, plate, mode,

content, etc. formed in the industrialization era meet these needs? Is education just a livelihood issue, or is it a basic and leading strategic issue that affects and ultimately determines the success or failure of China's economic and social development? Is it "tinkering" in the traditional educational concept and framework, or does education also need reform and innovation and a profound educational revolution that keeps pace with the times? The above problems, which are related to the long-term national movement, cannot be ignored.（Dong Lu Wan Long，2022-06-17)

Keywords: educational development, opportunity innovation, "four major sectors", "six major supports", innovative and entrepreneurial teaching mode, future education.

INTRODUCTION

Research objective：

Realize educational fairness, narrow the unfair situation of educational resources, narrow the regional differences of educational resources, and improve parents' satisfaction.

Through research, it is found that:

The innovative and entrepreneurial teaching mode, which promotes the cultivation of deterministic thinking, can no longer meet the needs of innovative talents cultivation in the new era (*East Snow*, 2018). The new talent cultivation mode based on innovative spirit and entrepreneurial consciousness, grasping opportunities and uncertainties to cope with various challenges is reshaping the future of education. Based on the new era, innovation determines the future, and the cultivation of innovative talents is the key factor for our country to win the future. Therefore, it is necessary to change the teaching mode of innovation and entrepreneurship, take innovation as the foundation and entrepreneurship as the carrier, and organically combine innovation and entrepreneurship to cultivate more innovative talents for our country. China's innovation and entrepreneurship education model facing 2035 should be a new model that can meet the needs of modernization and promote individual development. Through the strategy of innovation and development of education in China, education has become more and more perfect from primary school to university, master's degrees and doctor's degrees.

Social development urgently needs educational innovation and development.

Human society is rapidly transforming into a new social form knowledge economy and network society. The rapid development of China's economy and society has caught all countries in the world off guard(Xiao Juan, 2012). At least two characteristics of China's reform process are closely related to education: First, China is faced with a double transformation from an agricultural society to an industrialized society and from an industrialized society to an information-based networked society, and the pains and challenges brought by the double transformation are intertwined at the same time; Faced with the lag of the reform of educational concept, system, mode, content and method, the overall knowledge, skills and quality of talents and nationals, especially the preparation of innovative consciousness and ability, are seriously inadequate. Second, in the past 40 years, China has grown rapidly from less than one-tenth of the gross domestic product of the United States to the second largest economy in the world after the United Sates, and has been at the forefront of promoting the globalization of the world economy. China's economic and social transformation is large in scale and speed, and its challenges are diverse and complicated, which is rare in history and globally. The quantity, quality and cultivation of innovative talents and the overall improvement of national quality have become the biggest bottleneck for China's economic and socially sustainable development. It is urgent and takes a long time to get out of the bottleneck through educational reform and innovation. Even if the education reform is correct, it will take one or two generations to show its effect. Time waits for no man, we need to seize the day.(Guo Wei. 2019)

At the same time, the Sixth Plenary Session of the 19th Central Committee comprehensively summed up the great achievements and historical experience of our party and called on us to take advantage of the situation and forge ahead bravely, so as to achieve the second century-long struggle goal of building a socialist modernization power in the middle of the 21st century. As college students in the new era, we should shoulder the mission entrusted to us by the new era, always be innovative, be determined to innovate and be a fresh force in reform and innovation. The traditional teaching mode definitely needs to be changed, so how can we cultivate students' innovative thinking and methods in classroom teaching, and how can we improve students' innovative ability? This requires us to construct an effective new teaching model and apply it to the specific innovation and entrepreneurship classroom teaching process to carry out classroom revolution. Implement the education plan of "cultivating people by virtue" and enhance the competitiveness of China's innovation strategy through innovative talents.

LITERATURE REVIEW

2.1. Research status of innovation and entrepreneurship education in China

The education of innovation and entrepreneurship in China started late, and it really started in the last ten years. For a long time, we didn't even really know about innovation and entrepreneurship, and denied taking courses of innovation and entrepreneurship. We felt that compared with professional courses, it was a marginal discipline. Everyone's impression of innovation and entrepreneurship seemed to be Taobao, Ctrip, Home Inns, bike-sharing, Charging Bao, etc. There was some misunderstanding. So what exactly is innovation and entrepreneurship?

Innovation refers to any behavior and process that can change the wealth creation potential of existing resources《Chen Zhanggong (2022-08-10)》. It is to develop things that have not been done in the past and do things that have not been done in the past. In a narrow sense, entrepreneurship refers to starting a new enterprise (Start-up). The relationship between innovation and entrepreneurship is close, and it is difficult to separate them. Their relationship is: consistency and relevance in connotation, interaction and development in practice. The difference is: the main body, its focus and ultimate goal are different. For example, innovators and entrepreneurs are different, and their roles are different.

In the era of rapid development of the Internet, the new Internet format "internet plus" formed under Innovation 2.0 provides new ideas for reform and development. College students make full use of the Internet in their study and employment stages. The plus sign in "internet plus" represents addition and combination, which can be deeply integrated with work, add new elements to traditional work and industry, and adapt to the development of the new era. The employment situation faced by college graduates is becoming increasingly severe: on the supply side, the number of college graduates has gradually increased in recent years; On the market side, the demand for jobs has dropped sharply, accompanied by structural contradictions; In addition, the intense employment competition has resulted in the increase of college students' employment expectation. All these have caused the employment guidance service in colleges and universities to get into trouble. "internet plus" can inject innovative power into college employment guidance. In the work practice, through the following three aspects: establishing a good interactive platform, actively exerting the function of WeChat, and carrying out employment education from the beginning of students' enrollment. The "internet plus Employment Guidance" mode is an effective mode to improve students' employment quality.

2.2. Research status of innovation and entrepreneurship education abroad

Entrepreneurship courses in the United States have become a key subject in the teaching of university degree or above. It is said that 95% of the wealth in the United States was created by Chuangyi generation after 1980. Courses for young businessmen have been arranged in the curriculum system of primary and secondary schools in the United Kingdom, which focuses on cultivating students' innovative interest. Japan pays more attention to entrepreneurship training, and various entrepreneurial competitions are in the ascendant.

In the past, the international innovation and entrepreneurship education model was a linear model, which first taught students how to find ideas, then how to turn them into business opportunities, then how to seize this business opportunity and turn it into a profitable model, and finally made a complete and systematic business plan. （Ma Yongxia ,2022)

In the future, take the developed country, the United States, as an example, for the United States is now changing the past model and trying to make a new one(Zhai Xiaoning, December 8, 2020). Now the American entrepreneurship education model has changed into a nonlinear one. First, pay attention to cultivating students' entrepreneurial awareness, and then look for business models. Because the technology and products you own are not profitable, only the later business models are profitable, so the second step is to find a business model, find this business model, consider how to start a business, and pay attention to encouraging students to do it right away, iteratively, and carefully. If you fail quickly, you will soon succeed. This process is actually to help students gradually accumulate experience, and these practical experiences are students.

2.3. Review of research on innovation and entrepreneurship education at home and abroad

Through the previous literature review, it is found that the development of innovation and entrepreneurship education in China is relatively slow, and many related studies remain at the theoretical level to a large extent, superficial, and do not go deep into the essence of innovation and entrepreneurship education, especially in the construction and exploration of innovation and entrepreneurship mode, and there are still many shortcomings. On the contrary(Professor Ma Yongxia, 2022), with the historical evolution of foreign innovation and entrepreneurship education models, they have made great progress in many aspects. To sum up, experts and scholars at home and abroad have done some research and exploration on innovation and entrepreneurship education. With innovation and entrepreneurship teaching mode as the theme, the author has found few doctoral dissertations in journals on How Net, and the research is weak. Therefore, the research on innovation and entrepreneurship teaching mode is still a field worth exploring, and there is still room for further research and thinking. Especially, the research on constructing a brand-new teaching mode and applying it to specific teaching practice in order to improve the effectiveness of innovation and entrepreneurship teaching is immature, and most of them focus on the description of innovation and entrepreneurship forms, and there are some problems such as weak theory and single discussion perspective.

2.4 The direct influence of the double reduction policy on the senior high school entrance examination

The 2022 senior high school entrance examination is the first senior high school entrance examination after the implementation of the double reduction in primary and secondary schools. It also has historical significance. So what changes will be made in this year's senior high school entrance examination?

First, it is forbidden to appear high school knowledge points and off-campus training content; This is also the biggest restriction to comply with the double reduction policy.

The second is to reduce the memory test questions and increase the open, comprehensive and inquiry test questions; This change was mentioned as early as 2021, and it is also a chance to achieve quality education. Today's senior high school entrance examination selection policy is no longer limited to academic hegemony with pure theoretical knowledge, but to cultivating students with all-around development in morality, intelligence, physique, beauty and labour.

The policy of "double reduction" does not allow off-campus remedial institutions to set up remedial classes in disciplines, nor does it allow on-campus classrooms to talk about excessive content. Therefore, this proposition restriction is essentially in line with the change of "double reduction".

New changes in 2022 senior high school entrance examination

Realize the provincial unified proposition in 2024.

This is also mentioned in the notice just issued by the Ministry of Education. On the premise of ensuring the quality of the proposition, the goal of provincial unified proposition will be promoted in 2022, and the final singing voice will be guaranteed to achieve the provincial unified proposition by 2024.

Combination of two examinations

This point was also put forward in 2021. Before that, in big cities such as Beishangguang, there were two exams: the junior high school graduation exam and the senior high school entrance exam. Now, it is stipulated that the senior high school entrance examination should take into account graduation and further studies.(On Kexin Education 2022-04-07)

2.5. Background analysis of the era of innovation and entrepreneurship

At present, China has comprehensively deepened the innovation and entrepreneurship education reform, and many aspects have given active support and provided corresponding supporting measures, hoping to establish a new talent training mode oriented to innovation and entrepreneurship. At present, in the era of mass entrepreneurship and innovation, the times call for college students' innovation and entrepreneurship (Department, 2022).

According to the Global Entrepreneurship Monitor (GEM)2017/2018 China Report:

2.5.1. Chinese entrepreneurs: over 30% are aged 25 ~ 34, and about 50% are aged 18 ~ 34.

2.5.2. Highlights from 2002 to 2017: Academic qualifications showed advantages, but the fear of entrepreneurial failure increased from 25% in 2002 to 41% in 2017.

2.5.3. The innovation capability and high-tech entrepreneurship ratio of Chinese start-ups are lower than the average level of G20 economies.

2.6. Problems existing in the current teaching mode of innovation and entrepreneurship(Guo Yanhua, 2022-06-21)

2.6.1 In the early stage, the author adopted the following activities: (1) The basic theory study adopted the method of literature analysis, aiming at the study, collation and reading of important speeches, works and documents published by the leaders of the CPC Central Committee and the State Council, and searched and consulted the relevant research materials at home and abroad. (2) Continue to study, adopt the comparative research method, and compare the current innovation and entrepreneurship education models in colleges and universities in China against the background of the world innovation and entrepreneurship education models, and compare their characteristics and shortcomings. (3) In the stage of data sorting and summarizing, a survey questionnaire was initially formed and an interview outline was prepared. (4) Carry out investigation and research, learn more about the present situation of innovation and entrepreneurship teaching in several universities in the province through observation, interview and questionnaire, and collect data. (5) In-depth analysis of research data and collection and collation of data again. (6) Analyzing the final survey results, it is concluded that there are the following problems in the current innovation

2.6.2.entrepreneurship teaching mode in colleges and universities: (1) The innovation and entrepreneurship teaching mode in colleges and universities is converging. (2) The implementation of innovation and entrepreneurship courses is a mere formality. (3) The type of curriculum setting is mainly traditional subject courses, with few active and practical courses. (4) Single teaching methods and means, traditional and rigid teaching concepts(Guo Yanhua, 2022-06-21). (5) Lack of professional teachers with high quality and profound foundation.

2.7 "Four sections, six supports" collaborative innovation and entrepreneurship teaching mode construction.

2.7.1 the purpose of construction

This mode aims to build a talent training goal that can serve the national "double innovation" strategic thought. This mode aims at cultivating students' innovative thinking and entrepreneurial ability. According to the content structure of "innovative thinking training+entrepreneurial knowledge analysis+entrepreneurial success case sharing", flexible and diverse teaching methods and curriculum settings, students can master and analyze more knowledge and skills needed in each stage of entrepreneurial process on the basis of mastering the basic concepts, principles and methods of innovative entrepreneurship, and cultivate a solid foundation.

This model aims to make colleges and universities understand that the purpose of innovation and entrepreneurship education can't be utilitarian. It's not simply teaching students to start a company or an online shop, or a crash course in entrepreneurship, or letting every student start a business. When entrepreneurs are entrepreneurs, the training goal of innovation and entrepreneurship education should be "college students' ability improvement, value shaping and knowledge imparting" in three dimensions, which coincides with the requirement of "cultivating people by virtue".

2.7.2 Problems to be solved by this model

Trying to construct a new mode of innovation and entrepreneurship teaching, seeking the convergence point between innovation and entrepreneurship education and "moral education" education, and reconstructing the relationship between theoretical knowledge, skills and practice, so that they can complement each other. How to guide students to break through thinking patterns, cultivate critical thinking, teach innovative methods, improve innovative skills, and finally serve and give back to the society in the specific innovation and entrepreneurship teaching mode is the main problem to be solved by this mode.

2.7.3 The main features and highlights of this model

Professor Song Xiongxiong, an international leading scholar and educator in the field of innovation and entrepreneurship research, once said, "The best innovation and entrepreneurship education mode is to let students do it." This coincides with Dewey's educational idea of "learning by doing", which is deeply inspired by two academic leaders.

The prominent feature of this model is that it is not just a general theoretical discussion with labels, but a series of problems such as concept, system, curriculum setting, etc. in the current innovation and entrepreneurship teaching model are reformed, understood and solved from the essence of specific refinement to curriculum implementation and even classroom teaching. By improving the teaching mode of innovation and entrepreneurship, it is hoped that it can help college students master the basic knowledge and literacy needed for innovation and entrepreneurship comprehensively, and lay a good foundation for innovation and entrepreneurship in the future. The Ministry of Education has issued many documents on innovation and entrepreneurship education. It is hoped that vocational colleges should update their educational ideas in time, recognize the social and educational significance of innovation and entrepreneurship education, and consciously integrate how to cultivate students' innovative thinking and how to improve their innovative ability into the whole process of our teaching. The best way is to carry out the integration of specialty and innovation in classroom teaching, and integrate the educational idea of improving innovative ability into college students' professional curriculum system and learning practice.

2.7.4 The expected goal to be achieved by this model

The innovation and entrepreneurship teaching mode of "four sectors and six supports" fully implements the requirements of national "double innovation" personnel training, insists on teaching for all kinds of professional students, adapts to the differences of disciplines [5], advocates taking the formation and development of college students' cognitive ability of innovation and entrepreneurship as the main line in teaching, takes the basic knowledge and methods of innovation and entrepreneurship as the foundation, runs through the process of innovation and entrepreneurship inquiry with a large number of "learning by doing" activities, and pays attention to developing students' innovative thinking. Inspire students' entrepreneurial consciousness, cultivate students' innovative entrepreneurial spirit, guide students to practice innovation and entrepreneurship, and comprehensively improve students' comprehensive quality and ability[6], so as to provide some suggestions and suggestions for China's colleges and universities to carry out innovative and entrepreneurial education activities. At the same time, I hope this teaching mode can help students develop solid skills in the tide driven by innovation, become the forge ahead of the times, fight, and achieve a wonderful life.

The practical application value of this model.

Through the exploration of the teaching mode of innovation and entrepreneurship, I hope it can help college students master the basic knowledge needed for innovation and entrepreneurship comprehensively, and lay a good foundation for innovation and entrepreneurship in the future.

At the same time, through the analysis of many teaching elements of this model, it makes colleges and universities understand that the purpose of innovation and entrepreneurship education can't be utilitarian, and the training goal should be the three-dimensional integration of "college students' ability improvement, value shaping and knowledge imparting".

Constructing the practical application value of this model (Guo Yanhua, 2022-06-21)

Through the exploration of the teaching mode of innovation and entrepreneurship, I hope it can help college students master the basic knowledge needed for innovation and entrepreneurship comprehensively, and lay a good foundation for innovation and entrepreneurship in the future. At the same time, through the analysis of many teaching elements of this model, it makes colleges and universities understand that the purpose of innovation and entrepreneurship education can't be utilitarian, and the training goal should be the three-dimensional integration of "college students' ability improvement, value shaping and knowledge".

In the information age, the orientation of employment service and management for college graduates determines the final result and effect to a certain extent. Educators should ensure the correctness of decision-making, adhere to the three basic principles of informatization of employment service, modernization of ideological and political education and practice of student management, and formulate a practical and instructive employment service strategy. That is, colleges and universities should continue to strengthen the construction of employment guidance courses, enhance graduates' professional spirit based on ideological and political education, use big data to guide students into promising fields, and rely on specific innovative and entrepreneurial projects for employment guidance and ideological and political education. (Wang Wei, August 15, 2002)

Adhere to the integration and innovation of teaching system concepts.

Zhai Xiaoning, December 8, 2020)

Deep integration and innovation. Artificial intelligence education needs the cross-integration of multi-disciplines and a world vision. It is necessary to integrate the advanced ideas and successful practices of international education, and carry out local innovation. It is necessary to strengthen international exchanges, combine the idea and practice of STEAM education, and promote the deep integration of artificial intelligence and education. It is necessary to make artificial intelligence education a kind of literacy education, so that students can correctly know, understand and apply artificial intelligence. Students and teachers are the main body of educational innovation, which contains strong scientific research and innovation ability. Guiding students and teachers to enter the development cycle of education and scientific and technological research together is an effective measure to truly break down barriers and grasp the breakthrough point of educational innovation, which is of great significance to the exploration and practice of future education. In the tide of educational reform, we should stimulate the wisdom and strength of teachers and students, jointly carry out educational innovation, open integration, break down barriers, share common progress, combine online and offline in an all-round way, and encourage teachers and students to jointly innovate, create courses, share teaching resources, and cooperate for common progress.

CONCLUSION

Facing the future education, from the perspective of technology-enabled education, the following thoughts can be made on educational ecology. First of all, the blueprint for future education needs to be interpreted from a technical perspective. Some scholars concluded that the future education is characterized by lifelong goals, comprehensive contents, diversified forms, individualized methods, precise services and developed evaluation. All these features need to be properly and maturely implanted, which is the main battlefield for education and technology researchers to strive for at present and in the future. Secondly, the development of educational environment enables the change of teaching resources, and the development of educational technology will enable the change of teaching means and modes. Rich learning resources are the prerequisite for fruitful future education, and the development of technology will impact the existing educational paradigm, especially the blended learning paradigm (Mingyue, 2021-09-16), further blurring the online and offline learning boundaries. Innovation and entrepreneurship teaching is different from the traditional "indoctrination" and "spoon-feeding" teaching mode, and it does not dig deep into the deep connotation of the theory. We should pay attention to stimulating students' creativity and subjective initiative, and make use of the teaching mode of "four sections and six supports". When preparing lessons, we should first find the starting point. Who is this class designed for?) Second, find the right foothold. (How to fall is how the classroom is implemented?) Finally, find the right end, ok? (Evaluation and Reflection) In teaching, if teachers can get the employment and entrepreneurship cases and materials that students are meeting and struggling with for classroom teaching, and analyze the important and difficult points in teaching with cases, if the specific employment and entrepreneurship after class can continue what they have learned in teaching and use them flexibly, it will constitute an innovative and entrepreneurial education experience with strength and more moist growth.

The outbreak of epidemic in COVID-19 has affected all aspects of people's social life. The state is promoting the normalization of epidemic prevention and control, and promoting the production and life to return to normal order. In the post-epidemic era, the environment for the development of innovation and entrepreneurship education in colleges and universities has changed significantly. Colleges and universities need to pay more attention to the synergy of different subjects, optimize the quality of existing education and resources, and attach importance to the cultivation of college students' values. At the same time, we should regard the new situation and new scene in the epidemic as a new field to carry out innovation and entrepreneurship activities, make clear all kinds of factors that affect the quality of innovation and entrepreneurship education, optimize the existing innovation and entrepreneurship education methods in this way, reflect the new characteristics of innovation and entrepreneurship education in the post-epidemic era, and promote the development of innovation and entrepreneurship education to a new stage. (Gao Mailing, Cai Shengnan, August 16, 2022)

Innovation is the engine of social and economic growth, the need of the development of the times, and also an important path for personal growth and an important way to realize value. The construction of the teaching mode of "four sections and six supports" is to encourage and guide college students to have strong innovation self-confidence, to show their enterprising and high-spirited demeanor, to take the road that no predecessors have ever taken, and to be a valuable person to the country and society.

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MANAGEMENT STRATEGIES FOR THE INDUSTRIAL DEVELOPMENT OF SPORTS STADIUMS

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ABSTRACT

With the rapid development of China's social economy, the people's desire for a healthy life and their enthusiasm for national sports participation have been rising, which led to one of obvious phenomena that the demand for sports has grown significantly. However, the sports items and types vary from region to region, and the existing business management mode of sports venues can no longer meet the growing sports needs of the people. In the current development trend, the industrialization of sports venues is particularly critical. To promote the industrialization of sports venues and to significantly improve the quality and level of development, the key solutions are to effectively enhance the industrialization of sports venues, to make the managers realize the importance of establishing a correct and comprehensive business management concept, to focus on solving the current problems like small-scale sports venues industry, weak foundation, system imperfection and so on, and to coordinate the upstream and downstream industry chain and jointly solve the problems of the industrialization of sports venues, so as to make a guarantee for the development of sports. This paper through expert interviews and on-the-spot inspections of some sports venues, this paper understands the current situation of sports venues' operation and use, and uses the method of literature and logical reasoning to analyze and explore the existing industrialized management of sports venues in China. Hence, I accordingly put forward some rationalization suggestions: scientific planning and correct positioning; improving the management mode; increasing the support of national policies; strengthening brand construction and obtaining more financial support, so as to ensure the significant improvement of the industrialized development of sports venues.

Keywords: sports venues, industrial development, business management, strategy

INTRODUCTION

With the innovation of the management concept of large sports venues (hereinafter referred to as venues) in China, the diversification of social needs and the innovation of construction technology, the newly built venues in recent years have broken through the basic function of holding sports events and become a collection of sports competitions and cultural performances. It is a large comprehensive sports and cultural center integrating exhibition services, fitness and entertainment, advertising and development, hotel catering, shopping and leisure, and urban tourism. Relevant government departments should establish and improve the legal system of sports, strengthen the legal system of development environment, make the sports venues more functional, standardize the reasonable allocation of resources, expand the training ways of professional and technical personnel, increase the training of talents, set up regional emergency event rescue agencies to ensure the safety of the event, accelerate the construction and improvement of infrastructure, comprehensively upgrade the industrial capacity, adjust the industrial structure, carry out the reform of system and mechanism, as well as perfect the policy system, etc.

The main problems of industrial development and management of sports stadiums

1.1 Under-utilization of the site

1.1.1 Single building use

Some sports venues are purposely built to host large sports competitions, often on a larger scale, focusing only on short-term needs without long-term planning, resulting in the venues remaining idle after the competitions. According to relevant research, more than half of the venues are not planned and designed with the post-competition operation needs in mind, while most of the operation and management organizations are not involved in the preliminary design of the venues, resulting in unfamiliarity with the venues and the inability to carry out effective post-competition development and precise positioning (Yang Xiaoyin, Zeng Jianming, Zhu Junpeng, Wang Yule,2022).

1.1.2 Site selection issues

With rising land prices and urban construction, many sports venues have chosen to be built in the suburbs in recent years. Although this approach saves money, sports stadiums are often disconnected from urban life because of the distance from urban areas, less foot traffic, and less need for sports and fitness activities. Due to the lack of transportation, people have to drive to the stadiums, which not only reduces people's enthusiasm for sports, but also wastes a lot of resources. Due to the distance from urban areas, the distribution of venues is uneven, and some areas concentrate a large number of venues in one place, so that their functions cannot be fully developed and operated, and there is an urgent need to solve the contradiction between supply and demand (Yang Yulong, Li Pengsong,2022).

1.1.3 Single service line

Sports stadiums should also have other diversified operational contents to meet the needs of sports and playing fields. Large sports venues are a multi-functional complex that can accommodate a variety of activities such as large sporting events, cultural performances, fitness and entertainment at the same time （Qiu Majia, Wang Fang，2022）.However, because of these problems, many venues are competition-oriented, focusing only on the needs of the competition, instead of fully considering the post-competition sports stadium construction and supporting services, the lack of multi-functional, multi-level design, which can't meet the needs of modern urban residents of sports consumption （Li Gang, Huang Haiyan，2022）.

1.2 Lack of professional management and administration

1.2.1 Lack of specialized personnel

Most of the managers of sports venues in China are contractors for property management, and only a small number of them are professional and technical personnel specialized in management and marketing, and there are relatively few studies for professional marketing of sports venues in China, and they can only accumulate experience through their work. Due to the lack of professional managers, it is difficult to manage the sports venues effectively and systematically （Wan Jianhong, Nie Fangfang，2022）. However, from the current point of view, there are too many sports venues organizing and carrying out training of sports professional and technical personnel to meet the needs of the current booming sports talents, and the lack of market supervision and monitoring of sports venues makes the technical personnel of sports venues unable to meet the standards, which eventually leads to the lack of standardized development of sports venue industrialization. Many sports venues' business managers themselves do not know the danger of the activities, are not familiar with the geographical location of the activities, do not understand the local climate, lack of experience in dealing with emergencies, lack of professional sports skills. Also, there is a lack of organizers who could organize and hold projects, and there are even fewer team leaders with certain qualifications （Chen Yiming，2022）.

1.2.2 Lack of conception

The operation concept is the guiding ideology for the development of sports venues. However, at present, most sports venues in China are still backward in their management concepts, and operators lack active marketing strategies and methods, and can only passively wait for customers to come to their doors. The restriction from the traditional management and operation concept makes the development of sports venues always in a passive and reactive position. In a sense, privatization operation is more conducive to the development of sports, but in the process of privatization, some investors do not know much about it yet, and their understanding of the concept is shallow （Chen Yuanxin, Zhou Biao, Ji Qing，2022）.

1.2.3 Disadvantages of administrative system

Most sports venues are managed on a budget. Additionally, all expenses are not made until the end of the previous year and must be arranged strictly according to the budget, without which funds cannot be spent. The company's operating income will also be included in the budget, according to the income and expenditure. In actual operation, the maintenance and upkeep of the venues are infeasible. Without funding, various sports cannot be played and the flexibility of sports fields is greatly limited. In terms of sports venue management, establishment management is still in place （Song Zhongliang, Wu Peng， 2022）. This system stipulates that formally employed managers must meet the required staffing levels. If there are vacancies, they can be filled through open recruitment, but the end result is somewhat different from the actual need. The establishment system has led to constraints on staff mobility and the inability to move freely between institutions, resulting in staff sticking to their original positions for years and years. Due to the lack of fresh blood, sports venues were unable to adapt to the new situation for a long time（Lu Li,and Wang Zhiqiang，2021）.

1.3 Funding issues

1.3.1 Government policies

In order to ensure the popularity of sports for all, China has formulated a series of policies, which have had some positive effects to a certain extent, but have not played a good role in promoting sports as a whole. Currently, financial subsidies to sports institutions at all levels of government are mainly focused on the sports system, and the subsidies available to sports facilities in the non-sports system are very limited. The lack of transparency in the process and the lack of an objective criterion for judging makes it difficult to implement financial subsidies from local governments, and some venues that rely on private forces to operate are also not subsidized by the government. At present, most countries give certain tax benefits to the social welfare of public resources, while the benefits of taxing them are very limited. First, the wide variety of taxes and, second, the growing tax gap between government and business as sports venues are gradually privatized further constrain the development of venues. The normal operation of sports venues must have enough energy to maintain them, and the national prices of water, electricity, gas and heat for sports venues have to be in accordance with the industry standards, but the reality is not as good as it could be, and most of the venues are charged at commercial rates, which are not strictly enforced （Yang Guang，2020）.

1.3.2 Poor financing channels

There should be various sources of funding for the construction of sports venues in China, however, most of them rely on financial allocations, and if they encounter financial difficulties, the venues will not be able to stand. The front-end venues are built for competitions, and once the competitions are over, there is a huge amount of money invested in the subsequent development. However, now it seems that the government has invested a huge amount of money in the front-end, but is not willing to invest more, which eventually leads to the phenomenon of closing these venues when there are no sporting events or athletes for training, and failing in functioning them properly（ Lou Xu，2018）.

LITERATURE REVIEW

Sports stadium industrialization development and management measures

2.1 Scientific planning and correct positioning

2.1.1 Create a good development environment

The development of the industrialization of sports venues needs a good development environment, but at present many regions have not formulated corresponding management regulations and rules, resulting in too much confusion in the development and implementation of the industrialization of sports venues. In response to this situation, "National Sports Management Regulations", "Sports Management Regulations" and other laws and regulations should be formulated as soon as possible to establish a perfect sports management system and regulate the operation of sports events. It is necessary to further clarify the association between sports event venues and management departments to prevent them from shirking their responsibilities to each other. In addition to strengthening the coordination and service functions, it should also provide favorable conditions for sports development in terms of information collection, industry management, and government communication. General sports include mountaineering, hiking, orienteering, rock climbing, gliding, as well as skiing, horseback riding, fishing, biking, etc. By integrating the strengths of various parties, associations are formed, costs are reduced, and benefits are increased. For example, both parties collaborate on technology and talent in order to complement each other's strengths and promote maximum efficiency in each production chain（Wang Linjun，2016）.

2.1.2 Implementation of resource integration and industrial collaboration

Sports include high-risk sports such as mountaineering, hiking, and wilderness exploration, which are more professional and practical compared to other sports. These sports require to master professional skills and be organized rigorously to reduce accidents. It is necessary to be professional in business management, personnel training, and construction of regulations, which is the only way to ensure the healthy and sustainable development of sports activities and the healthy development of sports activities （Yin Xuelin,andWang Zhaohong，2014）. The existing sports venues should be actively developed, and certain funds should be invested to renovate, expand, improve, and gradually transform them. The hosting of large events is no longer a mere goal, but the addition of mass participation projects with a profit zone like gyms and swimming pools. The utilization rate of existing venues can be effectively improved through the intensive use of existing venues. Government agencies in various sectors should cooperate with each other, for example, the departments of sports, culture and education can share resources to prevent duplicate construction and save land. In the planning and construction of sports venues, the demand for multiple functions should be fully considered, and multi-functional and multi-level composite design should be carried out to realize the function of serving different groups of competitive sports and popular sports, so as to realize the effective utilization rate of sports venues. In such ways, people could really participate in sports to enjoy the fun brought by sports, which will promote the sustainable development of sports in China （Li Tian，2013）.

2.2 Improvement of business management model

2.2.1 Introduction of professional talents

Professional management personnel can provide a more reasonable program for the development of the venues, while regular training can be conducted and the allocation of corresponding positions can be decided according to the effect of training to achieve the goal of cultivating talents. In the process of recruitment, attention should be paid to the selection of people with certain professional skills to prepare them for future work （Pan Yanwei, Xia Fang,andLi Yanle, 2012）. At present, most of the venues in China are still operating in a career-based operation, but due to the development of the times, the current operation of sports venues can no longer adapt to the current business situation, and it has become a trend for private companies to intervene in the operation. This requires the relevant units to play a leading role, in-depth study and comprehensive understanding of the idea of privatization. In the operation process, we should consider the public's point of view, try to consider from the public's point of view, as far as possible to meet the public's sports needs, meanwhile taking into account the economic and social benefits. Relevant departments should provide a legal basis for the reform of the operation and management of sports venues （Yang Yufeng,2011）. The operation and management of sports venues are subject to certain constraints in terms of financial budgets and establishment systems. A realistic budget system can be developed according to the characteristics and development purposes of the venues, and the restrictions on staff can be relaxed to promote inter-institutional staff mobility and sports activities, thus injecting new vitality into the management of sports venues （Wu Longji，2011）.

2.2.2 Strengthen publicity and education

A standardized fitness activity site has not yet been established due to the lack of norms for the five major activities: science, rationality, safety, teamwork, and environmental protection. The guidance of the correct concept requires not only an outstanding expert for promotion, but also a standardized teaching base for demonstration and teaching （Wang Yanyuan，2011）. It is necessary to further improve the sports facilities for the purpose of standardization. Firstly, the provincial mountaineering association should be organized to organize sports experts and technicians to jointly develop standards (including the amount of resources, camp standards, environmental protection standards, knowledge dissemination system, early warning system, management system, signposting system, emergency system, etc.).

Secondly, in accordance with the relevant regulations, a scenic area with more abundant resources in their respective regions was selected as the standard. Finally, a scenic area investment, each city's mountaineering association-led effort, and joint investment by major sports venues are used to form a win-win situation for all three （Du Lele, Liu Yu'e, Wang Hui,and Chen Fei,2011）.

2.3 National policies support

2.3.1 Increase the Policy Support

The development of sports venues cannot rely entirely on the strength of all parties, but requires the joint efforts of all parties, and at the same time, we should seek strong support from the local government, coordinate with relevant departments and implement various legal documents that support the development of sports venues. In terms of energy, such as water, electricity, gas and heat, the finance department should give more concessions to reduce expenses and ease their burden. At the same time, the government can also take some specific measures to promote the development of sports in China. By setting up a "public sports facilities development fund", the construction and development of sports facilities can be effectively guaranteed by the government with dedicated funds, forming a good model for healthy development. Many European countries consider the use of composite forms in the design of venues. Many newly built arenas have multiple functions such as leisure, housing, and entertainment while meeting various sporting needs（ Feng Dazhi and Dai Hongfei，2010）. In addition to holding sports competitions, they can also host some large concerts, festivals, cultural performances, etc. Some venues are well designed on the floor in order to save space and improve the efficiency of use. For example, there is a huge parking lot with a theater, bowling and basketball courts on the ground floor, while on the second floor, there is a sports field with a swimming pool and a community fitness center above.

2.3.2 Build a perfect management organization system

The development of China's sports stadium industry should be built and improved as soon as possible with authority, reasonable division of labour, efficient operation and rule of law protection of administrative institutions. It should also reach the goal of breaking through industrial and regional barriers and streamlining approval procedures. The "decoupling" of state-owned enterprises from state-owned enterprises will be promoted in accordance with the requirements of the General Programme for the Decoupling of Industry Associations and Chambers of Commerce from Administrative Organs. Through innovation in policy, management, technology and services, the market potential could be given full play to break down industry barriers, remove institutional barriers and establish a sound system of sports market management, and to promote the healthy and rapid development of the sports industry. To strengthen the guidance of planning, policies and standards, and actively explore new ways of developing the sports service industry. To optimize marketing and activate the vitality of enterprises. We should vigorously develop a variety of business entities, absorb all kinds of social funds, bring into play the enthusiasm and creativity of the whole society, and create conditions for goods and services produced by the masses. It is necessary to adapt to local conditions and to have characteristics. On the basis of development, we should make comprehensive use of spatial resources, take advantage of the vast territory and rich natural resources to develop sports industries with regional characteristics, build a system for coordinated regional development and promote the sustainable development of sports. The development of the sports industry should be supported in accordance with the current planning layout, taxes, land prices and land, making full use of the existing sources of funding （ Li Guanjun,2010）.

2.3.3 Build and improve the linkage mechanism

To actively promote innovation in areas such as insurance services, rescue systems and industry statistics. The first step is to consolidate the grassroots level, strengthen the service system in the concentration areas, and enhance the construction and improvement of the policy, transportation, safety, information, technology and rescue service systems around the concentration areas. To strengthen the combination of industry, academia and industry standardization, improve activity service standards, improve activity safety, order and quality assurance systems, and enhance the standardization of activity facility construction, service provision, skills training, personnel qualifications, activity management, project operation, equipment and equipment. To establish and improve the sports industry statistical system, indicator system, evaluation and monitoring mechanism, regular release of data and other working mechanisms. Second, to strengthen the protection of outstanding talents. To encourage higher education institutions to develop the sports stadium industry, encourage higher education institutions to develop sports stadiums, and encourage higher education institutions, research institutions, vocational training institutions and enterprises to develop sports teaching, research and training bases. To strengthen external exchanges and collaboration to promote the development of the sports industry. To strengthen the leadership of the organization. Through communication and collaboration with relevant government agencies, to analyse the current situation and problems in the development of China's sports industry and formulate relevant countermeasures. To include the sports base as a national economic and social development plan in the development plans of relevant industries and sectors. Governments at all levels should invest more in the construction of sports facilities in order to promote their development. To strengthen supervision. All relevant units should further develop their tasks, objectives and guarantees in the light of their own realities, get the focus of their work right, clarify their responsibilities and improve the organization and implementation of their work. A sound monitoring and implementation system should be established to effectively monitor the implementation of the project and ensure its smooth progress.

2.4 Strengthen brand building and get more financial support

2.4.1 Enhance the planning and layout of sports fields

A three-dimensional and diversified system of "points, lines, and surfaces" is built, and the utilization rate of sports equipment and related facilities is appropriately increased. Integrating smart cities and green transportation, we have designed China's urban slow walking system and integrated urban and rural greening networks to form a nationwide walking and car transportation network. To vigorously promote the creation of star standards, including camping trails, hiking trails, walking trails, and cycling trails. Integration of high-quality sports programs with popular sports programs, and vigorous development of national and regional sports events. To develop sports programs with distinctive characteristics and actively innovate and plan a number of high-level and high-quality sports programs; sports clubs and sports festivals featuring regional and regional culture; cultivate experiential adventure sports with the core of environmental protection, knowledge skills and personality building; and create an influential competition.

2.4.2 Expand the operational coverage

To cultivate sports industries with certain strength through business export, chain operation and scale operation, thus enhancing the core competitiveness of enterprises. To vigorously develop large sports bases to achieve regional, industry and ownership mergers, reorganization and listing. To actively introduce foreign high-quality sports brands and expand foreign business. To support the rapid development of sports business clubs. To vigorously support all kinds of small and medium-sized fitness facilities to "special, fine, special, new" direction of development, strengthen the characteristics of business, special products and special services. To strengthen the organization of social organizations, and actively develop various sports associations, associations, clubs and so on. To actively promote the construction of national sports associations, and actively explore the construction of social groups. To encourage all kinds of associations to operate in accordance with laws and regulations and norms to reduce the relevant restrictions. The industrial layout of industries such as sportswear property and equipment manufacturing has been further improved. To actively develop sports and support a large number of excellent clubs, excellent sports venues and internationally renowned sports events in China. To vigorously promote the production of equipment to high-end research and development, design and sales direction, improve the research and development strength of enterprises, to create high-end sports, sports, sports equipment and other high-end sports equipment of well-known brands. To strengthen demonstration and leadership, vigorously promote fitness industry standards, select a number of distinctive, industry-rich areas and projects, and create a number of fitness brands with certain citation. According to the geographical characteristics of the country's geographical resources, the "three vertical and three horizontal" development mode of urban sports industry, and on this basis, through the complementary industries, supply and demand docking advantages complement each other, the formation of a distinctive sports industry clusters and industrial zones. To comprehensive consideration, reasonable adjustment of the layout of the project, vigorously develop mountaineering, hiking, camping, cycling, etc., and steadily develop professional sports activities such as mountaineering and rock climbing, constantly enrich the content and content of sports activities, and promote the healthy development of sports. Promote integrated development. To actively build an intelligent, networked and interactive industrial integration system in order to improve the consumption level of urban sports. To make full use of the Internet, various professional intelligent software and cell phone client software to broaden the market for the long-term development of venues. It is also possible to develop the tourism industry, support and guide qualified tourism enterprises to carry out sports activities and create quality tourist destinations. It is important to make full use of entertainment and leisure sports and competitive sports activities, organically linked thus achieving the purpose of stimulating the market.

CONCLUSION

With the development of the national economy and the rise of national fitness activities, China's sports career has also stepped into a high-speed development track. To enable sports to develop in a sustainable, rapid and healthy manner, it is necessary to have a comprehensive grasp of the development status and development trend of sports, and to increase the construction of sports bases, which is conducive to promoting the overall development of Chinese sports and promoting the enthusiasm of sports for all. The current low utilization rate, poor management and financial imbalance of sports venues in China urgently require the construction of a number of service sports centers, the improvement of management methods, the enhancement of training of professionals, more preferential government policies for sports venues, and constant exploration and innovation to bring fitness for all to fruition.

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ARTIFICIAL INTELLIGENCE AND METAVERSE APPLICATIONS TO BUSINESS

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ABSTRACT

Based on the application of artificial intelligence technology and natural language processing technology in the field of telecommunications, semantic understanding and analysis, speech recognition and other application requirements, as well as specific business requirements, the difficulties in system architecture design are summarized. In view of the positioning and reuse mechanism of artificial intelligence operation technology, The future application directions of ARTIFICIAL intelligence, such as data fusion, semantic understanding and semantic interoperation of Internet of Things based on different recognition and parsing systems, are proposed.Using qualitative research method, this paper combines the meta-universe and business, presenting a new business structure. Bring brand new experience to consumer groups, virtual and reality as well as artificial intelligence, and lead the public to meet the coming new concept of the 22nd century

Keywords: artificial intelligence; Natural language understanding; Telecom operators; Yuan universe

INTRODUCTION

Artificial intelligence (AI) is a research, development, and used to simulate, extend and expand people's intelligence theory, method, technology and application system of science and technology, it hopes to understand the nature of intelligence, the machine can produce similar to human intelligence, research interests include robot, speech recognition, image recognition, natural language processing, expert system, deep learning. (Dong Chao & Xiaojun, 2019).

Ai's ability to improve productivity and its commercial value is being recognized by various industries.Artificial intelligence can make better decisions than human beings in complex scenarios, providing effective solutions to many difficulties and challenges encountered in the process of telecom network transformation.

AI will permeate all levels of network, business, operations and peacekeeping operations, from simple efficiency to AI-led, from passive processing to active prediction, from artificial to automation to AI autonomy and intelligence, from assisted decision making to autonomous decision making (Xu Feng & Leng Fuhai, 2019).

I.the requirements of the telecommunications industry for ARTIFICIAL intelligence

1.1 Demand for ARTIFICIAL intelligence in telecommunication industry

Communication network is usually divided into infrastructure layer, network and service control layer, operation and orchestration layer (Yang Zhen, 2020).For different levels, the higher the level, the more centralized, the stronger the cross-domain analysis ability, the higher the requirements for computing power, the richer the required data, the centralized training and reasoning suitable for global strategy and definition, the lower the sensitivity to real-time requirements;The lower the level, the closer to the end, the stronger the special analysis ability, the higher the requirements for real-time, the computing ability can meet the business needs, suitable for the introduction of AI reasoning ability, or with real-time lightweight AI training ability.Ai integrates big data, including data collection, storage computing, analysis and mining, machine learning and deep learning algorithm framework, algorithm modeling, evaluation and publishing, visual display, and operation and maintenance management.On this basis, AI provides customized solutions and technical services for a variety of applications.

1.2 Application value of ARTIFICIAL intelligence: data analysis and machine learning

1) Data analysis

Data analysis is the science of identifying patterns and drawing conclusions by collecting large amounts of data, organizing and analyzing them.There are four types of data analysis methods that can be applied to telecommunications.

● Descriptive analysis:

Analyze past performance by mining historical data to discover potential causes of past successes or failures.Post-mortem analysis is applied to management reports, such as sales, marketing, operations and financial analysis reports (Xu Zhaoxin, 2019).

● Diagnostic analysis:

Focuses on identifying and explaining the factors and events that led to a result (Wang Zhihong & Yang Zhen, 2019).

● Predictive analysis:

Use statistical techniques such as modeling, machine learning, data mining and game theory to assess current and historical facts, predict future events and turn data into actionable information.

● Standard type analysis:

Automate the integration of big data, business rules and machine learning to leverage the advantages of prediction to provide recommendations for decisions or actions.Improve prediction accuracy through continuous and automatic processing of new data and provide alternatives.

2) Deep Learning (DL)

Also known as deep structured learning, hierarchical learning and deep machine learning, is a branch of machine learning.DL is algorithm-based, modeling high-level data abstractions using multiple processing layers, complex structures, and/or nonlinear transformations (Yue xiu, 2021).Google's DeepMind DL platform used deep learning and augmented learning techniques to beat a nine-dan go player.

LITERATURE REVIEW

The application of ARTIFICIAL intelligence in telecommunications

2.1 User Experience-driven Network planning becomes intelligent

Network planning is the first and most critical step in deploying any network.The quality of network planning largely determines the subsequent user experience and return on investment.Traditional network planning mainly depends on a variety of test data and experience, the effect and cost is difficult to achieve the optimal, although the use of simulation tools, but this method is often one-time, can not achieve real-time dynamic adjustment.

Machine learning/deep learning and predictive modeling methods are introduced to improve the performance of network planning tools for online learning and implementation.After continuous iteration, the implementation effect is constantly improved, so that the network is easier to meet the requirements of coverage goals and user experience.Of course, this depends on the collaboration and continuous improvement of domain experts, multidimensional big data and algorithms.

Applications include access, transmission, bearer, core network, content transmission network and service network, as well as base station wireless coverage, wireless resource management, operator aggregation, interference coordination, congestion control/load balancing and other fields.

As software definition function network (SDN)/network virtualization (NFV) gradually deepened, intelligent control particle size increases, the end-to-end network planning becomes the norm, active early prediction and allocation of resources, and connecting with the actual results fast measurement and adjustment, more closely integrated planning and optimization, better real-time performance, finally realizes the real-time autonomous system.

2.2 ARTIFICIAL intelligence contributes to 5G technological innovation and business innovation

All layers of the 5G network will be equipped with intelligence and automation capabilities, paving the way for improving overall network performance, network efficiency, and maintenance and operation efficiency.

5g intelligent network segment on cloud virtual resources and business resources on the network management flexibility, on-demand configuration, introducing agile, automation, self-healing, slicing optimization, independent and intelligent management method, in order to solve internal resource of automatic adjustment, meet the requirements of SLA, and maximally satisfy slicing the resource competition between problem, improve the utilization rate of resources.

Aided by AI, large-scale MIMO beam shaping can play an important role in beam tracking, high-frequency orientation, joint beam management, base station positioning, LBS enhancement, indoor and outdoor decision making, high and low speed decision making and other fields through rf fingerprint library, combined with data map and rule training.

With the development of 5G network towards the direction of heterogeneity, the resource utilization imbalance between communities is becoming more and more serious.Artificial intelligence-based 5G mobile load Balancing (MLB) uses rf fingerprint libraries and machine learning/deep learning algorithms to predict loads in advance and choose to switch between users and target units to quickly reduce and balance loads.

5G network features high throughput, low latency, larger capacity and better network uniformity, enabling rapid development of VR/AR, M2M, smart city, autonomous driving, industrial automation and other applications, becoming the natural soil for the development of ARTIFICIAL intelligence.

METHODOLOGY

Artificial intelligence and the meta-universe

3.1 Another upgrade in human interaction with the world: AI in the metaverse

The meta-universe is a rising concept and a technological singularity born in the context of the development of artificial intelligence technology.Universe concept at present, the yuan has sparked the extensive discussion, it is based on extended reality technology provide immersive experience, based on the number of twin technology generates a mirror image of the real world, based on block chain technology structures, economic system, the virtual world and real world in the economic system, social system, identity system closely, and allows each user to content production and world editor.It's an artificial parallel world in which people can enjoy being the "creator."The typical features of the metasomes themselves require training in vast amounts of data that only artificial intelligence can handle.Starting from the development history of human-computer interaction and AI, this paper discusses the role of artificial intelligence in the meta-universe, and gives infinite imagination for the future scenarios and applications of the meta-universe based on the framework of artificial intelligence.

3.2 Meta-universe value chain and AI

In the new digital world, the meta-universe will be more AI-powered and content and support.AI will drive all seven layers of technology in the meta-universe: powering spatial computing, providing a framework for creators, and providing new and complex forms of storytelling.This is the seven layers of the meta-universe, and we're going to start at the very bottom, the infrastructure layer.

The infrastructure layer includes the devices that support the metastases, the technologies that connect them to networks and provide content, such as 5G and local computing chips.5G networks will significantly increase bandwidth while reducing latency. The next generation of mobile devices, smart glasses and wearable will also require more powerful, smaller hardware: semiconductor chips with processes of 3nm and above; Microelectronic mechanical systems (MEMS) that support tiny sensors and more compact, longer-lasting batteries.

And AI will help optimize manufacturing, network routing, security, materials science, and many other areas needed to build the future.While exploring new ways to design chips, Scientists at Google have developed an algorithm to aid chip design based on machine learning models. While existing chip baselines require human experts to participate and take weeks to generate, their machine learning algorithms can produce baselines superior to or equal to manual designs in less than six hours.

Human-machine interface is the space where human-machine interaction takes place. The goal of this interaction is to allow efficient manipulation and control of the machine from the human side, while obtaining feedback from the machine.

In today's explosion of information technology, artificial intelligence provides countless new options for human-computer interaction.With the help of artificial intelligence algorithms, computers are getting better at gesture recognition, enabling users to interact with computers more naturally.Eye tracking is another important approach to immersive interfaces in virtual reality.VR devices present the best information where the eye is most focused, while AI is used to predict where the eye will look next, and even help prepare the best rendering ahead of time by predicting blink.

The ultimate interface is a neural or brain-computer interface.Everyone's brain is different, and artificial intelligence is there to learn and adapt to each person's uniqueness.Researchers have implanted chips in monkeys' brains, used artificial intelligence to learn and interpret data received from the hardware, and finally trained Neuralink devices to read monkeys' minds.In the future, non-invasive brain-computer interface has a very broad prospect for further application.

The simplest example of a decentralized layer is the Domain Name System (DNS), which maps individual IP addresses to names so that users don't have to enter numerical addresses every time they want to access the Internet.The distributed computing and microservices model provides developers with a scalable ecosystem -- they can leverage online capabilities to build everything from business systems to professional ARTIFICIAL intelligence to game systems without having to focus on building or integrating back-end capabilities.

The spatial computing layer enables mixed reality/virtual computing and rendering, removing the barrier between the physical world and the ideal world.Spatial computing has evolved into a broad category of technologies that enable users to enter and manipulate 3D Spaces and enhance the real world with more information and experiences.In many cases, artificial intelligence algorithms can greatly improve the efficiency of computation.Nvidia (NVDIA) has developed artificial intelligence algorithms based on its graphics products, which ultimately make 3D rendering, person/object recognition, data integration, and other computing much more efficient.This undoubtedly helped lower the hardware threshold of the metasomes and greatly improved the accessibility of the metasomes.

The creator economy layer contains all the technologies that creators use every day to create popular experiences in the digital world.Designers and creators don't want coding bottlenecks to slow them down, they'd rather use their capabilities in the most unique aspects of each project.And creators gain new ai-assisted tools, templates, and content markets, repositioning development from a bottom-up, code-centric process to a top-down, creation-centric one.

Today, creators can create an e-commerce site from Shopify in minutes without knowing a single line of code.The site can be maintained in Wix or Squarespace. 3D graphics experiences can be created in game engines such as Unity and Unreal.All of these are driven by artificial intelligence technology.

The discovery layer is about introducing people to new experiences.It's a huge ecosystem, and the most profitable ecosystem for companies.Broadly speaking, most layers of discovery can be divided into inbound (where users are actively seeking information about the experience) and outbound (where users have no clear needs, even if they ultimately make a choice).The early days of the Internet were defined by the "stickiness" of social media around a few single providers, and the decentralized identity ecosystem could shift power to social groups themselves, enabling them to move frictionless in a collective experience.In this case, the ability to tell stories is particularly important, and this is exactly what AI is good at.

Community-driven content is more cost-effective than most forms of marketing.When people really care about the content or activity they are participating in, they will actively spread the word.As content itself becomes easier to exchange, trade, and share in a meta-cosmic environment, content itself will become a marketing asset.Artificial intelligence takes advantage of this and discovers exactly what people really care about and intensifies its distribution, ultimately turning accessibility into actual revenue.

The experience layer is the dematerialized layer of physical space, distance and objects.When physical space is dematerialized, experiences that were previously scarce can become very accessible.Games have shown us the way forward: in games, users can dream of being rock stars, Jedi knights, race car drivers, or anything else imaginable.Where once customers were merely consumers of content, they are now creators and amplifiers of content within the framework of the metasverse.In the past, there was the concept of "user-generated content" when it came to ordinary functions such as blog comments or uploading videos.Now, content is not only generated by people, but can be directly generated by AI, from user interactions and feedback to the substance of conversations within their community, which will be fed back by AI algorithms to generate new content.

3.3 AI use cases in the meta-verse

More accurate avatar creation

Users are at the center of the meta-universe, and the accuracy of their avatars will determine the quality of their experience and that of other participants.The AI engine can analyze 2D user images or 3D scans to provide a highly realistic simulation reproduction.AI can draw various facial expressions, emotions, hairstyles, features of aging and more to make the profile picture more lively.Companies like Ready Player Me are already using AI to help build avatars in virtual worlds, and Meta is developing the technology to do the same.

Digital human

A digital human is a 3D version of a chatbot that exists in a virtual world.They are not copies of another person.Instead, they are more like ai-enabled non-game characters (NPCS) in video games that can react and react to the user's behavior in the VR world.

Digital humans, built entirely using artificial intelligence technology, are essential to the landscape of the virtual world.From NPCS in games to automated assistants in VR workplaces, digital human applications are endless.Companies like Unreal Engine and Soul Machines have already invested in this direction.The metasomes also derive greater richness from the diversity and diversity of digital humans.

Multilingual accessibility

One of the main ways digital humans use ARTIFICIAL intelligence is language processing. AI can help break down a natural language like English, convert it into a machine-readable format, perform analysis, generate responses, and eventually convert the results back into English and send them to the user.The whole process takes a fraction of a second -- just like a real conversation.This makes the digital human truly practical and meaningful in the meta-universe.

The scale expansion of the VR world

When the AI engine imports historical data, it learns from the previous output and tries to come up with its own output.With new inputs, artificial feedback, and machine learning, AI output will get better every time.Eventually, AI will be able to perform tasks and provide almost the same output as humans. NVIDIA is now training ARTIFICIAL intelligence to create more complex virtual worlds.

The breakthrough will help push the extensibility of the meta-sexes, allowing new worlds to be added without human intervention.

The man-machine interface

AI can also assist human-computer interaction experiences.When a user wears a sophisticated, AI-enabled VR device, its sensors will be able to read and predict the user's bio-electrical signals and muscle movement patterns to know exactly how the user wants to move around the virtual world. AI could even help recreate the real sense of touch in VR.It also helps support voice navigation, allowing users to interact with virtual objects without using a manual controller.

AI as creative partner

The latest natural language processing (NLP) models open the door to using AI as a creative partner.The NLP model generates creative writing based on user input.

At the same time, AI goes far beyond writing aid to produce realistic images from text descriptions and even very simple drawings.Technologies such as Open AI's Dall-E or NVIDIA's GauGAN2 already partially achieve this goal.Creative partnerships will undoubtedly be an important enabler for all creators in a distributed world.

3.4 The future of AI in the metasverse prospects

In the future, the metasomes will provide lifelike sights, sounds and even smells, allowing users to visit ancient Greece at home and even the coffee shop at Starbucks headquarters.The interface of the metasverse will feature a full spectrum of VR headsets, smart clothing and haptic responsive gloves.

Users don't even have to be themselves.Members of the metaverse can wander the Brazilian rainforest like jaguars or take to the court at Madison Square Garden like lebron James.The only limit is the user's imagination.Through artificial intelligence algorithms that biometrics physics and behavior, identify and analyze individuals' emotions, and integrate personal data, the meta-universe will be able to create customized and augmented realities for everyone.

CHALLENGES AND CONCERNS

Ownership of AI-created content: Who owns and profits from ai-created content and the VR world?

How to use AI properly: Can users legally apply AI technology to meta-cosmic interactions?For example, can they use the AI code to win a match?

Legal questions: Is marriage legal in a virtual world?Or how will criminals be punished if someone is attacked in a virtual world?With the development of the virtual world, there is bound to be a huge vulnerability to false identity or identity theft.Thus, the identification of suitable persons and their physical addresses will be a major concern for all states and their legislative and criminal authorities.

concluding remarks

Driven by the pandemic, the virtual world industry is growing rapidly.It's only a matter of time before AI is more widely used in augmented and virtual reality to build smarter, immersive worlds.Since AI can parse large amounts of data at extremely high speeds, people can take advantage of this feature by combining AUGMENTED and virtual reality (AR/VR) with AI and blockchain to create scalable and accurate virtual worlds.Without AI, creating immersive, real and scalable virtual world experiences would be complicated and expensive.

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LOGISTICS SERVICE QUALITY MANAGEMENT BASED ON CUSTOMER SATISFACTION -- A CASE STUDY OF SF EXPRESS CO., LTD

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ABSTRACT

With the rapid development of e-commerce and the change of the market, China's express delivery industry has been developing continuously and has been developing into the current logistics ecological pattern. Changes in escalating in the logistics pattern, logistics enterprises according to customer satisfaction, found itself, implicit, hard to quantify problems, which through the consumer perspective, enhance their core competitiveness, and how in the fierce competition of industry structure, gradually expand the market share and become the backbone of the pattern of logistics industry, logistics enterprises are facing an important subject.

In the development of enterprises, the quality of customer service has become an important basis to determine the competitiveness of enterprises, but also the direction of the development of enterprises. This study used the method of literature analysis, questionnaire method, the suitable abundant speed luck co., LTD., analyzes the service quality of customer satisfaction, at the same time in order to solve this problem, formulate the reasonable content of the questionnaire, quality of service as the core to establish the questionnaire survey, to fill in suitable abundant speed luck consumer, for the obtained data, sort through factor weight estimation method and the method of fuzzy comprehensive evaluation method to weight allocation and data analysis and evaluation.

Conclusion, based on customer satisfaction of logistics service quality factors indicate that the speed of motion in logistics service quality of freight transport company is higher, the customer feedback response to the disadvantages of low efficiency, price competition in an industry, cannot form is directly proportional to price and the services provided by the problems such as, an analysis of the causes and at the end of this article in view of the above problems, put forward Suggestions for improvement. From the perspective of consumers, this article points out the problems existing in the service quality of sf express enterprises and provides some references for the service quality of logistics enterprises in this industry.

Keywords: Service quality, Customer satisfaction, Factor weight ranking estimation method, Fuzzy comprehensive evaluation method

INTRODUCTION

1.1 Research background and significance

1.1.1 Research background

In recent years, the logistics industry has been developing continuously, and with the rise of the e-commerce industry, it has gradually become a sunrise industry. The logistics industry has broken the limitation of time and space, and has gradually become an important link connecting online and offline resource scheduling, as well as the basic equipment to support the development of today's e-commerce. With the development of more than ten years, the logistics industry has gradually developed into a more complete service system. As a tertiary industry, the logistics industry, in the evaluation system for enterprises, customer satisfaction index is also an important indicator reflecting the development of the industry.

In 2019, the number of e-commerce transactions hit another record high during the Singles' Day holiday. According to a report by CCTV Finance, sales of Suning 3C home appliances exceeded 1 billion yuan in just one minute at the start of the event. Within 14 hours of opening, Tmall's total turnover exceeded 200 billion yuan..... The e-commerce industry is on a tear. The development of e-commerce industry, to a certain extent, comes from the support of the logistics industry.

In 2019, express delivery business grew rapidly. According to the China Express Development Index report released by the China Post Bureau, the business volume of China's express service enterprises reached 63.52 billion in 2019, up 25.3 percent year-on-year. Operating revenue was 749.78 billion yuan, up 24.2 percent year on year. The size of the market is growing at a medium and high speed.

In terms of customer satisfaction, according to the State Post Bureau's survey on customer satisfaction of logistics services, in the second quarter of 2019, for example, 10.6% of users used unified customer service to place orders, down 1.5% year on year, and the number of users who made inquiries and complaints through this channel increased by 9.6% and 4.6% compared with last year, respectively. Customer satisfaction of uniform customer service orders was 82.9 points, down 0.9 points year-on-year. Dispatchers' service satisfaction score was 82.8 points, up 0.6 points year-on-year. Dispatchers' satisfaction with service attitude and flexibility of distribution arrangement was 88.4 and 81.7 points, respectively, up 0.7 and 0.7 points year-on-year. Meanwhile, couriers' satisfaction with home delivery was 83.1 points, up 3.0 points from the same period last year. Therefore, according to the above data, the express service quality and customer satisfaction at this stage are constantly promoted and improved.

However, although the complaint rate and satisfaction rate have improved year after year, the data show a less optimistic problem after microscopic magnification. Statistics from the State Post Bureau and post offices of provinces, autonomous regions and municipalities directly under the Central Government in November 2019 showed that there were 21,096 consumer complaints in November alone, which were handled only through the postal industry's complaint platform. Among them, express service problems accounted for 97.0 percent, and postal service quality complaints accounted for 3.0 percent of the total complaints. The top four complaints were express delay, delivery service, lost goods and delivery service, accounting for 83.8% of the total complaints. The emergence of these service quality problems has become an important factor limiting the development of logistics. Therefore, the improvement of logistics service needs to cause logistics enterprises to attach great importance and take effective measures to improve.

1.1.2 Research significance

Today, with the gradual development of e-commerce industry, the logistics industry contributes more and more to the economy. The logistics industry is a part of the tertiary industry, which connects the physical industry and the e-commerce industry. The existence of logistics not only drives the development of the real economy, but also promotes the reasonable allocation of resources.

Logistics development is the lubricant of economic growth, providing security for economic growth, is one of the prerequisites of economic growth. Trade and consumption are highly linked. The efficient logistics system can effectively promote the specialization of the social division of labor, so as to become a "tonic" to promote economic development.

With the development of society and the improvement of people's living standards, the demand of consumers is gradually diversified, and the uncertain factors of logistics service chain are increasing. The development of logistics will be upgraded and improved according to the needs of the downstream demand side. How to improve the operation mode of modern logistics enterprises and modern logistics service industry from the perspective of customer satisfaction is a decisive factor affecting the development of the industry.

Throughout the domestic logistics industry, logistics enterprises are constantly upgrading and improving the quality of logistics services. For example, to solve the "last mile" problem, Alibaba set up Cainiao Wrapped as a temporary storage point for delivery services; Kingdee Express inquiry integration system "Express 100", become a convenient express inquiry tool; In order to provide stable delivery service quality, Jingdong has established self-built logistics, etc. The ecology of logistics industry is gradually improved, and the service level is also constantly improved. At the same time, the competition pattern of the domestic logistics market is constantly forming the situation represented by state-owned express, private express and foreign express, and the state-owned express is represented by the powerful EMS. Private enterprises have the rapid development of three links Yida, Best Express, etc.; Foreign companies take giant FedEx and FedEx as the mainstream, and together form the three pillars of the express industry. Among them, SF Express is known for its high-quality service and delivery speed, occupying a place in the logistics express market. Therefore, with the increasingly fierce competition in the logistics market and the gradual improvement of the logistics industry ecology, it is an important task for SF Express to improve its logistics management system by understanding customer satisfaction.

1.1.3 Sf Express operation status quo

According to the data survey of the Post Bureau in 2016, the speed of private express is about 50% faster than that of EMS nationwide, while SF Express is 20%

faster than that of other private express enterprises. It can be seen that the speed advantage of Shunfeng Express is unmatched by other express enterprises in the era of "speed first".

As early as 2003, SF Express had a special cargo plane for delivery. He started his own airline in 2010. Its fleet is expanding, with two to three cargo planes a year and point-to-point transport in key cities. Its hardware conditions ensure the "same day" service demand of SF Express, seize the domestic and foreign freight express market, occupying a high market share and growth rate.

Taking advantage of the delivery speed, so that SF Express has been a good harvest of reputation. However, under the continuous improvement and development of the overall construction of the express industry, logistics companies are also constantly improving the delivery speed and safety of service quality, so that SF Express's core advantages are no longer prominent.

At the same time, the high maintenance cost has also become a major factor hindering the development of SF Express. The high maintenance cost of SF Express leads to the customer unit price higher than the market price. As its price loses competitiveness, SF Express loses a large part of ordinary users who do not have high requirements on logistics quality, resulting in the lack of vertical integration advantage of SF Express. In addition, in the electricity industry rapid development period, suitable abundant speed luck missed electricity industry development market dividend, missed electricity industry development opportunity, make a "three links" such as express delivery companies beat occupies the electricity industry market, even in the current logistics industry companies and the electricity industry cooperation, continuous compression cost, and depress the guest unit price, It is difficult for SF Express to break through the bottleneck in e-commerce business, which brings a bigger blow to SF Express's high-end market strategy.

1.1.3.1Dot distribution problem

Network expansion is an indispensable step in the development strategy of express enterprises, and network expansion is an important method to improve market share. Between 2006 and 2008, SF Express focused on developing East China. As of 2019, SF Express has a complete network in North China, East China, Beijing, Jiangsu, Zhejiang and Shanghai, and other coastal and inland economic developed areas, while the network coverage in western China is not high, so its service scope is limited by geography. But at the same time, the service targets at the southeast coastal cities and the first - and second-tier cities with more demand, which can be regarded as a cost-saving strategy.

1.1.3.2Differentiation advantage is not obvious

The differentiated advantage of SF Express has been high price positioning and the corresponding speed advantage of the service as a boast. However, with the continuous upgrading and development of the same type of logistics enterprises today, the differentiated advantages of SF Express are no longer obvious.

Improving service quality is an important link for express enterprises to enhance their core competitiveness. Speed, service and timeliness are important factors for success. Express delivery enterprises need to give full play to the advantages of flexibility and efficiency. At the same time, through the differentiation of services, establish a brand image, expand the influence of enterprises, enhance their core competitiveness.

Through the above analysis, we can see that in today's logistics market, all kinds of logistics enterprises are accelerating the competition in the industry, and customers' diversified needs and the improvement of service demand are ready to challenge the strategic response and transformation and upgrading of enterprises. Enterprises need to measure customer satisfaction through effective methods, so as to measure the quality and effect of operation, grasp and analyze the potential needs and hopes of customers, so as to win customers on the basis of retaining the original customers, and gain greater competitive advantages and market shares. Therefore, taking customer satisfaction as the standard to drive SF Express enterprise management mode reform is a more effective and direct entry point.

1.2 Research status at home and abroad

1.2.1Overview of domestic and foreign research on customer satisfaction

There are extensive studies on logistics service quality and customer satisfaction at home and abroad. American scholar Cardozo (1965) first introduced the view of customer satisfaction into the field of marketing, pointing out that customer satisfaction will drive customers to make purchase impulse, and there is a mutual internal relationship between customer expectation and customer satisfaction (Cardozo.R. N, 2021). Oliver (1980) believes that satisfaction is the result of inconsistency between perceived performance and comparison standard (Oliver.R.L, 2020). Fornell (1996) constructed a Swiss customer satisfaction index evaluation model, which involved variables such as customer satisfaction, perceived value, customer loyalty, expected quality and customer complaint (Fornell, C.and Larcker, D.F, 2021). In 2005, Tsinghua University launched the basic model of China Customer Satisfaction Index (CCSI), in which brand image, expected quality, perceived quality and perceived value are the cause variables of customer satisfaction, and customer loyalty is the outcome variable of customer satisfaction. Zha Jinxiang (2006) established a structural model of the relationship between service quality of shopping websites, customer expectation and online customer satisfaction based on the expectation uncertainty theory and service quality measurement theory (Jin Yong jin, Wang Hua, 2020). Based on the definition of TQM in logistics, Dominik (2021) pointed out that the implementation of modern quality management system is crucial to the development of enterprises. Dewan et al., (2021) proposed that a completely free market could not be regarded as a framework to improve quality, and only the combination o customers and service providers could improve the quality of logistics. Abdul et al., (2021) studied that the operational technical capability of logistics service quality is the basic factor affecting customer satisfaction. Ieva et al., (2019) analyzes customers' satisfaction with logistics services and proposes that the logistics company must meet customers' needs; otherwise, the company will be replaced by other companies.

Ieromonachou(2021) studied the impact of service quality on customer satisfaction and loyalty in e-commerce environment. Jari (2020) studied how perceived service quality affects customers' satisfaction with logistics outsourcing services and determined the key dimensions of service quality.

From the perspective of free couriers, Yan Xiaole (2021) studied the key factors affecting the service quality of crowdsourcing logistics and proposed corresponding countermeasures based on grounded theory analysis. Through the case study of ZJDS Company, Liu Fugang (2020) showed that only by managing and maintaining good customer relations can an enterprise operate effectively.

1.2.2Literature review and summary of research direction

The above literature research shows that scholars focus on the whole process of logistics and the overall evaluation of logistics enterprises, so they ignore the influencing factors closely related to consumers, and the evaluation and analysis of logistics distribution services are less. Therefore, this paper will be based on the customer satisfaction research method, through the systematic study of SF Express logistics delivery service, analysis of the main factors affecting logistics delivery service.

At present, logistics service quality researchers basically refer to service quality research methods. This paper takes customer satisfaction with logistics service quality as the main research object, and studies customer satisfaction and logistics service quality through literature analysis, factor analysis, questionnaire survey and fuzzy comprehensive evaluation.

This paper will "SF Express" express enterprises as the research object, through the study of the representative logistics enterprise SF Express Co., Ltd. customer satisfaction, to analyze the development of SF Express and development pain points, to provide development suggestions and reference for SF Express and other logistics enterprises.

This survey is conducted through questionnaire interviews with sample people who use SF Express. The sample population may be concentrated in 18-40 years old customers with certain consumption power. The survey will list the factors affecting the service quality of SF Express customer satisfaction, establish the distribution service quality evaluation system based on customer satisfaction, fully collect consumer data, and adopt ASCI model, factor ranking estimation method, fuzzy evaluation theory to analyze the advantages and disadvantages of SF Express. It provides reference for enterprises to improve customer satisfaction and enhance enterprise competitiveness.

THEORETICAL REVIEW

1.3.1. Concept of customer satisfaction

The world's first user of customer satisfaction was Cardozo. Since then, more scholars have defined this concept. The concept of customer satisfaction, the first interpretation is: "customers" usually refers to the customers in consumer behavior, the second interpretation that customers have two types of emotional and cognitive, the third reading believes that alters customer psychological factor is customers something interest changed, such as customer expectations and experience process caused by emotional resonance, etc. Fourth, the stages that affect customer satisfaction can be divided into the following: the expectation stage before transaction, the experience stage during transaction, the evaluation stage after transaction and the overall transaction process.

1.3.2.ASCI model

ASCI model was proposed by Eugene et al.,(2021). which is used to measure the quality of economic output and evaluate customer satisfaction according to the whole process of consumption. The ASCI model has six interrelated structural variables: customer expectation, perceived quality, perceived value, customer complaint, customer satisfaction, and customer loyalty. Perceived quality, perceived value and customer expectation jointly affect customer satisfaction; Perceived quality and customer expectation act together on perceived value. The influence of customer on quality and expectation directly affects the perceived quality of customer expectation. Customer satisfaction also determines customer complaints and customer loyalty. If the customer is not satisfied with the service, it will cause the customer to complain to the enterprise, and affect the customer loyalty to a certain extent.

In the evaluation of logistics service quality, this paper will use ASCI model to divide the factors affecting customer satisfaction of logistics service into two aspects: perceived quality and expected quality, and the difference between perception and expectation determines the level of customer satisfaction.

1.4 Research framework and methodology

1.4.1.Research framework

This research is divided into the following framework:

The first part describes the background and significance of the research, summarizes the results related to satisfaction in domestic and foreign research literature, and puts forward the research of service quality evaluation model. It also introduces the related theories of logistics service quality based on customer satisfaction, including the related concepts and influencing factors of customer satisfaction as well as the basic theories and evaluation models of service quality (Zhou Yan,2019). Finally, the research content and research path of the paper are put forward.

The second part introduces the current operation and service status of SF Express Co., LTD.

The third part constructs the logistics service quality evaluation index system based on customer satisfaction, including the selection of indicators and sorting calculation methods, and conducts a questionnaire survey (Fawcett, 2020).

The fourth part, based on the questionnaire data, uses the method of AHP and paste comprehensive evaluation to calculate, and points out the problems existing in SF Express Co., LTD. Shenzhen Branch (Alex, kazimierz, 2020).

The fifth part analyzes the causes of the problems in the evaluation results.

The sixth part puts forward the corresponding improvement measures according to the problems of each dimension.

1.4.2.Research methodology

Questionnaire survey method: According to the index system obtained from theory and current situation analysis, a detailed questionnaire is formulated and distributed to customers to fill in, providing data support for the paper (Neil, 2020).

Literature research method: to obtain the support of theoretical knowledge through extensive searching of relevant literature on CNKI and Baidu Library, so as to make adequate preparation for subsequent work and ensure scientific and academic nature (YI Jing Wei, 2020).

Empirical analysis: Combined with literature research and current situation analysis, this paper proposed a service quality evaluation index system for logistics enterprises based on customer satisfaction, applied it to SF Express Co., LTD., found out the problems in SF Express 'service quality, and put forward reasonable suggestions for these problems.

ESTABLISHMENT OF SERVICE QUALITY EVALUATION MODEL

2.1 Selection of logistics service quality evaluation index

The ASCI model proposed by Eugene et al. is composed of six structural variables: customer expectation, perceived quality, perceived value, customer complaint, customer satisfaction and customer loyalty.

In the process of logistics quality evaluation, this paper divides customer satisfaction of logistics service into perceived quality and expected quality by using ASCI model, and the difference between them determines customer satisfaction. The customer satisfaction model of this paper is developed from two aspects: the overall perception degree of customers to logistics service quality and the expectation of customers to logistics service quality. In this paper, the satisfaction index is divided into four categories: timeliness, accuracy, security and economy, and then the analysis is carried out according to these four categories of indicators. The sub-factors of perceived quality and expected quality are shown in Figure 1.

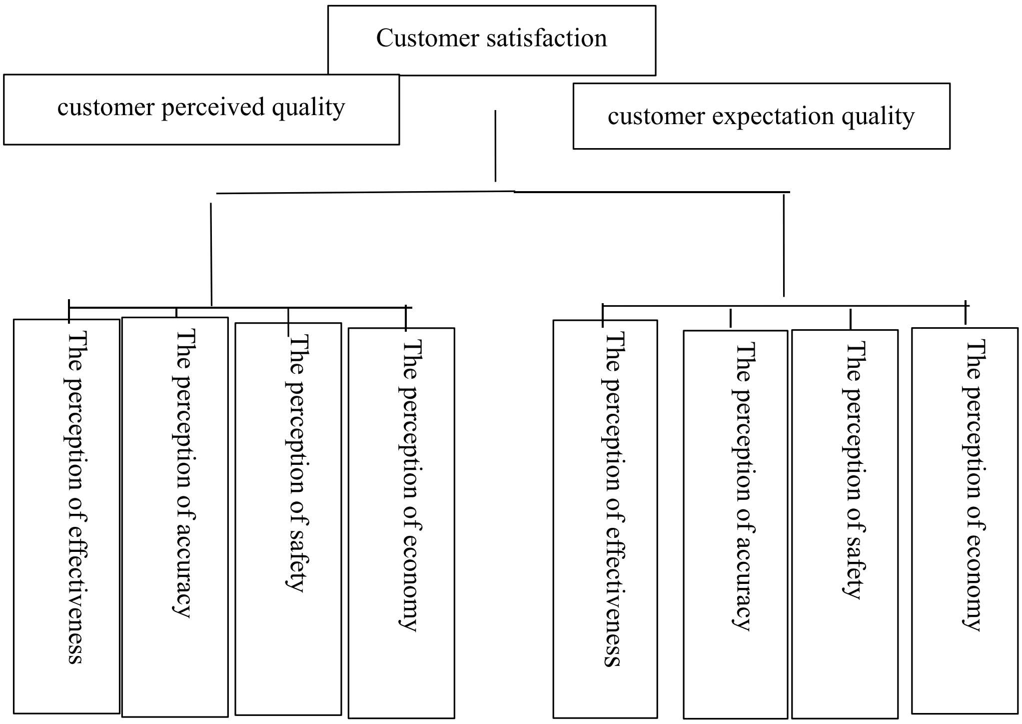

Figure 1 Customer satisfaction index

Based on the ASCI model, this paper studies customer satisfaction with regard to perceived quality and desired quality. By studying the gap between perceived quality and expected quality, the main factors affecting customer satisfaction are analyzed.

2.1.1.Establishment of perception logistics service ability index

Perceived quality consists of customers' perception of timeliness, accuracy, safety and economy. The perception of logistics service ability is the perception of the logistics service received by the customers, and the utility of the service is measured by the actual feeling of the logistics service after consumption. Mainly contains the aware of the ability of accurate delivery of goods, delivery ability, the ability to perceive orders timely delivery, ability to deal with the opinions of the owner in time perception, perception information accurate passing ability, the ability to perceive the goods intact perception ability to provide value-added services and hardware facilities, perception of employee attitude, actual charge level (ZHANG Ge, 2021), as shown in table 1.

Table 1 Preliminary index of influencing factors of logistics enterprise service ability on customer satisfaction

	Variables	Variable description
Effectiveness	1.Timeliness of orders 2.Timeliness of information transfer 3.Timely handling of customer comments	1.The ability to deliver the ordered goods within the specified time 2.Logistics enterprises can well change the delivery time and location for consumers Logistics enterprises to reflect the service feedback
Accuracy	1.Accuracy of information 2.Advanced information system	1.Logistics companies can provide real-time order information 2.Logistics enterprises can provide cash hardware and software facilities
Safety	1.Damaged cargo plums 2.Service attitude	1.Logistics enterprises can ensure that the goods are intact in the logistics process 2.The working attitude of logistics staff
Economy	1.Charge the price	1.Whether the price of logistics transportation is reasonable

2.1.2 The establishment of expectation logistics service capability index

Expected logistics service capability is the customer's expectation of logistics service before consumption. It mainly includes the ability to expect good goods, the ability to expect accurate delivery of goods, the ability to expect delivery of orders, the ability to expect information transmission, the expected attitude of employees and the expected charge price.

2.2Factor weight estimation method

2.2.1 Theory of factor weight ranking estimation method

The factor analysis method converts the variables associated with each other into several indicators unrelated to each other through the formula, and uses a factor to summarize the variables with the same nature. In THIS method, A well-defined common factor is constructed through PRINCIPAL component analysis, and the common factor is used as a framework to decompose the original variables, so as to test the relationship between the original variables. This paper combines the factor analysis method with customer satisfaction, collates the data obtained through the questionnaire survey, and then puts forward improvement measures for the main influencing factors (Tan Zhao tao, 2020).

2.2.1 Application scope of factor weight ranking estimation method

Regarding the applicable scope of the ranking estimation method, suppose that in the customer satisfaction survey, a total of N factors have been determined and set as Fi, I =1,2... , n. In the survey, N customers are investigated, so that customers rank the importance of these N factors according to their own situation (so the ranking is from important to minor). At this time, customers rank the factors according to the way of relative importance.

From the above operation methods and application scope, it can be seen that the requirement of this method for questionnaire design requires respondents to rank according to their relative importance, so it is different from the traditional questionnaire design.

2.2.2.Methods and processes of data processing

(1) Methods and processes of data processing

Suppose that the frequency is, where I,j=1,2... , N. K = 1, 2. In, Fij means that the KTH customer ranks the ith factor at the JTH position, then the frequency of the ith factor appearing at the JTH position, namely:

$$f_{ij} = \frac{\sum_{K=1}^{N} F_{ij}^{k}}{N} \qquad (1)$$

Formula (1) can be used to calculate the frequency of all factors concerned by the investigated customers at a certain ranking position. However, frequency is only a qualitative description of the appearance of factors in a certain ranking state, showing their absolute position. There is no quantitative description of factor ranking itself, so it is necessary to further describe the value of the quantization state, which is called ranking value.

(2) Calculate the sort value

The ranking value describes the quantized state of the factor at a certain ranking position, so it is related to the frequency of the factor at a certain position and the total number of factors. The ranking value of each factor can be calculated by

formula (2).

$$w(F_i) = \sum_{j=1}^{N} f_{ij} \times (n + 1 - j), \quad i = 1, 2, \cdots, n \qquad (2)$$

The ranking value reflects the ranking of the importance of each factor in the eyes of customers, which is an absolute importance, and the higher the ranking value, the stronger the importance.

On the other hand, the ranking value can also reflect the comprehensive expected state of the respondent group, but it cannot reflect the relationship between factors, because it is the absolute state value of a factor.

(3) Calculate relative importance

In order to obtain the relative importance of each factor, we set the weight of the factor with the smallest ranking value as ω0. Starting from the requirement of relative importance, the weight of all factors can be expressed as:

$$w_i = \frac{w(F_i)}{\min_i\{w(F_i)\}} w_i = \alpha_i w_0, \quad i = 1, 2, \cdots, n \tag{3}$$

Where is a_i the ratio between the ranked value of each factor and the minimum ranked value, which reflects the relative importance of the factors.

(4) Normalized treatment

The above calculated W_i does not meet the basic requirements of weight and should be normalized, namely:

$$\sum_{i=1}^{n} w_i = 1 \tag{4}$$

(5) Calculate the weight value

A system of equations can be obtained from Equations (3) and (4).

$$\begin{cases} wi = \dfrac{w\ (Fi)}{\min\{w\ (Fi)\}} W_0 = a_i W_0, \quad i=1,2,...,n \\ \sum_{i=1}^{n} wi = 1 \end{cases} \tag{5}$$

The relative importance weight of each factor can be obtained by solving equations (5).

2.3Fuzzy comprehensive evaluation theory

Fuzzy comprehensive evaluation is one of the most widely used methods in fuzzy mathematics and can quantify qualitative indexes. In this paper, the main factors influencing customer satisfaction obtained by factor analysis are modally evaluated, the key factors are obtained by calculating the weight, and then the measures to improve the overall customer satisfaction are put forward according to the results of these factors.

2.3.1Calculation of fuzzy comprehensive evaluation model

（1）Establish the index set of evaluation system

The set of factors influencing the service quality of the enterprise is called factor set, which is commonly represented by U. The six fuzzy factors affecting SF Express 'service quality selected in this paper are as follows: U1 timeliness,U2 empathy,U3 tangibility,U4 security,U5 responsiveness, and U6 economy, then it can be concluded that the first-level set of the index set of the system should be U={U1,U2,U3,U4,U5,U6}, and then the second-level index set can be inferred again, and the set should be: U1={U11, U12, U13, U14, U15}, U2={U21, U22, U23, U24}, U3={U31, U32, U33. U34, U35}, U4={U41, U42, U43}, U5={U51, U52, U53, U54}, U6={u61,u62,u63,}

（2）Construct judgment matrix

In order to reflect the importance of each factor, the criterion layer B=(B1,B2,B3,B4,B5,B6) in the system should be assigned the corresponding factor value, namely Cij (I =1,2,3,4,5,6,j=1,2,3,4). The source of the value assignment is various ways. This paper adopts the Delphi method to determine the weight of each indicator. In the company, experts and supervisors in related fields are invited to repeatedly compare and score the elements under the baseline layer by pairwise comparison method, so as to form the judgment matrix of each level, which can make the judgment quantitative. The following table shows the measurement methods 1-9.

Table 2 Meaning of scale of judgment matrix

Number	Level of importance	C_{ij} Assignment
1	I, j elements are equally important	1
2	the I element is more important than element j	3
3	I elements is more important than element j obviously	5
4	I elements is more important than element j strongly	7
5	I elements than j element is extremely important	9
6	I was a little not important than element j element	1/3
7	I element is more important than element j obviously	1/5
8	I elements is more important than element j strongly	1/7
9	I elements than j element is extremely important	1/9
10	the adjacent intermediate value	2,4,6,8

（3）Building a weight set

According to the principle of Delphi method, the weight matrix of the system can be established, and the following contents can be obtained through matrix calculation:

Perform the following operations on each row index in the matrix：$\bar{U}=(\bar{u}_{ij})$，$\bar{u}_{ij}=\dfrac{u_{ij}}{\sum_{n=1}^{n} u_{ij}}$，i,j=1,2,...,n (4-1)

Add the rows of the resulting matrix $\bar{U}$ to get：$\bar{W}=[\bar{w}_1,\bar{w}_2,..,\bar{w}_n]$ $\bar{w}=\sum_{j=1}^{n}\bar{u}_{ij}$ (4-2)

The normalization of W：W=[w1,w2,..,wn]T $w_i=\frac{\overline{W_i}}{\sum_{i=1}^{n}\overline{W_i}}$ (4-3)

One-time test is designed to help policymakers judge oneself to build perfect degree matrix, based on the inspection that the complete matrix judgment matrix, calculated matrix at the same time the consistency index of CI, if there is a CI = 0, so that, the matrix to keep the consistency, and with the value of CI gradually increases, not reasonable degree of the matrix, the more obvious, It needs to be revised. For different order matrix, CI value requirements are also different, so the CR (consistency judgment index) is introduced in the analytic hierarchy process (AHP) to judge whether the matrix is consistent.

The formula for CI is：$CI=\frac{\lambda_{max}-n}{n-1}$ (4-4)

$$\lambda_{max}=\frac{1}{n}\sum_{i=1}^{n}\left[\frac{\sum_{i=1}^{n}a_{ij}w_j}{w_j}\right] \quad (4\text{-}5)$$

$$CR=\frac{CI}{RI} \quad (4\text{-}6)$$

Where RI represents the average value of the average random consistency index and the maximum value of the characteristic root in the evaluation of the matrix. Because the order is different, the RI value of the matrix is also different. Table 3 is obtained through sorting and analysis:

Table 3 Statistical table of RI values under different orders

ORDER	1	2	3	4	5	6	7	8	9
RI	0.00	0.00	0.58	0.90	1.12	1.24	1.32	1.41	1.45

When the CR of the second order number is greater than or equal to 0.1, it indicates that the error is within the acceptable range, and it can be considered that the judgment matrix has good consistency.

The above method is used to calculate the weight of each index in the second level and establish the corresponding weight set.

（4）Set the rating of comments

The results in the evaluation process are divided into the following five levels according to the degree of satisfaction, namely, the set of evaluation results is

V={V1,V2,V3,V4,V5}, where V1 represents the result that the customer is very satisfied with the service quality described,V2 represents the result of satisfaction, and V3 represents the result of satisfaction. The evaluation words corresponding to V4 represent the satisfactory results, and the evaluation words corresponding to V5 represent the satisfactory results, and then the evaluation result set is V={5,4,3,2,1}.

（5）Matrix approach in fuzzy relations

Through analysis, it can be seen that different sets of evaluation words are actually equivalent to fuzzy subsets. After the subset is determined, it is necessary to complete quantitative processing for each factor and determine Ri through analysis.

$$Ri=\begin{bmatrix} r_{11} & r_{12} & r_{13} & r_{14} & r_{15} \\ r_{21} & r_{22} & r_{23} & r_{24} & r_{25} \\ . & . & . & . & . \\ . & . & . & . & . \\ r_{m1} & r_{m2} & r_{m3} & r_{m4} & r_{m5} \end{bmatrix} \qquad (4\text{-}7)$$

（6）Make fuzzy comprehensive evaluation

The fuzzy membership vector is calculated, and the first-level fuzzy evaluation vector B can be obtained by combining the weight vectors W and R as follows:：

Bi=Wi·Ri。

RESEARCH IMPLEMENTATION AND DATA COLLECTION OF SF EXPRESS LOGISTICS SERVICE QUALITY EVALUATION

3.1Design and distribution of questionnaires

3.1.1 The questionnaire design

The ASCI model was used to design the questionnaire, which was divided into three parts: the first part was the basic information of the respondents, such as gender, age and frequency of using SF Express services.

The remaining two parts will set up two questionnaires according to the ASCI model.

The first questionnaire section is the survey of the perception of logistics service ability. Factor indicators are determined by the above model, namely, the four dimensions of timeliness, accuracy, security and economy. This part of the data analysis using fuzzy comprehensive evaluation method. Through the dismantling of the above four dimensions, representative corresponding questions were proposed, and the respondents scored the service perception of the corresponding questions according to the actual situation. The rating scale is Likert scale. As shown in Table 4.

Table 4 Corresponding score table

Rating	very satisfied	satisfied	fair	dissatisfied	very dissatisfied
score	5	4	3	2	1

The second questionnaire is a survey on the expected logistics service capability, which is similar to the first one. It determines the factor indicators, namely, the four dimensions of timeliness, accuracy, security and economy. Therefore, some questionnaires are designed by ranking estimation method, which has different requirements from the traditional questionnaire design. In this part, the above factors are ranked and reflected in the importance degree of each factor in the eyes of customers in the questionnaire design.

3.1.2 The questionnaire distributed

Because of time, space, do not have flexibility, mainly through the electronic questionnaire form, using the questionnaire star making good electronic questionnaire, issued to all customers who may come into contact with suitable abundant service, mainly in the circle of friends around to grant and the network platform, questionnaire survey and spread, the real objectively make the respondents to fill in the questionnaire, because questionnaire form is relatively single, The survey group is limited, so the obtained survey data may deviate from the overall consumer satisfaction fact.

3.2Questionnaire Result Statistics

This questionnaire investigates the respondent's gender, age, and frequency of using SF Express. Specific data analysis is shown in Table 5.

Table 5 Sample statistics Table

Item	classification	The number of people	占比
gender	male	48	48.00%
	female	52	52.00%
age	under 18 years old	10	10.00%
	18-30 years old	82	82.00%
	Over 30 years old	8	8.00%
monthly frequency of using SF Express	0	8	8.00%
	1-3times	72	72.00%
	4-6times	14	14.00%
	above	6	6.00%

This questionnaire was in the form of online electronic questionnaire. A total of 100 questionnaires were distributed and 100 valid questionnaires were received, with an effective recovery rate of 100%.

The proportion of male data in the sample is 48%, and that of female data is 52%, which is relatively balanced. In terms of age, 10% of the total respondents are under 18 years old, 82% are between 18 and 30 years old, and 8% are over 30 years old. The respondents are mainly aged between 18 and 30 years old. From the perspective of the frequency of using SF Express logistics, the frequency of using SF Express logistics every month, 0 times accounts for 8%, 1-3 times for 72%, 4-6 times for 14%, and more than 6%. From the frequency figure, most respondents use SF Express 1-3 times per month, and more than 3 times also account for a certain proportion.

The expected logistics service capability data of the questionnaire are summarized as shown in Table 6, which is the priority factors (from important to minor) for consumers participating in the questionnaire when they choose express service enterprises.

options	Average composite score
Reasonable charge price	3.43
guarantee the integrity of goods	2.87
timeliness of logistics information	2.78
staff service attitude	2.07
whether it can meet the personalized needs of customers	1.43

Table 6 Part of the expected logistics service ability questionnaire

The data of perceived service capability of the questionnaire are summarized as shown in Table 7.

dimensionality	Corresponding indicators	very dissatisfied	dissatisfied	fair	satisfied	very satisfied	total
EffectivenessB1	Express delivery speed C11	8	0	10	46	36	100
	Timeliness in handling customer opinions C12	10	0	24	42	24	100
accuracyB2	timeliness in logistics information C21	10	0	10	46	34	100
	integrity of goods C22	8	0	10	50	32	100
securityB3	integrity of express packaging, C31	10	0	8	48	34	100
	working attitude of staff C32	10	0	14	48	28	100
economyB4	rationality of charge price C41	10	3	36	42	9	100

Table 7 Partial data summary of perceived logistics service capability

Therefore, only 100 valid questionnaires were collected from this questionnaire, and the number of samples of respondents was small, so the conclusions obtained had certain limitations. Therefore, the conclusion obtained from this questionnaire is relatively consistent with the actual situation of consumers aged 18-30 who frequently use SF Express services, and may not have considerable objectivity, and there will be certain limitations in the overall satisfaction score of all consumers who have used SF Express services.

DATA CALCULATION OF SF EXPRESS SERVICE QUALITY QUESTIONNAIRE SURVEY

4.1Perception of logistics service capacity part of the calculation

Determine the index weight:

Firstly, the weights of the second level are calculated and the weight set is established, as shown in the following table:

Table 8 Weight table of the second level

j\i	B1 effectiveness	B2 accuracy	B3 security	B4 economy
B1 effectiveness	1	5	3	1
B2 accuracy	1/5	1	1/5	1/5
B3 security	1/3	2	1	2
B4 economy	1	5	1	1

After normalization of U1, $\overline{U_1}$ s obtained, as shown in the following table:

Table 9 Weight normalization table at the second level

j\i	B1 effectiveness	B2 accuracy	B3 security	B4 economy
B1 effectiveness	0.35	0.38	0.54	0.24
B2 accuracy	0.07	0.076	0.04	0.05
B3 security	0.12	0.15	0.18	0.48
B4 economy	0.35	0.38	0.18	0.24

The eigenvectors of $\overline{U_1}$ are normalized to:

$W=(0.4,0.06,0.243,0.301)^T$

Its maximum characteristic root is：

λ_{max} =(1.73/4x0.4+0.249/4x0.06+1.097/4x0.243+1.244/4x0.0.301)=4.2

Index of consistency：CI= $\frac{\lambda_{max}-n}{n-1}$ =0.067，RI=0.90，CR=0.074，CR<0.1 （4-9）

It can be concluded that the indicators of the first layer are as follows：

W=(0.4,0.06,0.243,0.301) （4-10）

In the same way, the timeliness, accuracy, security and economy were calculated respectively to obtain the weight of each indicator, as shown in the following table：

Table 10 Weight table of each indicator

target	weight	λ_{max}	CI	CR
effectiveness	(0.167,0.833)	2.002	0.01	0
accuracy	(0.833,0.167)	2.002	0.01	0
security	(0.167,0.833)	2.002	0.01	0
economy	-	-	-	-

Fuzzy comprehensive evaluation data processing process：

Table 11 Partial data summary of perceived logistics service ability

dimensionality	Corresponding indicators	very dissatisfied	dissatisfied	fair	satisfied	very satisfied	total
Effectiveness	Express delivery speed	8	0	10	46	36	100
	Timeliness in handling customer opinions	10	0	24	42	24	100
Accuracy	timeliness in logistics information	10	0	10	46	34	100
	integrity of goods	8	0	10	50	32	100
Security	integrity of express packaging,	10	0	8	48	34	100
	working attitude of staff	10	0	14	48	28	100
Economy	rationality of charge price	10	3	36	42	9	100

（1）Construct the membership relationship matrix：

Table 12 Corresponding comment levels of each survey index

dimensionality	Corresponding indicators	very dissatisfied	dissatisfied	fair	satisfied	very satisfied	total
Effectiveness	Express delivery speed	0.08	0.00	0.10	0.46	0.36	4.02
	Timeliness in handling customer opinions	0.1	0	0.24	0.42	0.24	3.7
Accuracy	timeliness in logistics information	0.1	0	0.1	0.46	0.34	3.94
	integrity of goods	0.08	0	0.1	0.5	0.32	3.98
Security	integrity of express packaging,	0.1	0	0.08	0.48	0.34	3.96
	working attitude of staff	0.1	0	0.14	0.48	0.28	3.84
Economy	rationality of charge price C41	0.1	0.03	0.36	0.42	0.09	3.37

After the score is obtained according to the weight, the following relationship matrix can be obtained：

$$R1=\begin{bmatrix} 0.08 & 0 & 0.1 & 0.46 & 0.36 \\ 0.1 & 0 & 0.24 & 0.42 & 0.24 \end{bmatrix}$$

$$R2=\begin{bmatrix} 0.1 & 0 & 0.1 & 0.46 & 0.34 \\ 0.08 & 0 & 0.1 & 0.5 & 0.32 \end{bmatrix}$$

$$R3=\begin{bmatrix} 0.1 & 0 & 0.08 & 0.48 & 0.38 \\ 0.1 & 0 & 0.14 & 0.48 & 0.28 \end{bmatrix}$$

$$R4=\begin{bmatrix} 0.1 & 0.03 & 0.36 & 0.42 & 0.09 \end{bmatrix}$$

（2）Make fuzzy comprehensive evaluation

he fuzzy vector Bi of each dimension including timeliness, accuracy, security and economy is calculated respectively.

The first-level fuzzy evaluation vector B can be obtained by combining W and R：

Bi=Wi·Ri

$$\text{Namely } B1=(0.167,0.833)\begin{bmatrix} 0.08 & 0 & 0.1 & 0.46 & 0.36 \\ 0.1 & 0 & 0.24 & 0.42 & 0.24 \end{bmatrix}$$

=(0.0967 0 0.2166 0.4267 0.26)

In the same way, B2=(0.097 0 0.1 0.467 0.337)

B3=(0.1 0 0.13 0.48 0.297)

B4=(0.1 0.03 0.36 0.42 0.09)

The vectors B1, B2, B3, B4, B5 and B6 calculated above are used as the fuzzy relation matrix of the second-level fuzzy evaluation

$$\text{Get } R=\begin{bmatrix} 0.097 & 0 & 0.217 & 0.427 & 0.26 \\ 0.097 & 0 & 0.1 & 0.467 & 0.337 \\ 0.1 & 0 & 0.13 & 0.48 & 0.297 \\ 0.1 & 0.03 & 0.36 & 0.42 & 0.09 \end{bmatrix}$$

The second-level evaluation results of perceived logistics ability and SF Express service quality can be calculated as follows：

$$B=(0.4,0.06,0.243,0.301)\begin{bmatrix} 0.097 & 0 & 0.217 & 0.427 & 0.26 \\ 0.097 & 0 & 0.1 & 0.467 & 0.337 \\ 0.1 & 0 & 0.13 & 0.48 & 0.297 \\ 0.1 & 0.03 & 0.36 & 0.42 & 0.09 \end{bmatrix}$$

B=(0.099 0.002 0.228 0.441 0.223)

$$\text{The comprehensive score is: } U=(0.099\ 0.002\ 0.228\ 0.441\ 0.223)\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{pmatrix}$$

U=3.662

In the same way too：

Time effectiveness score U1=3.75

Accuracy score U2=3.95

Security score U3=3.895

Economic score U4=3.37

4.1.2 Expected logistics service capacity part calculation

Factor analysis method:

This case investigates the expected logistics service capability. There are 6 first-level factors in total, which are set as Ai, I =1,2... 6. 100 customers were investigated by the aforementioned ranking survey method, and the statistical data in Table 14 were obtained.

Table 13 Index names of each factor

divisor	A1	A2	A3	A4	A5	A6
Index name	Logistics timeliness	freight	real-time order tracking	staff service attitude	Personalizatio n demand	Goods integrity

Table 14 Customer satisfaction factor location statistics

divisor	Rank i times						
	1	2	3	4	5	6	Total
A1	70	21	6	1	1	1	100
A2	10	30	23	10	20	7	100
A3	6	19	32	11	10	22	100
A4	2	10	13	38	32	5	100
A5	2	0	10	24	23	41	100
A6	10	20	16	16	14	24	100
Total	100	100	100	100	100	100	

According to Table 1, the frequency of the ith factor appearing in the JTH bit can be obtained by using Equation (1), and the calculation results are shown in Table 15：

$$f_{ij} = \frac{\sum_{K=1}^{N} F_{IJ}^{k}}{N} \qquad (5)$$

Table 15 Frequency statistics of factors appearing in a certain position

divisor	Rank i times						
	1	2	3	4	5	6	Total
A1	0.7	0.21	0.06	0.01	0.01	0.01	1
A2	0.1	0.3	0.23	0.1	0.2	0.07	1
A3	0.06	0.19	0.32	0.11	0.1	0.22	1
A4	0.02	0.1	0.13	0.38	0.32	0.5	1
A5	0.02	0	0.1	0.24	0.23	0.41	1
A6	0.1	0.2	0.16	0.16	0.14	0.24	1
Total	1	1	1	1	1	1	

According to Equation (2), the ranking value of factor A1 is:w(A1) =5.55, j =1

The ranking values of other factors can be obtained by the same method, as shown in Table 16.

$$w(F_i) = \sum_{j=1}^{N} f_{ij} \times (n + 1 - j), \quad i = 1, 2, \cdots, n \tag{2}$$

Table 16 Importance ranking value of each factor

divisor	A1	A2	A3	A4	A5	A6
Order value	5.55	3.79	3.34	3.42	2.11	3.14

As can be seen from Table 16, the order of importance of the above six factors is A1>A2>A4>A3>A6>A5, and the weight of A5 is W0 (the smallest value), so the weight of A1 can be expressed as：

W1=（5.55/2.11）*W0=2.630W0

In the same way
$$\begin{cases} Wi=\dfrac{5.55}{2.1}\text{W0}=2.63\text{W0} \\ \sum_{i=1}^{n} \text{W}i=1 \end{cases}$$

The weights of other factors can be obtained, and the system of equations can be obtained：

After solving the system of equations, the weight value of each factor is obtained, as shown in Table 17.

Table 17 Weight value of each factor

divisor	A1	A2	A3	A4	A5	A6
wight	0.2866	0.1957	0.1725	0.1765	0.109	0.1621

4.1.3 Summary of each index score

After sorting out SF Express 'evaluation system based on customer satisfaction, the following table content is obtained, and the relevant information is sorted into the following table 18 and Table 19.

Table 18 Scores of influencing indicators in the process of SF Express logistics service

	item	Level 3 index score	Level 2 index score	total score
effectiveness	Express delivery speed C11	4.02	3.75	3.662
	Timeliness in handling customer opinions C12	3.7		
accuracy	timeliness in logistics information C21	3.94	3.95	
	integrity of goods C22	3.98		
security	integrity of express packaging, C31	3.96	3.85	
	working attitude of staff C32	3.84		
economy	rationality of charge price C41	3.37	3.37	

Table 19 Importance degree of each factor of customer expectation logistics capability

divisor	Logistics timeliness	freight	order tracking real-time	staff service attitude	personalized needs	goods integrity
wight	0.2866	0.1957	0.1725	0.1765	0.109	0.1621

CONCLUSIONS ON LOGISTICS AWARENESS

According to the conclusion, from the perspective of customer satisfaction, the service quality score of SF Express is 3.662, which is at an average level. Combined with the questionnaire feedback results, the following conclusions can be drawn：

5.1Timeliness dimension: Customer feedback is not timely

The score of this dimension is 3.75 points. According to the score, customers are relatively satisfied with the timeliness of SF Express (4.02 points), but their satisfaction with the timeliness of handling customers' opinions is slightly lower (3.7 points).

In terms of the speed of express delivery in timeliness, SF Express has obtained a high score of customer satisfaction, which is also the highest score among all the listed customer satisfaction factors. Therefore, it can be analyzed that SF Express still has a prominent advantage in speed, which is the most important factor to maintain customer satisfaction. However, SF Express is less satisfied with the timeliness of logistics feedback. At present, SF Express has launched an online feedback service, where customers can give feedback on the feedback page of SF Express's official wechat official account, the corresponding complaint hotline and the official website. There are many ways of information feedback, more channels to deal with customer complaints, customer rights protection, SF Express service quality supervision is friendly. However, the feedback efficiency is not high, and the feedback process is long, which prolongs the cycle of problem solving, affects customer satisfaction to a certain extent, and ultimately affects the protection of consumers' interests.

5.2 Accuracy dimension: Improve accuracy

The score for this dimension was 3.95. According to the score, customers are satisfied with the accuracy of SF Express. The timeliness of sub-factor logistics information (3.94 points) and goods integrity (3.98 points) were relatively satisfied. Sf Express can continuously improve the timeliness of logistics information and strengthen the construction of information system; At the same time, improve the information tracking, control the information construction of all links, strictly check the logistics distribution of the "last kilometer", reduce the loss rate of goods, goods error rate, and reduce the rate of customer lost parts; Continue to improve the level of accuracy to achieve a better customer experience.

5.3 Security dimension: improve the service attitude of staff

The score of this dimension is 3.95, which is at the level of customer satisfaction. Customers have a high score of 3.96 for the sub-factor package integrity, and a low score of 3.84 for the staff's work attitude. When customers obtain express services, they have direct contact with the express personnel, so the service attitude of the express personnel has a great impact on the customer's evaluation of the overall logistics service attitude. Whether to complete the delivery of goods to customers, whether to reflect professional quality in negotiation, whether to solve the corresponding express problems for customers, are the elements that customers are very concerned about. Therefore, the staff should have strong professional quality and good service attitude, timely reflect customer needs, and improve the handling of unexpected problems, SF Express can also establish a complete set of training mechanism, improve the professional quality of express delivery personnel, so as to maintain the corporate image and further improve customer satisfaction.

5.4 Economic dimension: reduce customer unit price

The score of this dimension is 3.37, the lowest among the four dimensions, which also indicates that customers are generally not satisfied with the charging price of SF Express.

Table 20 Price comparison between SF Express and ZTO

distance	logistics company	weight/kg	First charge	Renewal of the cost
Within the province	S.F. Express	1	13	2 rmb
	Zhongtong Express	1	10	3 rmb
outside the province	S.F. Express	1	23	13 rmb
	Zhongtong Express	1	15	8 rmb
Hongkong	S.F. Express	1	30	6 rmb
	Zhongtong Express	1	18	6 rmb
Macao	S.F. Express	1	30	6 rmb
	Zhongtong Express	1	25	8 rmb

By the above data can be reflected, suitable abundant no advantage in price, and in the context of electricity development, motion in the field of electricity is not good, it is understood that the majority of taobao sellers rarely use along abundant express, but choose to use cross a da for the delivery, the choice of taobao sellers make cross, eat up a large part of market share, It can be seen that price factor is also an important indicator of competition in the e-commerce industry. In this dimension, SF Express's advantage in speed does not outweigh its disadvantage in price, which becomes one of the important factors hindering its development.

As SF Express has been pursuing a high price strategy, its price competition is at a disadvantage in the industry. From the beginning of its establishment, SF Express has focused on timely delivery services and high-end market, so the express delivery price is relatively high. However, in today's logistics market, more and more logistics enterprise to improve its technology level and service level, improve the speed of delivery at the same time, not only with guest unit price also maintained a relatively low level, so under the competition of suitable abundant speed luck distribution no longer is the industry's top speed, relatively high cost of logistics does not cost-effective for customers. Therefore, SF Express needs to vigorously adjust its strategic positioning and conform to the development trend of the logistics industry. It not only needs to pay attention to the e-commerce market, but also needs to continue to improve the delivery speed and occupy the market share with service advantages. Or reduce the cost, reduce the customer unit price, or launch the corresponding differentiation strategy to improve customer satisfaction.

According to the weight of each logistics influencing factor, the order of importance of each factor in customers' mind is as follows: logistics timeliness > freight cost > staff service attitude > real-time order tracking > goods integrity > personalized demand. Therefore, it is necessary to pay attention to the three factors of logistics timeliness, logistics price and service attitude of staff. On the basis of ensuring that the above three factors can meet the needs of customers, it is necessary to ensure the real-time tracking of orders, the integrity of goods and the service of personalized needs.

SF EXPRESS CUSTOMER SATISFACTION IMPROVEMENT MEASURES

Combined with the above conclusions of customer logistics expectation ability and logistics perception ability, it can be seen that among the four dimensions, customers pay most attention to the timeliness and freight in logistics services.

While the logistics timeliness of SF Express has won high praise from customers, the freight factor has become one of the important factors that lower customer satisfaction.In the logistics expectation ability, the service attitude of staff ranks the third in customers' mind, and the service attitude index score of SF Express staff is not ideal.

The rest of the order tracking real-time, goods integrity, personalized needs, SF Express can adjust the price strategy, improve the service attitude of staff, on the basis of improving the above three needs, so as to comprehensively improve logistics satisfaction.The following are the improvement measures of each subdivision factor:

6.1 Adjust market positioning

The charging standard of SF Express is higher than that of other logistics companies, mainly because the cost of logistics delivery is the premise of ensuring the delivery speed. As early as 2017, SF Express was reported to have owned five Boeing all-cargo planes and even rented cabins for 13 all-cargo planes and more than 530 passenger planes. Since its establishment in 1993, SF Express has been expanding its business. By 2017, SF Express had covered 34 provinces in China, covering various regions in South and East China, North and Central China.

As it is equipped with more efficient transportation equipment, its logistics transportation cost is higher. In order to improve customer satisfaction, SF Express can optimize its distribution system by increasing the number of goods delivered in a single time, reducing the total number of transportation, reducing the number of empty driving, reasonably arranging transportation vehicles, and optimizing transportation resources.

Secondly, at the beginning of its establishment, SF Express positioned its services in the middle and high-end market, with high price and fast speed as its differentiated market positioning strategy. In the early stage, SF Express became the leading enterprise in logistics enterprises, and its high reputation was also related to its market positioning. In electric business increasingly development today, however, the market environment began to change, motion should improve sensitivity to the environment, timely adjust marketing strategy, to cross one of enterprises in the electricity industry development after encroaches upon the present situation of the express delivery market, carry out the corresponding motion can be business, such as needle push different customers, introduce different services, can also take the appropriate strategy, occupy the low-priced market. In addition, targeted express service strategies are formulated for the current e-commerce industry to increase the market share, improve the business coverage rate, and improve the ability to resist risks.

6.2 Improve the logistics information network

Logistics information management system consists of storage operation management, transportation and stowage management, financial management, human resources management and other subsystems. Through various technologies, it can improve its information capability, improve the processing and transmission speed of the whole system, improve the efficiency and response ability of logistics operation, and make personalized service possible. Meanwhile, it also improves real-time logistics tracking and reduces logistics costs.

The ability of real-time information transfer greatly affects the expected logistics service ability. The construction of logistics information network ensures the connection of various transportation links and distribution links, and also ensures that customers can obtain distribution information in the first time.Along abundant logistics information system more perfect, the process is that motion of call center customer service staff will be in the customer order will order entry information system, real-time synchronization, and with the express Courier number is created by the gun scan of Courier (the gun has a real-time synchronization information), upon completion of this action. All information is synchronized between the regional branch and the headquarters. In addition, the system will generate waybills and automatically transmit them to the express information system. In the internal control system, express delivery status will be reported when the express item is included in the next link. Finally, the express package arrives at the destination distribution center, and then distributed to a specific site.

Improve the logistics information network, through strengthening the effective communication between links, optimize the time-consuming links, improve the response speed of each link, local optimization promotes the improvement of the overall distribution speed, so as to improve the logistics level of SF Express.

6.3 Improve customer complaint management system

Improve the training of customer service staff, improve their professional quality, establish a normal event handling mechanism: such as lost and missing parts, timeliness issues, compensation issues, etc., establish a standardized response mechanism, based on compensation measures when necessary.

Establish a multi-channel customer feedback mechanism. Use the combination of online and offline, in addition to official phone, open small programs, public accounts, wechat, apps and other channels.

6.4 Monitor customer satisfaction regularly and strive for customer loyalty

After the customer completes using the express every time, the system can pop up a questionnaire to guide the customer to fill in the satisfaction of the service and propose the improvement and modification measures. Customers who complete the questionnaire can receive random prizes or cash incentives to promote information communication with customers.

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THE STUDY OF SOCIAL MEDIA PLATFORMS THAT AFFECT COMPANY PERFORMANCE OF NEW RETAIL COMPANIES

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ABSTRACT

The development of network marketing from the early days of the Internet to the present has promoted the rise of a new era of digital marketing. The transition of network communication technology from 4G to 5G will accelerate the digitization of products and services, and the digitization of markets and channels (Susilo & Putra, 2019). The traditional one-way marketing method can no longer meet the Internet technology environment of Web2.0 - Web3.0. Internet users are more inclined towards social attributes such as content creation, sharing and interaction (Wibowo et al,2020).

Social media marketing is one of the marketing methods with the most "social network" attributes and the most value-oriented consumer interaction in digital marketing. It also pushes online network marketing channels to a new level. According to the data released by Instagram, as of 2021, more than 1 billion users will search the world's latest products through Instagram, with an interaction rate of more than 2.2%, and Instagram ads will reach 928.5 million users.

This article will first study the relevant theoretical part, and make an in-depth analysis of the main aspects of social media, marketing theory and precision marketing. For example, it analyzes the problems existing in the process of social media precision marketing, and finally provides solutions and various guarantees to ensure the implementation of the solutions.

Deriving the accuracy of the user profile, the right way to reach the target user, the precise presentation of content, and the relationship with the customer is crucial for accurate marketing in social media

Keywords: new retail, social media, precision marketing, user portrait

INTRODUCTION

At present, research on precision marketing began in 1999. Professor Philip Kotler (2005), a master of modern marketing theory, believes that companies need more accurate, measurable and high-return marketing communications, and they need to develop marketing communications plans to make them more effective. Much focus on results and actions, and more and more emphasis on investment in direct marketing communications, has led to the concept of precision marketing (Howells & Ertugan, 2017). Zabin and Brebach proposed the 4 Rs of precision marketing, that is, the right customer, the right message, the right channel, and the right moment. As far as the existing research results are concerned, most of the research on enterprises such as automobile and telecommunications are concerned, and the research field mainly focuses on the design of enterprise marketing programs (Hsu,2018). However, for the retail industry and the current fast-developing social media, there are few breakthroughs in the research results of precision marketing. Therefore, based on the core idea of precision marketing, I analyze the marketing situation of the "new retail" industry, and help companies based on their own user portraits. Find customers externally, then target customers and influence customers through social media to become users of corporate social media and e-commerce platforms. Do a good job in the operation of new users and existing users, use the customer database to establish long-term relationships with valuable customers, push appropriate products to target consumer groups and track them, and promote the best match between the company's actions and customer needs to achieve the win-win goal of maximizing customer satisfaction and maximizing corporate benefits. Help "new retail" enterprises to achieve business growth with lower costs in the current market environment.

CONCEPTUAL OVERVIEW

2.1 Social media

Social media is a social online platform for content creation, sharing, dissemination and interaction based on user relationships in the Internet Web2.0 model. A network system in which users, communities, and organizations are interconnected and dependent on each other mainly through technical capabilities (Mahdi et al.,2020). Mainstream social media in the digital age include Weibo, video, blogs, forums, and more. Outside of China, mainly Facebook, Twitter, YouTube, Instagram, the content on these online platforms is selected and edited by users. YouTube has 2.562 billion users worldwide as of January 2022, and viewers 18 and older spend an average of 41.9 minutes on YouTube per day (Ysb, Ssa & Aa, 2019).

Social media characteristics include a. Openness. Everyone can use social media and enjoy the services it has to offer. Social media itself does not set any barriers to entry (Machado & Miranda,2022). b. Timeliness. At any time, any place, with the help of mobile terminals such as mobile phones, you can publish and receive information (Zheng, X. J.,2019). C. Interactivity. Users share, comment, and forward information with each other, and users forward information helps to expand the coverage of information, and interactive behavior constitutes a huge social media network. c. Personalization. Users can choose to accept or reject a certain piece of information according to their own preferences, and can choose to forward, comment, or like a certain piece of content according to their interests. For B2C businesses, social media is an opportunity for precision marketing (Yannan et al.,2017).

2.2 User portrait

User portrait is a labeled user model, which is described by the user's own characteristics, geographical habits, behavior characteristics, etc (Lauterborn, 1990). In layman's terms, it's tagging users. Markers are highly accurate feature identifications derived from user information analysis. Markers can describe users with some common and easy-to-understand functions, which can make it easier for people to understand users and process them with computers.

User portraits have been widely used in the field of online sales, which can help us better understand users and products, and play a great role in personalized recommendation and sorting, user refined operations, product analysis, and decision-making assistance (Abraham & Lodish,1990).

2.3 Traditional retail industry and "new retail" industry

The traditional retail industry is a form of the retail industry, and it is the first model of the retail industry. The reason why it is called the traditional retail industry is relative to the emergence of e-commerce in the later period. The transaction platform of the traditional retail industry is the physical storefront, and the main body of the transaction is the retail enterprise that conducts business activities around the physical store. Simply put, traditional retail refers to a retail method of buying and selling a small amount of goods based on a fixed time and place (Jie & Niu,2017).

In October 2016, Jack Ma proposed at the Hangzhou Yunqi Conference that the era of pure e-commerce has passed, and the future retail era will present a new retail model of "online + offline + logistics", namely "new retail" the concept of. "New retail" is not a brand-new retail format, but a new format compared to the traditional retail industry. It is the product of the combination of Internet technology and the retail industry. "New retail" is a retail model that uses new technologies such as cloud computing and big data to innovate and upgrade traditional retail and online retail. The purpose is to achieve the upgrading and integration of offline stores and online pure e-commerce., and ultimately better display products and services to consumers, meet their individual needs, and realize scenario-based retailing. Its essence is to use "new technology" and "new logistics" to realize the combination of online, offline and mobile channels, improve retail efficiency, increase market share, reduce sales costs, and achieve personalized customization.

2.4 Precision Marketing

The concept of precision marketing was first proposed in 2005 by Philip Kotler, the founder of modern marketing. He believes that precision marketing is a new marketing development trend with higher precision requirements, measurable process, and more focus on return on investment. At the same time, more attention should be paid to investment in direct sales communication. Since then, some scholars have defined precision marketing: precision marketing is a detailed analysis of different consumers in the target market by combining quantitative and qualitative methods (Xiao-Long & Feng,2016). of different consumer groups to achieve efficient marketing. There is also an image description: precision marketing is to recommend the right product to the right person at the right time and in the right way (Lin,2020). The so-called "appropriate" means "precise". Fully implement the "customer-centric" concept in the entire process, and continue to optimize marketing (Xuefeng et al., 2019).

DEVELOPMENT TREND OF "NEW RETAIL" INDUSTRY

After the "new retail" was proposed, many companies began to practice. In China, Alibaba, Xiaomi, JD.com, etc. are more typical. In 2016, Alibaba's sales reached 120.7 billion on Double Eleven. Seeing this huge profit, many brick-and-mortar retail stores also began to develop online shopping and create online shopping channels. At the same time, in order to satisfy consumers' shopping experience, traditional e-commerce companies are also stepping up the deployment of physical channels, such as the opening of unmanned convenience stores. Physical channels and online channels are gradually becoming integrated, and the trend of the retail industry entering the era of "new retail" is unstoppable. Its development trends are as follows:

3.1 Shift from a production-based economy to a consumption-based economy

"New retail" is driven by data, which improves the circulation efficiency of commodities, truly realizes the reverse-driven production reform of consumption mode, and guides the economy to transform from a "production-based economy" to a "consumption-based economy". The entire retail format presents: online + offline, commodity + service, retail + technology, deep integration of various formats and industries; traditional e-commerce has turned to O2O model; technological improvements have broadened sales channels; customers based on price wars The competition for resources is changing to individualization, diversification, and quality.

3.2 Integrated development of online and offline

Before the emergence of e-commerce, consumers could intuitively feel the quality, appearance, feel, etc (Hutter et al.,1992). of goods in physical stores. Later, with the emergence of e-commerce, consumers are more inclined to online various APP software, online stores to select products by browsing pictures and videos, and placing orders online, they can buy the products they need without leaving home (Ahmad et al.,2018). With the improvement of people's consumption level and consumer demand, the disadvantages of traditional stores and e-commerce continue to emerge, making it difficult to meet customer needs. More and more consumers choose to experience products in physical stores first, then place orders online, and finally go to the physical store. Stores pick up goods, this change is actually the trend of online and offline integration and development (Zou, 2015). Under this trend, both Alibaba and JD.com have taken a series of actions to continuously develop offline. In addition to building self-operated logistics, the two also cooperate with other companies, such as Alibaba and Suning, to establish Maoning e-commerce company, and use Suning to make up for Alibaba's offline shortcomings. JD.com cooperates with Wal-Mart and Tencent. Tencent can expand better online capabilities for JD.com, while Wal-Mart makes up for JD.com's offline shortcomings. In short, the development of pure e-commerce and brick-and-mortar stores has faced many problems. Only the integration of online and offline development is the way out for the development of the retail industry.

3.3 High technology becomes the basis for the development of "new retail"

On the one hand, big data has become more common as an underlying service, and big data has become a new fundamental force in the retail market, providing a data foundation for consumers and merchants to build personalized consumption scenarios. Big data can reduce the time and cost of online shopping for consumers by intelligently processing the browsing data and purchase data of network users. At the same time, retailers can also make product recommendations based on these data, grasp the dynamics of consumers to a higher degree, and provide high-quality services. On the other hand, there is a new breakthrough in VR shopping. Taobao's VR shopping Buy+ appears, and users can experience online shopping in virtual stores. As the technological logistics distribution system becomes more and more perfect, the logistics system under the background of "new retail" will be built on the basis of the automated logistics system, which not only improves the transportation efficiency, but also reduces the labor cost.

3.4 Scenario-based and entertainment-based consumption

In the context of "new retail", more consumption scenarios will be created. In these scenarios, consumers are no longer just simple buyers, but they pay more and more attention to emotions and value propositions in the shopping process. The retail form under the "new retail" model will focus on the customer's sense of experience, such as browsing experience, interactive experience, trust experience, etc. This maximizes user participation, allows them to fully experience the joy of shopping, and improves consumers' brand awareness. In addition, consumer entertainment is also a development trend of "new retail"(Gash & Ahmeti,2021). The consumption proposition has gradually shifted from "survival" to "enjoyment and development"; consumption patterns have changed from "buying products" to "buying services"; consumption behavior has changed from "standardization" to "individualization". With the continuous influx of "post-90s" and "post-00s" into the consumer market, their new consumption concepts gradually affect the retail behavior of the retail industry. Compared with the "material consumption" of "post-70s" and "post-80s", they are more inclined to for emerging consumption patterns such as the Internet, games, interactions, parties, and fitness, they prefer blogs, Moments, and other social media with strong interaction, and they are more willing to express their views and opinions(Swallehe,2022). Driven by them, consumer entertainment has become the development trend of "new retail".

4.1 Overview of Company a’s Social Media Marketing

Company A is a provider of household electrical appliances in China. The company independently researches and develops a variety of small household appliance products, and the products provided are aimed at the global consumer market and enjoy a good reputation in overseas markets. Since its establishment, the company has begun to use network marketing channels for product sales and brand promotion. At present, the marketing area has covered North America, Europe, Australia and other countries. Due to the rapid development of intelligent hardware, the company's products are constantly being updated. In line with the business philosophy of "customer needs as the center", company A has set up multiple regional customer service departments within the company, and the personnel of the R&D department also give priority to solving the problems raised by users.

In recent years, in the competitive environment, the company is striving to expand its market share, increasing the operating expenses of network marketing every year, and the annual turnover is showing an upward trend. However, Company A has been investing operating funds in the improvement of search engine content before, and its investment in social media is somewhat weak. As far as the current situation is concerned, the company has set up social platform accounts for different product line brands, and also set up official accounts on mainstream media websites and conducts daily maintenance. At present, the social media operated by Company A include Facebook, Twitter, and also posting pictures on Instagram and uploading videos on YouTube. The problems that can be seen at present are that the number of postings is small, the number of comments under each message is small, and the activity of the group on the site is low. The content released by the company brings less traffic to the company's official website, and the quantification of the effect of social media marketing is also facing new challenges for company A.

Company A's marketing adopts a small team model, and allocates and collaborates according to product lines. Each marketing department has a social media marketer dedicated to social marketing and maintenance. Use social media marketing to increase traffic and exposure for your product business. At present, the measurement of marketing effectiveness is the amount of traffic and fans. In terms of sales, the assessment criteria have not yet been perfected. The status quo is that marketers are only submitting content on social media platforms, not thinking about overall social media management.

At present, the company finds that a. social media marketing is becoming more and more important, and it is also increasing event marketing, but the effect is still not satisfactory, but it increases the financial burden. The only way to increase market funding is to control and save R&D costs, which is not conducive to the long-term financial development of the company. b. There is a lack of reasonable marketing management methods for social media marketing. The more obvious problems are that the distribution of marketing resources is scattered, the attention of fans is low, and the number of fans is small. The company's official social media data has already shown deficiencies from the side. c. From the user search path, the conversion rate is low. Improving return on investment and strengthening social media precision marketing are the goals that Company A urgently needs to improve.

Social platforms / Marketing form	Facebook	Twitter	YouTube	Instagram
Text content	Y	Y	N	N
Advertising	Y	Y	Y	N
Image push	Y	Y	Y	Y
Video push	Y	N	N	N

Figure 1: Overview of company A's social platform marketing

4.2 Current Situation of Social Media Marketing of Company A

In order to obtain the first-hand information of company A's social media marketing, this paper designs a questionnaire based on the research needs, understands the basic information of consumers, and accurately locates the consumer groups of social media. With the help of the results of the questionnaire, we have further obtained consumers' recognition of social media marketing and relevant data on the media marketing effect of Company A, which provides ideas for further improving Company A's social media marketing strategy. In the setting of questionnaire items, it mainly focuses on user portrait and identification in social media marketing, digital coverage and arrival, continuous user relationship, and direct return factors. Second, set up questions for the platform of choice, content to post, user engagement, and conversion volume. Again, consider the products of company A, set up user attitude questions, find problems from user feedback, and find out the actual problems of company A when using social media as a marketing tool, which will help to choose a reasonable target Markets and Platforms. Some research data:

Respondent Demographics

N=190

variable	describe	quantity	percentage
Sex	male	92	48.42%
	female	98	51.58%
Age	under 18	4	2.11%
	18-24	23	12.11%
	25-34	73	38.42%
	35-44	73	38.42%
	45-54	16	8.42%
	55+	1	0.53%
Education	Master's degree or above	45	23.68%
	Bachelor degree	71	37.37%
	College degree	52	27.37%
	Below College degree	22	11.58%
Industry	Information Technology	40	21.05%
	Manufacturing	26	13.68%
	Logistics	4	2.11%
	Education	15	7.89%
	Government	5	2.63%
	Financial	17	8.95%
	Retail	4	2.11%
	Art	5	2.63%
	Freelance	29	15.26%
	Other	45	23.68%
monthly income	Below 5000	38	20.00%
	5001-8000	44	23.16%
	8001-13000	48	25.26%
	13001-16000	19	10.00%
	16001-20000	14	7.37%
	More than 20000	27	14.21%

Figure 2: Respondent Demographics

Company A's social media platform customer behavior statistics

user messages	percentage	forwarding	percentage	type	percentage	browse time	percentage	number of ad clicks	percentage
20 and above	13.68%	20 and above	10.53%	Product Image	28.42%	under 3 hours	16.32%	10	12.63%
15-19	13.68%	15-19	11.58%	Event release	13.68%	2-2.5 hours	20.53%	6-9	15.79%
10-14	15.26%	10-14	15.26%	video	30%	1-1.5 hours	35.26%	3-5	24.21%
5-9	14.74%	5-9	14.74%	Creative Advertising	17.37%	0.5 hours and below	27.89%	1-2	31.05%
1-4	23.16%	1-4	30.53%	Product introduction	10.53%	N/A	N/A	0	16.32%
0	19.47%	0	17.37%	N/A	N/A	N/A	N/A	N/A	N/A

Figure 3: Company A's social media platform customer behavior statistics

4.3 Problems existing in social media marketing of Company A

4.3.1 Social media marketing has fewer effective customers

According to the survey results, it can be seen that the number of target users obtained by Company A through social media platforms is relatively small, and the company's operation effect in attracting users' attention is not good. However, users show a positive attitude, and users have room for improvement in subscription and purchase. Such potential users can be turned to target users by improving marketing capabilities. From the results of the company's social media content release and user interaction data, it can be seen that under the social media model, the company has not yet accurately understood user needs and has not established long-term relationships with users. Secondly, Company A hopes to gain user attention by operating Facebook, Twitter, Instagram and other social media platforms. So, there will be ads on social media. The effect is good during the advertising period, but once the advertisement goes offline, the traffic will drop rapidly.

4.3.2 The low quality of social media marketing content

It can be seen from the survey results of content release and push that Company A has not achieved a certain scale in terms of content promotion. The coverage of social content is not wide, and the number of advertisements pushed and the opening rate of potential users are low. The data from the questionnaire results showed that most of the ways respondents learned about Company A were on the YouTube website, and the content displayed in the form of videos was the preference of the target users. The coverage of various social platforms is not balanced. Facebook and Instagram have low resource coverage. For the content and articles pushed by the company, online users have few clicks. Although the company continues to increase its advertising operating expenses year by year, and regularly launches Facebook creative advertising, the direct sales conversion brought by such advertising is very low.

4.3.3 Inaccurate Target Group Marketing

At present, the main content of precision marketing on social media is to push products to customers according to their preferences. Although Company A advocates the implementation of precision marketing, it mainly attracts customers to purchase by placing accurate advertisements. Strictly speaking, it belongs to advertising communication, which is only a part of precision marketing. Social media marketing is still in the unidirectional marketing stage, failing to establish information exchange between merchants and consumers. There is no sales feedback from consumers, the effectiveness of information communication between the two parties is poor, and the information exchange is asymmetric. As a result, Company A is unable to obtain the personalized needs of consumers, and misses the right time to push suitable products or services to consumers.

4.3.4 Lack of in-depth understanding of precision marketing

Company A has been conducting social media marketing for more than three years. From the interviews and questionnaires, it can be seen that the company's internal understanding of precision marketing is one-sided. For example, the concept and method of precision marketing are relatively vague. As far as the main managers of the company are concerned, the professional marketing knowledge reserves are not enough, the understanding of precision marketing is not comprehensive enough, and they lack the initiative and methods to promote the implementation of precision marketing strategies. The lack of awareness of precision marketing among company insiders is also a major obstacle to the realization of precision marketing in social media. According to the questionnaire survey, the relevant staff of the company have average educational background, the turnover of turnover is high, and those who lack data analysis use relevant methods to process data, making it difficult to implement social media precision marketing with the background of big data technology.

A COMPANY'S SOCIAL MEDIA PRECISION MARKETING SUGGESTIONS

5.1 Collect user data through different channels, clarify user groups, and accurately locate

User portrait is one of the important tools for enterprises to apply big data analysis. It presents the collected consumer information in the form of labels. User portraits can provide enterprises with complete user information in a simple and clear way, allowing enterprises to quickly find target customer groups.

In order to improve the accuracy of social media consumer group positioning, companies should give priority to the design of user portraits. The data form of user portraits can be static or dynamic. With the help of big data analysis of social media consumer groups, accurate positioning of the company's consumer groups can be achieved. Static data mainly includes demographic and social attributes such as age, gender, region, marital status, and asset characteristics; dynamic data includes behavioral characteristics such as browsing, searching, clicking, and purchasing. Enterprises can combine static data and dynamic data to construct user portraits by analyzing users' purchasing habits, purchasing preferences, and other related purchasing behaviors, as well as the gender, region, and age of the population.

The collection of enterprise data can come from the data collected by the enterprise on its own platform. The breadth and depth of data collection are determined by the enterprise itself, and the data reliability is relatively high. On the other hand, external platform data can be collected through social media and e-commerce. The API interface data provided by social media includes the behavior data of customers on the social media accounts owned by the enterprise. The advantage of this part of the data is its authenticity. The authenticity of the data such as the words and deeds of customers on social media and the products purchased on the e-commerce platform is very high. Marketing based on this part of data can achieve maximum accuracy, and because data is collected in real time, it can support real-time scenario marketing. Third, collect open data. There is a large amount of data on the Internet. These data are of various types and will be automatically updated. They are of high value in different application scenarios.

Company A can also collect the customer identification codes of the same customer in multiple data sources through data matching technology, and combine the data by connecting these customer identification codes to play the role of user ID management. Through data mining, integration and standardization, the original static, isolated and fragmented data is integrated into a dynamic and interrelated user data chain, and enterprises can use these identification codes to connect different platforms to conduct a 360-degree all-round customer service. cover. Applications on various terminals we use every day (mobile phones, computers, PADs, TVs, smart home appliances, smart wearable devices, etc.) and third-party devices (advertising screens on the street, vending machines, advertising screens in elevators, etc.) Personalized pushes can be based on some kind of customer identification code, and when a customer's behavior on a device is recognized, he may receive marketing push information in social media.

5.2 Choose the right way to reach the target users of social platforms

Through the analysis of the operation effect of the existing social media platform of company A, the social marketing platform suitable for company A is selected to achieve the optimal goal of resource investment efficiency.

According to the results of the questionnaire, YouTube ranks first in the frequency of users' use of social platforms, with the highest resource efficiency. At the same time, he showed a strong interest in pictures and video content. The viewing time of respondents and the popularity of short videos make Instagram a reasonable choice for video promotion. The company's current content release effect on Instagram is not obvious, and it can increase investment to improve the effect. Google is the company's main search engine resource, but its output ratio is lower than YouTube. Other mainstream platforms Facebook and Twitter have lower output ratios. As far as company A's products are concerned, YouTube is suitable for posting videos, Facebook posting pictures, events, advertising and community marketing, Instagram focuses on content coverage, and Twitter is more inclined to information and tweets.

5.3 Precise presentation of social media content.

As early as 1996, Rick Doyle of the American Association of Newspaper Editors put forward the concept of content marketing, thinking that it is a new type of communication and marketing. The Content Marketing Association of America defines content marketing as: "Marketing and business that attracts, acquires, and gathers clearly defined target groups by producing and distributing valuable, engaging content that ultimately leads to conversion and revenue generation for these people. process."

For company A, content marketing can be divided into three types: one is soft advertising that conveys product and company-related information that consumers want to know, and is not aimed at direct sales; the other is brand-related entertainment information; the third is other hot information.

5.4 Improve customer relationship and realize cross-marketing

The improvement of company A's social media marketing strategy should ultimately increase the achievement rate of social media marketing, thereby enhancing the company's market share and competitiveness. Therefore, precision marketers need to understand what customers care about, what motivates them, and what makes them give up; whether marketing information predicts customer needs or next moves, and whether it always includes customer needs, choices, and acceptance. products; what to do to achieve sustained success and incentivized growth, all of which depend on the establishment of sound customer relationship management data.

In precision marketing, social media can build a bridge of communication between sales staff and customers, and establish a consumption profile for each customer, including customer name, address and economic income status, communication channels and the number of friends and fans, purchases History, credit status, and even information such as customer birthdays and preferences, and integrate information resources through social media, make timely revisions and supplements to maintain and improve data.

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THE PATH ANALYSIS OF THE FAIR REGULATION-STAFF TURNOVER IN HIGH-STAR HOTELS: EMPIRICAL EVIDENCE FROM SHANDONG, CHINA

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ABSTRACT

A high turnover rate is one of the salient features of the hotel industry and one of the most significant challenges. The fairness that employees feel in the work process is an important part of their motivation to create performance, especially in the hotel industry with strong interaction and service. The purpose of this study is to explore the process of fair regulation affecting staff turnover in high-star hotels. The method applied is Path Analysis: The first step is to publish the questionnaire on Questionnaire Star and put forward hypotheses, and the second step is to verify the hypothesis on SPSSUP online software. The questionnaire design is divided into four parts and 17 questions according to the logic of "precondition - problems - measures - effects." The results are as follows: First, the lower the degree of fair regulation, the stronger tendency to change careers. Second, the stronger the tendency to change careers, the faster the action. Third, self-improvement management with organizational support can reduce the tendency or action to change careers. Fourth, self-improvement management with organizational support can reduce the turnover rate due to unfair regulation. The findings are as follows: The employees who left were disappointed with the hotel, but they still have hope for it. Perhaps artificial intelligence (AI) under organizational support can strengthen the institutional fairness of high-star hotels, which may change the future of human resource management.

Keywords: fair regulation, staff turnover, organizational support, self-improvement management, path analysis

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INTRODUCTION

The hospitality industry, especially the hotel sector, is one of the world's highest staff turnover rates (Karinadewi & Martdianty, 2020). Turnover intentions among hotel employees are a common phenomenon worldwide and one of the biggest challenges facing the hotel industry (Wen et al., 2020). Maintaining an appropriate staff turnover rate can continuously bring new vitality to star hotels. Without the support of a relatively stable staff team, the hotel will inevitably face the risk of being eliminated by the market due to the lack of talent. A high turnover rate is one of the salient features of the hotel industry and one of the most significant challenges (Wen et al., 2020). For example, the annualized staff turnover rate in the Indian Hotel and Motel industry is 73.8%, higher than the annual average level of 10-15% (all industries) (Bairwa, 2020). Regarding career choice, American hotel industry leaders face 70% higher turnover intention than other industries (James, 2020). Staff turnover has become one of the most challenging problems in the Chinese hotel industry. A statistical result shows that the average turnover rate of hotel employees in Beijing, Shanghai, Guangdong and other regions is about 30%, and some hotels are even as high as 45%. According to a survey conducted by the human resources development and training center of the China Tourism Association on the human resources of 2-5-star hotels in 23 cities, the employee turnover rate of the hotel industry has reached 23.95%. The average staff turnover in the general industry is about 5% to 10%, while the turnover rate of employees in the hotel industry is as high as 30%. As a traditional labor-intensive service industry, human resources are the core guarantee for its development. For example, the turnover rate of grassroots employees of XLD hotel reached 33.33% in Xi'an City (Xie, 2019).

Challenges faced by high-star hotels with high turnover rate include work environment, transfer opportunities, talent development planning (Michael & Fotiadis, 2022), and so on. In particular, a fair regulation is a very important factor (Kurian & Nafukho, 2021). Moreover, a fair regulation is inseparable from the support of the organization. However, many scholars pay attention to the result of turnover caused by unfair regulation rather than the process. The purpose of this study is to explore the process of fair regulation affecting staff turnover in high-star hotels. The practical significance is to provide a new measure for star hotels to reduce the turnover rate. Therefore, the research questions are as follows:

(1) How to design a questionnaire to reflect the fair regulation-staff turnover in high-star hotels?

(2) What is the process that the fair system regulation the turnover rate in high-star hotels?

LITERATURE REVIEW

2.1 Staff turnover in high-star hotels

Employee turnover intention has become a vital phenomenon concerned by scholars in the field of organizational science. It refers to the willingness of individuals to voluntarily and permanently quit the organization (Memon et al., 2015). Research shows that it has various adverse effects on individuals and organizations, including but not limited to employee and organizational performance (Nuhn et al., 2019). Recent studies have identified employee turnover as a major problem in the hotel industry (Dwesini, 2019; Rasheed et al., 2020). The Covid-19 pandemic has aggravated all the above problems recently because of hiding the development of the industry but also exposes the problem of retaining employees (Giousmpasoglou et al., 2021). There are many research perspectives on the turnover rate of hotel employees, and the most common perspective is the reasons - measures. In terms of the reasons for turnover in star hotels. O'Neill (2012) supports that employees leave because of poor leadership and the lack of career development opportunities for hotel employees. Some researchers believe that irregular and long-time work, low salary, lack of decent career development opportunities and insufficient training are the reasons for the high turnover rate of the hotel industry (Chang & Busser, 2020; Rasheed et al., 2020). Al-suraihi et al. (2021) got that the reasons for leaving were job stress, job satisfaction, job security, working environment, motivation, salary and reward. Some scholars specially analyzed the reasons from psychology (Cheng et al., 2021). Regarding the measures for turnover in star hotels, Chung et al. (2021) firmly believe that perceived supervisor support eased employee turnover. Bello & Bello (2021) support that stress management on the job, increasing promotion opportunities, appropriate supervisor support, and a friendly working environment can reduce turnover. Michael & Fotiadis (2022) believe that strategies to reduce turnover include promoting a good working environment, providing mobility opportunities, and developing a talent plan. Fakhry et al. (2022) verified that career promotion should be essential in improving employee loyalty and retaining employees. There was a significant relationship between employee turnover intention and employee compensation, working environment, and engagement. The above views are representative. It can be put into the questionnaire as a question of the reference value.

2.2 Fair regulation in high-star hotels

The fairness that employees feel in the work process is an important part of their motivation to create a performance (Ding et al., 2022). Fairness and justice is the inevitable requirement of contemporary social development and the key to promoting enterprise harmony. Formulating fair policies and implementing them in a fair and unbiased manner is conducive to creating a good ethical climate (Lata & Chaudhary, 2022). Fairness is of great significance to enhance employees' sense of belonging. However, at present, in many public institutions, the loopholes of organizational procedural fairness are still everywhere (Deng, 2022). The hotel industry is no exception. Fair systems and policies need the support of organizations. Hotel managers probably have two kinds of management ideas: One is to violate psychological commitments, squeeze the residual value of employees to the greatest extent, and supervise employees with strict and abusive means (Ampofo, 2021; Saleem, 2021), especially for interns and bottom employees. The second is to achieve a win-win situation with employees, such as the research and application of psychological contract theory and organizational support theory (Anyaoku, 2022) in the hotel industry. In addition, many scholars have confirmed that organizational support can reduce the turnover rate. Most of them use quantitative methods to verify the hypothesis, such as partial least square-structural equation modeling (PLS-SEM) (Asghar et al., 2021), regression analysis (Chung et al., 2021), structural equation modeling (SEM) (Karatepe et al., 2022), and so on.

RESEARCH PROCESS

3.1 Questionnaire design

This questionnaire is designed by integrating management and psychology with unfair regulation as a precondition. After consulting relevant references and asking 6 hotel managers, a questionnaire with 4 parts and 17 questions was finally determined. The four parts are Basic Information, Changing Careers, Job-hopping, and Organizational Support. And the questions are designed according to the logic of "precondition - problems - measures - effects." Q5, Q6-Q11, Q12-Q15 and Q16-Q17 belong to the Precondition, Problems, Measures and Effects classes, respectively. As shown in Table 1.

A fair regulation has an impact on the turnover rate (Kurian & Nafukho, 2021). Therefore, Basic Information has five aspects: hotel level (Q1), age (Q2), career maturity (Q3), gender (Q4), and the degree of fair regulation (Q5). The purpose is to screen unqualified questionnaires.

Resignation is divided into Changing careers and Job-hopping. From the perspective of psychology, the formation of resignation generally has two stages, psychological tendency and practical action. Mulang (2022) defined turnover tendency as the intention of employees to consciously leave the organization. Rahim and Cosby (2016) said that resignation action refers to employees leaving the organization voluntarily and not being terminated by the organization. Although employees may intend to leave, they may not necessarily do so. Many factors are involved from the psychological tendency to practical action (Lee & Chen, 2021). Therefore, Change careers has three aspects, namely, the intensity of the change-careers tendency (Q6), how long to take action after tending change-careers (Q7), and what measures the interviewees want the hotel to take to reduce change-careers (Q8). The purpose is to reveal the degree of disappointment from respondents in the hotel industry. Job-hopping also has three aspects, that is, the intensity of job-hopping tendency (Q9), how long to take action after having a job-hopping tendency (Q10), and what measures the interviewees want the hotel to take to reduce job-hopping

(Q11). The purpose is to reveal the degree of expectation from respondents on the hotel industry.

Perceived supervisor support can alleviate hotel employee turnover (Chung et al., 2021; Asghar et al., 2021). Organizations support many effective behaviors, including fair regulation (Michael & Fotiadis, 2022) and smooth career promotion (Fakhry et al., 2022; Wu et al., 2022). These two measures can reduce the biggest obstacle to realizing their work value, thereby reducing the turnover rate. Therefore, Organizational support has five aspects: what are the rewards that reflect the value of the interviewees (Q12), the biggest obstacle to the realization of reward (Q13), "Managing people by people" VS "Managing people by fair rules" (Q14), "Forced \ punishment management" VS "Self-improvement management with organizational support" (Q15), the extent to which the fair self-improvement management system eliminates the biggest obstacle (Q16), and the extent to which the fair self-improvement management system with organizational support reduces the tendency or behavior of resignation due to unfair regulation (Q17). The purpose is to reveal the means and effects of organizational support.

Table 1: Questionnaire structure

Order	Name	Questions	Design Logic	Purpose	Supporting literature
Part 1	Basic Information	Q1-Q4		to screen unqualified questionnaires	Kurian & Nafukho, 2021
		Q5	Precondition		
Part 2	Changing careers	Q6-Q8	Problems	to reveal the degree of disappointment	Lee & Chen, 2021
Part 3	Job-hopping	Q9-Q11		to reveal the degree of expectation	
Part 4	Organizational support	Q12-Q15	Measures	to reveal the means and effects on organizational support	Chung et al., 2021 Asghar et al., 2021 Michael & Fotiadis, 2022 Fakhry et al., 2022 Wu et al., 2022
		Q16-Q17	Effects		

In addition, several points to be explained about the design of the questionnaire: (1) The questionnaire adopts the sampling method of voluntary participation, which considers psychological pressure to express their ideas. (2) The Q1-Q2 are the limiting condition. That is to say, the interviewees are ordinary employees with career maturity who work in 4 or 5-star hotels, which considering that they had been in the hotel for a short time and had a deep initial impression of the hotel, it is easier to find problems in the hotel. (3) All 17 questions are set as required questions, which can avoid the negative image of incompleteness on effectiveness. (4) If someone's answer indicates that they do not have career maturity, the entire questionnaire will be judged invalid. Therefore, all the valid questionnaires are made by the interviewees with career maturity.

3.2 Questionnaire analysis

The questionnaire was released through the online platform "Questionnaire Star" and sent to 4 high-star hotels in Shandong province, China, from May to June 2022. The target is entry-level employees aged 18-25. Affected by Covid-19, the total number of target interviewees is 348. Using the sampling method of voluntary participation, 267 employees participated in the survey. After eliminating the invalid questionnaire (the key is to see whether Q3 career maturity meets the requirements), 184 valid questionnaires were finally obtained. The effective recovery rate is 68.9%.

3.2.1 Basic information

The basic information is divided into two parts, the Reliability-validity test and Descriptive statistics. Reliability is used to study the reliability and accuracy of quantitative data (especially attitude scale). Theta coefficient is 0.731, ranging from 0.7 to 0.8, which indicates that the reliability of the research data is good and can be used for further analysis. Validity is used to analyze whether the research item is reasonable and meaningful. KMO value is 0.625, ranging from 0.6 to 0.7, so the research data is more suitable for extracting information. Descriptive statistics can be observed from Table 2 that there are no abnormal values so that the average value can be directly described and analyzed.

Table 2: Descriptive statistics

Questions	Minimum	Maximum	Average	Std.Deviation	Median
Q1	2	2	2	0	2
Q2	1	1	1	0	1
Q3	3	3	3	0	3
Q4	1	2	1.81	0.39	2
Q5	1	5	1.69	0.72	2
Q6	5	11	9.57	1.81	10.5
Q7	1	5	4.5	1.02	5
Q9	1	11	7.55	3.28	8.5
Q10	1	5	4.62	0.94	5
Q12	1	5	3.14	1.39	4
Q14	1	2	1.86	0.35	2
Q15	1	2	1.71	0.46	2
Q16	1	11	6.93	2.49	7
Q17	1	11	6.31	2.64	6

Note: (1) Source from SPSSAU online software. (2) Q8, Q11 and Q13 are multiple choices, so descriptive statistics cannot be performed.

3.2.2 Data collation

This study collects the results of the questionnaire and sorts all the options of each question from high to low according to the proportion. In addition, the proportion lower than 5% is not considered because it is too small to be worth it. By observing Table 3, we can find some conspicuous data, which is more than 50%. For example, the degree 0-20 of Q5 is 71.24%, "81-100%" of Q6 is 61.9%, "0-3 months" of Q7 and Q10 are 73.81% and 80.95%, respectively, "Increase average sales" of Q8 and Q11 are 92.86% and 97.62 respectively, "Promotion" of Q12 is 61.9%, "Unfair regulation" of Q13 is 67.4%, "Managing people by rules" of Q14 is 85.71%, and "self-improvement management" of Q15 is 95.71%. Therefore, these conspicuous data deserve in-depth analysis.

Table 3: Data collation

Questions	Options	Proportion	Questions	Options	Proportion
Part 1: Basic information					
Q1(×)	4 0r 5 star level	**100%**	Q2(×)	18-25 years old	**100%**
Q3(×)	Career maturity	**100%**	Q5(—)	0-20 degree	**71.24%**
Q4(×)	Female	**80.95%**		21-40 degree	11.29%
	Male	19.05%		41-60 degree	6.23%
Part 2: Changing careers			Part 3: Job-hopping		
Q6(+)	81-100%	**61.9%**	Q9(+)	81-100%	38.09%
	61-80%	21.42%		61-80%	14.28%
	41-60%	14.28%		41-60%	21.43%
Q7(—)	0-3 months	**73.81%**		21-40%	11.9%
	4-6 months	14.29%	Q10(—)	0-3 months	**80.95%**
	10-12 months	7.41%		4-6 months	9.52%
Q8(×)	Increase average salary	**92.86%**	Q11(×)	Increase average salary	**97.62%**
	Fair and just regulation, Friendly atmosphere	**76.19%**		Fair and just regulation	**73.81%**
				Friendly atmosphere	**69.05%**
	Clear career prospects	**69.05%**		Clear career prospects	**66.67%**
	Improve social status	47.62%		Improve social status, Humanistic management	35.71%
	Humanistic management	42.86%			
Part 4: Organizational support					
Q12(×)	Promotion	**61.9%**	Q13(×)	Unfair regulation	**67.4%**
	Bonus	26.19%		Dishonest leader	48.7%
Q14(+)	Managing people by fair rules	**85.71%**		Poor little bonus	23.8%
	Managing people by people	14.28%		Other	9.7%
Q15(+)	Self-improvement management with organizational support	**95.71%**	Q17(+)	81-100%	38.57%
	Forced \ punishment management	28.57%		61-80%	23.81%
Q16(+)	81-100%	14.28%		41-60%	19.17%
	61-80%	28.57%			
	41-60%	30.95%		21-40%	21.42%
	21-40%	16.66%			

Note: (1) Data more than 50% are shown in bold; +, the positive scale question; —, the reverse scale question; ×, the non-scale question. (2) The questionnaire can be recognized as available only when Q1-Q3 prerequisites are met. (3) The questions Q4, Q8, and Q11-Q13 are non-numerical questions, not used for hypothesis testing but to help understand the interviewee's situation.

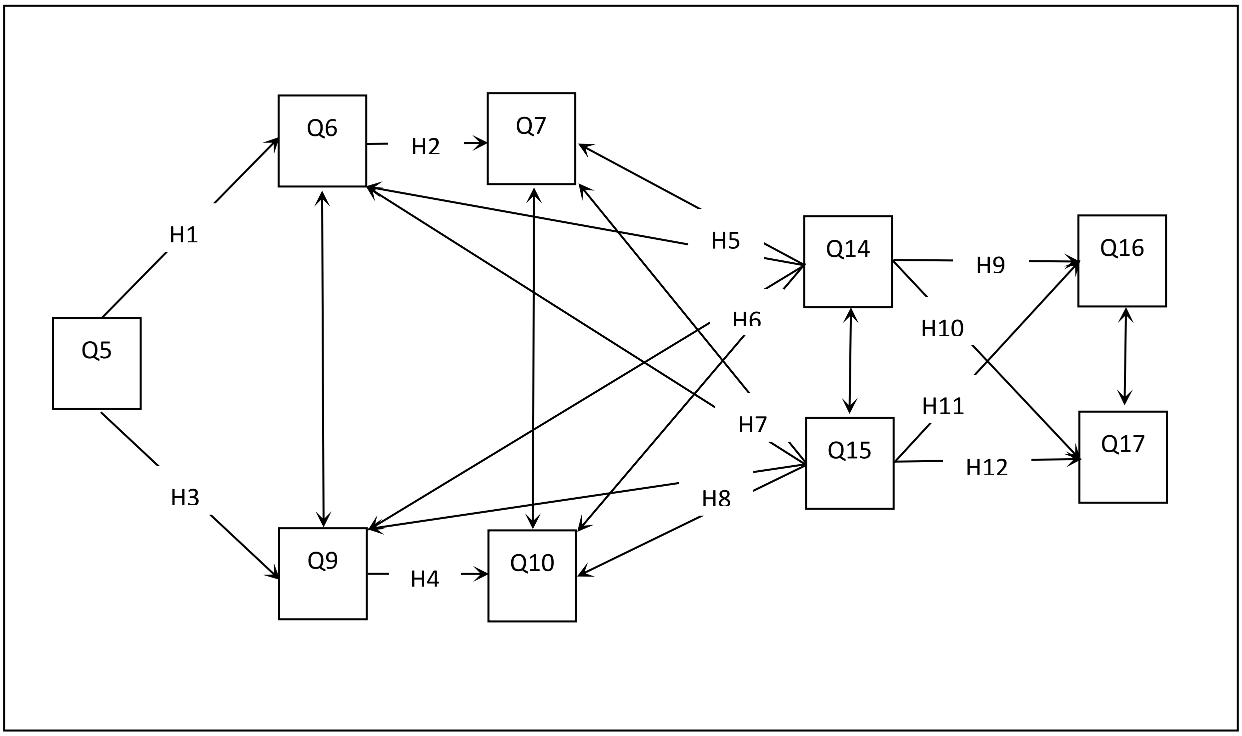
3.3 Path analysis

Path analysis is to study the influence relationship of the thought, and it is a method to test the hypothesis. It has an advantage, which is in line with the needs of this questionnaire. That is, it can study the influence relationship of multiple independent and dependent variables simultaneously (Adhikara et al., 2022).

3.3.1 Hypotheses

According to the data collation in Table 3, some hypotheses have been proposed as follows:

Figure 1:The relationship between hypotheses



HI: The lower the degree of fair regulation, the stronger tendency to change careers.
H2:The stronger the tendency to change careers, the faster the action.
H3: The lower the degree of fair regulation, the stronger tendency to Job-hopping.
H4:The stronger the tendency to Job-hopping, the faster the action.
H5:Managing people by rules can reduce the tendency or action to change careers.
H6:Managing people by rules can reduce the tendency or action of Job-hopping.
H7:Self-improvement management with organizational support can reduce the tendency or action to change careers.
H8:Self-improvement management with organizational support can reduce the tendency or action of job-hopping.
H9:Managing people by rules can reduce the biggest obstacle leading to a turnover.
H10:Managing people by rules can reduce the turnover rate due to unfair regulation.
H11:Self-improvement management with organizational support can reduce the biggest obstacle leading to a turnover.
H12:Self-improvement management with organizational support can reduce the turnover rate due to unfair regulation.

3.3.2 Hypothesis-testing

The structural equation thought is used to evaluate the proposed hypotheses (Karatepe et al., 2022), and the regression thought coefficients are as follows:

Table 4: The regression thought coefficients

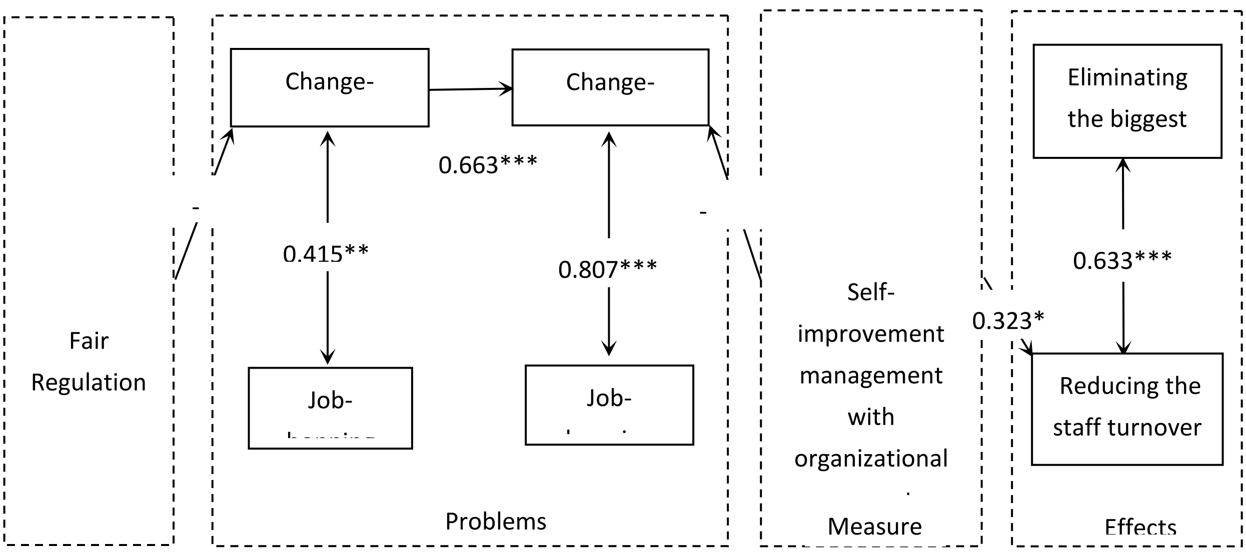
Hypotheses	Independent variable	Relationship	Dependent variable	SE	z	p	Standardized path coefficient
H1	Q5	→	Q6	0.343	-3.536	**0**	-0.479
H2	Q6	→	Q7	0.071	5.736	**0**	0.663
H3	Q5	→	Q9	0.694	-1.245	0.213	-0.189
H4	Q9	→	Q10	0.047	-1.749	0.080	-0.261
	Q6	↔	Q9	0.254	2.953	**0.003**	0.415
	Q7	↔	Q10	0.085	8.865	**0.000**	0.807
H5	Q14	→	Q6	0.788	0.105	0.916	0.016
	Q14	→	Q7	0.482	0.460	0.646	0.071
H6	Q14	→	Q9	1.398	-1.354	0.176	-0.205
	Q14	→	Q10	0.452	-0.247	0.805	-0.038
H7	Q15	→	Q6	0.602	1.136	0.256	0.173
	Q15	→	Q7	0.100	-2.526	**0.012**	-0.615
H8	Q15	→	Q9	1.106	-0.150	0.881	-0.023
	Q15	→	Q10	0.368	-1.176	0.239	-0.179
	Q14	↔	Q15	0.199	0.278	0.781	0.043
H9	Q14	→	Q16	1.075	-0.037	0.971	-0.006
H10	Q14	→	Q17	0.872	1.221	0.222	0.185
H11	Q15	→	Q16	0.833	-0.959	0.338	-0.146
H12	Q15	→	Q17	1.126	2.752	**0.044**	0.323
	Q16	↔	Q17	1.168	3.475	**0.001**	0.633

Note: →, the influence relationship; ↔, the interrelation; the data comes from SPSSAU software.

RESULTS AND FINDINGS

H1, H2, H7 and H12 are valid according to the significance judgment standard by observing the p-value in Table 4. The final path of "fair regulation - staff turnover" is as in figure 2.

Figure 2: The "fair regulation - staff turnover" path



This study gets four results. First, the lower the degree of fair regulation, the stronger tendency to change careers. Second, the stronger the tendency to change careers, the faster the action. Third, self-improvement management with organizational support can reduce the tendency or action to change careers. Fourth, self-improvement management with organizational support can reduce the turnover rate due to unfair regulation.

In addition, there are two findings. On the other hand, the tendency to change careers will lead to action, but the tendency to job-hopping does not necessarily lead to action. Career change is used to measure employees' disappointment with the hotel, and job-hopping is used to measure their expectations. This shows that most entry-level employees are very disappointed with the hotel's work and do not want to continue working in the hotel industry. If they tend to job-hopping, they may not act, because they know that even if they go to another hotel, their disappointment will still exist. On the other hand, there is no inevitable connection between Measures and Effects, which shows that solving institutional unfairness will reduce the turnover rate among entry-level employees, but it cannot completely solve it. The reasons for staff resignations are complex, and different situations should be taken.

CONCLUSION AND DISCSSION

The questionnaire is designed and the four parts reflect the fair regulation-staff turnover in high-star hotels. From the results of the Reliability-validity test, the data are acceptable. By analyzing the data collected from the questionnaire and putting forward the hypothesis, the process of fair regulation on staff turnover is shown in Figure 2. Two points can be observed in Figure 2: the first is the high staff turnover rate in the hotel industry. Few employees who leave will want to go to another hotel, but to leave the hotel industry. This shows that the high turnover rate is not a problem at the employee level but in the entire hotel industry. Second, although the staffs are disappointed in the hotel industry, they still have hope for it. Fair regulation supported by organizations can save the situation of a high turnover rate.

The fairness that employees feel in the work process is an important part of their motivation to create a performance (Ding et al., 2022). Perhaps artificial intelligence (AI) under organizational support can strengthen the institutional fairness of high-star hotels, which may change the future of human resource management (HRM). Let's take a look at some data in the questionnaire, for the question of "what measures do the interviewees want the hotel to take to reduce change-careers," 76.19% of them chose a just regulation and a friendly atmosphere. In the question of "what are the rewards that reflect the value of the interviewees," "Promotion" accounts for 61.9%. In the question of "what is the biggest obstacle to the realization of reward," "unfair regulation" accounts for 67.4%. 85.71% of interviewees want to manage them by rules rather than managers. You can make a bold imagination: to design an artificial intelligence self-improvement system in a high-star hotel. Each employee has their account number. In this system, employees can freely apply for job transfer and promotion under the prediction and analysis of AI, on the premise that the application conditions formulated in advance in the system should be met. Moreover, all employee applications and HR decisions are open and discussable. Perhaps such an employee-centered AI self-improvement system can enable employees to give full play to their initiative in a fair regulation rather than passively obey the arrangement of HR. From the perspective of sustainable and green development, this may be an effective measure that high-star hotels can take to reduce employee turnover. This is also the next research direction of this study, which is to ensure institutional fairness with the blessing of AI to reduce the turnover rate in high-star hotels.

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INNOVATION AND MANAGEMENT IN THE SHARING ECONOMY

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ABSTRACT

The concept of sharing has long existed, and sharing economy has become an indispensable part of various economies in China. In the current ERA of COVID-19, although sharing economy in different fields has been adversely affected in the short term, objective conditions have also brought new opportunities to sharing economy. At the same time, huge new users and objective conditions are also forcing sharing economy management innovation to accelerate. Therefore, in management practice, management innovation is indispensable. It is necessary to introduce the essence of traditional industry methodology and transform it into a new theory and method with sharing economy characteristics.

Keywords: Innovation, governance, the sharing economy, COVID-19, Internet

INTRODUCTION

The concept of sharing is already there. In traditional societies, borrowing a book or sharing a piece of information between friends, including neighbors borrowing things from each other, is a form of sharing.

1.1. Sharing economy

The term sharing economy was first used by Marcus Felson, a professor of sociology at Texas State University, and Joel.Spaeth, a professor of sociology at The University of Illinois, in a paper published in 1978 Collaborative Consumption:ARoutine Activity Approach. Its main features include a market platform based on information technology created by a third party, which can be commercial institutions, organizations or governments. Individuals use these platforms to exchange idle goods, share their knowledge and experience, or raise funds from enterprises or some innovative projects. Economy involves three main bodies, namely, the demander of goods or services, the supplier and the sharing economy platform. The sharing economy platform serves as a link between supply and demand. Through the establishment of a series of mechanisms such as mobile LBS application, dynamic algorithm and pricing, and mutual evaluation system, the supply and demand sides can trade through the sharing economy platform.

1.2. The current sharing economy in China

In today's Chinese society, sharing economy has become an indispensable part of various economies, such as shared bikes, shared charging banks and shared umbrellas. The sharing economy has encountered problems in the current ERA of COVID-19, which was also mentioned in the research on the development and management innovation of the sharing economy published by Zeng Yi, a teacher from Xinyang Agriculture and Forestry University, in 2020. Although COVID-19 has adversely affected the sharing economy in different sectors in the short term, such as home-based accommodation, online car hailing and other industries that must provide offline services, the order volume and operating revenue of platform companies have significantly decreased. However, objective conditions make all other activities of people move online as far as possible, which brings new opportunities to the sharing economy. Meanwhile, huge new users and objective conditions force the management innovation of the sharing economy to accelerate.

PROBLEMS ENCOUNTERED IN THE DEVELOPMENT OF SHARING ECONOMY

In addition to addressing the impact of COVID-19, the sharing economy has dealt with natural problems brought about by the characteristics of the sharing economy, such as insufficient behavioral constraints on participants, management problems of shared resources, and frequent opportunistic behaviors, which have become more prominent during the epidemic.

2.1. The degree of controllability of participants' behavior constraints is low

In every scene of our life, there are basically platforms and locations to meet our needs, from takeout, recruitment, to information acquisition, we have many convenient choices, coupled with the diversity and diversity of transportation, to promote our travel colorful.

However, while we enjoy this convenience, we have brought social inconvenience, among which shared bikes are the most obvious.Bike-sharing is the boom of 2018, and it's still the best way to get one kilometer away from subway and bus.

Share the bike just as its name implies is the public bicycle, everyone can go to ride, the premise is to pay a fee, may choose the inside of the package, from nature, sharing is the economics of lease, the lease, the lease time and place, return the time and place, is very free, without human control.

The emergence of shared bikes makes people go to work for the last kilometer, which is well solved. Because shared bikes do not emit exhaust gas, they are natural environmental protection and green travel, which can reduce traffic congestion.

But if, in accordance with the society must be woven, share the bike will develop very well, but have vacuum in city planning and corporate planning, enterprise there are leaks in the maintenance of the cases, emerged a large number of

Shared cycling place litter phenomenon, the serious influence of city appearance, influence people to travel and use, more important is seriously reduce the city's image, People feel that the quality of these people in the city is not high.

2.2. Opportunistic behaviors of participants are frequent

Brushing can indeed do a certain degree of blind system, improve the search weight, optimize the ranking. But there are also hidden trouble, if the seller brush list this baby, does not conform to search the needs of the buyers, so even if the baby has a certain rank, clicks are raised, but because of the high search words and baby don't match, or does not meet the needs of buyers, inevitably leads to conversion rate, low or even no conversion once stop brush list, the baby's ranking dropped soon. If you want to maintain the ranking, you can only continue the cycle of brushing, in order to maintain this low conversion rate, the gain is not worth the loss.

INNOVATIVE PROFIT MODEL AND MANAGEMENT OF SHARING ECONOMY

3.1 Platform service fee

Take measures to collect part of the operation service fee to ensure its normal operation.

3.2 Platform promotion fee

To maximize advertising revenue without affecting the functions of the sharing economy, the advertising push method is adopted.

3.3. Offline exhibition fee

Take the way of outdoor publicity, obtain the corresponding advertising revenue, and then organically combine advertising and publicity to obtain operating expenses.

3.4. The Value - added surcharges

With the gradual accumulation of O2O platform data resources, trading platforms gradually evolve into data centers. When the accumulation of resources reaches a certain level, qualitative changes can be realized and transformed into another sharing economy format.

CONCLUSION

During the COVID-19 pandemic, the characteristics of participants in the sharing economy are different from those of other traditional industries, so they have encountered more new problems in management practices. Management innovation is indispensable for the sustainable, healthy and rapid development of sharing economy. In view of the problems encountered in the development of sharing economy, it is necessary to introduce the essence of traditional industry methodology and transform it into a new theory and method with the characteristics of sharing economy.

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IMPACT OF COMMUNICATION AND TOP MANAGEMENT SUPPORT ON SUPPLY CHAIN RESILIENCE

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ABSTRACT

94% of Fortune 1000 companies were facing disruption in their supply chains. The severe shortage of key healthcare supplies caused by COVID-19 has brought great challenges to the healthcare supply chain (HCSC). This study explores new drivers of HCSC resilience, the impact of top management support and communication on supply chain resilience, and the impact of supply chain resilience on supply chain performance. Complex adaptive systems theory (CAS), dynamic capability theory (DCT), and institutional theory (IT) have proved to be the most helpful in solving the research problems of this study, the purpose of this study is to develop a theoretical framework. A mixed research method will be adopted. Data are analyzed with the help of NVivo and SmartPLS software. The medical supply chain accounts for only 4% of the industry in risk management and resilience practice. China's aging population is growing rapidly and China's policies are conducive to the development of the healthcare sector. This effort will increase the resilience of the supply chain to cope with supply chain disruptions caused by various factors. This study can be extended to China's healthcare sector. This study obtained a perspective at three levels of the HCSC for the first time. Including a focal firm (a Chinese healthcare manufacturer), suppliers of a focal firm, and customers of the focal firm, also include logistics providers at three levels. A mixed research method to complement more single research methods in the research of supply chain disruption and resilience.

Keywords: COVID-19, supply chain resilience, top management support, communication, healthcare supply chain

INTRODUCTION

1.1 Background of the study

94% of Fortune 1000 companies were facing disruption in their supply chains, while 75% have been negatively affected (Linton & Vakil, 2020; Ivanov, 2020). Global logistics movement is also affected (Linton & Vakil, 2020). COVID-19 has affected the global supply chain, highlighting the need to build a more resilient supply chain (Guiyang et al., 2020; Demitry, 2020). The severe shortage of critical medical supplies caused by the COVID-19 outbreak poses a severe challenge to the healthcare supply chain (HCSC) (Spieske et al.,2022). Previously published studies addressed topics of supply chain risk management, resilience, assessment, responsiveness, agility, and vulnerability (Norrman & Wieland, 2020; Hendry et al., 2018). Providing limited insight into the new risks caused by COVID-19, it may not be possible to "return to normal".

The healthcare sector is one of the most important areas severely disrupted by the COVID-19 outbreak (Singh & Parida, 2022). China's aging population is growing rapidly (China National Bureau of Statistics-NBS, 2021). The aging of the population has brought about a series of problems such as healthcare, pension, and assistance (Liu et al.,2022). An aging population will increase the demand for the healthcare sector.

Although supply chain disruptions have been studied in the past decade, few studies have specifically addressed the healthcare sector (Singh & Parida, 2022). Figure 1 shows the proportion of industries in supply chain risk management and resilience practices, compared with a very small proportion of just 4%.

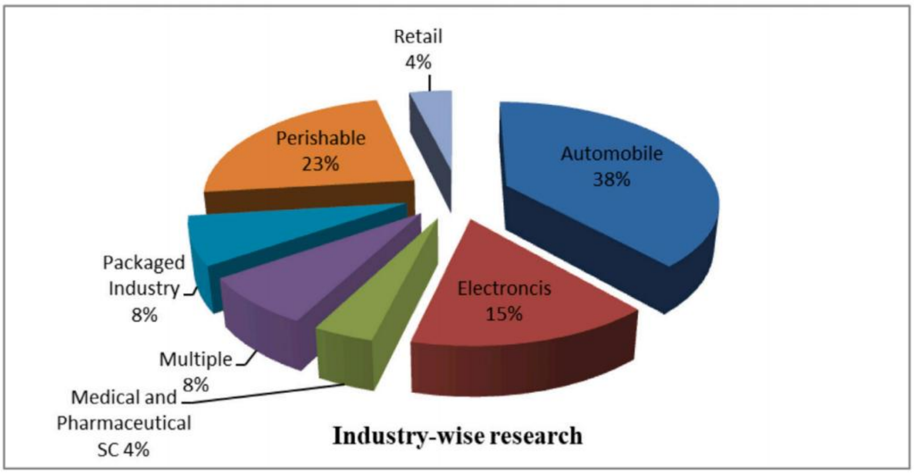

Fig. 1 Industry-wide application of SCR
Source: (Singh & Parida, 2022)

Top management support and risk management culture play a key role in ensuring supply chain resilience (Ali & Golgeci, 2019). The importance of top management in improving supply chain resilience has not been explored in the existing literature (Mandal, 2020). Although the drivers of supply chain resilience have been extensively studied from different perspectives. However, large-scale theoretical studies of many driving forces and their efficiency results are lacking in many areas. In particular, top management support, resilience culture, industry 4.0 technology, and innovation (Ali & Golgeci, 2019). While many strategies have improved overall resilience, very few papers have recognized the importance of communication (Suryawanshi et al., 2022).

Supply chain resilience can be divided into internal resilience and external resilience, external resilience includes supplier resilience and customer resilience. The existing research studies on supply chain resilience from the perspective of an individual enterprise, and only on internal resilience (Gu et al., 2020). Supply chain resilience research will include comments of customers, as supply chain resilience also includes customers, and will be studied from a comprehensive perspective (Mandal, 2020). 87.8% of supply chain managers indicate that logistics is part of supply chain management (Edward et al., 2018). See figure 2. Therefore, this study will include logistics suppliers in the sample. There is a gap in the previous research on supply chain resilience, especially the research on mixed methods (Ali & Golgeci, 2019).

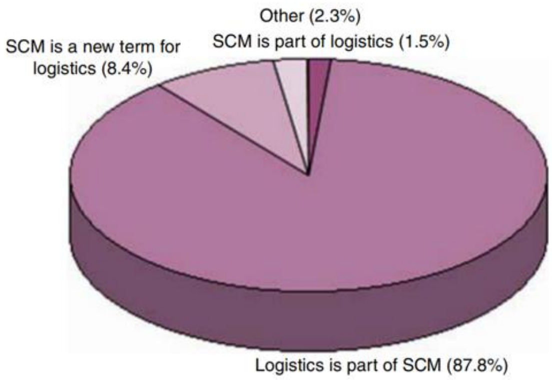

Fig.2 The relationship between supply chain management and logistics
Sources: Edward et al., 2018

COVID-19 poses unprecedented and severe challenges to the supply chain (Ozdemir et al., 2022). The literature shows that many companies are not prepared for today's challenges (Esmizadeh & Parast, 2020). This study aims to explore the new drivers of HCSC resilience, and the impact of supply chain resilience on supply chain performance. The study aims to establish a theoretical framework to improve China's healthcare resilience, and successfully respond to the supply chain disruption caused by accidents, to help China's healthcare sector improve its international competitiveness, and maintain a world-leading growth rate. Therefore, this paper presents the following three research questions:

RQ1: How does supply chain resilience affect supply chain performance?

RQ2: How does the top management support affect the establishment of supply chain resilience?

RQ3: How does communication affect the establishment of supply chain resilience?

1.2 Research Objectives

RO1: To explore the impact of supply chain resilience on supply chain performance.

RO2: To explore the impact of top management support on supply chain resilience.

RO3: To establish the effects of communication on supply chain resilience.

LITERATURE REVIEW

2.1 Theory

Three theoretical areas have proved to be the most helpful in solving our research questions. The complex adaptive systems (CAS) provide similarities and understanding. The HCSC is a complex process. Dynamic Capacity Theory (DCT) studies how to integrate, build and reconstruct internal and external resources to respond quickly, table 1 shows previous researchers' use of CT/CAS and DCT (Ali & Golgeci, 2019). Finally, as a supplement, the institutional theory (IT) improves organizational matching through standardization, specialization, and integration. These patterns of behavior have stable characteristics.

Tab. 1 Theory, definition and source

Theory	Definition	Source
Complexity theory / Complex adaptive systems	In a complex adaptive system, analysis of individual parts does not convey the perfect understanding of the whole system.	Day (2014), Gunasekaran et al. (2015), Apadopoulos et al. (2017),
Dynamic capability theory	Ability to integrate, build, and reconfigure internal and external resources to deal with a rapidly changing business environment. *Sources: (Ali &Golgeci, 2019)*	Golgeci and Ponomarov (2013), Dabhilkar et al. (2016), Chowdhury and Quaddus (2017).
Institutional theory	standardization, professionalism, and integration to improve organizational compliance. *Sources: Lincoln, 1995*	(Not found at present)

2.1.1 Complex adaptive systems / complexity theory

Complex adaptive systems (CAS) are based on complexity theory (Brownlee2007; Tukamuhabwa et al., 2015). CAS is a special complex system with adaptive properties (Surana et al., 2005). CAS can exist in unstable, but incomplete, chaotic environments (Innes & Booher, 1999). This is very similar to the environment of supply chain resilience. CAS adaptation consists of multiple organizational networks that respond to changes in the environment and organizational networks (Choi Et., 2001). Supply chain resilience is a flexible and active response in this complex adaptive environment. Supply chain resilience is a phenomenon at the system level, which involves the connection between enterprises, rather than the individual enterprise-level elements that constantly interact with the environment in an adaptive way. Their adaptation is achieved through these adaptive and coevolutionary processes. The CAS theory provides such a very accurate shot. There appears to be a logical correspondence between the CAS theoretical lens and the research (Tukamuhabwa et al., 2015). It considers the relationship among the elements, rather than analyzing the elements of the supply chain separately. Because the healthcare supply chain is a complex system, the analysis of individual parts cannot be transmitted to the entire system.

2.1.2 Dynamic capability theory

Dynamic Capacity Theory (DCT) studies how companies adapt to rapidly changing environments by integrating, creating, reconfiguring internal and external resources, capabilities, and creating new capabilities (Teece et al., 1997). This theory describes how companies respond to the environment. Dynamic capabilities can be used to create and maintain their strengths in change (Teece, 2007). These capabilities are critical in dynamic market environments, as they enable businesses to address these challenges by redistributing existing resources to adapt to new, unstable, and uncertain environments (Buccieri et al., 2020).

2.1.3 Institutional theory

Institutional Theory (IT) has not yet been applied to the study of supply chain resilience. Institutions include rules, professional norms, culture, and so on (Hawlye, 1968). Institutional theory influences the individual, organizational capacity, and inter-organizational levels (Oliver, 1997). When organizations comply with systems and processes, they operate more legally, and organizations receive more resources (Yang & Konrad, 2010). In this case, when the supply chain is at risk of disruption, as enterprise and the top management of the enterprise, it is the responsibility to establish a supply chain resilience institutional, such as supply chain disruption risk reporting systems, which guides participants on how to communicate with suppliers and customers to ensure the resilience of the supply chain. The top management has played a major role in adapting and developing new processes, confirming their compliance, and improving new processes (Tortorella et al., 2022). China's medical device regulatory system has become more standardized, which has promoted the more strict compliance operation of the healthcare sector.

2.2 Supply chain resilience

Supply chain means that three or more companies are directly connected. Their products, services, funds, or information flow down or up from the source to customers (Robert et al., 2008). This requires the focal firm to work with its suppliers and customers to ensure the integrity of the collaboration framework and processes (Emma et al., 2014). Supply chain disruptions are random events that stop or slow down normal material flows (Craighead et al., 2007). The resilience of the supply chain refers to resuming its functioning as well as possible during any form of disruption (Tukamuhabwa et al., 2015). In the context of COVID-19, supply chain disruptions and closures at different levels of the supply chain may affect the efficiency of the supply chain (Dmitry Ivanov, 2020). It is very important to identify and elucidate how supply chain disruptions lead to changes in the supply chain and logistics. Disruption will affect the strategic and operational decisions of supply chain and logistics. (Sonal et al., 2021). Identifying and responding to risks requires collaboration between complex and broad organizations (Ali & Golgeci, 2019).

Supply chain performance indicators include supply chain ability to meet customer requirements, enabling accelerated supply chain processes, providing excellent delivery performance, and providing high levels of customer service (Beamon, 1999). Supply chain resilience of both suppliers and customers can improve supply chain performance, and only when suppliers and customers use supply chain resilience management together can they have significant effects (Gu Minhao et al., 2020).

2.3 Top management support and Communication

Top management has the ability to motivate employees to achieve the company's goals and vision. Top management mainly influences the successful implementation of new technologies (Zhen et al., 2012). In strategic management research, it was shown that the impact of implementation support on the strategy occurs indirectly through resource commitment (Shumin, 2020). Assigning resources to implement the strategy requires top management approval. The critical resources are provided and are enhanced by top management to identify and address emergencies (Gunasekaran et al., 2011). Communication is the degree to which a company shares information with its supply chain partners through its communication, information, and communication networks (Barki & Pinsonneault, 2005). To avoid supply chain disruptions, important information about potential threats needs to be shared promptly (Dubey et al., 2018 B). Communication enables supply chain integration, accelerating response and information sharing, and thus improving supply chain efficiency (Asamoah et al., 2020). Communication will be an important factor in building supply chain resilience (Suryawanshi & Dutta, 2022). Communication is one of the most effective measures to curb supply chain disruption and manage supply chain resilience (Suryawanshi & Dutta, 2022).

2.4 The Healthcare sector

Healthcare supply chain management which is the oversight of medical and essential medical services from manufacturers to patients, is a very complex and decentralized process (Marialuisa et al., 2014). The figure 3 shows the typical of healthcare supply chain. Disruptions play a very important role in the healthcare supply chain. The resilience of the supply chain is determined by flexibility, redundancy, collaboration and visibility (Saenz et al., 2015). These supply chain resilience factors are important in the healthcare sector (Senna et al., 2020).

China's medical device market has maintained a growth rate of about 20% in recent years, and the future market space is huge. However, cooperation with upstream and downstream supply chains should be strengthened (China medical device supply chain development report, 2021). COVID-19 has exposed the weaknesses and weaknesses of China's medical device supply chain, which will become a top priority for the country and enterprises to strengthen, and optimize the supply chain management to improve the resilience of the HSCS (China Medical Device Supply Chain Development Report, 2021).

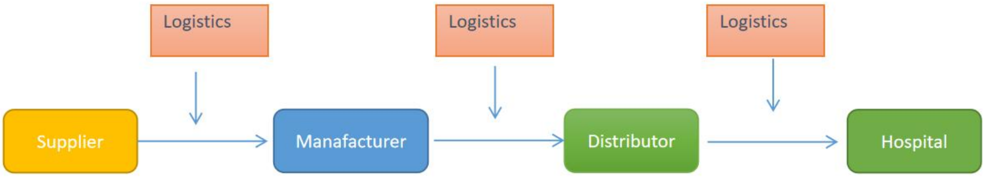

Fig. 3 Typical healthcare supply chain
Source: Authors' Elaboration

RESEARCH METHODOLOGY

By taking different approaches to expanding the breadth or scope of different requests (Creswell, 2006). An effective approach in social science research is to test the triangulation method of both quantitative and qualitative outcomes. Therefore, this study will use mixed study method for separate data collection and software analysis.

3.1 Sample frame and data collection of qualitative

This study uses purposive sampling and defines three levels of dimensions. Suppliers are the main players in initiating supply chain operations (Suryawanshi et al., 2022). Therefore, the number of suppliers accounts for the largest proportion. Logistics service providers throughout the supply chain are also included in the sample. Logistics related activities are also important for the resilience of the supply chain (Suryawanshi et al., 2022). The integrated logistics capabilities of enterprises are linked to the agile supply chain characteristics such as the speed, agility, visibility and collaboration of the supply chain (Mandal et al., 2016). Good supply chain resilience ensures the continuous supply of materials and a stable supply of products in a tertiary supply chain environment, which is essential to the survival of enterprises (Pournader et al., 2016).

In this study, the main method of data collection is to interview key managers at multiple nodes in the supply chain. See figure 4 . First, the managers of the manufacturer were interviewed. They are responsible for the supply chain management. And then they provide the contact information of its suppliers, customers, and logistics providers. Then the suppliers and the customers provide the contact information of their logistics service providers.

The manufacturer was chosen based on the following criteria:

- ✧ It belongs to the healthcare manufacturer
- ✧ It is part of the global supply chain
- ✧ Willing to provide partner firms with participating in this study

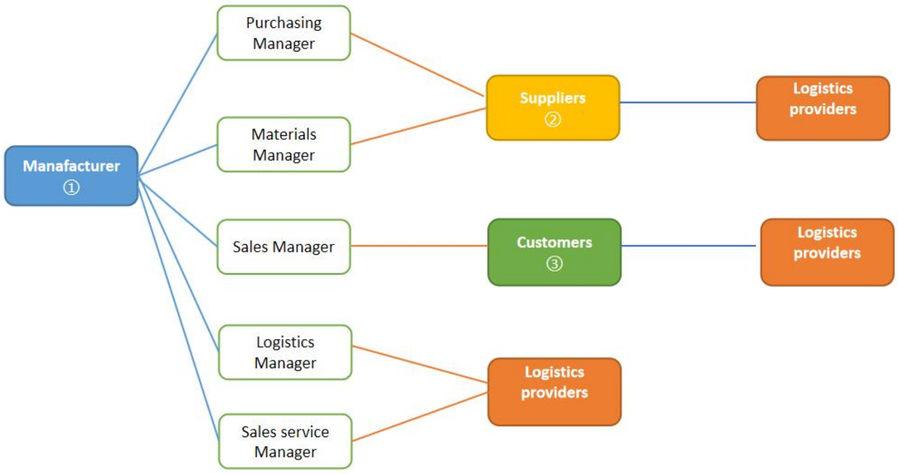

Fig. 4 The Sequence of interviews
Source: Authors' Elaboration

The population size is 316.

- The focal firm (healthcare manufacturer).
- Suppliers of the focal firm, 200 suppliers who often purchases. Logistics service providers in the whole supply chain, 15 companies that often provide logistics services.
- Customers of the focal firm, 100 customers who often buys.

The sample size of the qualitative data depends on the saturation, and the interviews may be between 20 and 30 individuals (Creswell, 2012). This paper plans to select the managers of 30 three-level HCSC enterprises to participate in the interview. The interview protocol is adapted from (Kevin & Jennifer, 2018) and (Jennifer et al., 2011). The selected suppliers shall cover the supply of various parts as much as possible to ensure more different information. All respondents are required to be functional managers who manage the supply chain, with an average working experience of at least 5 years, to confirm that they have a good understanding of the interview questions (Zhao et al., 2011).

3.2 Interview data analysis

Qualitative data will be analyzed by NVivo software, interview information will be imported into the software for coding, and queries will be used to find topics. Since the sampling of three dimensions will be adopted, the information of the three dimensions will be analyzed separately to fully study the supply chain resilience of the three-level supply chain.

3.3 Quantitative data

COVID-19 has had a negative impact on logistics and transportation in China, and the recovery from the post-epidemic situation is quite difficult (Xu et al.).2021). Therefore, further quantitative methods are needed to collect and analyze the data. The questionnaire was adapted from (Mandal, 2020) and (Yamin, 2021). The questionnaire used a five-point Likert scale design to measure items, with extreme points ranging from 1= very disagree to 5= very agree, to send the cover letter, survey purpose, definition of the basic terms, and links to participation in the online survey to the respondents.

3.4 Questionnaire data analysis

This research plans to analyze the interview information with the help of SmartPLS software. First, to verify the reliability and validity of the model structure. Then to check the Path value and correlation significance (t-statistic). To confirm whether the relationship between the result of hypothesis test and hypothesis is supported. The overall effect evaluation and index value will be further evaluated. To confirm the impact of top management support and communication on supply chain resilience, and the impact of supply chain resilience on supply chain performance. Finally, it needs to be compared with the results of qualitative research, to find the consistency and difference between the two research methods.

RESULTS AND FINDINGS

The pretest was conducted from the supplier contact of the manufacturer. The respondents were all functional managers in the supply chain, and their average experience was 10 years. From the results of the pretest, it is found that the results show that the resilience of supply chain has a positive impact on the performance of the healthcare supply chain, and the top management support and communication have a positive impact on the resilience of the healthcare supply chain.

CONCLUSION AND DISCUSSION

This paper aims to explore the new driving factors that affect HCSC resilience, and the impact of supply chain resilience on supply chain performance, to reduce the impact of disruption. The purpose of this study is to develop a theoretical framework. In order to achieve this goal, explored the importance of top management support and communication to the establishment of supply chain resilience, and the importance of supply chain resilience to supply chain performance. From the perspective of complex adaptive systems theory (CAS), dynamic capability theory(DCT), and institutional theory(IT), it is very new to study the supply chain resilience of China's healthcare sector from three levels of supply chain participating firms. Logistics service providers are also included in the sample to have a deeper and comprehensive understanding of supply chain resilience management. This study will use mixed research methods, with the help of qualitative and quantitative software for analysis. Finally, the supply chain resilience management model will be established. This model can improve supply chain resilience and HCSC performance. The model brought by this effort can be actively promoted in China's supply chain resilience management, and enhance the global competitiveness of China's healthcare sector.

However, the interviewees of this study were limited to China’s healthcare company, their suppliers, their customers, and logistics providers in the whole supply chain. Specific background may affect the research results. Future researchers can use different methods to test the current research model.

The implementation and improvement of supply chain disruption and supply chain resilience management in China's healthcare sector will help improve supply chain performance and ultimately enhance the international competitiveness of enterprises. The competition between enterprises in the future is not the competition between individual enterprises and between individual enterprises, but the competition between supply chains, which is today's need.

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INNOVATION MANAGEMENT IN DEVELOPMENT TREND OF ADVANCED MANUFACTURING TECHNOLOGY IN CHINA

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ABSTRACT

This study introduces the general situation and development status of advanced manufacturing technology in China and abroad. This paper expounds the development trend of advanced manufacturing technology, points out the gap between Advanced manufacturing technology in China and advanced countries, and puts forward corresponding solutions.

Keywords: Advanced manufacturing technology, Trend of development, Intelligent manufacturing

INTRODUCTION

In order to meet the new challenges, it is necessary to recognize the development trend of manufacturing technology, shorten the gap with advanced countries, and make China's products on the quality, efficiency, variety and level, so as to enhance the market competitiveness. Therefore, the research and implementation of manufacturing technology and manufacturing mode is an urgent and important task in front of us, in order to realize China's machinery manufacturing industry into the world advanced ranks (Wang,2021).

1.1 Background of the study

1.1.1 Theoretical background.

In 1993, the United States government approved the Advanced Manufacturing Technology-AMT program, which was implemented under the auspices of the Federal Coordinating Committee for Science, Engineering and Technology (Davim,2021). The concept of Advanced Manufacturing Technology was first proposed. Since then, European countries, Japan and Asia's newly industrialized countries such as South Korea have also responded.

1.1.2 Practical background.

Machinery manufacturing is the most important basic industry of national economy. And the continuous innovation of machinery manufacturing technology is the technical foundation and power of the development of machinery industry. With the progress of science and technology and the introduction of new management ideas, management mode and production mode, in recent years, the application of advanced manufacturing technology in the field of mechanical processing is more and more extensive, more and more in-depth. So what exactly is advanced manufacturing technology?

Mechanical manufacturing technology is an engineering discipline that studies the whole process of product design, production, processing and manufacturing, sales and use, maintenance and even recycling and regeneration(Galindo-Salcedo,2022). It is a complete system engineering that aims at improving quality, efficiency and competitiveness and includes material flow, information flow and energy flow. China's manufacturing science and technology have undergone rapid changes and development, establishing a socialist market economy system. But there is still a certain gap compared with advanced countries. In order to meet the new challenges, it is necessary to recognize the development trend of manufacturing technology, shorten the gap with advanced countries, and make China's products on the quality, efficiency, variety and level, so as to enhance the market competitiveness(THERRIAULT,2021). Therefore, the research and implementation of manufacturing technology and manufacturing mode is an urgent and important task in front of us, in order to realize China's machinery manufacturing industry into the world advanced ranks.

1.2 Research gap.

Mechanical manufacturing technology is an engineering discipline that studies the whole process of product design, production, processing and manufacturing, sales and use, maintenance service and recycling (Iffat et al., 2021). Mechanical manufacturing technology is a complete system engineering which includes material flow, information flow and energy flow, aiming at improving quality, efficiency and competitiveness (Hatefi,2022). China's manufacturing science and technology have undergone rapid changes and development, establishing a socialist market economy system(Asogwa et al., 2021). But there is still a certain gap compared with advanced countries. In order to meet the new challenges, we must recognize the development trend of manufacturing technology, shorten the gap with advanced countries, so that China's products on the quality, efficiency, variety and level, to enhance the market competitiveness.

1.3 Problem statement.

In the past half century, China's machinery manufacturing industry has achieved rapid development from scratch, but there is still an obvious gap compared with western advanced industrial countries, mainly reflected in the following aspects:

1.3.1 The product grade is low, and the proportion of high-level products is small. At present, leading products of Chinese machinery industry have not reached the contemporary international advanced level.

1.3.2 Low Specialized Production Level There is a big gap between China's specialized level of basic components and basic technology and that of foreign advanced countries (Huang Jingde, 2022).

1.3.3 Backward production management technology. At present, the production management of most Chinese enterprises still stays in the past planned economy management mode, cash management mode and means have not been implemented (Wang, 2021).

1.3.4 Promote the development of advanced manufacturing technology by raising awareness and making comprehensive planning.

1.3.5 Deepen the reform of the science and technology system and promote the construction of the technology innovation system.

1.3.6 Integrate the introduction and digestion of foreign advanced manufacturing technology with independent development and innovation.

1.3.7 Vigorously develop advanced high-tech manufacturing technology and its industries.

1.3.8 Actively cultivate creative talents and strive to improve the quality of all employees in the manufacturing industry.

1.4 Research Questions.

1.4.1 What are the deficiencies in the understanding of the development of advanced manufacturing technology?

1.4.2 How to carry out the reform of science and technology system to promote the construction of technology innovation system?

1.4.3 How to combine foreign advanced manufacturing technology with independent development and innovation?

1.5 Research Objectives.

1.5.1 To promote the development of advanced manufacturing technology by raising awareness and making comprehensive planning.

1.5.2 To deepen the reform of the science and technology system and promote the construction of the technology innovation system.

1.5.3 To integrate the introduction and digestion of foreign advanced manufacturing technology with independent development and innovation.

1.6 Scope of the study.

China's advanced manufacturing industry includes rail transit equipment, civil aircraft, civil aerospace, energy conservation and environmental protection equipment, energy equipment and other industries. This study will collect data from three dimensions: rail transit equipment, energy saving and environmental protection equipment and energy equipment.

1.7 Research significance.

1.7.1 Advanced manufacturing industry is an important way to transform and upgrade China's manufacturing industry and will become the leading force for China to participate in international competition.

1.7.2 The development of China's advanced manufacturing industry has a certain foundation, but there is a big gap compared with the advanced level of the United States and other countries. If the strategy is correct, measures are effective and collaborative innovation is realized, China's advanced manufacturing industry will make great progress and take the lead in some fields after decades of efforts (Huang, 2022).

1.7.3 Advanced manufacturing will become a powerful tool to lead China's manufacturing industry from large to strong. Liu Baicheng an academician with the Chinese Academy of Engineering, said advanced manufacturing technology is the basic technology for manufacturing and strategic emerging industries, and is crucial to developing the economy and national security (National, 2021).

1.7.4 Research and development of intelligent manufacturing technology is of great significance to improve production efficiency and product quality, reduce costs, improve the market resilience of manufacturing industry, national economic strength and national living standards.

1.8 Operational Definition.

Key technologies in the development of advanced manufacturing technology.

1.8.1 Group technology (GT).

Group technology reveals and USES similarities between things and classifies them according to certain criteria (Achieng, 2021). The same method is used to deal with things in the same group, in order to improve efficiency, called grouping technology. In mechanical manufacturing engineering, group technology is the basis of computer-aided manufacturing. It will be used to design, manufacture and management the whole production system, change the production mode of many varieties and small batches, and obtain the maximum economic benefits (Paul et al., 2022). The core of group technology is group technology, it is to structure, material, process similar parts into a group (group), according to the parts group to develop the process for processing, expand batch, reduce varieties, facilitate the use of efficient methods, improve labor productivity.

1.8.2 Agile manufacturing (AM).

Agile manufacturing refers to an enterprise to achieve agile production and operation of a kind of manufacturing philosophy and production mode. Agile manufacturing includes the flexibility of product manufacturing mechanical systems, employee authorization, manufacturer and supplier relations, overall quality management and enterprise restructuring. Agile manufacturing is to construct a "VM" environment with the help of computer network and information integration infrastructure, and select partners dynamically in the virtual manufacturing environment under the principle of competitive cooperation, and form a task-oriented virtual company for rapid and optimal production (Barua et al., 2022).

1.8.3 Parallel engineering (CE).

Parallel engineering is a systematic working mode for parallel and integrated design of products and their related processes, including manufacturing and supporting processes (Sergio et al., 2021). In the traditional serial development process, the problems or deficiencies in the design can be found in the processing, assembly or after-sales service respectively, and then modify the design, improve the processing, assembly or after-sales service, including maintenance service. Parallel engineering is to combine design, technology and manufacturing, and use the computer Internet to work in parallel, greatly shorten the production cycle.

1.8.4 Rapid prototyping technology (RPM).

Rapid prototyping technology is a prototype manufacturing technology integrating CAD/CAM technology, laser processing technology, numerical control technology and new materials. Rapid prototyping technology is different from the traditional method of manufacturing parts by material removal (Shabab, 2021). It USES the 3d CAD model data to make parts to directly generate the product prototype, and can easily modify the CAD model and re-manufacture the product prototype.

1.8.5 Virtual manufacturing technology (VMT).

Virtual manufacturing technology takes the modeling and simulation technology as the premise of computer support, and carries out unified modeling of the whole process of design, processing, manufacturing and assembly (Shahatha et al., 2021). In the stage of product design, real-time and parallel simulation of the whole process of future manufacturing of products and its impact on product design, and predict the performance and manufacturing technology of products. The products produced by virtual manufacturing system are virtual products, but have all the characteristics of real products.

1.8.6 Intelligent manufacturing (IM).

Intelligent manufacturing is a comprehensive technology that penetrates and interviewees each other in manufacturing technology, automation technology, system engineering and artificial intelligence (Chien et al., 2022). Its specific manifestation is: intelligent design, intelligent processing, robot operation, intelligent control, intelligent process planning, intelligent scheduling and management, intelligent assembly, intelligent measurement and diagnosis, etc. It emphasizes the construction of a new generation of intelligent manufacturing system patterns through "smart devices" and "autonomous control". Intelligent manufacturing system has self-discipline, self-organizing ability, self-learning and self-optimization ability, self-improvement ability, so it has strong adaptability, and the human-machine interface is more friendly due to the adoption of VR technology (Chien et al., 2022).

LITERATURE REVIEW

2.1 Constraint theory.

2.1.1 Background of constraint theory.

Early days: Israeli physicist Goldrat optimizes production techniques. A method applied to solve bottleneck problems in manufacturing industry (Sun et al., 2021).

Later: The index system based on "production and sales rate, inventory and operating cost" is oriented to increasing production and sales rate rather than the traditional management theory and method oriented to reducing costs.

1990s-: the 1990s gradually formed a sound management system (Palčič, 2020). By identifying and eliminating these constraints one by one, constraint management makes the improvement direction and improvement strategy of enterprises clear.

2.1.2 Concept of constraint theory.

2.1.2.1 TOC is a set of processes for addressing constraints.

Question: Improve what?/What to change?. What will it look like?/What to change to? How to achieve improvement goals?/How to cause the change?
This definition focuses on the rational thinking of the bottleneck factors that hinder development, and these three questions must be considered by any enterprise when improving the process.

2.1.2.2 TOC is a set of management tools.

It can be used to greatly improve management efficiency, such as how to effectively communicate, how to solve conflicts in a win-win way, how to work as a team, how to distribute rights, etc. This definition focuses on the smooth implementation of day-to-day management by the enterprise, which is necessary and fundamental to the successful resolution of constraints.

2.1.3 TOC is an innovative empirical scheme.

It is an innovative empirical approach applied to a specific field. These areas include production, distribution, marketing and sales, project management, and setting the direction of the enterprise (Ramirez-Corredores, 2021). This definition mainly focuses on the application of TOC theory. TOC theory is a set of management ideas and principles about improvements and how best to implement them. It can help enterprises identify what constraints exist in the process of achieving their goals, and further indicate how to implement the necessary improvements to eliminate these constraints and achieve their goals more effectively.

2.2 Architecture and classification of advanced manufacturing technology.

Advanced manufacturing technology is a systematic engineering technology, which can be divided into three levels and four categories (Zhang, 2021).

2.2.1 Three levels:

A. High quality, high efficiency, low consumption and clean basic manufacturing technology. This level of technology is at the heart of advanced manufacturing. It is mainly optimized by casting, forging, welding, heat treatment, surface protection, machining and other basic processes used in production.

B. Novel manufacturing cell technology. This is a new manufacturing technology combined with high technology. Such as manufacturing automation unit technology, extreme processing technology, quality and reliability technology, new material forming and processing technology, laser and high density energy processing technology, clean production technology, etc.

C. Integrated technologies for advanced manufacturing. This is the use of information technology and systems management technology. As a result of the technical integration of the two levels, the system controls the material flow, energy flow and information flow in the production process. Such as group technology (CT), system integration technology (SIT), independent manufacturing island (AMI), computer integrated manufacturing system (CIMS) and so on.

2.2.2 Four major categories:

A. Modern design technology refers to the technology of making plans and putting them into practice by applying modern technology and scientific knowledge according to the functional requirements of products.

B. Advanced manufacturing technology, mainly including precision and ultra-precision machining technology, precision molding technology, special processing technology, surface modification, molding and coating technology.

C. Manufacturing automation technology, including NUMERICAL control technology, industrial robot technology, flexible manufacturing technology, computer integrated manufacturing technology, sensing technology, automatic detection and signal recognition technology and process equipment condition monitoring and control technology, etc.

D. System management technology, including engineering management, quality management, management information system, etc., and modern manufacturing mode, such as lean production, CIMS, Agile manufacturing, intelligent manufacturing, etc.

2.3 current situation of advanced manufacturing at home and abroad.

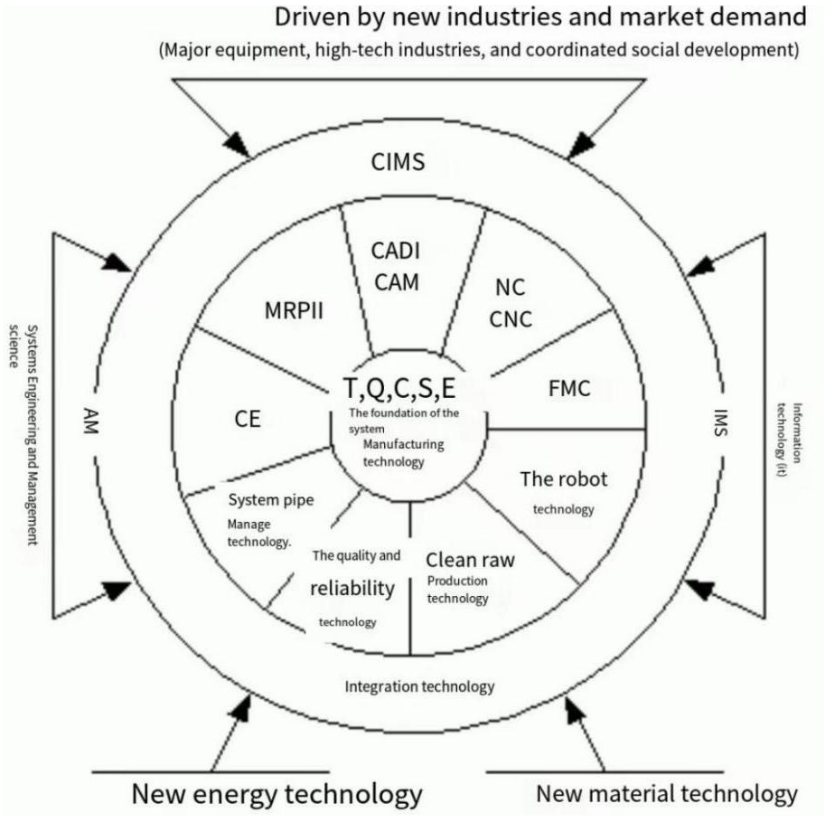
2.3.1 current situation of advanced manufacturing technology in foreign countries.

In terms of product design, computer-aided product design (CAD) (Bag et al., 2021) computer-aided engineering analysis (CAE) and computer simulation technology are generally used (Salmi, 2021). In the aspect of processing technology, the automation of the ground floor (workshop layer) has been realized, including the extensive use of machining center (or numerical control technology (Barua, 2022), automatic guidance car (AGV) (Ufomba et al., 2022), etc. In the past 10 years, developed countries have mainly found a way out of the automation of manufacturing systems with new manufacturing concepts, and put forward a series of new manufacturing systems. Such as computer integrated manufacturing system (Zhang et al., 2021), intelligent manufacturing system, parallel engineering, agile manufacturing, etc. Computer integrated manufacturing system(CIMS), on the basis of automation technology, information technology and manufacturing technology, organically integrates the various decentralized automation systems required for all production activities of manufacturers through computers and their software (Kundrák, 2021), and it is suitable for the overall high efficiency and flexible manufacturing system suitable for multi-variety and small batch production (Pu et al., 2021). First of all, it contains all the production and operation activities of a factory, that is, from market prediction, product design, processing technology (Blanco et al., 2021), manufacturing, management to after-sales service and disposal. Therefore, it is much larger than the scope of traditional factory automation, which is a complex and large system and the development direction of factory automation. Secondly, in terms of integration, the automation involved is not a simple superposition of automation in each link of the factory, but an organic integration supported by computer networks and distributed databases (Goldman et al., 2021). This integration is mainly reflected in the technical integration characterized by information and functionality, that is, information integration and functional integration (Stavropoulos et al., 2021). The core technology of computer integrated manufacturing system is CAD/CAM technology.

2.3.2 current situation of China's advanced manufacturing technology.

Since the founding of the country, especially the reform and development of more than 20 years, China's machinery manufacturing industry has developed rapidly. Mechanical industry is one of the fastest growing industries in China's industry. Before the 1970s, the technology of products was relatively simple. A new product is on the market, and soon products with the same features will follow. After the 1980s, with the further development of market globalization, market competition became more and more fierce. In the early 1990s, with the great popularization and application of CIMS technology, including the research environment of CIMS experimental engineering center and seven open laboratories has been completed (Bag et al., 2021). Several research projects for CIMS, such as CIMS software engineering and standardization, open system structure and development strategy, have been deployed nationwide in China. CIMS overall and integration technology (Zhu et al., 2021), product design automation, process design automation, flexible manufacturing technology, management and decision information system, quality assurance technology, network and database technology and system theory and method have all achieved rich results (Bag et al., 2021). Progress was made to varying degrees. However, due to the majority of large machinery manufacturing enterprises and the vast majority of small and medium-sized machinery manufacturing enterprises are mainly limited to CAD and management information system, the underlying foundation automation is still very weak, because the programming complexity of CNC machine tools, has not really played a role. Therefore, compared with the developed industrial countries, China's manufacturing industry still has a phase of overall gap.

Figure 1 Advanced Manufacturing Technology System diagram proposed by AMST



RESEARCH FINDINGS

Modern manufacturing technology is the integration of modern technology and industrial innovation, which is the main symbol of the level of a country's manufacturing industry and also the foundation and pillar of the country's industry.

3.1 Advanced manufacturing technology involves all aspects of product life cycle from market research, product development and process design, production preparation, processing and manufacturing, after-sales service and so on. It aims to improve the comprehensive economic and social benefits of manufacturing industry and is a technology oriented to industrial application.

3.2 Advanced manufacturing technology emphasizes the application of computer technology, information technology, sensing technology, automation technology, new material technology and modern system management technology in product design, manufacturing and production organization management, sales and after-sales service. It controls the material flow, energy flow and information flow of the production process, and is the system engineering of the production process.

3.3 The latest development stage of advanced manufacturing technology maintains the effective elements of the past manufacturing technology, and absorbs various high-tech achievements to penetrate into all fields and all processes of product production, thus forming a complete technology group with new technical fields facing the 21st century.

CONCLUSION

4.1 Conclusion

Modern manufacturing technology is the integration of modern technology and industrial innovation, the main symbol of the level of national manufacturing industry, as well as the foundation and pillar of national industry. With the development of the society, people have changed a lot, to the requirement of product requires multiple varieties, update, want quick, quality high-grade, use more convenient, reasonable prices, to beautiful appearance, high degree of automation to, better after-sales service, to meet the requirements of people more and more high, we must adopt the advanced mechanical manufacturing technology. Therefore, we should seize the opportunity to understand the development status of China's machinery manufacturing technology, grasp the development trend of modern machinery manufacturing technology, so that China from a manufacturing country into a manufacturing power.

4.2 Discussion

Development trend of China's advanced manufacturing technology:

4.2.1 Precision.

Precision machining, special machining, ultra-precision machining technology and micro-machinery are one of the developing directions of modern machinery manufacturing technology. Precision and ultra-precision machining technology includes precision and ultra-precision cutting, grinding, grinding, and special machining and composite machining, such as mechanical chemical grinding, ultrasonic grinding and electrolytic polishing, in three major fields. Ultra-precision machining technology has developed to nanometer (1nm=10-3um) technology. Nanotechnology has been applied in nanomechanics, nanoelectronics and nanomaterials. Therefore, nanotechnology promotes the development of mechanical science, optical science, measurement science and electronic science.

Since the emergence of automation technology in the early 20th century, it has experienced a development process from rigid automation to flexible automation. The successful application of automation technology not only improves efficiency, ensures product quality, but also replaces people to complete dangerous work. For large batch production automation, through machine tool automation refit, application of automatic machine tools, special combination of machine tools, automatic production lines to complete. Small batch production automation can be achieved by NC, MC, CAM, FMS, CIM, IMS, etc. In the implementation of automation technology in the future, more attention will be paid to the role of human in automation system.

4.2.2 Informatization.

Information, matter and energy are the three elements of a manufacturing system. Information input in product manufacturing process has become the main factor determining product cost. The essence of the manufacturing process is the collection, input, processing and processing of various information resources in the manufacturing process, and the final product can be regarded as the material expression of information. Therefore, information can be considered as an industry, including manufacturing. For this reason, some enterprises began to use network technology, computer networking, information highway, satellite data transmission to achieve remote production. Make the production decentralized network, in order to meet the needs of high flexible production.

4.2.3 Flexibility.

With the rapid development of science and technology and the continuous improvement of people's living standards, accelerate the speed of product replacement. This requires that modern enterprises must have certain production flexibility to meet the needs of the changeable market. The so-called flexibility refers to the ability of a manufacturing system to adapt to changes in various production conditions, which is related to system schemes, personnel and equipment. The flexibility of system scheme refers to the freedom of machining different parts. Personnel flexibility refers to the adaptability of the operator to ensure the processing task and to complete the quantity and time requirements. Flexibility refers to the ability of machine tools to adapt to new parts in a short time.

4.2.4 Integration.

Integration is an important feature of comprehensive automation. The function of integration is to integrate multiple unit systems that used to run independently into a new system that can work harmoniously and has stronger functions (Arden et al., 2021). Integration is not a simple connection, it is through unified planning and design, analysis of the role and mutual relations of the original unit system and optimization and reorganization. The purpose of integration is to realize the function integration of manufacturing enterprises. The function integration needs the help of modern management technology, computer technology, automation technology and information technology to realize the technology integration. At the same time, emphasis should be placed on human integration. Since there is no human in the system, the effect of system operation is related to the enterprise's management idea, operation mechanism and management mode. Therefore, the integration of management and human should be emphasized at the same time of technical integration.

4.2.5 Intellectualization.

Intelligence is one of the development trends of manufacturing technology. Intelligent manufacturing technology (IMT) is the integration of artificial intelligence into every link of the manufacturing process (Ramezankhani et al., 2021). The implementation of intellectual activities in the whole manufacturing process, so that the system flexible way integrated, by simulating the intelligent activities of human experts, replacing or extending part of the manufacturing system of mental work. The system can monitor its running state automatically in the manufacturing process. In the external interference or internal excitation can automatically adjust its parameters to achieve the best state and self-organization ability.

4.3 Contribution of the research.

By understanding the development status of China's machinery manufacturing technology and grasping the development trend of modern machinery manufacturing technology, China will be transformed from a manufacturing power into a manufacturing power.

4.4 Limitation of the research.

With the development of society, great changes have taken place in people's requirements for products. People and the market require variety to be diverse, update to be fast, high quality, convenient to use, reasonable price, beautiful appearance, high degree of automation, good after-sales service. To meet people's higher and higher requirements, it is necessary to adopt advanced machinery manufacturing technology, and need to be updated and continued research.

4.5 Future direction.

4.5.1 Industrial applied technologies, mechanical, electronic, information, material and energy technological achievements shall be comprehensively applied in the manufacturing process. Such as: Numerical Control technology, computer-aided design and manufacturing CAD/CAM, special processing technology.

4.6.2 Integrated automation of manufacturing industry, organic combination of information technology, automation technology and modern enterprise management technology. Such as robotics, Group Technology, AND FMS-Flexible Manufacturing System (Huang Jingde, 2022).

4.6.3 System management technology, manufacturing integrated automation, process industry integrated automation, system technology and other comprehensive application in the whole process of manufacturing, to achieve high quality, efficient, low consumption, clean, flexible production, to achieve the ideal technical and economic effects. For example, Concurrent Engineering, Virtual Manufacturing and Computer Integrated Manufacturing System.

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HUMAN RESOURCE MANAGEMENT MODEL INNOVATION IN THE ERA OF BIG DATA

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ABSTRACT

The rapid development of the Internet has profoundly changed all aspects of people's lives. In the wave of "big data", human resource management has also been affected. How to apply the concept of "big data" development to human resource management and promote the innovation and leap of human resource management has become the most concerned issue in the field of human resources. Therefore, the purpose of this paper is to study how to use the value of "big data" to improve the efficiency of human resource management, make human resource work more efficient, and achieve greater success in forecasting. At the same time, on how big data can better serve human resource management, provide a basis for human resource management, interact with each other, and thus promote the development of enterprises, through research, we found that big data has information resources that are highly shared, easy to obtain, large in quantity, and updated. The fast feature brings accurate information extraction to human resources, data-based thinking management, and significantly improved timeliness, providing strong support for human capital for the creation of corporate wealth.

Keywords: big data, current situation of human resource management, data-based thinking

INTRODUCTION

With the continuous deepening of the research and application of big data, the management mode and management technology of enterprise human resource management will inevitably change under the background of the big era to adapt to the development requirements of enterprises in the new era. This paper discusses the impact of the arrival of the era of big data on enterprise human resource management, and the need for enterprise human resource management to follow the development of the times, environment and technology. More efficient work links, so as to analyze the changes and optimization schemes required by enterprise human resource management.

Human resources, big data-related concepts and related relations

1. Big data

The essence of big data and its modern management significance, with the development of the information network era, big data has become a feature of our times. The essence of big data is an unprecedented big change in the fields of thinking, business and management, and a huge amount of information is being selected or "deleted" as a whole. According to British scholar and Oxford University professor Victor May-Scherberg and others in his book "The Era of Big Data") (He Yun et al., 2014), the era of big data (2014): first, not random samples, but all data; second, not accuracy, but confusion; third, not causality, but relationship. In short, it presents three dimensions of change: more, more complex, and better. From this, it is not difficult to see that digitization and its data innovation have become an important factor affecting social and economic life in the process of globalization and digitization, and a new opportunity for business and management changes.

Big data is usually used to describe and define the massive data generated in the era of information explosion. It has four basic characteristics: massive data, high-speed processing capability, diverse data types, flexible analysis and processing. (World Economic Forum, 2012) (Zhang Wei, 2017).

2. Definition of Human Resource Management

Human resource management refers to the requirements of the enterprise development strategy (Zhao Hongcheng, 2015), the rational allocation of human resources in a planned way, through a series of processes such as recruitment, training, use, assessment, motivation and adjustment of employees in the enterprise, mobilize the enthusiasm of employees, give full play to the potential of employees, and contribute to the enterprise. Create value and bring benefits to the enterprise. Ensuring the realization of corporate strategic goals is a series of human resource policies and corresponding management activities of an enterprise.

The definition of big data human resource management has not yet reached a consensus in the field of human resource management. Based on the views of scholars at home and abroad, big data human resource management starts from the unstructured data generated by employees at work (Angraveeta 1., 2016), through data Analyze technology, experience, and tools to provide employees and managers with real-time or insightful decisions about talent.

3. The relationship between human resources and big data

Human resource management and big data in the development of enterprises complement each other and interact with each other (Xinan et al., 2017), and they are a close partner. A large amount of data will bring us more useful information, which is a more accurate orientation and problem in our management. From past data to future prediction, from static data to dynamic data, the comprehensive use of various data can directly improve human resources. The scientificity, objectivity and accuracy of management can improve the ability of analysis, prediction and auxiliary strategic decision-making in the field of human resources, thereby enhancing the competitiveness of enterprises. The management of human resources also supports the original data basic information provided by big data. (Bian Weijun, 2016)

The impact of big data on human resource management

（1）Positive impact

①The application of big data makes the management of human resources in enterprises tend to be networked and digital. Big data analysis is based on a large amount of data. Enterprises can continuously expand the data sources of human resource management systems to enhance data collection capabilities, strengthen database construction, effectively increase data thickness, and ultimately improve the objectivity, rationality and efficiency of their human resource allocation. Targeted.

②The application of big data makes the human resource management of enterprises more efficient (Wang Qun, Zhu Xiaoying, 2015). With the construction of the "big data" information platform, the previous "pyramid" management system will be replaced by a "flat" optimized organizational structure, and the information in the work process can be transmitted between the decision-making level and the grass-roots employees through the network more realistically and quickly , Effective communication reduces costs, enables employees to better participate in the organization and personnel work, truly forms artist-centered management, improves management efficiency, and establishes a more standardized work process. (Li Ting, 2015)(Wang Shanshan, 2015)

③The application of big data makes enterprise human resource management standards tend to be comprehensive and quantitative. Under the guidance of the "big data" analysis method, the human resources department of the enterprise can obtain various contents including the analysis and prediction of personnel flow, the analysis of performance appraisal results, and the analysis of training needs and effects (Li Qiang, 2016). Coordinate comprehensive human resource information, conduct continuous and repeated in-depth mining through methods such as human resource accounting or talent evaluation and analysis, which can realize the organic combination of data and information of major modules, and ultimately improve the enterprise's predictive analysis and strategic predictive capabilities, which truly reflects Human capital concept.

④ The application of big data makes human resource management objects tend to be knowledgeable, and management concepts tend to be more humanized. In the era of big data, the data related to human resources will be collected automatically by employees in their daily work. Human resource managers only need to establish algorithms and models to eliminate unnecessary factors, so as to make the human resource management process more efficient. Standardization, which also corrects the traditional error of relying on the subjective judgment and experience of human resource managers, reduces the subjective assumptions about talent selection and retention, and promotes the scientific and humane nature of the human resource management process.

⑤ Big data applications promote the transformation of organizations from efficiency to effectiveness. Each specific position in a traditional enterprise organization is often set up based on certain work tasks. The basic form of an enterprise is to organize division of labor and cooperation, thus forming a post-based human resource management model has been playing a huge role in enterprise management practice. However, in the era of big data, this management model is no longer applicable to employees in enterprises.

⑥Big data application promotes the integration of enterprise human resource information islands and fragmented management. Because of the obvious structural features of the classification of human resources management work and the intersection between jobs, as well as the limitation of the ability of some human resource managers, and the lack of normative systems for personnel work, most human resources management is in the unsystematic manner. It is fragmented management, and managers have invisibly overlooked some problems and necessary links in the work (Zhu Wenyin, 2017). In the era of big data, enterprises can apply big data concepts and methods to link each position unit in the organization into an orderly and efficient whole, and innovate and create human resource management models and processes, so that the management of human resource information islands and fragmentation can be achieved. integration.

（2）negative effect

① Personal privacy and business secrets may be violated. While taking advantage of the convenience brought by big data, we should also attach great importance to the information security issues that follow. In fact, the optimal allocation of human resources in the whole society can be achieved through the complete disclosure of human resources data. Collecting all human resources data and information into one database can achieve the most ideal state of resource integration and utilization, but it will inevitably endanger the Security and Privacy of Personal Information (Zhang Yanpei et al., 2022). If business secrets, personal privacy or internal information of the enterprise is leaked or lost, the consequences are immeasurable, and it will also cause losses to customers. This is fatal to the enterprise. While benefiting from data, the organization also has an additional troubled.

②The blind combination of human resource management and big data can easily lead to the paralysis of the enterprise human resource management system. At present, a large number of small and medium-sized enterprises have fallen into a cognitive trap: having big data means having an opportunity. Under the domination of this misconception, blindly following the crowd, collecting a lot of useless information just to create big data, and at the same time consuming a lot of money to digitize the information, build an information management system based on big data and maintain it, this behavior is completely ignored. The ratio of input and output has been increased, resulting in the confusion of the original human resource management model of the enterprise, which is not worth the loss.

LITERATURE REVIEW

Big data drives change in human resource management

(1) The big data thinking change of the enterprise human resource management concept is based on the theoretical analysis of big data, changing the traditional human resource management thinking mode, forming a big data thinking, actively changing the human resource management mode and management method, and becoming an enterprise human resource management to deal with the big data. At the heart of the challenges of the data age. Victor Mayer-Schönberg pointed out that big data has subverted the human thinking routine for thousands of years, and presented a new challenge to the way of human cognition and communication with the world. Accordingly, the reform of "big data thinking" mainly includes: ① Human resource managers should first have big data thinking. It is not only necessary to have strategic insight and foresight to changes in talent demand, but also to have the ability to clear the fog and see the future, and to have higher sensitivity, concentration and innovative thinking ability for daily management work (Chen Liyue, 2014) . At the same time, we must also focus on training and instilling big data thinking in employees, so as to form an all-round three-dimensional big data thinking. ②Big data human resources must be regarded as the core production factor in enterprise management. As an important functional department in an enterprise, the amount of information that the human resources department needs to contact and process every day is gradually increasing, and the types of data are becoming more and more diverse, such as recording basic employee information, actual work performance, training, return on investment in human capital, employee Satisfaction, employee performance appraisal, core employee turnover rate, etc. (Li Hongwei, 2017). In addition, there is a huge amount of relevant human resources information available outside the enterprise. According to the requirements of big data thinking, such abundant human resources are regarded as the strategic core assets of the organization, which can provide a strong human resources guarantee for the organization's performance and the acquisition of long-term competitive advantages. ③ According to the characteristics of big data, human resource managers need to transform the thinking mode of human resource decision-making from "experience + feeling" to "fact + data". As the management system continues to collect, organize, analyze and mine various personnel business and personnel information, develop and utilize the value of big data according to the characteristics of big data, formulate human resources strategies and plans that are basically consistent with the company's strategy, help departments and More rational, faster and more scientific decision-making by senior executives of the enterprise all urgently need the transformation of human resource decision-making from the previous "experience + feeling" to "fact + data" thinking mode, so as to improve the efficiency of enterprise human resource development and utilization. ④ Predictably establish a people-oriented big data strategic policy, and solve the problems of enterprise people through big data.

(2) Enterprise strategic human resource management really moves from

"behind the scenes to the foreground"

Strategic human resource management requires the human resource management department to help senior managers design strategic plans, formulate departmental functional strategies that support the overall strategic planning of the organization, and provide talent support for the realization of the strategy (Bu Ma Fei, 2018). With the advent of the era of big data, the external environment of an organization is constantly changing, competition has intensified industrial integration, and new business formats have emerged rapidly, resulting in shorter and shorter strategic cycles of enterprises, and the organization's strategic goals are constantly changing and adjusting. Human resource management, as an effective connector between the enterprise and the external environment, establishes the big data thinking of strategic human resource management, and changes from the previous causal relationship to the thinking change of the correlation relationship. On the one hand, it uses big data resources and big data technology to gain insight into the risks faced by enterprises. and challenges, to carry out predictive analysis under the premise that the future environment and organizational goals may change, to ensure the human resource needs of the enterprise's long-term, medium-term and short-term strategy implementation, so that the supply and demand of human resources can reach a dynamic balance; on the other hand, big data For strategic human resource management, the role of human resource management is more clearly divided into four categories: strategic partners, functional experts, employee supporters, and change promoters from the perspectives of people and work processes, daily operations, future development, and strategy. The allocation efficiency of matching and internal matching improves the efficiency of human resource management, and promotes the strategic human resource management of enterprises to truly move from "behind the scenes to the foreground".

(3) The content and management system of enterprise human resources management will bring forth new ones.

At present, human resource management in general enterprises is mainly composed of six modules (Li Litao, 2019), including human resource planning, recruitment and allocation, training and development, performance management, compensation and benefits management, and labor relationship management. The six major modules have their own key points, which are relatively independent and inseparable, covering all aspects of enterprise selection, education, employment and retention. The era of big data promotes changes in the content and system of human resource management: ① The content of human resource management is more refined and efficient. For example, employee recruitment and selection, the use of big data to discover and select talents can achieve "holographic search" as much as possible. All kinds of information of candidates, whether it is personal video photos, work information, living conditions, social relations, and abilities, may be used by human resources. The resource department understands and grasps, so as to form comprehensive three-dimensional information about candidates, and achieve accurate "person-post matching". Another example is talent assessment, which can use big data information and technologies such as "talent quality model radar map" to find hidden information from some large human resource databases, help decision makers find potential connections between data, and effectively conduct talent training. Assessment, improve the lack of talent assessment. Hewlett-Packard's resignation risk scoring system built with big data has successfully helped the company reduce the resignation rate, which is the best case. ②Big data has spawned the emergence of new business formats and new positions, and some job functions and job relationship requirements have been re-established. In July 2012, Alibaba Group announced that it would set up a Chief Data Officer position at the group level, becoming the first company in China to appoint a real Chief Data Officer position. At the same time, data scientists, data analysts, and chief information Positions such as officer and chief customer officer have emerged one after another. Peter Sondergaard, senior vice president and global research leader at Gartner, said: By 2015, big data will create 4.4 million IT jobs worldwide, and it is expected that each big data-related job will create three non-IT jobs. Another example is the former general manager of the marketing department of the company, who is now facing the transformation into a new chief marketing officer, promoting the transformation of marketing from a "cost" center to a "value" center, and realizing the expansion and business transformation from marketing to customer experience. , Performance appraisal proposes reform and innovation. ③ The seventh module of human resources—human resources information (big data) management emerges, and its functions will become increasingly prominent. The seven modules are relatively independent and highly integrated. It should be said that many enterprises have always attached more importance to human resource information management, and regard it as an important work content of the human resource department. However, due to the limitations of information grasped and analyzed, and the constraints of technology, it is often limited to the static information of human resources within the enterprise, and there are information islands and fragmented management. With the maturity of cloud technology, distributed processing technology, and storage technology, a large amount of data that is mostly in a "dormant" state can be used to truly improve the efficiency of human resources. On the other hand, with the acceleration of the construction process of the industrial chain of human resources big data owners, providers and service providers, the development of a large number of human resources professional companies and human resources outsourcing business, coupled with human resources big data resources will become an important strategy for enterprises Resources, the function of the "seventh" module of human resources big data information management will become increasingly prominent (Nai Rongshi, 2020). The massive data of human resources is really used to improve corporate strategies, improve business efficiency, change business processes, and transform business development. The relative independence of the original six modules has become highly integrated, and the data penetration of each module, so that the content of the module is related to the module. Fuzzy and prominent boundary re-engineering will prompt the introduction of new ones in the content, management methods and management systems of human resource management in enterprises (Ke Limin, 2018).

(4) The upgrading and reform of the enterprise human resources management model and organizational structure.

Human resource management mode and management system, as an important part of the modern information management system of enterprises, are also facing the challenge of reform in the era of big data.

①The management of enterprise human resource information islands or single-line information association and fragmentation is expected to be integrated. At present, the main work of enterprise human resources management is still based on employee entry and exit, employee training, appointment, appointment, job promotion, resignation or dismissal. , can independently become a work unit. Due to the overlapping phenomenon between jobs, most human resources are managed fragmented in an unsystematic situation, and most of the work is trapped in specific, repetitive and tedious affairs. In addition, due to the limitation of the ability of some human resource managers and the lack of normative systems for personnel work, some problems and links in the work cannot be effectively managed. Based on this, it is necessary to apply big data concepts and methods to innovate human resource management, link each post unit in the organization into an orderly and efficient whole, create new human resource management models and processes, and make human resource information islands or single-line information associated and connected. Fragmented management is consolidated. ② The human resource management mode based on the position is transformed to the human resource management mode based on the ability as the core and the combination of ability and position. In an enterprise organization, each specific position is set up to complete certain work tasks. Individuals in the organization must be in certain positions. Organizational division of labor and cooperation is the basic form of an enterprise. The formation of a position-based human resource management model has been in the enterprise. important role in management practice. Today, in the era of big data, this management model can no longer be applied to employees in the enterprise. Taking data analysts as an example, they not only need strong data processing capabilities and scientific data statistical analysis methods, but more importantly, they also need to have foresight on industry prospects and insight into future business development trends. You need your own continuous learning, thinking and comprehension (Nairongsh, 2020). Therefore, based on the ability management as the core, the ability and position are organically combined, and the change of the human resource management model to comprehensively improve the quality and ability of employees has become inevitable. This model requires a different approach to personnel selection, compensation, performance, personal development and training, and career guidance, with each link linked to competencies. The core of human resource management is no longer the job but the individual, and the focus is no longer on the description of the job and job tasks, but on the description, motivation and development of personal abilities, forming a true match between jobs and abilities. The existing human resource management system in the corresponding organization is adjusted, including organizational structure design, corporate culture reconstruction, etc. ③ The organizational structure of enterprise human resource management is transformed from "pyramid" to "flat" organizational structure. In the past, human resource managers were often at the top of the pyramid. In addition to the basic information of personnel collected from ordinary employees, more human resource information came from the periphery of the organization (third-party recruitment, file hosting departments) or the upper layers of the organization. The multi-level (secondary, third... level) management mode of human resource management increases costs and reduces communication. With the construction of the big data informatization platform, the "pyramid" management system will be replaced by the "flat" optimized organizational structure. The decision-making level and the grass-roots employees can better transmit the information in the work process through the network, and the effective communication reduces the cost and improves the In order to improve the management efficiency, truly form a people-centered management.

(5) The integration of big data methods makes human resource management methods more abundant and advanced.

Human resource big data has become an important force to promote human resource management innovation and decision-making upgrade. It will also promote the derivation and exploration of the "big data" technology of the human resource management system, and the continuous innovation and enrichment of management methods and management methods. Victor Meier-Schönberg pointed out: Big data is the source of people gaining new cognition and creating new value; big data is also a method to change the market, organization, and the relationship between government and citizens, the core of big data is predict. ①Big data technology penetrates human resource management and innovates management methods. For example, through the function of big data multi-dimensional data warehouse, data modeling can be carried out to improve the efficiency of human resource analysis in the era of big data. Specifically, for example, using big data to analyze employee turnover, based on the principles of general psychology and popular psychology, phenomena such as continuous performance decline, abnormal attendance, and alienation from the team were used as harbingers of employee turnover. However, this prediction method is time-consuming, labor-intensive, and highly subjective, and the signs that employees show are often about to leave, and there is little room for recovery. If we can use big data technology to build a database based on employees' personality, value orientation, career development rules, industry and enterprise characteristics, occupational environment and other factors, and predict employees' turnover tendency 2 to 3 years in advance through advanced means, it will be beneficial to human resource management. Work brings more predictability and precision. ② Improvement and innovation of the original human resource management methods. Big data technology can find relevant information hidden in some large human resource databases, help decision makers find potential connections between data, and effectively carry out human resource development and configuration. For example, the Heidegger analysis method based on big data analysis, which consists of a series of constraints and challenges, such as the formation of high-level big data management reform thinking in the enterprise, the capital investment in the construction of human resources big data information platform, the full reuse of information resources and resources The construction of the sharing mechanism, the application of modern information technology to the collection, processing, screening and extraction of massive human resources data, the construction of the industrial chain of human resources big data owners, providers and service providers, and the information security of enterprise, industry and national human resources big data The establishment of systems and mechanisms, and the training of specialized talents such as "data scientists" who can process big data, etc. (Ke Limin, 2018). This requires the full cooperation of enterprises, governments, education, science and technology, social organizations and other departments, as well as the strong support of national laws and policies, the formulation of macro strategies and financial funds. These will be an important guarantee for enterprises to win the change of human resource management in the era of big data.

OPTIMIZATION STRATEGY OF ENTERPRISE HUMAN RESOURCE MANAGEMENT IN THE ERA OF BIG DATA

The optimization strategy of enterprise human resource management in the era of big data can be considered from the following aspects:

1. Optimizing human resource management mode. The traditional human resource management model adopts static information management, which cannot achieve timely update of human information, and lacks the ability to collect and organize information fragments and the ability to integrate single-line. In the era of big data, human resource information should be highly informatized, and the construction of human resource information big data should be actively carried out. Clarify the main role of people in the development of enterprises, use the analysis and integration capabilities of information technology, fully tap the potential of human resources, and realize the optimal allocation of positions (An Suchao, 2022). Implement humanized management, pay attention to personnel training, and The combination of enterprise management and advanced knowledge and technology realizes scientific management, improves the cohesion of the enterprise, creates a good enterprise atmosphere, and promotes the benign development of the enterprise.

2. To build a new type of human resource management team, on the one hand, the traditional personnel management team should upgrade the concept and improve the knowledge and technology, understand the new personnel management concept in the era of big data, master the technology of big data, and have the ability to apply big data technology to the management of enterprise personnel resources. ability. On the other hand, actively absorb new talents, update the staffing of human resources management team, let new technical talents drive the reform of enterprise management model, and also become the main force in building enterprise human resources big data, and achieve the goal of building new human resources in terms of talent preparation. The requirements of the management model need (Yang Wenxia,

2017) (Zhou Tao, 2013).

3. Update Human Resource Management Concepts Update Human Resource Management Concepts. First of all, it is necessary to increase the emphasis on the reform of enterprise human resources management in the era of big data from the enterprise leadership. Enterprise leaders should view the enterprise management reform in the era of big data from the perspective of development, fully understand the value of the new human resource management model in the future development of the enterprise, and complete the management model update as soon as possible to optimize the human resource allocation structure as soon as possible. , Improve the efficiency of human resource management, for enterprises to occupy a more favorable position in the future market competition. Leaders vigorously promote the innovation of human resource management, encourage human resource managers to change their management thinking, accept new management concepts, actively carry out human resource informatization construction and big data construction, and get used to the new human resource management model as soon as possible (Jin Xiaozhe, & Zhang Mingzhao, 2021). Let human resource managers realize the role of information management in improving the mastery of employee information, promoting the optimal allocation of positions, and improving the statistical efficiency of work performance, so that human resource managers can accept new management concepts and improve their implementation of human resources. The enthusiasm for the innovation of resource management model.

CONCLUSION

The advent of the era of big data has changed both the internal environment for the survival of enterprises and the external environment for enterprise development, prompting enterprise management to adapt to the times and make innovations to adapt to new market competition. Human resource management is an important part of enterprise management, and it is also the focus of innovation by applying big data technology. Enterprises should fully understand the development opportunities brought by the arrival of the big data era and actively carry out the innovation of human resource management.

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RESEARCH ON THE APPLICATION OF FOLK ART ELEMENTS IN PACKAGING DESIGN

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ABSTRACT

Different national cultures have been formed in different regions in different times, and then different types of folk art have been born. Packaging design is a method to express the value of commodities, which plays an important role in promoting the effective circulation of commodities. Packaging design is an important part of traditional culture, is the carrier of cultural inheritance, and is related to the national cultural life in a specific period. With the progress of society, people have higher and higher requirements for products. Integrating folk art elements into the packaging design of products can highlight the characteristics of new products and improve the quality of products. As a non-cultural material heritage, the paper-cut art in Ruichang, Jiangxi Province, relies on abundant materials to vividly express the scenery and characters. Therefore, through literature analysis, field research and multidisciplinary comprehensive research methods, this paper analyzes and studies the characteristics of Ruichang paper-cut, its relationship with packaging design and its value in packaging design, and puts forward a solution of combining folk art with packaging design to integrate Ruichang paper-cut, which embodies the wisdom of the people, It can realize the inheritance and dissemination of folk art on the basis of ensuring the nationalization of product packaging design.

Keywords: folk art; packing design; Ruichang paper cutting;

INTRODUCTION

As a materialized form of traditional culture, Chinese folk art is a comprehensive embodiment of the aesthetic feelings and ideals of the working people. Folk art is the foundation of other fine arts and runs through all fields of people's life. Folk art reflects the economic and cultural characteristics of different regions by relying on patterns and colors, and expresses the people's plain aesthetics (Chen Jianfeng, 2022). The application of folk art elements in product packaging design can promote the inheritance and dissemination of folk art on the basis of improving the uniqueness of packaging design. In this paper, through the application of Ruichang paper-cut elements in packaging appearance, packaging culture and packaging brand, it provides theoretical and practical guidance for packaging design to improve the cultural value and economic benefits of goods.

1. Characteristics of Ruichang paper cutting

Paper cutting is the oldest art form in China. It has been popular since the late Western Han Dynasty and has spread across many provinces. Paper cutting in different provinces and cities has its unique characteristics. Paper cutting is an art completed by hand, and its works embody Chinese traditional culture. Ruichang paper cutting is unique in the theme and pattern, the combination of illustrations, and the style of works.

1.1 theme characteristics

Ruichang folk paper cutting is mainly divided into three categories in terms of themes: first, the expectation of the continuation of clan or family life, second, the expectation of abundant food and clothing and noble social status, and third, the expectation of social stability and national peace and security. Paper cutting art is not only the interest of artists, but also the responsibility of social groups. Paper cutting with three themes is the main form of Ruichang paper cutting. With the advent of modern society, Ruichang paper cutting relies on paper cutting art to express a better life, which is related to people's life and has a unique aesthetic feeling.

1.2 pattern characteristics

Ruichang folk paper cutting generally adopts balanced individual patterns, which is very traditional and local. Ruichang paper cutting artists respect tradition very much, abide by the rules handed down by the older generation, and will not change at will. The pattern of Ruichang paper cutting represents the aesthetic orientation of the region and has a certain authority. When creating patterns, paper-cut artists usually give emotion under the guidance of traditional schemas to express their good wishes. Ruichang paper cutting generally does not choose symmetrical patterns when making, and usually selects the "s" of a single pattern element to connect the works.

LITERATURE REVIEW

The relationship between folk art and packaging design

2.1 folk art is the basis of packaging design

Packaging design is not created out of thin air, but re created by relying on life scenes. Folk art is also derived from life practice. It is the material library of packaging design and can inspire designers. The designer of packaging design must have a keen design perspective, integrate folk art elements into the design concept, and improve the effect of packaging design on the basis of absorbing the nutrients of folk art elements(Wang shenfang, 2021).

2.2 folk art and packaging design complement each other

There are many commonalities between folk art and packaging design. Folk art is mainly presented in strong colors to highlight the visual tension of the works. Packaging design is also a combination of graphics, words, symbols and other elements to attract the audience and then convey artistic feelings (Li Li, 2017). Packaging design relies on the visual presentation of the designed works to highlight the emotional elements of art. After integration with folk art, it is simple and can enter people's hearts, and improve the quality of packaging design on the basis of highlighting the characteristics of Oriental Art.

APPLICATION VALUE OF FOLK ART IN PACKAGING DESIGN

3.1 highlight the artistic value of packaging design

Folk art originated from the folk and is an art form created by the ancestors of different nationalities in their work. It presents the unique cultural characteristics and artistic styles of different nationalities in shape, color and composition (Liu Zhengping, 2021). China is a multi-ethnic country with a vast territory. In the process of development, different ethnic groups have formed their own culture with national characteristics. Therefore, folk art has its own characteristics. The application of folk art elements in packaging design can endow packaging design with profound artistic value, and bring consumers more beautiful experience based on folk art elements on the basis of providing designers with creative inspiration (Zhang Li, Zheng Junling, 2017).

3.2 highlight the economic value of packaging design

Packaging itself has the ability to sell itself. For example, the salesperson of DuPont company in the United States found that more than 60% of consumers make purchase decisions based on the appearance design of product packaging by summarizing market research data. The vast majority of people who shop in supermarkets often buy more goods than they intend to buy when they go out because of the attractive packaging. This is the famous "DuPont's law". It can be seen that the integration of art into packaging design plays an important role and increases the additional attributes of products. The quality of packaging design directly impacts the psychological balance of consumers whether to buy or not.

In the era of rapid economic development, the competition between commodities is increasingly fierce. For businesses, they need to rely on packaging design to improve the taste of commodities, and then cultivate more loyal customers. The integration of folk art elements into packaging design can highlight the uniqueness of commodity manufacturers' products, enhance the value of inheriting traditional culture of commodities, and then meet people's needs for inheriting traditional culture on the basis of increasing commodity premium, so as to improve the economic value of products.

RESULTS

Application Countermeasures of folk art in packaging design

4.1 define the target population and design concept

When integrating folk art elements into the packaging design of products, the target group should be determined first. Generally, older ordinary consumers are more likely to accept folk art elements, while younger consumers are more willing to accept fashion elements. Therefore, the packaging design for older consumers can directly use the patterns of folk art elements. For young consumers, innovative applications of folk art elements (Zhang Zhiying, Zhang Liang 2020), such as simplification or deformation, should be carried out to improve acceptance. In the application of folk art elements, the original characteristics of folk art should be maintained to reflect the cultural value of folk art (Zhao Yapeng, 2022). To determine the target population, the purpose is to innovate the application of folk art elements on the basis of considering the needs of different consumer groups, so as to enhance the effect of packaging design. When applying folk art elements, the concept of packaging design should be determined. The purpose is to integrate national cultural concepts into packaging design, so as to stimulate consumers, make consumers and products establish close contact, and then realize the inheritance of folk art. Packaging design is to enable products to achieve the impact on consumers by relying on consumers' Consumption Motivation in a complex environment, mainly to enable consumers to obtain emotional experience. The application of folk art elements can bring cordial and novel feelings to packaging design, and then stimulate consumers' purchasing desire. For example, bamboo barrel wine is made of natural bamboo, which brings natural and environmental protection feeling to consumers; For example, the face changing king wine integrates the facial makeup culture in folk art with the text, highlighting the facial makeup art.

4.2 relying on folk art materials to reflect the simplicity of packaging design

Folk art is very pure and simple. In the production of folk art works, bamboo, soil, hemp, grass, cotton, etc. are generally used as materials. Although the materials are rough in appearance, they integrate the creation intention with the materials according to the natural characteristics such as texture, luster, texture and decoration, so as to make the works more attractive. The simple application of folk art materials in packaging design can reflect the simple beauty of packaging design. Such as wrapping palm seeds with palm cotyledons, filling clam oil with shells, and weaving baskets with bamboo. The rational application of folk art materials can reflect the green concept of packaging design on the basis of cost saving (Yang Qing, Liu Xin, 2017). Designers draw inspiration from packaging design by relying on the simplicity of folk art materials, and can enhance the affinity of packaging design on the basis of reflecting the simplicity and beauty of packaging design (Li Feng, 2018). The theme and color of folk art reflect the relationship between man and nature, and are recognized by the public with inheritance and symbolism. The integration of folk art elements into packaging design can make packaging design more realistic based on consumers' awareness of the subject. The application of folk art elements such as pomegranate, which symbolizes more children and more blessings, in packaging design can highlight the cultural and ethnic characteristics of the East. Packaging design is a designer's spiritual activity, which can enhance the appeal of goods by integrating culture. The application of folk art elements in packaging design conforms to the consumer psychology of consumers and can promote the sales of goods on the basis of making consumers feel friendly (Sun Li, 2021).

4.3 relying on folk art forms to reflect the emotional beauty of packaging design

Folk art can express people's life and emotions, and convey people's yearning for a better future. Integrating folk art forms into packaging design can inject emotion into packaging design, meet the spiritual needs of consumers (Tong Dongsheng, 2021), and improve the added value of commodities on the basis of enriching the aesthetic factors of commodities. When carrying out packaging design, designers should explore the formal elements of folk art and explore the path of its application in packaging design. The purpose is to integrate the aesthetics of traditional and folk art elements into packaging design, break through the traditional design restrictions and highlight the cultural connotation of packaging design through the transformation of folk art forms (Wang Shiqi, Hu Han, 2020). In the application of folk art forms, attention should be paid to the visual path of the emotional gene expression of folk art forms. The purpose is to carry out innovative application of packaging design through differential spiritual needs, so as to improve the appeal of packaging design. Taking the packaging design of tea as an example, China has a long history of tea drinking and has formed a unique tea culture. In order to open up the tea market, the packaging design of tea can reflect chrysanthemum, lotus, bamboo, plum, etc. on the container, with the aim of making the outer packaging of tea more elegant and more Chinese characteristics, and then arouse the resonance of consumers (Zhang Jing, Wang Shengxuan, 2018).

SPECIFIC APPLICATION OF RUICHANG PAPER CUTTING IN PACKAGING DESIGN

5.1 application of Ruichang paper cutting in packaging appearance

In the appearance design of any packaging design, six major elements such as appearance design, appearance container, pattern expression, brand logo, color selection and text expression will be taken as design support (Yao Songqi, 2021). The purpose is to highlight the cultural connotation of the goods and attract consumers. In the packaging design of commodities in the market, the external containers are mostly iron, plastic, paper, etc. no matter what kind of commodities, they want to highlight the cultural taste of commodities by relying on the appearance design of external materials (Zhao Jingjing, 2017). The application of paper containers of Ruichang paper-cut elements in packaging design can make commodities stand out from traditional materials. The paper materials integrated into Ruichang paper-cut have great aesthetic value and collection value, and can win good reputation for the goods on the basis of highlighting the elegance of the goods. When consumers choose goods, they have a stronger ability to accept graphics than words (MA Yingnan, 2018). In the packaging design process, Ruichang paper-cut elements are integrated into the appearance design of commodity packaging, which can enhance the appearance expression of goods by relying on the traditional Chinese painting art form and calligraphy art form of paper-cut. The traditional Chinese painting and calligraphy elements of Ruichang paper-cut have been developed for thousands of years and integrated into the national cultural feelings, which are acceptable to consumers (Liu Jinghua, 2022).

5.2 application of Ruichang paper cutting in packaging culture

Packaging design is the form of appearance expression of goods, and aesthetic feeling and cultural connotation should be considered in the specific design. Introducing the traditional cultural elements of Ruichang paper cutting in the design of commodity packaging can enhance the attractiveness of commodities to consumers on the basis of improving the cultural connotation of commodities. Any commodity itself is the carrier of culture. In packaging design, we should base on the commercial characteristics of the commodity and integrate Ruichang paper cutting elements to meet the spiritual needs of consumers (Lu Ning, 2012). The integration of Ruichang paper-cut elements into commodity packaging design can enhance the cultural attribute of commodities, highlight the cultural connotation of commodities, and achieve better sales effect on the basis of meeting the needs of market consumers. Taking tea packaging design as an example, after integrating Ruichang paper-cut elements, it is more in line with the cultural characteristics of tea, which can improve the aesthetic ability of consumers on the basis of improving the brand value and market position of tea. In the specific application, we can draw on the calligraphy and traditional Chinese painting elements in Ruichang paper-cut art, and carry out penetration design around the tea ceremony, tea nature and tea virtue of tea. The purpose is to highlight the traditional Chinese cultural elements of tea by relying on the ink bamboo materials of patterns and the font selection of characters, so as to improve its competitiveness (Zhao Rong, 2019).

5.3 application of Ruichang paper cutting in packaging brands

The packaging design is the symbol of the commodity brand and is integrated with the commodity itself. Because of the great influence of brands on commodity sales, it is very important to strengthen the packaging brand design of commodities (Tian Tingzhou, 2022). Commodity logo is an important part of commodity appearance design, which runs through the whole process of commodity packaging design. The pattern of trademark is the symbol of commodity enterprise and the embodiment of commodity connotation. Relying on the graphic art of Ruichang paper-cut to design the packaging brand of commodities, it can highlight the modern aesthetic view of commodities on the basis of inheriting traditional culture, and shape the brand image of commodities on the basis of improving the cultural identity of consumers. Brand connotation is the spiritual embodiment of commodities. Integrating Ruichang paper-cut elements can enhance the cultural added value of commodities and thus improve the economic benefits of commodities.

CONCLUSIONS

In short, folk art is an important part of Chinese traditional culture, and its cultural value is huge. The folk art of different nationalities has different presentation forms. Packaging designers should explore the diversified elements of folk art, deeply study the aesthetic changes of consumers, and apply the material elements and form elements of folk art to packaging design on the basis of mastering the design concept of commodity target groups, so as to reflect the simple beauty and emotional beauty of packaging design. Designers should pay attention to the application of Ruichang paper-cut elements in packaging design. The purpose is to rely on the application of Ruichang paper-cut elements in packaging appearance, packaging culture and packaging brand to enhance the added value of goods and enhance the economic application of folk art elements in packaging design makes commodity packaging more aesthetic and cultural value, which can effectively improve the aesthetic taste of commodities, and then enhance cultural confidence on the basis of inheriting and carrying forward traditional culture.

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The purpose of this paper is to solve how to use Chinese folk art to improve the competitiveness of goods and carry out product packaging design under the influence of society, culture, technology and other aspects in the development of product packaging art design. Taking Ruichang paper cutting in folk art as a research case, this paper puts forward corresponding design strategies, and tries to put forward new ideas and methods for the same type of packaging design. In the research process, I am very grateful to the research conclusions and contents in this field at home and abroad, which have guiding significance for this paper. At the same time, I am very grateful to the instructor of this paper. In the process of writing this paper, I have been giving careful guidance from the research topic, research and research to the research content. I have put forward many valuable opinions on this paper and revised the research content for many times. Because of the instructor's patient guidance and professional knowledge and experience, we can successfully complete this paper.

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THE DEVELOPMENT OF COMMERCIAL WUSHU COMPETITIONS BASED ON BRAND CONSTRUCTION——TAKING SANDA AS AN EXAMPLE

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ABSTRACT

In recent years, with the orderly implementation of the national sports industry policy, the comprehensive benefits of sports events have increasingly attracted attention from all walks of life. As an important part of sports events, Wushu Sanda events play an important role in promoting the development of the overall value of Wushu Sanda projects such as economy, society and culture. This research adopts the method of literature materials, expert interviews, questionnaire survey and case analysis to study the brand strategy of Chinese Wushu Sanda commercial events, and strives to find out the strategic plan to promote the brand of Sanda events to win the nation. In conclusion:

1. The characteristics of my country's Wushu Sanda commercial events are from the perspective of confrontation and viewing: compared with the same type of domestic and foreign fighting events, the confrontation is slightly worse, and due to the restrictions of the rules, the viewing value is poor; from the professional point of view: participating There is a big gap in the professional level of the athletes in Sanda commercial events, and there is a big gap in the professional level of the event site layout, clothing and protective gear; from an international perspective: they have a low right to speak in the international market; Market demand is conducive to the development of Sanda commercial events, but there are some problems: unclear brand positioning, poor brand cultural appeal, broad communication paths, insufficient marketing process, unstable competition system, incomplete professionalization system, neglect of player packaging, The talent of running the competition is not complete.

2. The significance of formulating brand strategic planning for Wushu Sanda commercial events is to promote the brand to become a platform for Sanda to communicate with audiences, to guide the development of event-related industries and the maintenance of existing events, to guide the brand to maximize the integration

of communication resources, and to generate a strong brand for commercial events. Competitive Advantage.

3. The formulation and implementation of the brand strategy planning of Chinese Wushu Sanda commercial events is divided into five links. The first link is: enhancing the core value of the brand; the second link is: standardizing the brand identification system; the third link is: optimizing the brand strategy; The four links are: brand extension and expansion; the fifth link is: strengthening brand management.

Keywords: Wushu Sanda, commercial events, brand strategy planning

INTRODUCTION

In recent years, with the orderly implementation of the national sports industry policy, the comprehensive benefits of sports events have increasingly attracted the attention of all sectors of society. As an important part of sports events, Wushu Sanda events play an important role in promoting the development of the overall value of Wushu Sanda projects such as economy, society and culture.

It is the need to enhance the market competitiveness of Wushu Sanda commercial event brands

Since the Wushu Sanda competition was held, its competitiveness in the market has been at a disadvantage, which directly affects the development level and commercial benefits of the competition. From a domestic perspective, with the exception of the Wushu Sanda events within the system, the extension of the names of most Wushu Sanda commercial events has gradually increased, and the events themselves attracted very few spectators who came to watch the scene, and some even left the stadium before the end of the game. In fact, these flashy status quo shows that the marketization of Wushu Sanda events is very low. From an international perspective, the commercial events of Chinese Wushu Sanda basically have no influence in the world, and there is no foothold in the forest, resulting in their overall benefits cannot be compared with other competitive sports events. Therefore, building a brand strategy plan for Wushu Sanda commercial events is the need to enhance market competitiveness. 1.1.2 is to meet the needs of the ever-increasing level of consumer demand for Wushu Sanda commercial events

With the increase in the demand for spiritual culture, the proportion of people's consumption of Wushu Sanda has increased in the market, and more parents send their children to extracurricular classes where they learn Wushu Sanda, fighting and other confrontational projects. In addition to improving their physical fitness, they must also learn to protect themselves. Oneself, to avoid school bullying; more and more women practice this project to protect themselves and avoid being unable to resist when they encounter danger; more and more men practice this project mainly because of the wonderful confrontational nature of Wushu Sanda. . In addition, the brand benefit of Wushu Sanda events can bring spiritual, cultural and behavioral benefits to consumers, which is an inevitable result of the increased consumer demand for Wushu Sanda events. Therefore, building a brand strategic plan for Wushu Sanda events is to meet the needs of the ever-increasing level of consumer demand for Wushu Sanda commercial events.

It is the need to create a brand of Wushu Sanda commercial events under the encouragement of national policies

In December 2018, the General Office of the State Council issued the document No. [121] "Guiding Opinions on Accelerating the Development of the Sports Competition and Performance Industry", pointing out that all localities are encouraged to strengthen the brand innovation of sports events and cultivate a group of amateur events with great social influence and high reputation. . In 2019, the General Office of the State Council issued the "Opinions on Promoting National Fitness and Sports Consumption to Promote the High-Quality Development of the Sports Industry", which reflects the high importance the party and the country attaches to sports, and will effectively promote the comprehensive, coordinated and sustainable development of the sports industry. Promote the construction of a sports power and a healthy China. In the same year, the "Wushu Industry Development Plan" was released, pointing out that the supply-side structural reform of the martial arts industry is the main line, focusing on expanding and improving the martial arts industry chain, cultivating and tapping the market potential, promoting the agglomeration and integration of the martial arts industry, and promoting Chinese martial arts to "go global". "To provide strong support for cultivating new momentum for economic development.

BODY OF PAPER

2.1Analysis on Characteristics of Chinese Wushu Sanda Commercial Events

With the implementation of the State Council (No. 46) document in 2014, the number of commercial Wushu Sanda competitions in my country has increased, and the level of competitions has improved, but a mature competition brand has not yet been formed. By reading a large number of literature on the direction of Sanda commercial events, analyze and sort out the relevant content of brand strategy, and compare the current situation of my country's Wushu Sanda commercial events according to the reading of related literatures such as foreign fighting event brands, K-1 events, UFC events, etc. Combined with the relevant content mentioned in the expert interview, the characteristics of Chinese Wushu Sanda commercial events are summarized as follows:

2.1.1 confrontational and ornamental

Sanda is a sport that uses boxing, kicking, throwing and other techniques to conduct unarmed confrontation according to certain rules, and it has certain confrontation in itself. However, compared with the same type of Kunlun Finals, UFC and other domestic and foreign fighting competitions, the confrontation is slightly worse.

The fierce Sanda confrontation can catch the audience's attention and drive the audience's emotions. The venue layout, lighting changes, musical backgrounds, and language incitement of the on-site commentary in commercial events all stimulate the audience's awareness and improve the viewing experience of the event. However, due to the restrictions of the rules, there is still a certain gap between the viewing value of Sanda events and other fighting events.

2.1.2 professional

As the country increases its support for holding events, many commercial Sanda events of various levels and positions have been held, but the quality of the events varies. Therefore, there is a large gap in the professional level of athletes participating in Sanda commercial events. There is a big gap in the professionalism of clothing and protective gear.

2.1.3 international

My country's well-run Chinese Men's Basketball Professional League, Chinese Football Super League, Beijing Marathon, Shanghai Marathon and other large-scale events attract foreigners to participate, send domestic athletes to study abroad, and have a certain international influence. On the other hand, Sanda is not an Olympic sport, and almost no foreigners participate in Sanda commercial events, so it has a low voice in the international market. In addition, there are mixed martial arts, Muay Thai, kickboxing and other types of events. Sanda events are currently relatively difficult to go out, and their international character is low.

2.2 Analysis of brand strategy planning of Wushu Sanda commercial events

2.2.1 The significance of formulating brand strategy planning for Wushu Sanda commercial events

Sanda is a traditional sport in our country. It has a long history and profound cultural heritage. With the development of national sports, Sanda has gradually entered the public's field of vision. However, compared to popular sports such as football, basketball, marathon, and even foreign fighting sports represented by UFC, Sanda sports are relatively small.

When a sports event is elevated to a sports career, the event not only retains its sportiness, competition, and appreciation, but also expands its commercial, social and other attributes. The core of the Wushu Sanda commercial event brand is based on the Sanda project, and related events and series of activities are carried out on the basis of "Sanda". Before the event is held, use the publicity effect of the brand to establish an audience network for the Sanda project, stabilize existing Sanda fans, attract new audiences, and throw information about the Sanda event to the audience; when the event is held, improve the audience's understanding of the Sanda event through services such as event quality. The trust of the brand lays the groundwork for future events; after the event is held, the information that they need is delivered to the audience, so as to improve the audience's loyalty to the brand and their understanding and love of Sanda events.

The significance of formulating a brand strategy plan for Wushu Sanda commercial events is to promote the brand to become a platform for Sanda to communicate with the audience. By building a brand, the event conveys the purpose of the event, the brand development vision, the development potential and ability of the event brand in a way that the audience can accept, and establishes a communication platform between Sanda and the audience.

The fundamental purpose of commercial events is to maximize profits. If only taking Sanda events as a revenue channel is not enough to support the long-term operation of the brand, the extension of the brand should be a key part of the brand development strategy.

Formulating a brand strategic plan in the early stage of brand establishment is conducive to the smooth development of the brand building work. All operating departments and personnel are in place, and various means and methods for maintaining products are planned in advance; the stage development plan in the long-term development plan is formulated, including the development of each stage. Task. Relevant industries are bound to be developed on the basis of firm brand establishment and stable operation of existing competitions. They should be gradually carried out in accordance with the brand strategic plan, and adjusted flexibly in combination with market dynamics, so as to seek advantages and avoid disadvantages in a timely manner to complete the task of brand development planning.

The related industries of Sanda commercial event brand development will undoubtedly open the door to the promotion of Sanda events. For example, traditional Sanda commercial events obtain revenue by means of competition tickets and brand sponsorship, and their contribution to the society is also quite limited. However, the development of related industries is conducive to expanding the influence of the brand. For example, the event brand provides Sanda training. On the one hand, it improves the athletes' participation level and provides them with competition opportunities. At the same time, it expands the audience of Sanda events and attracts more age groups to participate. Sanda projects, whether watching, training, management, or competitions, are reflected in Sanda-related education industry, service industry, etc.; Encourage young people to actively participate in Sanda projects, watch or participate in Sanda competitions, which is reflected in the e-sports industry.

The significance of formulating a brand strategy plan for Wushu Sanda commercial events is to guide the development of the event-related industries and the maintenance of existing events. In fact, the development of new industries is also an act of maintaining and improving the brand, an affirmation of existing events, and a win-win situation for each other.

Brand strategy is not only to provide the general direction of guiding ideology for the operation of the enterprise, but also to comprehensively plan and manage all aspects of the operation of the enterprise. The planning activities involved must conform to the brand positioning, focus on the core value of the brand, and rationalize the functions of various departments within the enterprise. Fully utilized, brand strategy can play a role.

Judging from the interviews with the event organizers and the survey results of the people participating in the event, the publicity channels of Wushu Sanda commercial events mainly include new media publicity, public relations publicity, and interpersonal communication publicity. New media publicity mainly includes: online live broadcast, TV broadcast, or network rebroadcast; public relations publicity includes: release of news briefings, holding press conferences, event management of martial arts associations and other departments; interpersonal communication includes: consumer groups communicate with each other, Forward the news of the event to the circle of friends through WeChat, and contact each Sanda club by phone to explain and inform.

In order to expand the scope of benefits, the organizers have caused serious waste of resources due to too many dissemination methods and too much propaganda in the early stage. What kind of communication method to choose, what kind of advertisement to make, and what kind of media to put in can find the accurate answer from a strong brand strategy, so as to minimize the waste of communication resources.

The significance of formulating a brand strategy plan for Wushu Sanda commercial events is to guide the brand to maximize the integration of communication resources, reduce resource waste, shorten publicity time, and expand communication effects. Effective advertising conveys the most accurate information to consumers, whether it is athletes participating in the competition, spectators watching the competition, sponsors who invest, or partners who yearn for cooperation, they can find their own position and refresh the inherent cognition of the competition brand. , generate good associations and increase consumption impulses. At the same time, the dissemination of the event brand is also a brand extension, which is an asset accumulation of the commercial Sanda event for the brand, which has a promoting effect.

STEPS TO FORMULATE AND IMPLEMENT BRAND STRATEGY PLANNING FOR WUSHU SANDA COMMERCIAL EVENTS

The content of this part is based on the five core steps of brand strategic planning, and the content of Wushu Sanda commercial events is added for a sub-induction analysis, which are to enhance the core value of the brand, standardize the brand identification system, optimize the brand strategy of Wushu Sanda commercial events, and brand extension. Expansion, and strengthening of event brand management.

3.1 Enhance brand core value

In the formulation stage of enhancing the core value of the brand, the strategic planning of branding decision-making is mainly overcome. Explore and find strategic content that is suitable for your own brand and differentiate it from competitors, and formulate a brand strategic plan that complies with national policies and adapts to market development. In the implementation stage of enhancing the core value of the brand, it mainly includes the analysis and positioning of the three strategic content brands, determining the brand strategy, and refining the core value of the brand.

Branding decision of Wushu Sanda commercial events

The first step in the brand strategy planning of Wushu Sanda commercial events for brand decision-making. When the event brand only carries out marketing activities around the holding of Sanda events, the development pattern of the event brand is single, which is not conducive to the long-term development of the event. However, after the expansion of related industries of Sanda projects, there are many difficulties in brand names. Should we continue to use the name of the general brand, or use a new name? If the name of the general brand is to be used, the existing influence of the general brand name in the market should be considered, and whether it is consistent with the content of the new industry, whether it can reflect the core value conveyed by the new industry, and whether it can establish consumers and brands. factors such as bridges between industries. If a new brand name is adopted, how should the new industry coordinate with the overall brand.

Therefore, the decision to add a brand name to a commercial event in Sanda is very important. The correct brand decision can make it stand out in many sports events and be favored by consumers, so as to obtain satisfactory results.

According to the results of the questionnaire (see Table 2), after the competition, nearly 50% of consumers did not remember the brand name of the Sanda competition at all, nearly 20% of consumers could not remember it clearly, and 30% of consumers Remember clearly. And as the time after the event ends, consumers are less likely to remember the brand name of the event.

In addition, according to the content of expert interviews, a brand name with connotation, communication point, rich appeal, and concise and easy-to-remember brand name can remain in the minds of consumers for a longer time.

In addition to the decision on the brand name of the event, the quality level of the brand product is also determined through rigorous decision-making. In the early stage of event brand creation, the concept of "branding" is relatively complex, and should avoid the situation where the form is greater than the content, and strictly control the quality level of the brand product - Sanda commercial events, so as to achieve the strategic goal.

Analysis and positioning of the brand of Wushu Sanda commercial events

The brand strategy of Wushu Sanda commercial events must be based on certain national policies and objective market environment, and is different from the positioning of most corporate brands in the market, because Wushu Sanda events belong to the branch of the sports industry, and its competitive, political, etc. Factors determine the starting point of the event brand is different from other companies. The brand positioning of Wushu Sanda commercial events is different from other competitive events, such as the Chinese Men's Basketball Professional League, the Chinese Football Association Super League and other popular large-scale leagues. The nationality and confrontation of Sanda events determine the particularity of Sanda event brands.

3.1.1The principles of brand positioning of Wushu Sanda commercial events

First, conduct a market positioning demand survey. Event brands should grasp market trends, understand relevant information about competitors, analyze objective factors, and formulate reasonable positioning goals.

Second, target consumers. Through the analysis of the results of the questionnaire survey, most of the audience watching Sanda competitions are male, and most of them are 45 years old; most of the audience participating in Sanda training are teenagers, and most of them are A5 years old. (See Table 3) In addition, men and women have different motives for watching Sanda events, and the difference is large. Event brands can improve the content, structure and other forms of Sanda events according to their motivation. Consumers with a monthly consumption level of more than 6,000 yuan have a large proportion of the number of people watching the game.

A survey on the gender situation of consumers in Wushu Sanda commercial events n=267

Age	18below	19-30	31-45	46-60	Total
man（%）	7（3.4）	78（38.4）	94（46.3）	24（11.8）	203（76）
woman（%）	2（3.1）	13（20.3）	46（71.9）	3（4.7）	64（34）

A survey on the motivation of consumers watching Wushu Sanda commercial competitions n=267

gender	man（%）	woman（%）
Experience the live atmosphere	177（87.2）	19（29.7）
Entertainment and leisure, spiritual enjoyment	75（36.9）	36（56.2）
Like Sanda projects	128（63.1）	22（34.5）
I like a Sanda player	35（17.2）	51（79.7）
Learn high-level adversarial techniques	52（25.6）	3（4.7）
Human recommendation	41（20.2）	42（65.6）

A survey on the consumption level of consumers in Wushu Sanda commercial events n=267

gender	man（%）	woman（%）
less than 3000 yuan	7（3.4）	2（3.1）
3000-6000	24（11.8）	17（26.6）
6000-10000	86（42.4）	38（59.4）
10000-15000	55（27.1）	7（10.9）
More than 15000 yuan	31（15.3）	0

Again, the uniqueness that distinguishes it from the same type of industry. In the Chinese market, there are martial arts, UFC, Kunlun Jue, Sanda King and other fighting sports event brands, and their positioning is different. Sanda is not only a traditional national sports event, but also a fighting sports event. Maintaining uniqueness in the brand will establish a good brand image in the minds of consumers.

Then, integrate into the brand culture of the event. Wushu Sanda commercial events should not only inherit the traditional Chinese culture and national martial arts characteristics, but also combine the innovative spirit of the new era, and integrate this cultural concept of linking the previous and the next into the competition field and life, so that consumers can feel a refreshing brand positioning.

Also, the event brand sales positioning. The consumers of Sanda events are basically determined, but the event brand will expand the scale of the industry and increase the type of industry when the brand extension is carried out. Therefore, the products of the event brand should be positioned in a targeted manner. For example, tickets for Sanda events will affect the number and category of consumers. If the price is too high, consumers with low economic strength may give up the opportunity to watch the competition on the spot; if the price is normal or low, It may attract more consumers to join the team to watch the game live. In addition, the sales positioning of the event brand affects the brand that sponsors the event, the number of sponsors and sponsorship funds are more or less, and the types of sponsors are also uncertain.

Finally, maintain and strengthen the brand positioning of the event. With the impact of the market, the brand of the event will be tested and challenged. Strengthening the brand positioning of the event in the chaotic external environment is conducive to protecting the brand, reducing the impact and avoiding losses. For example, the cultural concept conveyed by the brand of Sanda competitions is "grow in adversity and resist stubbornly", when consumers face difficulties, the first thing they think of is the brand, which consolidates the brand's position in consumers' consciousness and is conducive to Maintain and protect the brand positioning of the event.

3.1.2Determine the brand strategy of Wushu Sanda commercial events

The brand operation of Wushu Sanda commercial events should have relative strategic goals in different development stages or different departments of responsibility, but the strategic goals must be in line with the brand positioning direction, not too high, and based on the actual situation, the strategic goals should be practical and challenging. sex, long-term.

In 2020, there will be most Wushu Sanda commercial events in my country, and many of them have some brand influence, such as "Wancheng Shenghui Cup Wushu Sanda Kung Fu Skills", "Emei Legend Western Regions Wuhun Fighting Competition", "Ambition Shanxi Pingyao Fighting" There are also competitions named by well-known companies, such as "China Sports Lottery 2020 Huanghe Shaoxia Wushu Sanda Competition along the Huangjiu District of Tianqiao District", "Red Star Macalline Cup Wushu Fighting Classic" and so on. Take the above-mentioned several events for example, none of them have been held for more than 5 years, and some events have changed their titles, some are just well-known for their titles, and some are jointly held in combination with other fighting events such as fighting. of.

However, in terms of the current Sanda commercial event market, these events have certain development potential, and they can use their respective advantages to formulate strategic goals, improve the competitiveness of the event brand, expand the extended industry, and add value to the brand equity. For example, "Wushu Sanda Kung Fu Skills" is committed to creating the most influential Wushu Sanda club brand event in China. Therefore, its preparations have promoted the development of the industry, established a training system for club coaches, formed a Guangdong Sanda fighting training system, and improved the club alliance. The core value of the company drives the combination of the fitness fighting market and the professional Sanda fighting group. These strategies serve to achieve the brand's strategic goals.

The positioning of my country's Wushu Sanda commercial event is to become the most influential Wushu Sanda commercial event in the country. From this launch, the strategic planning of the event brand must be a long-term plan with overall development goals. According to the positioning of the event brand, the strategic objectives should be established in steps:

First, be prepared for a long, tough battle and stand out from the crowd. Many event brand operators have just seen the immediate benefits, but the pattern is imprisoned, and they lack the awareness of long-term development. As a result, the event cannot be held for a few years, and the early efforts have been in vain. There are many competition brands of the same type in the market. It is necessary to impress consumers in the "fighting" of many competitors, cultivate competition brand loyalty, and establish a unique brand image.

Secondly, the brand strategy of Wushu Sanda commercial events is systematic. All elements of the event brand, business strategy, management model, etc. are covered in the brand strategy. Therefore, the event brand strategy is not a single, but systematic, and many conditions must be considered.

Finally, highlight the advantages of national culture. The Wushu Sanda competition itself has national characteristics. Under the supervision of the brand strategy setting, the Chinese culture is further enhanced, which can better reflect the respect and inheritance of the competition brand for the traditional culture. Moreover, highlighting the national culture is more in line with the "Belt and Road" development strategy, which is conducive to driving the event brand to "go out", opening the international door, and having a certain influence in international sports.

3.1.3Refine the core value of Wushu Sanda commercial event brand

As the soul of the event brand, its core value will run through all business activities covered by the brand. After the analysis and positioning of the competition brand and the formulation of strategic goals in the early stage, combined with the existing information resources, the core value country of the brand that can touch the inner world of consumers is refined.

For example, the creed that Kunlun Jue adheres to is to strive to achieve self-worth, win respect and recognition through continuous hard work on the competitive platform of masters such as Lin, and through the competition in the form of fighting events, let the audience witness Yang Jianping, Tang Jin, Xiong Jingnan, A large number of very successful fighters such as Zhang Meiheng and Zheng Zhaoyu have also seen the world's top powerhouses such as Boqiu, Yasang Klei, etc., highlighting the core value of the brand.

The process of determining the core value of the Wushu Sanda commercial event brand should include the following three points:

First of all, analyze the core value of similar fighting competition brands. When other competition brands still lack core value content, the brand should determine the core value at the first time, seize the opportunity, and the follow-up work can be carried out conveniently with the core value. When a competitor has a brand's core value system, the brand must be different from its competitors. Only with differences can it have the advantage of winning. However, the core value of its own brand must be based on the recognition of consumers and give full play to the brand personality.

Second, refine the core value of the brand. The core value of the Wushu Sanda commercial brand should reflect the brand emotion and brand concept, so that consumers can empathize with them, communicate consciously, fully express the values of the competition brand, and convey different competition feelings to consumers.

Finally, strengthen the core value of the event brand. This part of the content belongs to a part of the event brand strategy. It is integrated into the various tasks of brand development. It can be an intangible publicity promotion or a tangible event brand communication. The purpose is to deepen the core value of the brand. The impression in the minds of consumers increases the core competitiveness of the brand.

Refining the core value of the event brand should be distinct from other brands, be able to conform to and resonate with consumers, and the core value of the event brand should be inclusive, which is conducive to future extension work.

3.2 Standardize the brand identity system

The definition of brand identity for Wushu Sanda commercial events is the focus of the event's brand strategy, and it is also a brand awareness and image conveyed to consumers. Brand identity is not simply a combination of brand connotation, brand core value, product

The brand industry and other information are passed to the design team to arrange it. If the Wushu Sanda commercial competition wants to emerge in many competitions, it is necessary to fully conduct brand research in the early stage, conduct brand diagnosis, study the market environment, and sort out the consumer groups targeted by the brand and competition. the situation of the person. On the basis of mastering accurate information, based on the core value of the brand of the event, select the cultural factors that are easily accepted by consumers, different from other brand logos, and can impress consumers, and formulate the brand identification of the event.

3.2.1 The connotation of brand recognition of Wushu Sanda commercial events

Based on the characteristics of nationality, confrontation, and appreciation of Sanda, which is different from other sports, the identification system of Sanda commercial event brands must be different from many event brands. However, in general, brand identification is inseparable from three aspects: concept identification, behavior identification, and visual identification.

Concept identification is the service concept implemented by all workers from top to bottom during the operation of the event brand, and it also highlights the operation concept, brand culture, brand strategy, and values of the event brand. For example, Wanda Sports Group has continued the core concept of Wanda Group, "International Wanda, a Centennial Enterprise". Since its establishment in 2015, it has developed into a global or Chinese exclusive business for FIFA, FIBA, BWF and other world sports organizations. Partner. According to the results of the reviewed literature, idea recognition is reflected in consciousness, and in slogans and slogans.

Behavioral recognition is the work of the event brand to implement the brand concept, which is reflected in the management and operation of the brand, and is the display and shaping of the brand image of the event. All internal or external work done by the Wushu Sanda event brand in order to build and develop the brand, such as internal brand management, allocation of institutional personnel, establishment of brand image, handling of market public relations, market research, promotion of new brand products, etc. It can be said that "every word and deed" all reflect the behavioral identification of the competition brand.

Visual identity is the most direct, symbolic and visual expression in the event brand identification system, which is embodied in the name, symbol, slogan, medal, field and so on of the event brand. It exists to convey the brand culture to consumers in a subtle way by the simplest means, and to make the event brand take root in the hearts of consumers, to encourage consumers to have consumption behaviors towards the brand, and to establish brand loyalty.

3.2.2 The Implementation of Brand Recognition in Wushu Sanda Commercial Events

Brand recognition refers to the definition of brand associations that can impress consumers and distinguish them from competitors from the levels of products, enterprises, people, symbols, etc. Therefore, the definition of the brand identity of Wushu Sanda commercial events should start from the Sanda event, run through the internal workers of the event organization, the event brand logo and other people and things related to the event brand, and should not be limited to the event brand identification.

First of all, conduct self-organization and analysis, and organize and analyze the basic information of the event brand resources, positioning, concept, culture and so on. Secondly, based on the brand development goals and development strategies of the event, as well as planning factors such as target consumers, a preliminary logo definition is carried out. Then, conduct market research and collect the brand logos of competitors to avoid similarities and brand losses. Finally, based on the above circumstances, an external brand identity team can be hired to help define the brand identity of the event.

From the cultural connotation embodied by the event brand, the behavioral standard of performance, and the established brand logo, the thinking, behavior, appearance and other characteristics of the Wushu Sanda commercial event brand are determined. According to the content of interviews with some event managers, the staff of different event brands and their work thoughts are different, and different brand cultures and brand operation effects convey different feelings to consumers.

For example, the brand logo of Kunlun Jue (see Figure 6): red letters on a black background, the color highlights the personality of blood and hard work; the spliced X graphics show the spirit of confrontation and disobedience; the abbreviated KLF (kun lun fighting) and Kunlun Jue San A simple and direct expression of the brand name. These simple elements are easy to be remembered by consumers, and they also convey the core of the event in the simplest way-through continuous hard work, strive to realize self-worth, and win respect and recognition. Use the brand logo to express the brand culture of the event, to tap the hearts of consumers, to grasp the common concept, and to generate commercial benefits. It can be seen that the logo of Kunlun Jue is relatively representative and can be used as a reference for the formulation of brand logos in Sanda commercial events.

CONCLUSION

The brand strategy of my country's Wushu Sanda commercial events is based on Sanda events, expanding and developing related event industries, and enhancing the value of event brands, so as to carry out brand strategic planning. By summarizing the research content of each summary of this paper and the overall logical argumentation of the paper, the conclusions of this paper are summarized as follows:

The characteristics of Chinese Wushu Sanda commercial events are viewed from the perspective of confrontation and viewing: compared with the same type of domestic and foreign fighting events, the confrontation is slightly worse, and due to the restrictions of the rules, the viewing value is poor; from the professional point of view: There is a big gap in the professional level of athletes participating in Sanda commercial events, and the professional level of event site layout, clothing and protective gear is greatly different; from an international perspective: the right to speak in the international market is low; from a professional perspective: the current state policy and market demand are conducive to the development of Sanda commercial events, but there are some problems: unclear brand positioning, poor brand cultural appeal, wide communication paths, insufficient marketing process, unstable competition system, incomplete professionalization system, neglect of player packaging , the competition operation talents are not complete.

The significance of formulating brand strategic planning for Wushu Sanda commercial events is to promote the brand to become a platform for Sanda to communicate with audiences, to guide the development of event-related industries and the maintenance of existing events, to guide the brand to maximize the integration of communication resources, and to generate commercial event brands. A strong competitive advantage.

The formulation and implementation of the brand strategy planning of Chinese Wushu Sanda commercial events is divided into five links, the first link is: enhancing the core value of the brand; the second link is: standardizing the brand identification system; the third link is: optimizing the brand strategy; The fourth link is: brand extension and expansion; the fifth link is: strengthen brand management.

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TOURISM DEVELOPMENT IN PUTUO MOUNTAIN BASED ON THE CHARACTERISTICS OF RELIGIOUS TOURISTS' CONSUMPTION BEHAVIOR

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ABSTRACT

Based on religious tourists' tourism motivation, this paper investigates the personal characteristics, tourism motivation, and tourism consumption behavior characteristics and the relationship between them, with the goal of better understanding the consumption needs of different tourist groups and providing reference suggestions for tourism enterprises and scenic spots to design tourism products and formulate marketing plans.

By combining and summarizing relevant literature at home and abroad, this work constructs a research model of the link between religious visitors' tourism motives and tourism consumption behavior and advances important hypotheses. During the empirical stage, religious visitors to Putuo Mountain were used as survey subjects, and questionnaires were distributed via convenient sampling. The SPSS statistical software was utilized to carry out the research.

According to the findings, there are four sorts of religious tourists' motivations for travel: Worshiping Buddha, cultural edification, body and mind adjustment, and sightseeing. Tourist motivation varies significantly depending on gender, age, educational level, career, and religious belief. Occupation and religious beliefs influence their tourist consumption behavior significantly. The frequency of visits is positively related to the motivation for worshiping Buddha and correcting body and mind. Tourism spending is tied to the drive to modify one's body and mind. The impulse to worship Buddha and go sightseeing is favorably associated with shopping intention. The impulse to adore Buddha is favorably associated with food choice.

Keywords: Religious Tourism ,Tourism Consumer Behavior,Mount Putuo

INTRODUCTION

Religion and tourism have a close and almost natural relationship. Religious pilgrimages began as early as the 8th century B.C.: the grand and solemn "Boubatis

Artemis" festival in ancient Egypt attracted pilgrims from all countries along the Nile River; the Greek Olympia festival gradually made religious pilgrimages a worldwide activity; there was also the prevalence of the medieval period: Islamists went to Mecca and Medina; Christians went to Jerusalem, Rome, and Santiago; and traditional Hindu "forest dwellers", who leave the warmth and bondage of their families and travel around the world to become a family of mendicant monks . modern In modern society, with convenient transportation, there are more people visiting religious holy places, making pilgrimages, and conducting academic exchanges. Religious culture is an important part of traditional human culture, which influences people's ideologies, life customs, and so on, and is an important part of tourism resources. The shadow of religion can be seen everywhere in modern tourism: almost all religious holy places have become important tourist destinations; famous religious sites are also famous tourist visiting points; and large religious events have become important attraction factors for tourist places. According to statistics, there are 82 of the 180 national five batches of scenic spots in China involving religious landscapes, accounting for 45.56% of the total number.

Mount Putuo is a sacred Buddhist site in China. It is one of the four most famous Buddhist mountains, together with Mount Emei, Mount Wutai and Mount Jiuhua. The name of Putuo Mountain originates from the Buddhist scriptures, and it is written that the residence of Guanyin Bodhisattva is "Mendan Loka", which is shortened to Putuo, meaning "beautiful little white flower". The religious activities of Putuo Mountain began in the Qin and Jin dynasties, and there are many relics of primitive Taoism and its alchemy. In 847 A.D., an ancient Indian monk burned his fingers to salute Buddha and sensed the appearance of Guanyin. In 858 A.D., the Japanese monk Hui E invited Guanyin from Wutai Mountain to return home by boat, passing through the Lotus Ocean of Putuo Mountain, encountering wind and waves, but unable to do so, so he believed that Guanyin refused to go east, and left the holy statue at the side of Chaoyin Cave to worship, creating the Guanyin Temple. Later on, the temple was built by successive generations, and there were many temples. At its peak, there were 3 major temples, 88 nunneries, 128 huts, and more than 4,000 monks, and it was known as the first Buddhist country in AURORA.

The development of religious tourism in a region is to a large extent also aimed at obtaining the corresponding economic benefits, and consumption, one of the most significant features exposed to tourists, and the level of tourist consumption is one of the most relevant indicators for the tourist hosts (Xie,2019). It has been argued that non-religious believers constitute the majority of tourists who participate in religious tourism activities (Cao,2019)and the composition of tourists involves people of all ages and various cultural and educational and professional backgrounds.

LITERATURE REVIEW

Religious tourism is defined in terms of both motives and destinations, and is considered to be all tourism activities that are motivated by religious reasons and whose destination is a religious site. This definition includes two aspects: from the perspective of tourism motivation, it includes both pilgrimage motivation of religious people and cultural experience motivation of non-religious people; from the perspective of tourism destination, religious tourism activities take place in religious places, such as religious shrines, monasteries, shrines, etc.(Blackwell,2018) .

"Religious tourism should include the sum of tourism activities that people engage in for religious purposes and the various phenomena and relationships that arise from them."(Yan,2020). "religious tourism is a tourism activity with the purpose of pilgrimage and dharma-seeking. It is an ancient form of tourism that continues to this day as religious pilgrimage travel."(Bao,2020).Here both scholars emphasize the "religious purpose" as its essential characteristic.

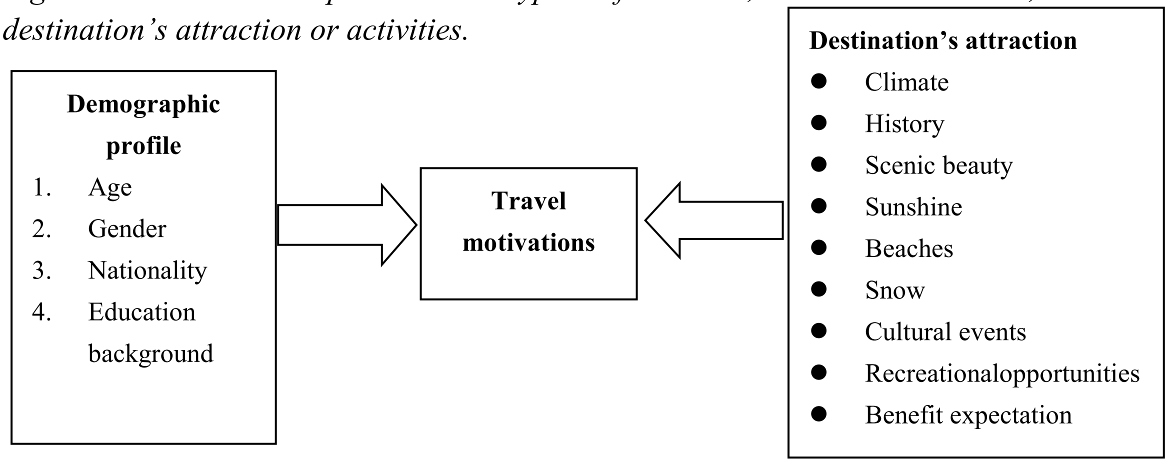
The study of consumer behavior is studied from the context of tourism, that is, the study of the consumer behavior of tourists. Therefore, the study of tourist consumption behavior also consists of two parts: the process of purchase decision and the practical process of purchase decision. Due to the specificity of tourism goods, it is decided that tourism consumption behavior has its own laws. The most basic meaning of tourism consumption behavior is: the process of selecting and purchasing tourism products and services by individual tourists or organizations in order to achieve certain purposes or motives (Zhang,2019). However, tourist consumption behavior is not only the purchase behavior of holding money, but also a special experience that is influenced by many factors, which is comprehensive, marginal, and super conventional, and its emergence, rise, persistence, decline, and disappearance can be examined continuously and uniformly from multiple perspectives at abstract levels such as psychological, geographical, social, aesthetic, economic, and human culture (Gu,2020). Wu (2016) also pointed out that although tourism consumption behavior has economic attributes, tourism consumption behavior is often not a purely economic behavior, but a complex emotional consumption influenced by factors such as social and cultural background, consumer personality and emotions, and obtaining psychological and spiritual satisfaction is a commonly pursued goal of tourism consumers.

In tourism research, this motivation concept can be classified into two forces, which indicate that people travel because they are pushed and pulled to do so by ‘‘some forces’’ or factors (Dann,2012). According to Uysal and Hagan (2013), these forces describe how individuals are pushed by motivation variables into making travel decisions and how they are pulled or attracted by destination attributes. In other words, the push motivations are related to the tourists’ desire, while pull motivations are associated with the attributes of the destination choices (Crompton, 2016; Dann, 2012). Push motivations are more related to internal or emotional aspects. Pull motivations, on the other hand, are connected to external, situational, or cognitive aspects. Push motivations can be seen as the desire for escape, rest and relaxation, prestige, health and fitness, adventure and social interaction, family togetherness, and excitement (Crompton, 2016). Tourists may travel to escape routine and search for authentic experiences. Pull motivations are those that are inspired by a destination’s attractiveness, such as beaches, recreation facilities, cultural attractions, entertainment, natural scenery, shopping and parks. These destination attributes may stimulate and reinforce inherent push motivations.

Push factors are the types of tourists in the target market.

Pull factors are the travel motivation of this market that will provide a sound basis for deciding types of attraction that should be provided at the destination.

Figure 2.1: relationships between types of tourists, travel motivations, and destination's attraction or activities.



Source: Dann,2012

CONCEPTUAL MODEL AND HYPOTHESIS

3.1 Variable settings

This paper intends to absorb relevant achievements in the field of consumer behavior research; use Putuo Mountain as a case study; design and conduct a questionnaire survey for tourists in this area; and conduct statistical research on tourists' basic information, tourism motivation, and consumption behavior characteristics. The following three objectives are crucial to the research:

1.Comprehensively comprehend religious travelers' personal traits, tourism motives, and tourism consumption behavior (including basic tourism consumption behavior characteristics, tourism consumption structure characteristics, and tourism consumption evaluation).

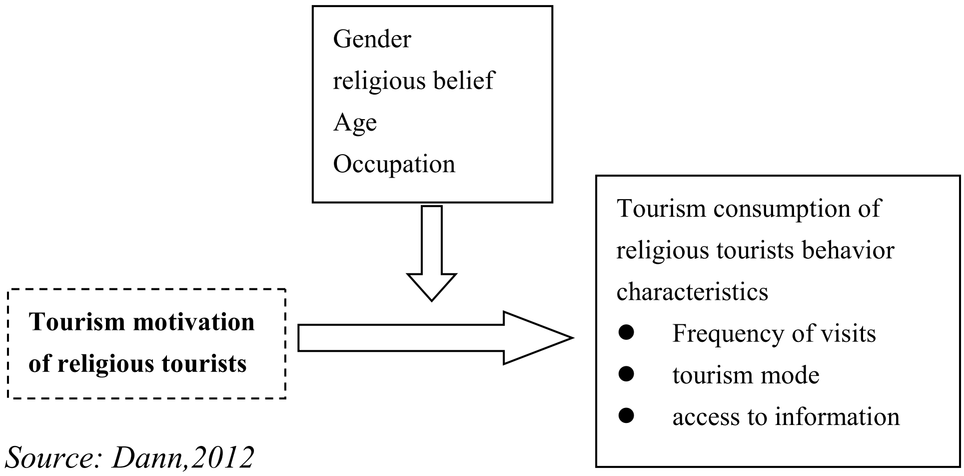
2. Investigate the relationship between religious tourists' personal characteristics and their tourism motivation and consumption behavior characteristics (basic tourism consumption behavior characteristics and tourism consumption structure characteristics).It is expected to know whether religious tourists with different demographic factors have certain differences in their tourism motivation and tourism consumption behavior.

3.Explore the relationship between tourists' tourism motivation and their tourism consumption behavior characteristics. It is expected to be known whether different tourism motivations are significantly related to tourism consumption behavior.

According to the above research purposes and by drawing on the previous research results, this study has constructed a research model of religious tourists' tourism motivation and tourism consumption behavior, as shown in Figure 3-2. This model is composed of three parts. The control variables are tourists' demographic factors, including gender, age, education level, occupation, average monthly income, and religious belief. The independent variables are religious tourists' tourism motivation, and the dependent variables are religious tourists' tourism consumption behavior characteristics. Follow-up research is carried out with this as a clue.

3.2 Conceptual model

Figure 3.1 Diagram of Framework



Source: Dann,2012

3.3 Hypothesis

Based on the setting of the primary model, the following hypotheses are formulated in relation to the needs of the study.

H1: Religious tourists with different demographic factors characteristics have some variability in their travel motivation. That is, religious tourists of different ages, religious beliefs, ages, literacy levels, occupations and incomes have different travel motives.

H2: Different travel motives of religious tourists affect their tourism consumption behavior.

METHODOLOGY

4.1 Research Methodology

4.1.1Descriptive Research

Descriptive analysis is performed to transform raw data into a form that can be easily understood and interpreted; data are rearranged, sorted, and manipulated to provide descriptive information. Describing responses or observations is usually the first form of analysis. Calculating means, frequency distributions, and percentage distributions are the most common forms of summarizing data (Zikmund, 2018).

4.1.2 Sample Survey Technique

Surveys involve asking people for information using verbal or written questions, and these people are called respondents. Questionnaires are used to collect data by telephone, face-to-face, and other communication media. The more formal term "sample survey" emphasizes that the purpose of contacting respondents is to obtain a representative sample of the target population. Thus, a survey is defined as a method of collecting primary data based on communication with a representative sample of individuals (Zikmund, 2018). In this study, the sample survey was used. A designed questionnaire was used to targeted respondents to collect data.

4.2 Respondents and Sampling Procedure

4.2.1 Target Population

Neuman (2020) stated that the target population is the units in the population that the researcher wishes to target for study.

4.2.2 Sample Size

In determining absolute sample size, statisticians have developed tables that can assist in determining sample size and the degree of confidence that the findings from the study reflect the whole population. Table 4.1 provides researchers with sample size when the population number is known. This table was developed by Krejcie and Morgan (1970).

Table 4.1 Sample sizes of Known populations

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2 800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3 500	346
25	24	130	97	320	175	950	274	4 000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6 000	361
45	40	170	118	400	196	1300	297	7 000	364
50	44	180	123	420	201	1400	302	8 000	367
55	48	190	127	440	205	1500	306	9 000	368
60	52	200	132	460	210	1600	310	10 000	370
65	56	210	136	480	214	1700	313	15 000	375
70	59	200	140	500	217	1800	317	20 000	377
75	63	230	144	550	226	1900	320	30 000	379
80	66	240	148	600	234	2000	322	40 000	380
85	70	250	152	650	242	2200	327	50 000	381
90	73	260	155	700	248	2400	331	75 000	382
95	76	270	159	750	254	2600	335	*1 000000 And above*	***384***

N is the population size. S is sample size.

4.3 Research Instrument/Questionnaire

This questionnaire contains three parts.

The first part has a survey on travelers' motivation to travel, specifically describing 18 motivational items.In this section, a 5-point Likert scale was used to measure each item, and respondents were asked to rate each item on a 5-point scale, where 1 means "strongly disagree", 2 means "disagree", 3 means "neither agree nor disagree", 4 means "agree", and 5 means "strongly agree".

The second part is related to the characteristics of tourism consumption behavior, mainly using a combination of multiple-choice questions and a 5-point Likert scale, the main items studied are: the number of trips, the way to obtain tourism information, the way to travel, and a total of three questions

The third section contains some demographic information about the background of the tourists, including four questions on age, gender, religion, and occupation.

EMPIRICAL ANALYSIS

5.1 Descriptive Statistic

1.Gender: 173 respondents (43.8%) were male and 222 (56.2%) were female who traveled to Putuo Mountain.

2.Religious beliefs: For respondents who went to Putuo Mountain, the majority of religious beliefs were Buddhism, accounting for 46.3%, followed by those with no specific beliefs, accounting for 42.8%, followed by Catholic Christians, accounting for 4.6%, and the sample size of those who believed in Islam was too low, so they were combined with those of other beliefs as others, accounting for 6.3%.

3.Age: The majority of respondents who traveled to Putuo Mountain were aged 41-50 years old, accounting for 29.6%; followed by those aged 31-40 years old, accounting for 25.8%; except for a smaller number of people under 20 years old, accounting for 4.1%, the proportion of both the 21-30 years old group and the 51 years old and above group was around 20%. Overall, the majority of Putuo Mountain travelers are middle-aged.

4.Occupation: The top four occupations of respondents who went to Putuo Mountain were corporate employees (23.8%), civil servants (19.2%), self-employed workers (18.2%), and science, education, culture and health workers (12.2%).

5.Number of visits: In this survey, the most visitors came to Putuo Mountain for the first time, with 44.3%; visitors who came for the second time and more than three times accounted for 22.0% and 20.8% respectively. Tourists who revisited accounted for 55.7%, which also fully reflected the high revisit rate of religious tourism.

6.Sources of tourism information: In this survey, it was found that 44.0% of the tourists chose Putuo Mountain to visit after being introduced by their relatives and friends. It indicates that the recommendation of relatives and friends is the most important source for Putuo Mountain tourists to get information.

7.Travel mode: In this survey, it was found that the majority of respondents traveled with friends and relatives, with 55.2%, followed by traveling with a group, with 36.7%.

5.2 Religious tourism motivation factor analysis

5.2.1 Sample reliability analysis

In this study, Cronbach's alpha was used as a measure of questionnaire reliability. In terms of reliability height, the intrinsic reliability can be evaluated by the magnitude of Cronbach's alpha coefficient. In basic research, a reliability of at least 0.80 is acceptable, in exploratory research, a reliability of 0.70 is acceptable, between 0.70 and 0.98 is high reliability, and below 0.35 is low reliability and must be rejected. The results show that the Cronbach alpha coefficient is 0.744, which indicates that this questionnaire has good reliability.

5.2.2 Religious tourism motivation factor analysis

The factor analysis in this study focused on the factor analysis conducted on the motivation of religious tourists to travel. The KMO (Kaiser-Meyer-Olkin) measure and Bartlett's Test of Sphericity were first conducted and the results are shown in Table 4-21. The results show that the KMO value is 0.857, which indicates that this sample data is suitable for factor analysis (0.8<KMO<0.9). The Bartlett's Sphere Test chi-square value in the table is 3716.977, which is large and has a probability p-value of 0, which is less than 0.01, and also shows that the travel motivation scale is suitable for factor analysis.

In this study, Principal Components Analysis (PCA) was used to select the commonality factors, and the principle of Kaiser's Eigen value was greater than 1. Moreover, to facilitate the naming and interpretation of the factors, Orthogonal Rotation (OR) was performed by the maximum variance method. The 18 tourism motivation questions were extracted into four major factors with Cronbach's α values over 0.6 for each factor, and the cumulative explained variance was 68.456%.

The factors are named and analyzed as follows:

Factor 1: Motivation to worship Buddha

This factor contains four questions: "praying to Bodhisattva for good fortune", "seeking God's wish", "seeking spiritual solace and peace of mind" and "seeking help from God to solve life The relevant questions focus on burning incense and worshipping Buddha to seek God's help, so it is named "worshipping Buddha", with an eigenvalue of 4.993, an explained variance of 27.739%, and a Cronbach's alpha reliability value of 0.83.

Factor 2: Motivation for cultural enrichment

This factor includes "like the tranquil atmosphere of Buddhist holy places", "feel the Buddhist meditation", "scientific investigation", "experience cultivation This factor consists of six items: "like the peaceful atmosphere of Buddhist holy places", "feel the Buddhist meditation theory", "scientific investigation", "experience practice", "feel the religious atmosphere" and "participate in religious festivals and rituals", and the relevant items are mainly about experiencing culture and enriching personal knowledge. The Eigenvalue is 2.815, the explained variance is 15.639%, and the Cronbach's alpha reliability value is 0.62.

Factor 3: Moderating physical and mental motivation

This factor contains three questions: "relaxation and relief of stress", "escape from daily life" and "health and wellness". The Eigenvalue was 2.316, the explained variance was 12.867%, and the Cronbach's alpha reliability was 0.60.

Factor 4: Motivation for sightseeing

This factor includes "visiting sea and mountain scenery", "learning about local customs", "enjoying religious sites", "tasting Buddhist vegetarian food", and "summer vacation". This factor contains five questions: "visiting the sea and mountains", "learning about local customs", "enjoying religious sites", "enjoying Buddhist vegetarianism" and "summer vacation".

5.3 Research hypothesis testing

5.3.1 Analysis of variance (ANOVA)

1.Gender: The t-test of independent samples of men and women showed that the two-tailed probability p-values of "pilgrimage motivation" and "transfer motivation" were 0.045 and 0.037, respectively, which were less than the significant level of 0.05. Therefore, it can be concluded that Therefore, we can conclude that there is a significant difference between "pilgrimage motivation" and "transfer motivation" in terms of gender.

2.Age：Since the categorization of age is greater than 2, ANOVA can be used to analyze the differences in the motivation of religious tourists in terms of age. The probability p-value of "pilgrimage motivation" and "physical and mental motivation" is less than 0.05 at the significance level of 0.05, and the original hypothesis is rejected, indicating that there is a significant difference in this motivation factor among tourists of different ages.

3.Occupation： The significance value of both the motivation factors of pilgrimage and ritual and conditioning is 0.000, which is less than 0.05, then the original hypothesis is rejected, indicating that there is a significant difference in this motivation factor among different occupational travelers.

4.Religious beliefs： The significance value of 0.000 for the motivation "pilgrimage to Buddha" indicates that there are differences in the treatment of this type of motivation by tourists with different religious beliefs.

5.3.2 Correlation analysis

Correlation analysis is a statistical method to describe the mutual relationship between two variables in order to explore the linear correlation between the variables. In this paper, we propose to use Pearson simple correlation analysis to study the correlation that exists between religious tourists' travel motivation and their travel consumption behavior characteristics.

The frequency of visitation was positively correlated with "pilgrimage and ritual motivation" and "adjustment of mind and body motivation", and was not significantly correlated with the other two types of motivation. The correlation is "pilgrimage motivation" > "physical and mental adjustment motivation", which indicates that the stronger the "pilgrimage motivation" and "physical and mental adjustment motivation", the higher the frequency of visitation. On the one hand, it shows that Putuo Mountain has a stable Buddhist faithful, on the other hand, the consumption ability and leisure consciousness of the residents in the surrounding cities are increasing, and a weekend trip market has emerged in the surrounding cities. Putuo Mountain, the "Land of Buddha in the Sea and Sky, Golden Sands of the Blue Sea", attracts more and more travelers to visit again and again in their leisure time.

From the above correlation analysis, it can be learned that there are some differences in the characteristics of tourists' consumption behavior including basic tourism consumption behavior characteristics under the role of different tourism motives, i.e., the hypothesis 2 of this study is verified: different tourism motives of religious tourists affect their tourism consumption behavior. Among them, the frequency of tourists' visits is significantly related to their travel motives.

CONCLUSION AND PERSPECTIVES

6.1 Research Conclusion

1. Analysis of personal characteristics of Putuo Mountain travelers

In this study, the majority of respondents who went to Putuo Mountain were female, accounting for 56.2%; the majority of religious beliefs were Buddhism, followed by non-believers; the majority of ages were 41-50 years old, followed by 31-40 years old; the top three occupations were corporate employees, civil servants and self-employed people.

2. Analysis of travel motives of Putuo Mountain tourists

The main motive of tourists to Putuo Mountain is "to worship the Bodhisattva and pray for luck", which proves that Putuo Mountain is a Buddhist holy place and the belief of Guanyin Daishonin in ties with the four seas and universal beings is widely spread and the incense is flourishing; the second is "to visit the sea and mountain scenery"; the second is "This shows that Putuo Mountain is not only a place to burn incense and worship Buddha, but also a place for visitors to completely relax, feel the purity and elegance of Buddha's country, seek relief from troubles and purify their souls. spiritual home. The weaker motives are "summer vacation", "understanding local customs" and "scientific research".

3. Analysis of the characteristics of tourism consumption behavior of religious tourists

In this survey, the majority of tourists revisit old places; after being introduced by relatives and friends, the largest proportion of tourists choose Putuo Mountain to visit; traveling with friends and relatives accounts for the majority, followed by traveling with a group; in Putuo Mountain, tourists are very interested in "pilgrimage to incense", "island scenery "and "Buddhist culture". Most of the travelers are willing to come back to Putuo Mountain for another trip.

4.Through the correlation analysis of tourism motivation and consumption behavior characteristics of Putuo Mountain tourists, we found that. The frequency of visitation is correlated with "pilgrimage motivation" and "adjustment of mind and body motivation", but there is no significant correlation with the other two types of motivation, and the correlation size is "pilgrimage motivation" > "adjustment of mind and body motivation". >The correlation between "pilgrimage motivation" and "mind-body motivation" was higher than "mind-body motivation", indicating that the stronger the "pilgrimage motivation" and "mind-body motivation", the higher the frequency of visitation.

6.2 Perspectives

Combined with the research results, this paper mainly puts forward marketing suggestions from the following three aspects:

1. Deep and comprehensive development of tourism products

Carry out comprehensive image planning for Putuo Mountain, establishing an overall image of both natural and cultural landscapes with Guanyin culture as the main focus and marine culture as a supplement. Tourists' preferences for scenic spots are improving as tourism concepts are constantly updated. The main tourist activities in Putuo Mountain at the moment are sightseeing and pilgrimage. Putuo Mountain is the Guanyin Bodhisattva ashram, but tourists go there to "see the temple-burn incense-kowtow," and Putuo Mountain is also a "see the temple-burn incense-kowtow" destination. The format is boring, the projects are repetitive, and the tourists are uninterested. With the rapid rise of experiential and leisure tourism, the types of tourism products available in Putuo are changing.

2. Cultivate Buddhist cultural tourism products

Cultivating excellent Buddhist cultural tourism and vigorously cultivating leisure tourism in the form of learning and experience benefits not only the development of its own tourism market, but also does not contradict the Buddhist doctrinal spirit of "promoting Dharma and benefiting life" and "giving all life's happiness and suffering with great compassion."

Specifically, a theme of tourist participation (such as "being a monk for a day, hitting the clock for a day") is required so that tourists can fully immerse themselves in a rich and solemn religious atmosphere. Tourists eat vegetarian food, stay in a monk's house hotel, listen to the morning bell and evening drum, chant scriptures, watch the smoke, and follow strict laws at this point. They purchase Buddhist tourism commodities such as Buddha tea and Guanyin cake to make tourists feel solemn. In a revered state of mind, you can get rid of random thoughts, forget about your problems, and achieve mental relaxation, purification, and spiritual detachment.

3. About tourism shopping and entertainment consumption

For tourism operators, tourism shopping is the largest part of the components of tourism products that can tap the potential of economic benefits. The development of tourism commodities in Mount Putuo should fully focus on relying on the local (Zhoushan City) resources and cultural advantages, closely contacting the market, strengthening innovation, improving packaging, and introducing the concept of cultural development, so that the development of tourism commodities can become an important supplement to local cultural tourism, cultural publicity, and cultural construction. Focus on the development and improvement of the following series of characteristic tourism commodities: Buddhist culture commodity series; Fishery culture commodity series; Native product series; Tourism cultural products series.

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ANALYSIS ON THE DEVELOPMENT OF IN-DEPTH TOURISM IN XIJIANG QIANHU MIAO VILLAGE

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ABSTRACT

With the development of modern science and technology, people's living standards are constantly improving. In order to ensure a high-quality life, we must work hard to increase our economic income. This invisibly increases life pressures such as employment, income, house purchase, marriage, sojourn, and emotions. Under multiple pressures, we must find a way to release the pressure, so that urban consumers can return to the countryside and experience ethnic customs in depth. As far as rural tourism is concerned, rural tourism has developed vigorously in the current era of experience economy. However, because the development of rural tourism projects is too commercialized, the experience value of rural tourism is insufficient, which reduces the tourism experience of tourists. Ignoring the most authentic way of experience, this way is often the way people need to travel the most. The key is to create a rural in-depth tour mode without the organization, introduction and guidance to solve the problems encountered in the development of rural tourism. This article takes Xijiang Qianhu. Take Miao Village as an example to conduct research.

Keywords: Rural revitalization, innovative model of in-depth travel, Miao culture

INTRODUCTION

The reason for the research is that rural development is increasingly commercialized, and the over-development of Xijiang Qianhu Miao Village has resulted in the loss of the original rural ecology. Controversy among the masses, in this regard, starting from the original ecology, creating an innovative model of in-depth tourism integration of "rural tourism + homestay + research". The local villagers in Xijiang Village adapted their local conditions and transformed their houses into test bases to innovatively develop original ecological tourism projects. , allowing consumers to truly experience the Miao folk customs, and at the same time, they can walk in, take them out, and find their own "source" in the countryside.

LITERATURE REVIEW

2.1 Miao culture

Xijiang Qianhu Miao Village is located in Nangui Village, Xijiang Town, Leishan County, Qiandongnan Miao and Dong Autonomous Prefecture, Guizhou Province. It is 36 kilometers away from Leishan County and 33 kilometers away from Qiandongnan Prefecture. It consists of more than ten natural villages built on the mountains. Connected into a piece, surrounded by mountains on all sides, overlapping peaks, terraced fields follow the mountains and connect directly to the sky, and the Baishui River passes through the village, dividing the Xijiang Miao Village into two.

Xijiang Qianhu Miao Village built unique wooden stilted buildings in the middle of the mountain. More than 1,000 stilted buildings are stacked with mountains and peaks as the terrain changes. The main attractions in Xijiang Qianhu Miao Village include Xijiang Miao Museum, Drum Head House, Hulu Head House, Brewing Workshop, Embroidery Workshop, Batik Workshop, Silver Decoration Workshop, Observation Deck, Karge Ancient Road, Pastoral Sightseeing Area, etc. Scholar Yu Qiuyu said: "Answer everything with beauty", vigorously develop tourism, and promote the rural revitalization and development of Xijiang Miao Village.

2.2 Rural Revitalization Strategy

The "rural revitalization" strategy is an important decision based on my country's national conditions and rural development needs. In 2017, General Secretary Xi Jinping pointed out in the report of the 19th National Congress of the Communist Party of China that it is necessary to always take solving the "three rural" issues as the top priority of the whole party's work, and fully implement the "rural revitalization" strategy. The No. 1 Central Document in 2018 is centered on the "rural revitalization" strategy, which further highlights the support and importance of the party and the state for rural development. In March of the same year, Premier Li Keqiang pointed out in the government work report that the "rural revitalization" strategy should be vigorously implemented. In September 2018, in accordance with the 20-character policy of the "Rural Revitalization" strategy, the "Rural Revitalization Strategic Plan (2018-2022)" was prepared.

In the central document issued in 2018, the guiding ideology, goals and tasks of the "rural revitalization" strategy were clearly explained. Rural development must closely focus on the 20-character policy of “prosperous industries, livable ecology, civilized rural customs, effective governance, and prosperous life”, and implement the “three-step” development strategy of rural revitalization. By 2020, an institutional framework and policies will be basically formed By 2035, the modernization of agriculture and rural areas will be basically realized; by 2050, the comprehensive realization of strong agriculture, beautiful rural areas, and rich farmers. Implementing the "rural revitalization" strategy is to alleviate my country's "three rural" problems, improve the living environment in rural areas, and increase the income of the people , a major measure to narrow the gap between urban and rural areas.

RESEARCH METHODS

3.1 Experience Economic Theory

Experience economy is a social and economic form that uses commodities as tools and services as forms of realization to attract consumers. Due to the gradual commercialization of services and the tendency of services to be standardized and unified, these cannot meet people's increasingly personalized consumption desires. People are more willing to transfer money expenditures to an economic form that can not only enhance personal value, but also achieve a good sensory experience. This is the experience economy.

According to the theory of experience economy, in the process of in-depth development of tourism in Xijiang Qianhu Miao Village, it is necessary to improve the participation, interest and education of Miao cultural tourism, enrich the form of Miao cultural tourism experience, and through the active participation of tourists, arouse resonance and let tourists You will feel something from the tour and gain something from the tour, increase the rate of repeat customers of Xijiang Qianhu Miao Village cultural tourism, and improve the satisfaction of Xijiang Qianhu Miao Village cultural tourism.

3.2 RMP (Amp) Analysis Theory

In the RMP theoretical analysis framework, R stands for Tourism Resources Analysis, M stands for Market Analysis, and P stands for Product Analysis. This is an analysis theory and technology centered on tourism products. In tourism development, after RC resource analysis and M "market" analysis, the P" product analysis is carried out on this basis, and a planning scheme 4 centered on tourism products is proposed. Using RMP analysis method, this paper studies the resources and market of Miao cultural tourism in Xijiang Miao Village, focusing on the Miao cultural tourism products in Xijiang Miao Village. The characteristics of local tourism resources and the in-depth development plan of Miao cultural tourism in Xijiang Miao Village are in line with the market development trend to provide the basis.

3.3 Tourism sustainable development theory

Sustainable development theory refers to the development theory that meets the needs of the present without harming the needs of future generations. In the process of tourism development, we must first ensure sustainable development in all aspects of ecology, resources and society. Tourism development should not exceed the carrying capacity of the environment, promote the sustainable utilization of tourism ecology, resources and society, and ultimately achieve the overall social, economic and environmental benefits. Sustainability.

To develop Xijiang Qianhu Miao Village cultural tourism, it is necessary to improve the basic supporting facilities. According to the theory of sustainable tourism development, the in-depth development of Xijiang Qianhu Miao Village tourism cannot be at the expense of destroying the natural environment, and it is necessary to fully recognize the Xijiang Qianhu Miao Village culture. The importance of eco-tourism resources should not be blindly developed and destroy the local natural ecology.

3.4 Theory of Industrial Integration

Industrial integration refers to the process of mutual penetration, crossover, and final integration between different industries within the same industry or between different industries, gradually becoming a new industry.

This paper mainly uses the theory of industrial integration to study the integration of tourism industry and agriculture to form new industrial forms such as sightseeing agriculture, experience agriculture, and ecological agriculture. The Humiao Village industry has created a relationship of competition and cooperation between the tourism industry and the Xijiang Qianhu Miao Village industry, extending the value chain of the Xijiang Qianhu Miao Village industry, enhancing the competitiveness of the Xijiang Qianhu Miao Village industry, and increasing employment opportunities for local residents. , to promote the rationalization of the cultural tourism industry structure of Xijiang Qianhu Miao Village, and to promote rural revitalization.

3.5 The theory of tourism culture

"Tourism culture" and "culture" are both a process and a result. It is necessary to emphasize its dynamic interaction, but also cannot ignore its static objective existence. Tourism culture is the sum of the material and spiritual achievements of tourism subject, tourism object and tourism media and their interaction.

There is no consensus in the academic circle on the understanding of the cultural structure of tourism. At present, Mr. Lu Yunting's three-element structure theory is more influential in academia. According to the three-element structure theory of tourism culture, in the process of integration and development of Xijiang Qianhu Miao Village industry and tourism industry, tourist attractions and tourism enterprises belong to tourism mediators. Therefore, tourist attractions and tourism enterprises need to create a good cultural atmosphere in terms of management, service, education, policy and industry regulations. At the same time, it should also be clear that tourists belong to the main tourism culture, which should be based on tourists' different cultural qualities, interests and hobbies. , aesthetics, values, personality psychology, behavior, political opinions, ideological beliefs, as well as the occupation and life background of tourists to provide different tourism services; Food, folklore, literature and art, landscape and other different perspectives are cut in, in order to attract more tourists to travel, thereby promoting the better integration and development of the Miao cultural industry and tourism industry in Qianhu Miao Village in Xijiang.

PROMOTE INDUSTRIAL DEVELOPMENT AND INNOVATE IN-DEPTH RURAL TOURISM MODE

4.1 Butler Mode:

The housekeeper is responsible for the safety of the guests, providing the necessary supplies, translation, etc. for the guests. There are three modes to choose from: individual, family, and team. The housekeeper and the host will lead the itinerary for one, two or three days:

Feeding of livestock: Make food for animals with the owner of the homestay and feed them such as chickens, ducks, cows, pigs, etc.

Field participation in farming: follow the owner of the homestay to take care of the daily life of the farmland; plant or pick crops, follow the owner of the homestay to manage the crops, there may be modes of fertilization, planting, picking, etc.

Portable shooting: During the period of in-depth experience, the whole process of recording and shooting will be remembered; there are two types of photography and videography.

Food preparation: The homestay owner guides the preparation of dishes using the ingredients obtained in the vegetable fields or fields, and can only use the original processing utensils of the homestay.

At night, you can choose to participate in local folk customs activities according to your own interests and hobbies: old people tell stories, stop at home, and Miao nationality love songs duet

4.2 Miao intangible cultural heritage integration experience mode:

Handmade experience such as embroidery and batik: The host will lead you to the local area to watch and create simple embroidery or batik works together with non-genetic inheritors

Silver jewelry experience: The host will lead you to the silver jewelry intangible cultural heritage base, visit and learn about silver jewelry casting, learn to make your own silver jewelry samples, save or sell them.

4.3 Ethnic festival culture experience mode:

Special festival food production: making glutinous rice cakes, making rice wine, making rice dumplings;

Miao etiquette learning; understanding of Miao sacrificial culture; participation in Miao festivals (you can participate when there are festivals);

Miao musical instruments and dance learning: blowing reeds, Miao dance.

CONCLUSION

In summary： Grasp the connotation of authenticity and strive to present the elements of authenticity. Deeply develop the tourism model, minimize the difference between the rich and the poor in rural areas, increase the employment rate in rural areas, and attract entrepreneurs, college students and young people with aspirations to start businesses and innovate in rural areas. Build a diversified new countryside, build an original ecological in-depth tourism platform, spread the in-depth experience culture of rural tourism, promote the development of rural tourism, further enrich the ecological culture of rural tourism, expand the tourism market, and help rural revitalization.

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academic attitudes and realistic teamwork styles. , encouraged me to practice and innovate boldly, and encouraged me to revise my ideas and research methods during the revision process, and at the same time gave me confidence and affirmation, so that I not only accumulated relevant knowledge, but also exercised a positive and mindful attitude. The most sincere thanks to the team members!

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Xu Lidi. (2020). Relying on rural tourism to build a modern agricultural industry system as soon as possible,With its own characteristics, the strategic goal of promoting industrial prosperity will be realized as soon as possible.

Luo Fangcheng. (2020). Focus on in-depth tourism construction, the creation of new tourism formats, personnel training, etc., pay attention to the construction of rural tourism service platforms, and achieve sustainable development of the rural tourism industry.

Fang Yuqi and Dong Bin. (2020). This paper proposes a path for the in-depth development of rural tourism from the aspects of scientifically planning the construction of scenic spots, strengthening infrastructure and creating characteristic brands, in order to better promote the in-depth development of rural tourism.

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TOURISM PERFORMANCE BRAND COMPETITIVENESS IN ANHUI PROVINCE

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ABSTRACT

The development of Anhui tourism performance brand has broad space and cultural value,which can better promote local cultural dissemination and economic development.This paper uses the niche analysis method to calculate the niche width and overlap,and finally calculates the competitiveness of the tourism performance brand development.The results show that the competitiveness of Anhui's tourism performance brands is different from north to south.In the process of actual tourism performance,there are problems such as low brand communication,weak brand innovation ability,and strong brand business dependence,resulting in relatively weak brand competitiveness of Anhui tourism performance.Therefore,the tourism performance brands should increase brand promotion efforts,deepen brand innovation,tap brand cultural resources,and strive to improve the communication,value and cultural tourism attributes of Anhui tourism performance brands,so as to enhance the comprehensive competitiveness of Anhui tourism.

Keywords: tourism performance; brand promotion;brand innovation; cultural and tourism integration; brand competitiveness

INTRODUCTION

1.1 Battleground of the study

With the development of tourism performance industry, the brand effect of tourism performance has become increasingly prominent.In the early stage of brand effect research, some scholars analyzed the importance of the brand construction of tourism performance products(XiaoYan Li,2007)and discussed the strengthening of brand construction in the process of tourism performance product development(Mingjie Chen,2005). In recent years, some scholars have researched on how to build tourism performance brands, for example,Xiulin Wu and Huijun Chen(2011) researched on the construction and promotion of tourism performance industry brands. Some scholars have carried out deeper research by combining relevant theories, such as Meihua Long(2013) from the tourist perception, Hui Shu(2014) from the influence on tourism loyalty, Yuanyuan Zhang(2013) from the ecological niche perspective,Wei Huang(2015) using structural and non-communication methods.The structural method focused on tourism brand image and personalization.With the deepening of research, scholars began to study the brand operation management of tourism performance products.The descriptive, conceptual, structural model and mathematical statistical research methods of tourism performance brand competitiveness were mainly used(Lin Lu,

1997&Dann G.et all,1988). Most are the qualitative research.

It is lack of quantitative empirical research, especially model statistics.It has integrated and arranged excellent cultural resources to form a tourism performance brand with local characteristics in Anhui province,which will attract more tourists and promote local economic development while disseminating culture.To evaluate the tourism performance brand competitiveness is valuable.

1.2 Research gap

The research reconstructs an tourism performance brand competitiveness index system on the basis of consulting experts, references and field research,which adds negative factors such as customer complaints and environmental pollution, and uses SPSS22.0 software for quantitative analysis to more objectively reflect the reality of tourism performance brand competitiveness.

1.3 Research question

RQ1:How to calculate the niche breadth of tourism performance?

RQ2:How to determine the niche overlap of tourism performance?

RQ3:How to analyze the influence of evaluation factors?

1.4 Research objectives

It studies tourism performance brand competitiveness in Anhui Province. Based on the profound cultural heritage, the regional characteristics of theatrical performance art are obvious, for example Huangmei Opera, Hui Opera, Fengyang Huagu, etc.; the characteristic literature and art have developed widely, such as Xin'an Neo-Confucianism,Huizhou Pu Xue, Huizhou Tea Ceremony, Huizhou Dialect,Huizhou Printmaking, Huizhou Architecture, Huizhou Three Carvings.To determine the competitiveness of tourism performance brands,and distinguish the competitiveness of different tourism performance projects is very important.The main objectives are formulated following:

RO1: To calculate the niche breadth of tourism performance.

RO2: To determine the niche overlap of tourism performance.

RO3:To analyze the influence of evaluation factors.

1.5 Significance of the study

Introducing the brand niche measurement and its evaluation method to measure the width and overlap of tourism performance brands,which not only broadens the application field of brand niche, but also enriches the relevant theory of brand niche. It will explore strategies suitable for its brand competitiveness enhancement, and provide a certain reference for the development through the brand ecology of tourism performance in Anhui Province.

LITERATURE REVIEW

2.1 Current situation in other Countries

2.1.1 Authenticity

In terms of whether tourism performances are real.Tourism performance is created through art forms for tourists to enjoy,it is not real(Dean MacCannell ,2008).It is found that the villagers' performances are very different from their real life, and the performances lacked authenticity after studying the tourism of Tanna Island(Connell,2007).Tourism performance is created to meet the needs of tourists, not the display of local original culture.In terms of whether the authenticity is need in the tourism performance.

Williams(1994) believed the performances are mainly to show the local culture in the tourism industry, it must be real.The function of tourism performance was excessive focused on,but tourists' perception was ignored.Wang(1999) thought that the experience gained from travel activities are not all real.He gave excessive attention to the perception and experience of tourists,but ignored the impact of tourism performance products on local culture, etc.In terms of the authenticity of tourism performances including presentation methods and presentation content.The form can be presented through staging(Cohen,1989&Chhabra Healy and

Sills,2003).The content can be decided by folk art stakeholders or local residents(Hiroyuki,H.,2003&Jes- sica.Anderson.Turner,2004);

it also should be judged by both the audience and the performers

(William Saxton,1998&Richard Handler,1998&Everett,2016);

it also should be decided by the organizers and performers

(Ringer,1998).The “authenticity”can be expressed in the form of a stage, and the content of the performance should not be decided by one party alone, but needs to be determined by the organizer, participants,audience and other parties through discussion.

2.1.2 Influence of traditional culture

The protection and inheritance of traditional culture has always been concerned and discussed in the academic circles.Peter Dunbar—Hall(2001)believed that ethnic music and dance can facilitate the traffic between local residents and tourists in the Bali island,while allowing tourists to feel the culture of Bali island.

Jessica.Anderson.Turner(2004)thought that tourism performances can integrate local culture with tourists.Tourism performances can enhance the attention of tourists and local residents to local culture, which provides new ideas for the protection and inheritance of traditional culture.The different views on the impact of tourism performance on traditional culture appeared.For example,

tourism performances could rob the art form of some of its hallmarks noodle(Tuchman－Rosta,C.,2014);tourism performances

was a way of interpreting cultural heritage(Charassri &Naraphong,

2004).Clendinning,E.(2016) believed that the tourism performances had promoted the better development of traditional culture through the study of the performances in Bali island.Some scholars also studied the impact of tourism performances activities on traditional cultural development.Cohen(1988) believed that tourism performances endowed local culture with new connotations by providing tourists with innovative cultural products.Altman(1989) believed that the indigenous dances were the expression of the original ecology and were an important part of the cultural heritage under the diversified background .

2.1.3 Influence on of tourism destinations

In terms of impact on tourism development.Donald Get (1991)believed that tourism performances could help promote the development of tourism.Zhao,X.(2011)believed that tourism performances provided sustainable development impetus for tourism development.Zeppel and Hal (2001)pointed out that tourism performance could eliminate the seasonal impact of tourism.In terms of impact on local economic development.On the one hand, tourism performances could directly drive the growth of the destination economy.For example, the economic income obtained from Broadway in New York and musicals in the West End of London would directly drive the growth of the local economy.On the other hand,tourism performances could indirectly drive the growth of the destination economy,and could provide employment and business opportunities for the residents of the tourist destination(Jessica Anderson.Turner,2004).Kelly,P.R.(2003)pointed out Bethel

Center for the tourism performances as a catalyst for rural economic development.In terms of tourism destination.Richard Prentice(2003)pointed out that festival tourism could easily affect the image of tourist destinations, and the original image could be changed through tourism performances.SouJ.P.U.,Vin- nicombe,

T(2016)explored how tourism performances could reshape the brand image of the destination by assessing the feasibility in Macau.

2.2 Current situation in China

2.2.1 Tourism performance products

Yiting Zhuge and others(2005) put forward the strategy of high-quality tourism performance products from the market, culture, resources and government.Ying Ma(2016)optimized the

development ideas of tourism performance products in Inner Mongolia from different resource types,product types,and regional tourism performance resources development.It was mainly focused on “phenomenological strategies” and “conclusions based on problems”.The research results had one-sided and utopian questions.

2.2.2 Marketing

At the macro level,the corresponding improvement measures had been proposed after summarizing the experience or lessons from the case.Fang Wen(2013)analyzed the problems existing in the marketing of Nanjing tourism performances,and discussed the relevant strategies for starting new media marketing based on new media platforms.Jingcai Lv(2008) discussed the marketing methods and the characteristics and elements they must have from the tourism brand cultural marketing.Wen Qin(2010)took Xiangxi tourism performance as an example, and studied the cultural marketing strategy of folk custom areas from the tourism resources.At the micro level,it mainly focused on the marketing methods and positioning of tourism performances.Wen Qin,Lijuan Xu et al.(2010) discussed the multiple marketing methods of tourism performance from the enterprises.Xin Li (2010) analyzed it from the specific cultural environment where tourism performances are located,and discussed that the market positioning should be consistent with its cultural environment.

2.2.3 Satisfaction of tourists

Xiaoyun Yao(2010)established a tourist perception model of landscape performances by the gray system theory;Jie Lian(2010) studied the tourist satisfaction of urban theater performances and established a tourist viewing experience satisfaction index system;

Shitai Jiao(2013)constructed a tourist perception index system for evaluating ethnic cultural tourism performances products by taking ethnic cultural products as the object;Haoqiang Liu(2014)designed and developed a quality measurement table for tourism performance products from the tourists' perception;Mengxue Zhan(2016)believed

that tourists' perception was affected by internal and external factors, and the key to maintaining and improving tourism performance was the continuous innovation of its content.

2.4 Underpinning theory

2.4.1 Comparative advantage theory

It originated from the absolute advantage theory of Adam Smith(1700s),the founder of the century classical economics, developed from the comparative cost theory of the century classical school David Ricardo(1800s)and the century neoclassical school Heckscher Ohlin's(1900s)factor endowment theory.The application in tourism is to emphasize the resource endowment condition,that is, the attractive attribute of tourism resources.It refers to the natural and artificial endowment conditions of a destination,including natural and artificial resources.To a certain extent,comparative advantage determines the development trend of tourist destinations, which can be used to measure the competitiveness,and plays an important role in shaping and enhancing the competitiveness.

2.4.2 Competitive advantage theory

In the early1980s, American economist Michael Porter put forward the theory of competitive advantage.The application of the theory in tourism destinations is different from the traditional view that emphasizes the characteristics of resources,emphasizing the role of management factors in the competitiveness of the destination,not only the current number of tourists or tourism revenue and other explicit competitiveness,more emphasis is placed on the dynamic development ability of the tourism industry in the competitive market, that is,the potential competitiveness.It can make up for the deficiency of the comparative advantage theory and give more flexible space for the destination to enhance its competitiveness, such as adopting low-cost and differentiated development strategies.

2.4.3 Tourism system theory

Tourism system is the use of systems theory to study tourism issues.The viewpoint of tourism system theory requires researchers to regard tourism as an interdependent and interacting system with balanced advancement and coordinated development.The earliest research is that Professor Gann(1972&2002),a famous American tourism planning expert,who proposed the concept of tourism system and a dynamic tourism functional system model composed of tourism attractions,services and facilities, transportation, information, guidance, and tourists.It reflects the essence of the tourism system.

2.4.4 Sustainable development theory

The"United Nations Conference on Environment and Development" (UNCED) achieved two important results: "Earth Charter" and "Agenda 21"in June 1992,marking the transition of sustainable development from theoretical research to practical exploration.The theory of sustainable development is reflected in tourism as sustainable development of tourism.To realize the vigorous development of tourism,we must take sustainable development as the fundamental starting point and ultimate goal, and combine the development and construction of tourism with sustainable protection.It emphasizes taking into account the sustainable development of tourism ecology,tourism economy and tourism society.

2.5 Conceptual framework

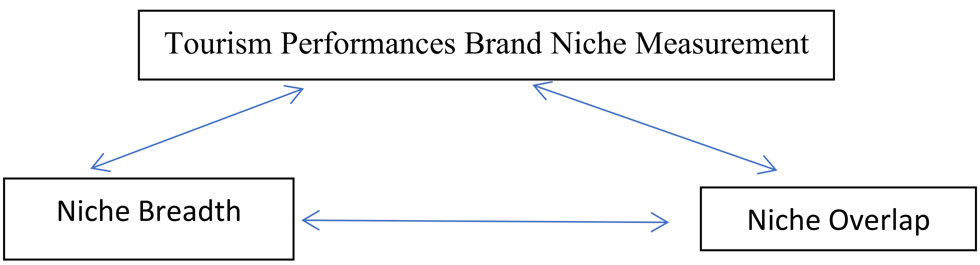

Figure 1 Brand Competitiveness Evaluation Framework

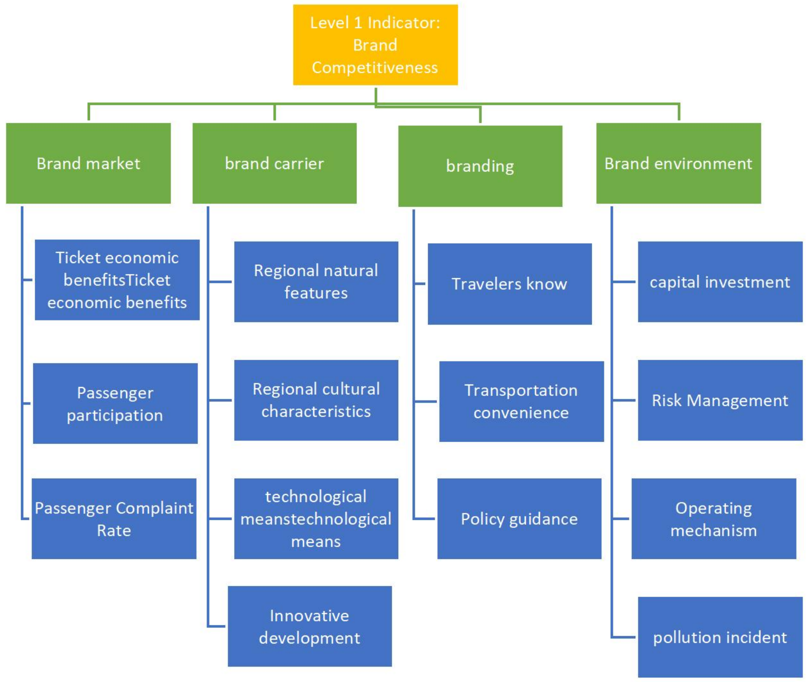

Figure 2 The evaluation index system of brand competitiveness

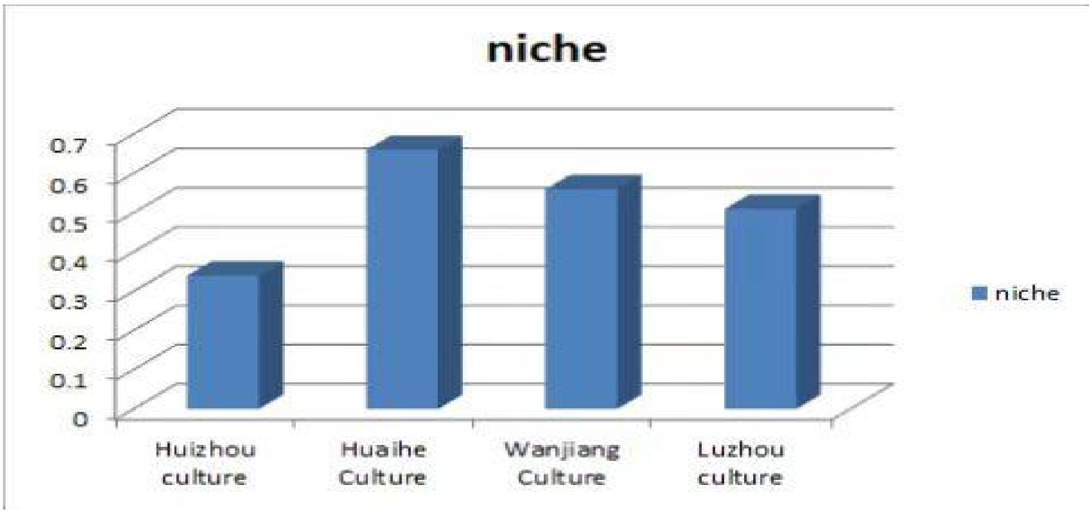

Figure 3 Niche breadth of tourism performances in Anhui Province

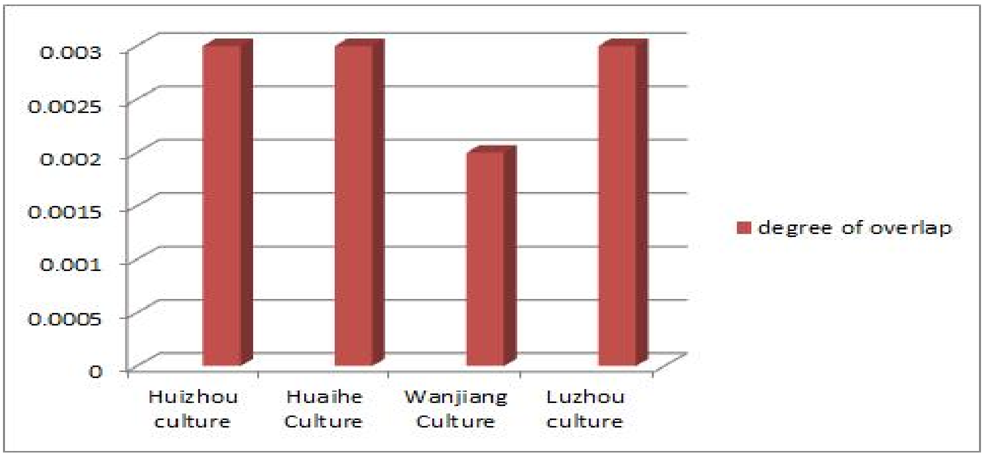

Figure 4 Niche overlap of tourism performances in Anhui Province

2.6 Hypotheses

Based on the conceptual framework in Figure 1,two hypotheses are proposed to achieve the research objectives 1 and 2. The two hypotheses are as follows:

H1 : Niche breadth has a positive impact on the competitiveness.

H2 : Niche overlap has a negative impact on the competitiveness.

RESEARCH METHODOLOGY

A quantitative and qualitative research methods are considered in this study.Data are collected from 17 cities including Huizhou cultural district,Luzhou cultural district,Wanjiang cultural district and Huaihe cultural district in Anhui province;A self-explanatory questionnaire was distributed to 350respondents, and 280 questionnaires were fully filled by respondents.The 100 usable questionnaire forms represent a sufficient number as suggested by Hatcher (1994),who recommended that the number of respondents should be either 100 or five times compared to the number of items,whichever is greater.Probability sampling technique is used,data are collected from the tourism scenic spots, parks, museums,theater and other places,Anhui Statistics Yearbook,China Tourism Statistics Yearbook,and official website of the Municipal Culture and Tourism Bureau .

Taking the tourism performance itself as the evaluation target layer S1;taking the external environmental conditions as the evaluation target layer S2,to construct a brand competitiveness index evaluation system for the development of tourism performances.It uses the factor analysis method to personalize the weighting of the factor layer,performs preliminary processing on the original data of the evaluation target,"dimension reduction"initial variables,and normalizes the data,analyzes the ecological niche and ecological overlap of the evaluation target,and integrates them. The evaluation results of competitiveness indicators are obtained and quantified in the form of a percentage system to ensure that the evaluation has more practical guiding value.Furthermore,the reliability and validity of the theoretical model are tested. The SPSS is appropriate according to Chuangxin Li et al.(2008),Yujie ye(2012) and Tong Yu(2016).SPSS 22.0 will be used in this research.

RESULTS AND FINDINGS

4.1 Communication is low

Anhui Province is located in the middle and lower reaches of the Yangtze River and Huaihe River,and belongs to the hinterland of the Yangtze River Delta,but its tourism performance brand development momentum is not as good as that of Jiangsu Province and Zhejiang Province. Due to the geographical location and jurisdiction,when tourists choose tourist destinations,they will give priority to Jiangsu Province and Zhejiang Province,which have more obvious cultural characteristics of tourism performance brands and more tourist attractions.The promotion of tourism performance brands should be the simultaneous efforts of the government,enterprises and the public to carry out multi-channel publicity,rather than single-level brand promotion by a single party. However,the current propaganda and dissemination of tourism performance brands mainly takes the government as the main body of propaganda.The enterprises and the public are weak in the promotion of local tourism performances,and some local people themselves do not understand Huangmei opera,pendant opera, flower drum lanterns and so on,resulting in a significant reduction in the brand's communication efforts.Although“Hui Yun”combines dance,acrobatics,Hui Opera,Peking Opera, Huagu lanterns and other performances features,some tourists will not choose to watch the performance without knowing it due to the low level of communication.

4.2 Innovation is weak

The content of the featured performances of Anhui tourism performances will be adjusted according to the feedback of tourists and the background of social development.However,in order to retain the characteristics of Huangmei Opera,changes in content alone in the process of program innovation are not enough to enhance brand competitiveness.At the same time,the performance forms,service methods and brand culture of some featured performances have always maintained the original style,and there is a problem of a single performance style,which cannot be integrated with the thinking of contemporary young people,resulting in a gradual decrease in the number of tourists watching the performances.

4.3 Strong commercial dependence

Although the development of Anhui's tourism performance brand has achieved initial results,it still lacks in-depth integration, and the policy system for cultural tourism development is not perfect, resulting in tourism performance that is overly dependent on commerciality and revenue-oriented,and has not been formed to enhance the tourism performance brand.Due to the lagging support system,tourism performance brands can not achieve efficient supply of the cultural tourism industry,and the correlation between tourism and culture is poor.Meanwhile,tourism performance brands have insufficient local influence and radiation capacity,resulting in a weak integration effect of “culture & tourism”in Anhui Province.

CONCLUSION, DISCUSSION AND LIMITATION

5.1 Conclusion

5.1.1The breadth of niche

The breadth of the brand niche refers to the sum of there sources of each dimension utilized by the tourism performance brand.The larger the B value of the Huaihe Culture brand niche width measurement result,the narrower the brand niche is,indicating

that the brand is weaker.The B value of Huizhou culture market dimension is lower than the B value of other cultural districts.The B value of the brand niche of Wanjiang culture is higher than that of Huizhou culture,but lower than that of Huaihe culture and Luzhou culture,indicating its brand niche of carrier dimension.The width is in the upper middle position.According to the overall calculation, the ecological niche of Anhui tourism and performances brands from south to north,the B value is getting bigger and bigger,and the brand is weaker.

5.1.2 Overlapping of the niche

The results is that the overlap of niches in each dimension of the brands of each cultural district:Huizhou Cultural District has the highest degree of overlap in the market dimension,followed by Wanjiang Culture,which is due to the number of tourism performances in Huizhou and Wanjiang.The number of tourists are much higher than others.In the dimension of communication,the overlap of Luzhou culture is low,and the overlap with other cultural areas is more than 1,the overlap degree of the Anhui River culture is relatively high,and the overlap degree with the Huai River culture is relatively low in the environmental dimension.In terms of the overall brand niche overlap,the greater the north-south difference in Anhui tourism performance,the lower of the overlap, and the highest degree of overlap in the niche of tourism performance brands within the same culture from the data analysis alone.

5.2 Discussion

The expert survey method is adopted to determine the weight of each index.Each expert gives the scores according to their knowledge and experience,so there are some subjective factors.The weight determination method should be more objective.The research can be from the following two aspects in the future:the first, the competitiveness evaluation index can be combined with the index of the sustainable development system in the further study.The second,

the selection of sample can be diversified to expand the scope of the survey objects.

5.3 Limitation

Data is obtained through websites,newspapers,interviews, questionnaires,statistical yearbooks and other channels.There is a certain degree of deviation in data collection and analysis,and all indicators in each dimension of the brand niche can not be analyzed in detail.In addition to adopting the niche perspective,we can continue to carry out related research on tourism performance brand promotion strategies from the brand perceived value and brand economics in the future.

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RESEARCH ON ECONOMIC DEVELOPMENT STRATEGY OF SPORTS INDUSTRY

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ABSTRACT

In recent years, the scale of my Chinese sports industry continues to grow. The sports industry occupies an important position in the national economy. Moreover, it plays an increasingly prominent role in driving the economy. The sports industry of China has established a foundation and is in a period of rapid development. It will become a new growth point in the national economy. Because of the large population base and the broad market prospects, the sports industry economy of China has a bright future. However, China's sports industry is now being turned into a new development mode and there are some questions in the market operation and the allocation of resources.

We analyzed the situation of our sports industry by the document method, experts interview method, scene investigation method, comparison method, and other methods to increase the economic development speed, have a better understanding of the sports industry situation and others problems. We used the SWOT to analyzed the situation of our sports industry and taken several tactics for developing diversified sports industry economic. The main contents are as follows:

We analyzed the advantages of the sports industry of China by SWOT: a) The sports industry is in rapid development, and the industry has good development potential and future; b) The basic conditions had been improved, and the development of the sports industry has a firm foundation; c) The scale and benefits of the industry have increased year by year. The driving effect of a national economy is obvious; d) The holding of large sports events. e) Chinese sports have greater influence the before.

The disadvantages of China's sports industry are as follows:

a) The unreasonable industrial structure, the narrow industry scale, and the small proportion in GDP; b) The imbalance development of the sports industry in all regions of the country; c) The lack of management talents; d) The nonstandard marketization and standardization

The opportunities are as follows: a) The Chinese government has placed the sports industry at an important position in national strategy; b) New technologies and technologies will inject power into the sports industry; c) A large population will take opportunities for emerging sports of development.

The main threats are as follows: a) The weakening of the global economy and

the impact of COVID-19; b) The application and effect of the new technologies are indeterminate; c) The proportion of the tertiary industry in the development of the sports industry is too low d) The imbalance development in some areas, lack of brand strategy and personnel training

(2) Point at the existing analysis results, put forward strategies for the economic development of the Chinese sports industry. From the perspective of industrial development, use sports events to promote economic development and explore the new model for the development of fans economy; from the perspective of economic development, propose a new model for the development of "fans economy"; At the same time, we put forward the diversified development tactics of industry economic. At the concrete operation point, propose the fire-new pattern of sharing economic and empolder sport economic from diverse aspects; from management aspect, we propose a strategy for sports brand operate; finally, from the talent training, we create the targets of sports economics and management talents, and propose the tactics of the curriculum system.

Through the analysis and investigation of the current economic development of the Chinese sports industry, several strategies for the economic development of the sports industry are systematically explained, which provides reference and decision-making support for the national economic development strategy, and promotes the comprehensive and rapid development of China's sports industry economy.

Keyword: sports industry / economic development / SWOT / strategy

INTRODUCTION

1.1 Research background

With the acceleration of China's participation in the process of economic globalization, the gradual improvement of China's economic strength has also accelerated the pace of China's sports industry economic development. The economic development of China's sports industry has formed a certain scale, such as sports fitness, sports competitive performance, sports goods, and other industries rise rapidly, which also improves the influence of China's sports industry to a certain extent (Tan Hong, Zhou min, 2017). However, compared with some developed countries, there are still many deficiencies in the economic development of China's sports industry. There are still some problems in sports industry policy, sports consumption, sports economic talents, brand construction, and so on, which need us to study seriously.

However, with the development of China's sports consumption market and national economy, the pulling effect of the sports industry on the development of the whole national economy is becoming more and more significant, which has attracted the attention of government departments and some experts and scholars.

From the perspective of sports industry practitioners, State Sports General Administration 2006-2008 National Sports and Related Industries Statistics Bulletin shows (National,2008), in 2006-2008, the national sports and related industries practitioners were 2.563 million, 2.8374 million, and 3.1709 million. According to the latest statistics, in 2014, the number of employees reached 4.2577 million.

On the output value of the sports industry, in recent years, the output value of the sports industry is also increasing, and the proportion of GDP is gradually increasing. During the period 2006-2013, the number of sports industry practitioners nationwide increased by 1.3167 million, the total output increased by 789.96 billion yuan and the added value created increased by 258.08 billion yuan (Jiang Tongren, Xia Maosen, 2015). By 2014, the total scale of my country's sports and related industries reached 1,357.471 billion yuan, with an added value of 404.098 billion yuan, accounting for 0.64% of that year's GDP. In 2015, the added value of my country's sports industry was 549.4 billion yuan, and its growth rate was 35.97%. The total value of the sports industry accounted for about 0.8% of the total GDP.

From the perspective of the regional development structure of the sports industry, the level of development of the sports industry varies greatly between regions. The economically developed provinces of Guangdong, Fujian, Zhejiang, Jiangsu, and other provinces have relatively developed sports industries, and the added value of the sports industry has reached 35% of the national level. But the relatively backward central and western provinces are very low.

It can be seen that the sports industry is showing a rapid growth trend in my country. However, in terms of the overall development scale of my country's sports industry, there is still a certain gap with the developed countries in the western sports industry. Most employees are concentrated in the sports goods manufacturing industry, and the proportion of people serving the tertiary industry is still very low; The employment-population of sports industry in the United States is about 3.2 million, accounting for about 2.5% of the total employment population of the United States, while the employment-population of China is only about 0.4% (Yi Jiandong, 2016); The added value of the sports industry in the western developed countries in the proportion of GDP average maintained at 2% - 3%. The added value of my country's current sports industry is less than 1% of GDP; Moreover, China's sports industry is seriously restricted by economic development, which develops faster in the eastern coastal areas, while the sports industry in the central and western inland areas develops more slowly.

1.2 Research purpose and significance

1.2.1 Research purpose

To study the problems existing in the development of sports industrialization in China at the present stage and find the internal relationship between the sports industry and economic development, this paper studies the economic development strategy of the sports industry with the help of industrial economic ideas and development approaches, and promotes the common development of sports industry and economy in China. It provides a decision-making basis for government departments to formulate sports industry policies and enterprises to determine sports industry investments, and also provides references for the sustainable development of the sports industry.

1.2.2 Research significance

The sports industry is due to its own specific sports product service characteristics, which makes the development of the sports industry have innate advantages and is closely related to economic development.

First of all, the scale of the sports industry is the result of modern economic development. China's sports industry is in a period of rapid development within the new period, and the country also needs to build a strong sports nation to achieve the revitalization of the Chinese nation. It is of great theoretical and practical significance to study the economic development of the sports industry.

Secondly, the proportion of the sports industry in the national economy is increasing, and the output value of the sports industry is greatly improving, which plays an important role in the development of the national economy. Sports investment, finance, sports venues, and events operation are all closely related to the national economy. Studying the relationship between the sports industry and economic growth and exploring the strategy of sports economic development are conducive to understanding the internal mechanism of the sports industry promoting economic development, adjusting the current industrial structure, and promoting the development of the entire national economy through the development of sports industry.

Thirdly, the sports industry is a healthy, pollution-free green environmental protection industry that consumes less energy and has no environmental pollution, which is in line with the general direction of my country's economic development. Moreover, sports culture is also a manifestation of national culture and health concepts. The sports industry is an industry that can exist and develop continuously for a long time. The sports industry has natural advantages in economic and ecological benefits. It will surely become a new growth point for my country's economic development and is of great significance to the sustainable development of China's economy.

At the same time, the study of the economic development strategy of the sports industry can also train several professionals who understand the sports major and the economic development for the country; attract more social capital into the sports field; let more enterprises also participate in the sports industry, to achieve common development.

Finally, the development of the sports industry is an important means to stimulate domestic demand, stimulate consumption and develop new economic growth points. It can solve a large number of labor employment problems; and provide sports, sports, and many other health consumers to society. Guide families and individuals to conduct scientific, legitimate, and positive consumption, resist bad ways of life, and improve the quality of life. While guiding and training a sports culture and sports health market, it also provides strong support for the national health and education and cultural industry. It is of great practical significance to study how to develop the sports industry economy.

OBJECTS AND METHODS

2.1 Study Subjects

The research object of this paper is the economic development strategy of China's sports industry. China, excluding Taiwan, Hong Kong and Macao.

2.2 Research methods

2.2.1 SWOT Policy Analysis Method

Using SWOT strategy research method, the main internal advantages, disadvantages and external opportunities and threats to develop the economic development and assist the development of the sports industry.

2.2.2 Literature method

Systestudy relevant theoretical books of sports and economics. Check out the latest literature in CNKI, Weibo database, Wanfang database, etc. Collect and sort out the relevant research data on sports industry development, economics and industry development. Collect relevant government-related policies, regulations and published statistics on sports and economic development. Through the study arrangement and analysis of the above literature materials, it provides theoretical support and technical support for the research of this paper.

2.2.3 Expert Interview Method

This paper selects government leaders, sports and private sports organizations, schools, officials, experts and scholars, sports equipment and sponsorship leaders, discuss the background and policies of the sports industry, the factors affecting the development of the sports industry, the status of the sports industry in the national economy, and solicit the opinions and suggestions of experts from all aspects.

The main interview list is shown in Table 2.1 (sorted by surname pinyin).

Table 2. 1 interview list

Name	Company	Position or title
Zhang Penghei	Institute of physical education, Tibet University for Nationalities	Professor / Master tutor
Dong Bin	Department of Physical Education,Shaanxi Institute of Technology	Deputy Professor / Dean
Huang Shifa	Institute of Sports Science, General Administration of Sport of China	Associate Researcher / Associate Director
Wu Bin	Beijing Xuebang Enterprise Management Co. Ltd Beijing Municipal Ski Association	CEO/Vice Chairman
Danyang Li	Wuhan Institute Of Sport	Associate Professor/ Master tutor
Liu Renhua	Beijing Vocational College of Physical Education	Professor/National referee
Sun Leifeng	Snow God Snow Making Equipment Co., Ltd，Beijing Snow Wonderful Skiing Technology Development Co., Ltd	Chairman
Qiu Xue	Sports Social Science Research Center of Institute of Sports Science of General Administration of Sport of China	Associate researcher/ Associate Director
Bao Mingxiao	China Sports Economy Research Center of Sports Science Research Institute of the General Administration of Sport of China	Researellow / Director
Chen Peijie	Shanghai University Of Sport	Professor / Dean
Zhang Lin	Shanghai Institute of Economics and Management	Professor / former Dean
Wang Zhenglun	Nanjing Institute of Physical Education	Professor/former Vice President

2.2.4 Field Investigation Law

Visit the areas with good economic development of the sports industry, investigate and understand the local sports industry scale (total output), added value and the internal structure of the sports industry; Field research on the scale and output value of sports services, sports goods production, manufacturing, and related sales, leasing and trade agents. These field surveys provide abundant material and raw data for the research in this paper.

2.2.5 The Comparative Analysis Method

Comparing with the current development status of sports industry economy in various regions, conduct comparative analysis from different dimensions, find out what can be used for reference, and provide reference for formulating the development strategy of the whole sports industry economy.

RESEARCH ON ECONOMIC DEVELOPMENT STRATEGY OF SPORTS INDUSTRY

The literature method was used to review relevant literature and government statistics to obtain basic data on the development of sports industry in each province and city. Sporting goods manufacturers and individual operators are sampled using the questionnaire method.

The sports industry in this survey includes sports service industry, sports goods manufacturing industry and sports goods sales industry. The results of the survey show that the structure of China's current sports industry is shown in Figure 4.1. Among them, the sports service industry includes sports, fitness and entertainment industry, sports competition and performance industry, sports training industry and sports intermediary industry. Sports goods manufacturing industry includes sports equipment and equipment manufacturing industry, sports ball products manufacturing industry, and other sports products manufacturing industry. The sports goods sales industry includes the wholesale sports service goods industry and the retail industry.

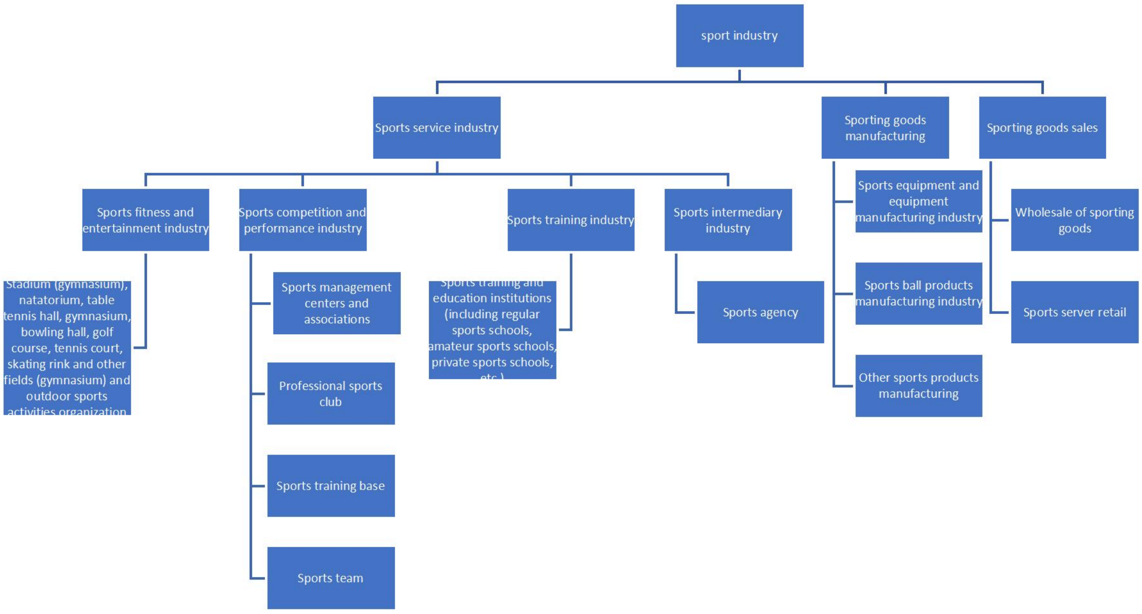

Figure 4. 1 The structure of China's sports industry

Field visits to examine representative regions and enterprises, and interviews with government, business leaders, experts and scholars, comparative analysis of the current situation of the development of the sports industry economy in each region, analysis and research of relevant information and data, the following strategies for the future development of China's sports industry economy are proposed.

4.1Using Sports Events to Promote Industrial and Economic development

4.1.1 Definition and Value of Sporting Events

At present, taking sports events as a special event is a common definition of sports events abroad. Sports events are special events able to provide competition-related products and services. The basic requirement of sports events is to cater to different participants for economic sharing, so as to achieve the diversification of goals, which has great significance and influence for promoting the development of social economy and culture.

4.1.2 Economic development mode of sports events in China

With the continuous development of social economy, the frequency of large-scale sports events shows the social value of sports events. The promotion and development of sports events in China mainly comes from the sponsor model. At present, the sponsor model has become one of the main forms of promoting major sports events in China, and has achieved remarkable results. These sponsors expand the publicity of sports events by connecting sports events and their own corporate culture and corporate spirit of the content, and give sports events a certain cultural connotation. While the income of foreign sports events mainly comes from the right of TV network institutions to broadcast sports events. So China's sponsor model can more adapt to the current ways and needs of large sports events in China.

4.1.3 The effect of Sporting Events for Economic Development

For now, the development of major sporting events not only test related management ability, but also notice the image of the city at the same time. The impact of sporting events on economic growth is reflected in promoting all aspects of the city such as taxi, catering and tourism， which are the opportunities the major sporting events bring in for the development of city. The driving effect of sporting events on the economy is reflected in the following aspects.

(1) Promote the rapid development of tourism

Formula One car racing has come to china. During the competition, It can attract thousands of tourists at home and abroad, and bring in more than 1 billion of consumption every year， which indirectly boost the local tourism around this competition, promote the improvement of the service industry， and better improve the tourism market.

By 2020, more than 100 sports tourism bases with important influence have been built across the country, 100 national sports tourism demonstration bases have been established, 100 sports tourism boutique events have been launched, 100 sports tourism boutique routes have been created, and 100 sports tourism companies and well-known brands with high visibility and market competitiveness have been cultivated. Moreover, the total number of sports tourists reached 1 billion, which takes up 15 percent of the whole numbers, and the scale of total consumption of sports tourists broken through 1 trillion. So far, in order to bring fresh elements into traditional tourism and promote the deep development of sports tourism, some provinces has positively explored the new pattern--tourism+sports.

(2) Promote the development of third industry such as Catering, hotel and retail

From November 11, 2001 to November 25, 2001, Guangdong province succeeded in holding the Ninth National Games， which drived the development of star hotels and the restaurant business in Guangzhou city. During the competition, catering industry hold a series of cultural activities of delicious food such as "happy and healty the ninth national games, delicious food waiting for you to enjoy ". They attracted tens of thousands of tourists， enhanced the cultural exchanges on food, improved the average daily revenue of most catering units, driven the catering industry, optimized the service quality in catering, and improved the quality of food.

In terms of hotels industry, even the rate of accommodation of some hotels highly reached 100 percent. The retail sales of some malls and markets increased a lot, especially the wine and water, local special food and cultural products with national characteristics, which favorably pulled the development of various retail sectors.

(3) Drive the development of related industries such as advertising, estate, transportation and communication.

The TV broadcast costs of Beijing Olympic Games reached billions of dollars, and even the advertising and general publicity expenses reached more. However, the attendant price of the estate around the Olympic stadium and playing field increased a lot, and the housing transaction volume has risen significantly. In order to meet with the needs of sporting events, the local government would speed up the construction of transport lines and infrastructure. For example, the 13th Winter Games was held in Xinjiang in our country. Seventeen airports has been built and rebuilt in Xinjiang which has the most airports in our country. 99 new domestic routes were opened, coupled with the construction of highway and high-speed railway, which played an important role in the development of transportation industry in Xinjiang. Meanwhile, to ensure the smooth progress of events, 1500 construction staff have been put in the field of communication infrastructure, 663 kilometers of optical cable lines have been laid, 275 mobile base stations have been added, and 612 WLAN hotspots have been built, which driven the development of communication industry.

CONCLUSIONS AND SUGGESTIONS

5.1 Conclusion

The sports industry plays a significant role in the national economy. It can not only stimulate consumption, expand domestic demand and increase employment steadily, but also promote the development of other related industries. Therefore, this industry has the potential to become a new growth point of the national economy.

At present, the main problems of China's sports industry are mainly concerned about the following aspects: irrational industrial structure, smaller proportion of production value, small industrial scale, imbalanced regional development and the lack of talents, etc. Although there is still a wide gap compared to the developed countries, the overall scale of China's sports industry is already close to the level of moderately developed countries in the early 1990s. The sports industry with a certain scale has been formed in our country and it is currently in rapid development period, having a broad market prospect and development potential. With the steady growth of China's economy, the improvement of residents' health awareness and income, the acceleration of urbanization and the increase of residents' leisure time, the development prospect of sports industry has become more and more attractive.

With the gradual development of national policies and systems on sports industry, sports consumption, industrial layout and development environment has been improved. The development of sports industry has shown good scale effect, linkage effect, structure effect and employment effect, becoming a new growth point of national economic development. However, the development of sports industrial economy should follow the general direction of economic development, expand the industrial scale, optimize the industrial structure, improve industrial organization as well as personnel training system, and cultivate new path and new pivot point of regional economic development. In addition, we are supposed to guide the sports consumption actively and develop the sports industry market so as to fully integrate the sports industry into the economic society and make it an emerging industry with rapid and healthy development. It is believed that our country's sports industry will certainly catch up with or even surpass the development level of developed countries and become a pillar industry in China's economic development.

5.2 Advice

To renew the sports industry deeply, to promote the renew of sports venues, to promote using public resources to develop physical activities. To make the policy of sports industry more complete, to update the environment of develop, to attract more social capital involved in sports industry. To optimize the environment of sports consume, make out police to improve the consume of sports, enhance the active of domestic demand and industry development.

To propaganda fitness to the public, to increase sports venues, to promote the build of Sports service complex and sports town, enhance the build and manage of sports industry base, to explore and build the new sports industry and soon. Courage people use existing facilities, park, government land to update the sports industry, which provides the basic of sports industry development.

Encourage people use the new model-sports plus internet, promote more than one industries developing at the same time. Use the new development model, such as sports sharing economy, event economic, sports fan economy to enhance the economy development of sports. At the same time, the government should led government guidance and participation of social capital to explore and develop varies of sports resources.

To change the structure of sports, enhance the percent of sports service, promote the layout of industry and encourage balance development. Up back the creative development of sports goods, promote sports games more professional, support developing new sports game and niche sports. Enhance the basic of the third industry, promote the size and the service level of sports service. At the same time, put more energy to develop excellent sports player, especially talents in economy, management sports and high-level compound.

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A CONCEPTUAL PAPER ON FACTORS AFFECTING THE CONSUMER PURCHASE INTENTION OF GREEN HOUSING IN SHENZHEN, CHINA DURING COVID-19 PANDEMIC

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ABSTRACT

This is a conceptual paper of a future study on factors influencing the consumers' intention to purchase green housing (GH) in Shenzhen, China during the COVID-19 pandemic. The COVID-19 pandemic has resulted in consumers having social stress and financial constraints, which may influence their behaviour. Hence this study aimed to study how different factors influence consumers' internal state and their intention to purchase green housing at this critical time. This paper seeks to assess the direct and indirect relationship between the factors and intention to purchase GH based on the extended theory of planned behaviour (TPB). In this paper, 9 constructs are identified, and 18 hypotheses are proposed. It is believed that the finding of this future study may provide a comprehensive framework to determine the factors influencing the purchase intention of GH in the context of the COVID-19 pandemic, adding value to the existing literature on this topic area. Furthermore, the findings may also provide insight to the policymakers and real estate developers so that strategies could be designed accordingly in order to promote green housing in Shenzhen.

Keywords: green housing, green residential building, theory of planned behaviour, perceived risk, trust, purchase intention

INTRODUCTION

1.1 Background of the Study

With buildings and construction amounting to 37% of the energy-related CO2 emissions in 2020 (United Nations Environment Programme, 2021), green building (GB) emerged and accelerated around the world as part of the social movement for sustainability because GB was found to produce 50% fewer greenhouse gases than conventional building (Huynh, 2021). China, being the largest emitter of CO2 globally (Larsen et al., 2021) and the largest building construction market in the world, committed to reducing its emission intensity by 18% from 2021 to 2025 in its 14th five-year plan (FYP) (The State Council Information Office of the People's Republic of China, 2021). Prior to 14th FYP, the Chinese State Council had already set targets for building energy efficiency in 11th and 12th FYP, and in its 13th FYP, the Ministry of Housing, Urban-Rural Development (MOHURD) aimed to 50% GB out of all new urban buildings. By the end of 2020, 77% of urban buildings will be green certified (The State Council Information Office of the People's Republic of China, 2021). Despite this, it was found that only green commercial and public buildings are well-accepted but not for residential buildings or known as green housing (GH). This is because the Chinese government has mandated green building in government projects while only using incentives to promote GH (Shen & Faure, 2020), not to mention the incentive policies are mainly focused on the supply side rather than the demand side (Zhao & Chen, 2021). The market acceptance for GH was found to be low due to high sales price, lack of awareness or knowledge about GH, high price discount in sub-sales which could not cover the price premium in pre-sale, and the gap between government policies and market expectations (Zhao & Chen, 2021; Sang et al., 2019; Jiang et al., 2021; Yuan et al., 2022). Since consumers are one of the critical stakeholders in promoting GH (He et al., 2021), it is essential to study the factors which affect their purchase intention of GH so that market players and policymakers could adjust their policies and strategies to promote GH on a larger scale.

1.2 Research Gap

The theory of planned behaviour (TPB) is the most used theory to determine the purchase intention of green housing. It is observed that the findings are inconsistent, and the framework is not replicated or re-evaluated. For instance, Sharma and Foropon (2019) did not include subjective norm as a variable following finding by Dabholkar (1994) and Warshaw (1980) which suggested that subjective norm has minimal influence on intention. Judge et al. (2019) however found that TPB constructs have influence on purchase intention. Zhang et al. (2018) expanded the TPB by adding three additional constructs to the TPB and found that attitude and subjective norms do significantly influence purchase intention but not for perceived behavioural control. The sample size for the study is however too small to generalise the framework, and to the author's best knowledge, there has not been a study that replicates this framework in a greater sample size.

Furthermore, while there have been studies evaluating the factors influencing China Consumers' purchase intention of green housing (Zhao & Chen, 2021; Sang et al., 2019; Zhang et al., 2018; Liu et al., 2018), the study which focuses purely on Shenzhen is limited. The research sites of Zhao & Chen (2021) are five urban cities in China: Beijing, Shanghai, Tianjin, Shenzhen and Suzhou. It is opined that the fact that different provinces/ cities have different policies on green housing may not provide a good insight as to which policies are failing and call for enhancement. Yuan et al. (2022) studied the price discount of green housing in Shenzhen's and found a negative mindset of the market toward GH. However, the study focused only on the second-hand market and the demographic characteristics which affect purchase behaviour are not incorporated. Lastly, De Toro et al., (2021) found that the COVID-19 pandemic has changed consumers' demand for residential property, the same may have been the same for factors influencing GH purchase intention in Shenzhen. Since there is no research on this setting so far, this study attempts to close the research gaps by introducing a comprehensive framework to determine the factors influencing purchase intention of GH in the context of the COVID-19 pandemic with attitude, subjective norm, perceived behavioural control, perceived risk, and trust as mediator.

1.3 Problem Statement

The COVID-19 pandemic was found to have changed the structural demand of consumers for residential property (De Toro et al., 2021), hence the factors influencing the consumers' purchase intention of GH may differ from pre-COVID-19 pandemic considering the significant socio-economic changes due to the pandemic. The housing market in Shenzhen has now succumbed to chills (Kirton, 2021) after a roughly two-year rise (Hinata, 2021), with a 60% decrease in sales of second-hand houses in 2020. This indicates the housing demand is substantially weakened. GH, which is less attractive and has lower market acceptance and higher market loss than traditional housing (Zhao & Chen, 2021; Sang et al., 2019) is facing an unprecedented challenge at this difficult time. However, recent findings by China Green Building Council which show that green buildings (particularly green housing) have a positive effect on COVID-19 prevention and control (World Green Building Council, 2020) might stimulate the intention to purchase GH among Chinese consumers regardless of the issues mentioned above. To align with the Chinese Central Government 14th FYP of promoting GH, there is an urgent need to evaluate the factors affecting consumer purchase intention GH in Shenzhen in the context of the COVID-19 pandemic. This study seeks to determine how different factors influence their purchase intention of GH using a modified TPB-based construct aa s mediator.

1.4 Research Questions

This study will attempt to answer the following research questions:

1. How do external factors in terms of price, government policies, subjective norms and environmental concerns influence consumers' purchase intention of GH in Shenzhen during the COVID-19 pandemic?
2. Do attitude, subjective norm, perceived behavioural control, perceived risk, and trust mediate external factors in terms of price, government policies, and environmental concerns to purchase intention?

1.5 Research Objectives

This study seeks to achieve its general objective of evaluating consumer's purchase intention of green housing by focusing on the following objectives:

1. To determine the relationship between factors in terms of price, government policies, environmental concerns and consumer purchase intention of GH in Shenzhen during the COVID-19 pandemic.
2. To assess the mediating factor of attitude, subjective norm, perceived behavioural control, perceived risk, and trust in the relationship between external factors and consumer purchase intention of GH in Shenzhen during the COVID-19 pandemic.

1.6 Scope of the Study

With the increasing effort of China's government to promote green building, there has been a corresponding increase in studies on this topic area. In view of this situation, this study aims to evaluate the factors influencing the purchase intention of green housing. The scope of the study is restricted to Shenzhen, Guangdong province. The study involves potential home buyers with different demographic characteristics with the intention to purchase residential houses during the COVID-19 pandemic.

COVID-19 pandemic here refers specifically from March 2022 onwards, which is the worst outbreak in two years. When COVID-19 gravely wounded the world economy in the past two years, China's iconic COVID-19 control strategies successfully prevented the resurgence of the COVID-19 epidemic (Yu et al., 2021; Lin & Peng, 2021) hence its economy was not significantly impacted compared to other countries prior to the March 2022 outbreak (Tang, 2022). This study aimed to evaluate consumers' purchase intention of green housing in the COVID-19 environment whereby the consumers are put in a context of great uncertainty and under heavy financial and social pressure (Di Crosta et al., 2021; Van Ophem, 2020).

1.7 Significance of the Study

This study will be able to provide insights on consumers' purchase intention of green housing in the context of the COVID-19 pandemic—an environment full of uncertainty, and financial and social pressure. Furthermore, this study will also enable the government, real estate developers and social marketers in Shenzhen to better understand the factors affecting the purchase intention of green housing and design strategies to motivate consumers to purchase green housing. It is believed that a more consumer-friendly environment could be created by all the relevant parties with the findings of this research to further promote the green residential building in Shenzhen.

1.8 Operational Definition

Green Housing	A kind of energy-efficient building, which minimises the impact on the environment from all aspects, i.e., the use of land, water, material, and not compromising the quality of residents' wellbeing and health (He et al., 2021).
Price	Total transactional price of the GH unit in Chinese Yuan (CNY)
Government Policies	Refers to the government's policies on GH in general as well as economic benefits offered by the government in various forms to motivate consumers to purchase GH.
Environmental Concern	Degree of a consumer's emotional involvement regarding different environmental matters (Zhang et al., 2018).
Trust	Level of consumer confidence in the quality and reliability of GH.
Perceived Risk	Perceived risk in this study includes security, social and financial risk. It refers to the probability that the purchase of, or, living in a GH will threaten an individual's personal safety, incur financial loss and reduce social position.
Attitude	Degree to which a consumer has a positive or negative appraisal or assessment of a GH purchase (Ajzen, 1991)
Subjective Norm	Consumers' perception of the social pressure, as in people around him want him/her to buy a GH. (Ajzen, 1991)
Perceived Behavioural Control	Degree a consumer believes he/she can purchase GH. (Ajzen, 1991)
Purchase Intention	Customers anticipates purchasing a GH the future

LITERATURE REVIEW

2.1 The Theory of Planned Behaviour (TPB)

TPB proposed by Ajzen in 1985 is the most widely used theory to analyse individuals' intentions and behaviour. As illustrated in Figure 1, the TPB determines intention from 3 elements, i.e., attitude (ATT), subjective norm (SN) and perceived behavioural control (PBC), and the intention is the closest antecedent of actual behaviour. The TPB also illustrates that PBC has a direct relationship with actual behaviour.

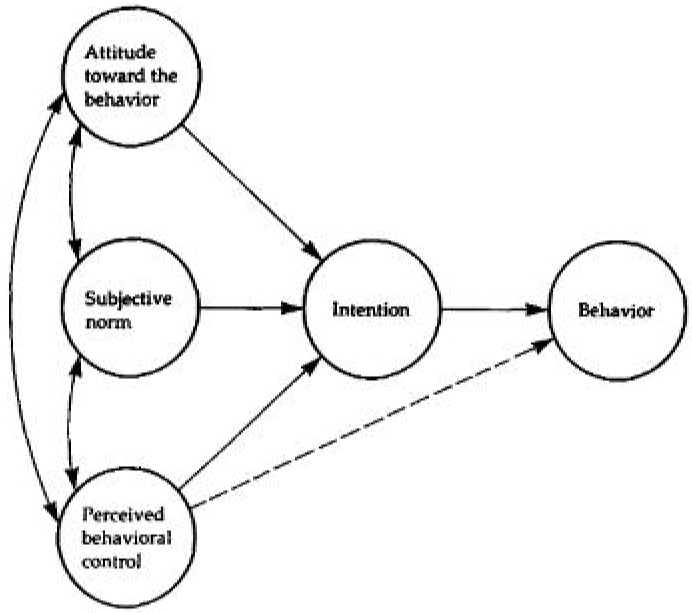

Figure 1 Theory of planned behaviour (Ajzen, 1991)

TPB is one of the most popular theories used to analyse intention and behaviour in the pro-environmental context such as green products (Sharma & Foropon, 2019), electric vehicles (Shalender & Sharma, 2020), green restaurants (Moon, 2021), green marketing (Patwary et al., 2022) and GH as shown in Chapter 2.8. Although the strength of association between attitude, subjective norm and perceived behavioural control and intention differs and is inconclusive, with some find a weak or insignificant relationship (Zhang et al., 2018; Zhang et al., 2020; Tan & Goh, 2018), most of the existing literature (Judge et al., 2019; Wang et al., 2021; Arli et al., 2018) suggests that these elements have a significant positive influence on intention. Hence the below hypotheses are predicted:

H1: Attitude has a positive effect on the intention to purchase GH.

H2: Subjective norm has a positive effect on the intention to purchase GH.

H3: Perceived behavioural control has a positive effect on the intention to purchase GH

2.2 Purchase Intention

TPB expresses that the purchaser will, more likely than not, be ready to perform whatever is necessary to carry out the actual purchase when the intention is solid and strong (Ajzen, 1991). Hence most of the studies examine consumers' purchase intentions and assume their actual behaviour (*See*, Chapter 2.8), as the actual purchase behaviour could not be determined in cross-sectional studies due to time constraints.

2.3 Price

Previous studies show that price is the main concern that deters consumers from purchasing GH, as the high price has made GH an "unaffordable luxury" for many consumers in China (Yuan et al., 2022). The high price was due to the additional cost of construction borne by the developers to ensure the building is policy compliant. The cost is subsequently reflected in GH pricing. Jiang et al., (2021) found that the price premium is as high as 6% compared to traditional housing at the resale stage. The problem arises when the premium for reselling a GH could not compensate for the purchase cost of GH (Yuan et al., 2022), substantially increasing the financial risk of purchasing GH. It is submitted that such a phenomenon may assert a negative sentiment on consumers towards GH, influencing their attitudes towards GH and intention to purchase GH. Based on the discussion in this section, this study proposed the hypotheses as below:

H4: Price has a negative effect on attitude towards GH.

H5: Price has a negative effect on perceived behavioural control.

H6: Price has a positive effect on perceived risk.

H7: Price has a negative effect on the intention to purchase GH.

2.4 Government Policies

As briefly discussed in Chapter 1, the Chinese government has proactively promoted sustainable development in the construction industry. The actions taken include, but are not limited to, providing financial and non-financial incentives, launching and constantly amending its Green Building Evaluation Standard, Civil Building Energy Performance Evaluation and Labelling scheme (Baker McKenzie, 2022). A building will only be certified as a Green Building if it meets the standard set by the government from six aspects: land, energy, water, resource/material efficiency, indoor environmental quality and operational management (The State Council Information Office of the People's Republic of China, 2021). The GH is assessed with a 3-star rating system as well as LEED (Leadership in Energy and Environmental Design). Zou (2019) in his study finds that the 3-star rating system is highly associated with residential buildings, and buildings in Eastern China are more likely to be certified with 3-star. It is suggested that setting the standard for assessment and rating systems would be able to minimise information asymmetry in the GH market (Zhao & Chen, 2021) as well as increase the consumers' trust and confidence in the GH market. Additionally, it is opined that the well-established assessment system by the government would also decrease the consumers' perceived risk of GH. In order to encourage green renovation of existing buildings, the Chinese government has also incentivised the use of renewable energies in traditional residential buildings. As discussed in Chapter 2.3, the high cost of GH has intimidated not only some consumers but also real estate developers. Hence, incentives provided by the government would be a significant driver to promote GH in society (Zhang, Chen, et al., 2018; Sang et al., 2019). With the financial incentives, it is believed that consumers' affordability and intention to purchase GH will be increased. Based on the literature on this part, the following hypotheses are proposed:

H8: Government policies have a positive effect on perceived behavioural control.

H9: Government policies have a negative effect on the consumer's perceived risk of GH.

H10: Government policies have a positive effect on the consumer's trust in GH.

H11: Government policies have a positive effect on the intention to purchase GH.

2.5 Environmental Concern

Existing literature on green products shows that environmental concern (EC) has been added to TPB to improve the predictive force of purchase intention of green products. It is well-established that consumers with high environmental concerns are more inclined to purchase green products as their attitudes are influenced by environmental concern (Zhang et al., 2018), leading them to be motivated to engage in any pro-environmental behaviour. EC was found to have a positive relationship with purchase intention of green products as well as with TPB constructs (Liu et al., 2018; Tan & Goh, 2018; Zhang et al., 2018). Consumers' environmental concern increases as the level of education increases (He et al., 2021), leading to the formation of a norm of preferring sustainable products (Cerri et al., 2018). Zhao & Chen (2021) also found that consumers with high EC have higher risk acceptance of perceived financial risk. Several hypotheses are postulated based on the discussion in this part:

H12: Consumers' environmental concern of GH has a positive effect on attitudes toward GH.

H13: Consumers' environmental concern of GH has a positive effect on subjective norm toward GH.

H14: Consumers' environmental concern of GH has a positive effect on perceived behavioral control.

H15: Consumers' environmental concern negatively affect perceived risk.

H16: Consumers' environmental concern of GH has a positive effect on their intention to purchase GH.

2.6 Perceived Risk

Perceived risk refers to an individual's subjective belief in the negative consequence of his/her decisions. Typically, consumers aim to minimise perceived risk as much as possible (Zhuang et al., 2021). As the GH market in China is still relatively new, consumers lack knowledge of the pros and cons of GH (Liu & Hu, 2019). Risk perception comes in when there is an information asymmetry. When the perceived risk is high, they are more disinclined to purchase the GH (Tarabieh, 2020). Therefore, consumer perceived risk negatively influences GH purchase intention (Li et al., 2018; Tan & Goh, 2018). This study will assess perceived risk from 3 perspectives: social risk, security and financial. Social risk refers to the potential loss of the social status of GH after the purchase. On the other hand, the security risk is related to the safety of living in GH, whereby there may be a misrepresentation of quality in the presales. Lastly, financial risk potential decreases in the price of GH or the pecuniary financial loss caused by GH maintenance after the purchase. Zhao and Chen (2021) found that all three types of perceived risks mentioned above significantly influence residents' intention to purchase GH. In a study by Tan and Goh (2018), financial risk was found to have a significant path to GH purchase intention but not for performance and psychological risk. A hypothesis is postulated based on the discussion in this part:

H17: Perceived Risk has a positive effect on the intention to purchase GH.

2.7 Trust

Trust is defined as "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another" (Rousseau et al., 1998). Generally, consumers are lacking professional knowledge relating to new science and technology, hence they tend to rely on experts' opinions and ratings or assessments of the authorities in determining the feasibility of GH. Trust is developed on the part of the consumers by the belief that the experts and governmental authorities will provide an honest assessment of the quality of GH and would take the necessary actions where the developers do not achieve the standard quality. Consumer's level of trust increases when the integrity of experts and government increases (Hurley, 2014). Existing studies (Zhao & Chen, 2021; Liu et al., 2018; Tan & Goh, 2018) argue that trust could influence consumers' intention to purchase GH. Trust is considered as a mediating variable in this study to examine how the external factors affect the consumers' trust in GH and purchase intention. A hypothesis is proposed from this part:

H18: Trust has a negative effect on the purchase intention of GH

2.8 Proposed hypothesis

Based on the literature above, the hypotheses proposed are summarised as below:

H1: Attitude has a positive effect on the intention to purchase GH.
H2: Subjective norm has a positive effect on the intention to purchase GH.
H3: Perceived behavioural control has a positive effect on the intention to purchase GH
H4: Price has a negative effect on attitude towards GH.
H5: Price has a negative effect on perceived behavioural control.
H6: Price has a positive effect on perceived risk.
H7: Price has a negative effect on the intention to purchase GH.
H8: Government policies have a positive effect on perceived behavioural control.
H9: Government policies have a negative effect on the consumer's perceived risk on GH
H10: Government policies have a positive effect on the consumer's trust on GH
H11: Government policies have a positive effect on the intention to purchase GH
H12: Consumers' environmental concern of GH has a positive effect on attitudes toward GH.
H13: Consumers' environmental concern of GH has a positive effect on subjective norm toward GH.
H14: Consumers' environmental concern of GH has a positive effect on perceived behavioural control.
H15: Consumers' environmental concern negatively affect perceived risk.
H16: Consumers' environmental concern of GH has a positive effect on their intention to purchase GH.
H17: Perceived Risk has a positive effect on the intention to purchase GH.
H18: Trust has a negative effect on the purchase intention of GH

2.9 Framework

Based on the analysis above, Figure 3 shows the research framework and hypothesis relationship of this study.

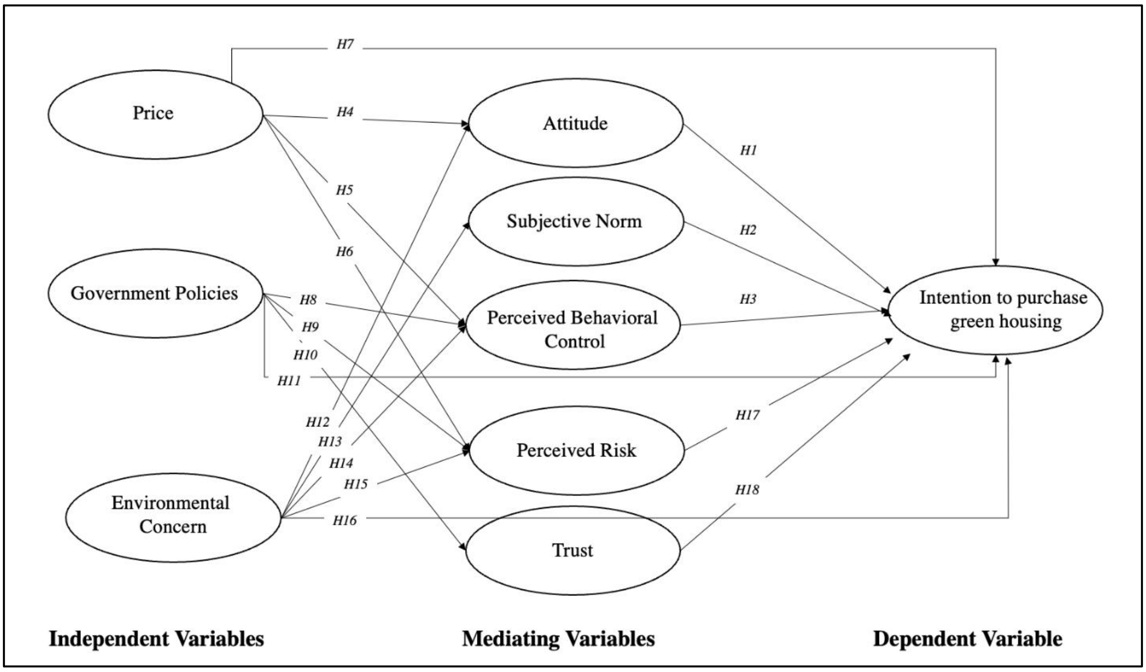

Figure 3 Proposed framework. Adopted and modified from Sang et al.(2020) and Zhang et al.(2018)

CONCLUSION & FUTURE RESEARCH

This concept paper provides a new framework for the study of the relationship between environmental factors and purchase intention of GH, with individuals' internal state and cognition as mediators in the context of Shenzhen and the COVID-19 pandemic. In order to proceed with the empirical study, it is prudent to explore a wider range of literature to enhance the insights and knowledge presented in this paper. It is hoped that this concept paper could contribute a new idea for the reference of scholars in future study.

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ANALYSIS AND RESEARCH ON TRAINING COURSES OF MANDARIN PROFICIENCY TEST IN COLLEGES AND UNIVERSITIES

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ABSTRACT

In China,mandarin proficiency test training is of great significance to the promotion of mandarin and the promotion of national mandarin proficiency level. Therefore, in order to this research, we will use the method of literature survey and action research to do a more in-depth study of the mandarin proficiency test curriculum. In this survey, a total of 410 effective students questionnaire In addition, through classroom observation and case interview in three angles to investigate and found that there are lots of problems for the current mandarin level test training courses, the curriculum goal curriculum content teaching mode should be academic assessment level respectively by the CARDS before examination on the traditional single simple one dimensional shift for ascension for this hierarchy multidimensional constructs of diverse and complex Therefore, this paper puts forward countermeasures, bold assumptions on the teaching model, and puts forward the conventional improvement layer and classified cooperation and mutual aid teaching model.

Keywords: College; mandarin proficiency test; training courses

INTRODUCTION

The mandarin Proficiency Test is a professional assessment that examines the standard proficiency level of the exam-takers in using the national standard language. It is an important measure to promote the popularization and application of the national standard language. In 2020, the popularization rate of Putonghua in China reached 80.72%, 27.66 percentage points higher than that in 2000, successfully completing the 13th Five-Year Plan of language development Development plan for the goal set for research institutes in the language so as to give full play to the school tradition promotion training and comprehensive study of the role of education, the Ministry of Education innovation to carry out the state language promotion base construction, the first batch of 60 countries such as the Beijing university of language promotion base In addition, also revised the putonghua proficiency test implementation summary , completed the Putonghua proficiency test for 5.278,900 person-times in China, and continued to carry out the Chinese character application level test. The annual putonghua proficiency test training for nearly 40,000 person-times is of great significance for promoting Putonghua and improving the national Putonghua level Due to the lack of systematic theory, the current test training is chaotic, and the study of putonghua proficiency test course can alleviate this problem

1.1 Research background

Our country is a multinational country with a vast, has a very rich resources of language and culture, various nationalities in national language as a carrier of ethnic culture is an integral part of Chinese culture As the han nationality common language, mandarin nationwide use most The most widely use scope, in the process of Chinese cultural heritage and development plays an irreplaceable role However, Due to China's vast territory, and once in a long period of time are backward transportation, inter-regional communication is very inconvenient, so, the complex characteristics of the dialect reflects the richness of China's language and cultural resources, but also highlights the difficulty of promoting Mandarin to a certain extent Therefore, to popularize the standardized universal language is beneficial to the development of socialist productive forces in China. In terms of politics, it is beneficial to the unity and stability of the country and the unity and harmony among ethnic groups. In terms of culture, it is beneficial to inheriting and carrying forward the excellent traditional Chinese culture and promoting the great development and prosperity of socialist culture Putonghua proficiency test has not only become the authoritative test brand to measure the putonghua level of people from all walks of life, but also makes the status of Putonghua as the common language of the nation deeply rooted in the people's heart, and promotes the construction of the language and character work grass-roots team represented by testers The continuous development of putonghua proficiency test and training, for it is closely combined with the test training discipline theory construction have higher requirements: first, mandarin level test training practices need to be further summarized Second, training in the practical use of mandarin Chinese test, need more is suitable for the guidance of scientific theory of development requirements Training is to testing what branches and leaves are to trunks. The development of testing is bound to drive the development of training activities. Good training will further improve the theoretical level and comprehensive quality of testers, ensure the reliability and validity of putonghua proficiency test, and ensure the quality and efficiency of testing training.

1.2 Research Significance

Language writing career, have a social and national characteristics, is the important supporting power of national comprehensive strength, is a matter of national quality improvement and man's all-round development, is a matter of national unity and national unity, is a matter of historical and cultural heritage and economic and social development, has the important status and role in the national development strategy. A strong country needs strong language, and strong language helps a strong country. Though the vigorous development of TuiPu career training discipline theory construction put forward higher requirements of the test, but the truth is, both in the theoretical research on, or in the working practice, test the training discipline theory research level is differ, the application effect is not obvious, particularly in the test and research on the imbalance of training, training research obviously lags behind the testing research. Based on this, it is of positive significance to carry out more extensive and in-depth research on putonghua proficiency test training, including it into the category of curriculum theory and establishing the corresponding subject theory system, which will guide the putonghua proficiency test and training to develop into a scientific and standardized direction.

RESEARCH STATUS

There is no denying that the research on putonghua proficiency test training lags behind that of putonghua proficiency test. However, in the process of application and development, this research project has made some stage achievements in the status and role of research, content research, teaching material research and many other aspects, which has certain reference significance for this research.

(1) Existing research achievements

First, the study of curriculum status and function. The status of putonghua training courses comes from its positioning in the promotion of Putonghua. In terms of the relationship between training and testing, many studies, such as Fan Yaohui (2002), Wang Yingle (2003) and Yan Shunling (2005), all agree that pre-test training is the key link to improve test quality. Li Delong (2005), based on the analysis of the guiding ideology of "training-based testing", believed that training should be the basis of testing, otherwise all tests could only be a form of testing. Some researchers have a broader vision. For example, Chen Zhong (2005), from the perspective of the overall promotion work, believes that pre-test training is a powerful guarantee to promote promotion, stimulate test-taking initiative, improve putonghua level, carry out the test smoothly and improve the quality of testers. While pointing out the importance of training, many studies have also mentioned the confusion of current training work. For example, Yan LAN (2004) believes that pre-test training has problems such as vague training objectives, emphasis on practice over theory, single training form and outdated training materials. Wang Hui (2009) also believes that Putonghua level training courses in China have not formed an industrial chain led by testing, nor can they meet the diversified needs of trade, public service industry and international Promotion of Chinese, so they have not played their due role.

Second, the study of course materials. There are few studies on putonghua test training materials. Among them, Wang Hui (2009) believes that training materials seem to be rich in variety, but most of them are experience-based ones with few innovative ideas. Wu Hui (2007) believes that the current national guidance book "Implementation Outline of Putonghua Proficiency Test" and the teaching material system established by relevant universities and training institutions show a serious simplicity in the speaking part. After analyzing three sets of training materials for Macao's tourism industry, Lu Wendu (2006) Mieze proposed that such training materials should be implemented.

(2) Urgent problems

For a long time, there are many questions and controversies in the research of putonghua proficiency test training. From the macro aspect, the research of Putonghua proficiency test training lacks sufficient strong support both theoretically and practically. From the micro aspect, although many experts and scholars have reached a relatively unanimous consensus on the significance of training in testing, believing that the development of Putonghua proficiency test training is beneficial to stimulate the initiative of examees and improve the professional quality of testers, which is conducive to ensuring the smooth development of putonghua proficiency test. It is conducive to promoting the orderly development of the language and writing cause, especially the promotion of the cause. However, it has to be admitted that in practice, the vague goal and single form of training not only make the existing resources not effectively integrated and played, but also restrict the further mining of its potential resources. Training target fuzzy lies in its focus on mandarin level test test-prep tricks, file a practicability, failed to pay attention to training based on internal logic, on the whole the laws and processes of the development of scientific induction and analysis, systematic theory into fruit co., LTD., its application to test within a relatively closed area. The only form of training is that it is affected by practicability. One-sided indoctrination is the main form of training for examinees, which not only affects the dynamic play of the trainers, but also damages the enthusiasm of the trainees, so the training effect is greatly reduced.

There are many problems that need to be further solved in training, whether from the macro or micro point of view. It is of great significance to study effective solutions to these problems to ensure the healthy development of training. It is urgent to conduct in-depth research on curriculum nature, curriculum objective, curriculum content, teaching mode, teaching technology and curriculum role. Only clarify the various links of putonghua proficiency test, the examinees, testers, organizers and other groups involved in the special

RESEARCH METHODS

(1) Investigation method

The present situation of putonghua proficiency test and its training research is the research base of this study. In order to understand the real classroom teaching, teaching operation of teachers and learning status of trainees, it is necessary to use common research methods such as questionnaire survey, classroom observation and in-depth interview to obtain first-hand information. Among them, questionnaire survey is mainly used to investigate the current situation of teaching content, course environment and ideal state of Putonghua proficiency test training; classroom observation is mainly used to analyze the influencing factors of classroom teaching; in-depth interview is mainly used to investigate the public's feedback, evaluation and suggestions on training content.

(2)Literature research method

Testing and training activities are complicated and ever-changing. How to understand testing and training activities and how to discover the rules of testing and training activities in the change need us to take dialectical materialism as the guidance. Everything is the result of contradictory movement and is in constant development and change, so we must discover, summarize and apply laws in movement and change. Under the guidance of this idea, we collected and sorted out the literature of putonghua promotion, training and testing since the founding of new China, and made a careful analysis and induction of the literature, and determined the three stages of the historical process of putonghua proficiency test training. In addition, in order to understand the present situation of putonghua proficiency test training materials, this study divided, counted, compared and evaluated the contents of 20 putonghua training materials selected from the current market.

(3) Action research

Action research method is characterized by research for action and research in action. I select "mandarin level test training course" as the research topic, one of the main reason is their daily mandarin level test training management and teaching work, found that the course needs to be system under the guidance of the theory of standard and improvement, and this study talked about many of the views are usually from himself in the work of the constantly practice, groping and reflection, as a result, The action research method is also a research method throughout this study, and the exposition of some chapters in this paper naturally carries the implication of educational narration.

FINDINGS

This paper makes an investigation and analysis of the students' ability to use Putonghua and the present situation of the training materials for putonghua proficiency test.

4.1 Ability of college students to use mandarin

Table 1: Survey sample gender analysis table

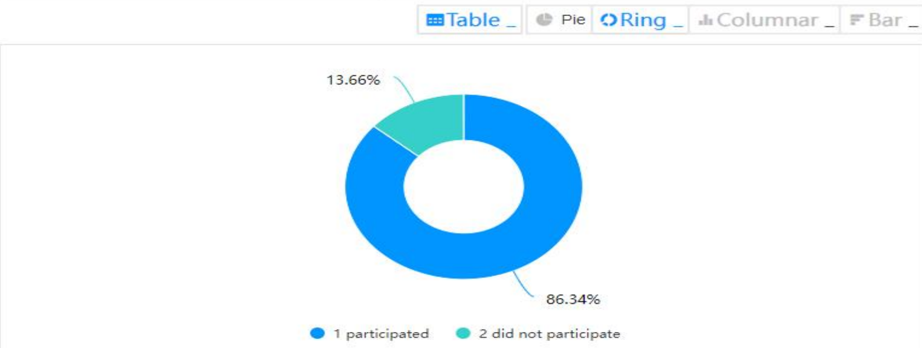
A1. Your gender: A1 [Multiple choice]

Options	Subtotal	Proportion
1 male	96	23.41%
2 women	314	76.59%
Number of valid fills in this question	410	

According to the above statistical data, the proportion of women in the questionnaire was 76.59%, and that of men was 23.41%, so the proportion of women in the test was larger than that of men. Most of the subjects were students majoring in preschool education and flight attendant, and there were many female students in these majors, so the test scores were particularly important in future career demands.

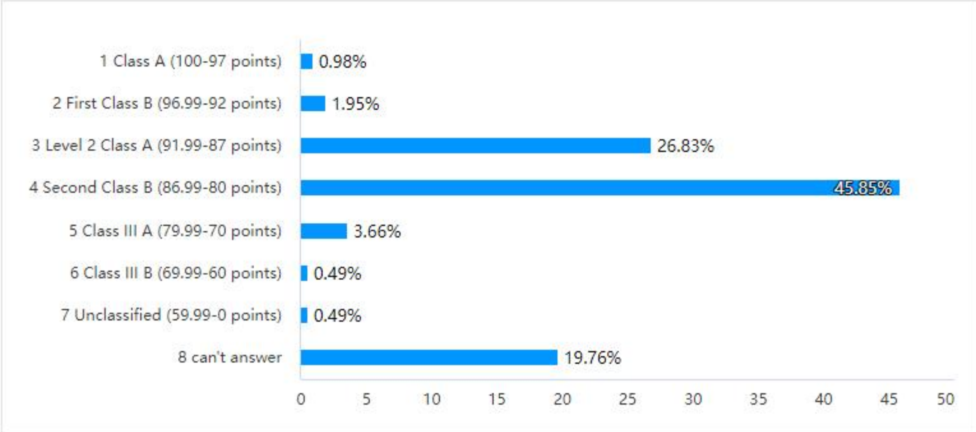
Table 2: Proportion of students taking putonghua proficiency test

Options	Subtotal	Proportion
1 participated	354	86.34%
2 did not participate	56	13.66%
Number of valid fills in this question	410	



According to Table 2, among the 410 students, those who have participated in the Putonghua proficiency test account for 86.34%, while those who have not take part in the test account for 13.66%. The survey shows that the promotion work of the school has a certain positive impact on students.

Table 3:mandarin proficiency test score distribution



Mandarin proficiency test is divided into three levels and six levels, from high to low, they are level 1 a, level 1 a, level 2 B, level 3 A, level 3 B. As can be seen from Table 3, the highest proportion is Grade 2, Grade B, and the test score is 80-86.99. This level belongs to the normal communication and communication in Putonghua, but there are still some pronunciation problems and dialect pronunciation. In the highest grade, grade A, students only accounted for 0.98% of the exam, which shows that the training of Mandarin proficiency test needs to be intensified, and oral practice is essential for students.

4.2Present situation of teaching materials for mandarin proficiency Test training

Table 4： Analysis of teaching materials of mandarin proficiency Test

No.	Test Overview (Putonghua, Putonghua Proficiency Test, Computer Aided Test)
1	The concept of Mandarin; Significance of testing; Examination paper composition; Test time; Scoring rules; Test outline.
2	The concept of Mandarin; Significance of testing; Grade standard; Specific requirements; Test paper composition
3	No specific test overview; A separate article introduces computer-aided testing.
4	The concept of Mandarin; Significance of testing; Grade standard; What is, why to machine test; Machine test guide.
5	Examination paper composition; Test time and scoring; Grade determination (as an appendix).
6	The connotation, origin, position of Putonghua and its relation with dialect
7	There is a chapter on "Mandarin Learning problems", including: Mandarin, Chinese spelling audios, basic phonetic knowledge, discrimination and standardization of languages and audios; The meaning, content,requirement, grade standard and preparation of putonghua
8	The scoring standard of putonghua proficiency test; Scoring rules; Notes for intelligent system candidates; Test guide for machine auxiliary test; certificate styles.

9	The definition, formation and relationship between Putonghua and dialects; Mandarin phonology; The significance, nature, method, content, scope, grade standard, object and requirement of putonghua proficiency test; Machine auxiliary test test process, matters needing
10	Definition of Putonghua; The definition of putonghua proficiency test several dialects.
11	Introduction to putonghua proficiency test and the standards of various industries; Machine auxiliary test operation process.
12	Introduction to putonghua Proficiency Test; Machine-auxiliary test process, machine-auxiliary test scoring standard.
13	Definition of Mandarin; Putonghua proficiency test definition, grade standard outline; The development, process, matters needing attention of machine auxiliary test, function introduction of online learning card.
14	Definition of Putonghua; Why to learn, how to learn; The nature, content, method, scoring standard, process and attention of putonghua proficiency test (machine-aided test is integrated among them).
15	Definition of Putonghua; Introduction of putonghua proficiency Test and eligibility criteria (see appendix for relevant information); The operation flow of machine auxiliary test.
16	Introduction of putonghua proficiency test, nature, content, grades, scoring rules, and standards of conformity in various industries; The operation flow of machine auxiliary test.
17	The meaning, characteristics, formation and development of Putonghua, laws and regulations, goals, status quo, importance, etc. The nature, characteristics, significance, content and scoring standard of putonghua proficiency test; Test-taking strategies.
18	With 17
19	With 17
20	nothing

Of the 20 textbooks selected, all the other textbooks have more or less introduced the general introduction of the test, except the Peking University edition of The Putonghua Course for Guangdong, Hong Kong and Macao (the second Edition), which is edited by Gao Ran. Among them, there are 19 kinds of textbooks introduced putonghua proficiency test, generally to putonghua proficiency test definition, content, requirements, scoring standards, etc., some also elaborated putonghua proficiency test significance, nature, characteristics, formation and development. There are 13 textbooks that explain the concept of Putonghua in detail. Among them, putonghua Testing and Training organized and compiled by Hunan Testing Center and edited by Chen Hui, and Putonghua Proficiency Testing Practical Textbooks in Shanghai, Jiangsu and Henan series published by Communication University of China Press have the most detailed exposition. The former introduces the definition, formation, phonology and the relationship between putonghua and dialects one by one, while the latter not only introduces the meaning, characteristics, formation and development of Putonghua, but also introduces the laws, objectives, status quo and importance of putonghua. There are 12 kinds of teaching materials to introduce machine-aided testing, including what is machine-aided testing, why machine-aided testing, machine-aided testing process, machine-aided testing score standard, machine-aided testing test strategy, function introduction of Archcy learning card, etc.

RESEARCH RESULTS AND SUGGESTIONS

In order to understand the current situation of the general training materials, this study simulated the pronunciation knowledge and pronunciation skills of putonghua and test introduction in 20 teaching materials Related appendix content of ink, by statistical analysis found that the current teaching material exam-oriented tendency obviously, in terms of examined 20 kinds of teaching materials, college textbooks compiled by linguistic scholars, tend to follow the clues of a from plane to point comparison pay attention to the integrity of the language teaching and systemic, therefore, on this basis, point tu file test item and test points difficult Testing experts are more from the perspective of putonghua proficiency test as a national examination, while highlighting the preparation of test content, pay attention to introduce the relevant national spirit and test-taking strategies At the same time, through the students to participate in the number of putonghua proficiency test and examination, as a kind of skill examination training, putonghua testing the content of the training than usual pre-test training uncertainty more obvious under this situation, to improve the quality of mandarin level test training, we must implement the layered architecture of training content Mandarin level test training courses Cheng is a kind of relying on the mandarin Chinese test TuiPu working practice, pay attention to the training object of learning experience, closely around the test points to read said rather than written oral English training, and general language courses but there is a big difference, so training teaching should be based on the practice of the development Pay attention to the open course content Focus on the generation of students' experience and pay attention to students' active participation

CONCLUSION

At present, putonghua proficiency test and putonghua proficiency test training should be the two wings of the cause of national language unification, putonghua proficiency test is the means of grading, putonghua proficiency test training is the basic measure to achieve the level of improvement. But in reality, training course research obviously lags behind test research. Therefore, we believe that as long as the subjects of management, training and training have a clear understanding of the course characteristics of putonghua proficiency test training and have a substantial understanding, putonghua proficiency test training course will be able to embark on a scientific and humanized mutual combination and development road.

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INNOVATIVE APPLICATION OF ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCE MANAGEMENT

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ABSTRACT

With the development and application of science and technology, the field of human resources is facing great changes. With the COVID-19 pandemic, the operation and production mode of all industries has been forced to change, and the "golden rule" of talent acquisition has changed greatly. (Yuheng Zhao, 2020). Even more serious as the budget cuts caused by the economic fluctuations caused by changes in the international environment, such as the pandemic and the war between Russia and Ukraine. On top of that, there is daily work. At a time of change, Artificial Intelligence can bring solutions to the human resource management profession. The goal of the solution is to improve and automate the recruitment of temporary workers to find the best match with existing job offers (Delecraz, S., Eltarr, L., Becuwe, M., Bouxin, H., Boutin, N., & Oullier, O., 2022). According to the survey, artificial intelligence and automation technology have the potential to help us solve the following human resource management problems, for example, Grasp the skill status of employees; Prevent unexpected staff turnover; Quickly respond to hot issues of employees; Arrang appropriate career development opportunities for employees and external candidates. Provide managers with more effective pay adjustment guidance; Eliminate human tasks in benefits administration and compensation by automating robotic processes, and create irresistible platforms for employees to learn anywhere and anytime. This article will discuss the possible future trends and implementation methods in detail to help human resource professionals start their journey in artificial intelligence. Results show that intelligent automation technologies constitute a new

approach to managing employees and enhancing firm performance, thus offering several opportunities for HRM but also considerable challenges at a technological and ethical level (Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A., Trichina, E., 2022).

Keywords: Artificial Intelligence; Human Resource Management; Application; Learning organization

INTRODUCTION

First, let's define what artificial intelligence is, (AI) is a catch-all term that covers many fields, including machine learning and cognitive computing. Artificial intelligence is a branch of computer science that aims to use computers to simulate intelligent behaviour. Artificial intelligence has been successfully applied in visual perception, natural language processing, speech recognition, speech-to-text conversion, language translation, intonation analysis and several other fields. What kind of HR scene will implement the AI application first? How do manage the cost and benefits of using AI applications? How to build up a data security strategy?

1.1 Challenges we face:

Human resources are undergoing rapid and profound changes. Human resource management, once regarded as a support department providing employee services, is now regarded as one of the most important departments in the company leading the global digital transformation organization of the enterprise. This change mainly occurs in three aspects: First, digital workforce: How can organizations promote new management practices, a culture of innovation and sharing, and a set of practices that foster new web-based organizational talent? Second, the digital workplace: how do organizations design a productive work environment, use modern communication tools, and promote engagement, health and a sense of purpose? Third, digital human resources: How can organizations change the HUMAN resources function itself, operate digitally, provide solutions using digital tools and applications, and constantly experiment and innovate? Digital human resources have experienced nearly 60 years of development. In the 1960s and 1970s, the human resources department focused on people operations, transaction automation, and maintaining employee records systems. As a result of the lagging concepts of the relevant managers of enterprises, these enterprises have not invested enough funds in the construction of their human resource database, which seriously restricts the innovative development of their human resource management mode (Deyu Xue 2016). With the progressive development of science and technology, Artificial Intelligence technology has been widely applied in various fields, at the same time, Artificial Intelligence technology has been more and more applied in human resource management practice.

This innovative move not only promotes organizational structure reform but also has a positive impact on human resource management. For example, Artificial Intelligence has injected new vitality and opportunities into human resource management, improved the efficiency and quality of enterprise work, realized scientific and reasonable salary management, and established a new learning platform based on artificial intelligence to promote enterprise innovation. While bringing opportunities, there are also some negative impacts, including the structural excess of human resources, the increase of the threshold of employment of human resources management, and the negative social effects caused by the dilemma of low-end talents facing elimination. This paper analyzes the influencing factors of Artificial Intelligence on Human resource management in China, and proposes countermeasures for Human resource management of Chinese enterprises in the era of artificial intelligence, to maximize the effectiveness and value of human resource management by using artificial intelligence as a platform (Zhen Ma, 2021). Human resource management is gradually developing with the progress of the organization, it represents a great change in the method and implementation of human resource management. Human resource management is based on a large amount of basic data processing of personnel information. Traditional human resource management adopts manual data processing, which is time-consuming and difficult to guarantee the accuracy and fairness of processing results (Tianjiao Chan, 2019). So it's more important than ever for human resource managers to understand how AI is reshaping the way industries work.

LITERATURE REVIEW

The application of artificial intelligence and automation technology can help us effectively solve and manage many problems, For example, Master the skills of enterprise employees; Guard against unexpected employee turnover; Quick response to employee hot issues; Arrange appropriate career development opportunities for employees and external candidates; Provide managers with more effective compensation adjustment guidance; Eliminate human tasks in benefits administration and compensation through robotic process automation; And create a platform for employees to learn skills that they can't refuse, so they can do it anytime, anywhere. From the above research, it is concluded that the combination of artificial intelligence and human resource management will be the development trend of human resource management in the future. Enterprise human resource management refers to the selection of the most appropriate human resource management model for an enterprise in the process of production and operation through data screening of big data and comparison with previous business data of the same industry and the enterprise (Zhe Wang, 2021).

Integrated some long-term applications of AI technology assistant human resources management of enterprises experiences show that artificial intelligence can significantly improve the work efficiency of human resource management department because artificial intelligence helps:

- Business Challenge
- To attract and cultivate talents of new skills
- Improve staff experience
- To provide decision support analysis
- More efficient use of human resources budget

1. The current situation of human resource management

With the continuous development of modern information and AI technology, information technology has been integrated into all walks of life and has played a strong role in promoting the development of all walks of life. Under the traditional human resource management model, the overall management efficiency is relatively low, and it is difficult to adapt to the development needs of the new era. For an enterprise, the management efficiency and level of human resources also directly affect the enterprise's operation and development level. Traditional management mode is mainly manual management, the overall management concept and means have been difficult to adapt to the development needs of the new era. In a word, in the development of modern enterprises, the informatization development of human resource management has become a part of the current enterprise operation and management work that must be paid attention to (Zhan Wang, 2010).

1.1 Human resource management is cumbersome

Human resource management is complicated and tedious, covering many aspects including recruitment, planning, training, development, interpersonal relationship coordination, salary performance, etc. For those human resource management part of the repetitive and monotonous work, is one of the reasons for the tedious human resource management work.

1.2 Strong subjective consciousness of human resource management

There are many subjective factors of qualitative analysis and evaluation in human resource management, which leads to errors and inaccuracy in many evaluation results. Too strong subjective factors make human resource management work, not objective, fair and just. Artificial intelligence technology allows human resource managers to deal with complex problems more professionally, efficiently and objectively. Of course, we should also note that at present, artificial intelligence technology only plays an auxiliary role in the decision-making process of human resources, and the final decision still needs to be made by decision-makers based on scientific analysis and systematic thinking. Decision-makers should assess the performance and development of employees with the convenience of ARTIFICIAL intelligence technology, and make decisions based on objective factors such as enterprise history, enterprise culture, enterprise development strategy and employees' characteristics (Yanbo Kuai, 2019).

1.3 Limitations of human resource management talent assessment and testing Angle

The traditional talent assessment technology usually uses past achievements or experience to judge a person's ability, but now it is more needed to evaluate the matching degree of the employee with the position and the competency of the position from the perspective of dynamic development, and the potential for development in the future work. The past cannot represent the future, and the limitation of talent evaluation and testing Angle cannot accurately identify talents.

2. Application of artificial intelligence in human resource management

Some of the changes that HR professionals expect to see in the mass adoption of AI in HR departments relate to three main areas: recruitment and onboarding, employee turnover and retention, and automation of administrative tasks. The role of AI in helping HR is to ensure every employee feels safe and gets the required help, and provide them space for creativity, intelligence, and empathy to offer excellent work. (Bhumika Dutta, 2021)

2.1 Recruitment and onboarding

So far, only a handful of organizations have started to incorporate AI into their recruiting efforts. There is a tremendous opportunity for professionals to adapt their processes and benefit from AI technology. Secondly, combined with relevant big data platforms and internal human resource management databases of enterprises, the recruitment information is released, the current recruitment requirements of enterprises are listed effectively in the recruitment information, and the preliminary screening or even screening of talents is completed according to the enterprise's database (Xiaqing Xi, Chunlei Leng & Jing Lei Qu, 2019). AI-based HR tools come in a wide range of forms, aiming to take on some aspects of HR work such as hiring, training, benefits, or employee engagement. (Matissa Hollister, 2021)

For example, AI technology can reduce the number of applications abandoned by simplifying the application process and creating more concise and efficient applications. The application of AI technology for the human resources departments makes their recruitment work easier to complete. For applicants, the application of artificial intelligence technology makes the application process more simple and easy to operate, which can improve the application completion rate. In addition, the application of the big data technology can help enterprises to better build a talent database management model, through the talent database integration of applicants and the enterprise’s internal staff information, information such as professional direction, professional ability and potential, can make the enterprise of talent shortage of jobs more quickly more accurate to find the suitable talents, Instead of spending a lot of time and resources looking for new candidates, truly achieve the precise match between talent and position. Once the hiring manager has found the best candidate for their open position, the onboarding process begins, using artificial intelligence technology to complete the onboarding process from anywhere via chatbots and remote support apps, which is a huge improvement over the previous onboarding process while saving time and reducing manpower. Through the establishment of established criteria can be a more objective evaluation of candidates, to make the selection of talent more fair and objective. At the same time, the information talent screening system can also effectively replace the human screening, avoid the problem of human screening errors, effectively improve the speed of talent recruitment, and find suitable talents for enterprises (Li Xiao, 2020).

2.2 Employee turnover and retention

In addition to improving the hiring process, HR professionals can leverage AI to improve internal mobility and employee retention. Megan Mc Neill (2020) points out that through personalized feedback surveys and employee identification system, human resource departments can understand the overall needs of employees more accurately than before, measure employee engagement and job satisfaction, and respond to the hot needs of employees more quickly to improve the competitive advantage of the organization. Some Artificial intelligence software is known to assess key indicators of employee success to identify those that should be improved to promote internal mobility. It has the potential to significantly reduce employee retention. At the same time, with the help of such big data technology, the new talent compensation incentive model can mobilize the enthusiasm and enthusiasm of talents to strive for the enterprise to a greater extent, so that the enterprise can realize higher economic benefits and talents with corresponding contributions to various positions can also get more generous compensation returns (Yufen Huang, 2018).

2.3 Build an open learning platform

In terms of learning, AI helps accelerate the development of individual skill levels, which in turn increases the productivity of the entire organization. Learning content tagging is a very good AI application. In traditional models when learners interact with a company's traditional learning platform, knowledge and documentation are often limited to past upload times and require a lot of manpower to keep the platform up to date. The use of artificial intelligence can not only allow employees to quickly find knowledge to learn and filter repeated content, but also reduce maintenance manpower. Artificial Intelligence integration into human resources practices will make organizations better because these applications can analyze, predict and diagnose to help HR teams make better decisions, according to research from the International Research Journal of Engineering and Technology (Dom Nicastro, 2020).

RESEARCH FINDINGS

The role and potential challenges of using artificial intelligence in human resource management

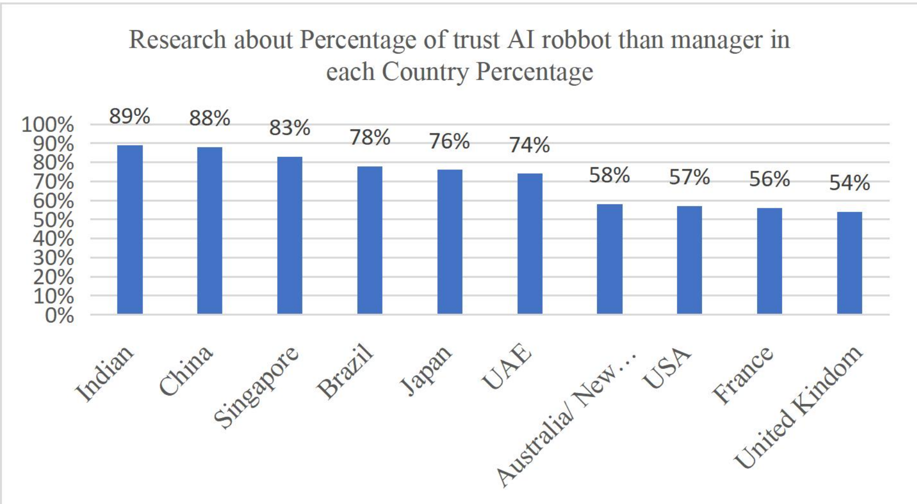
The role and potential challenges of AI, it is clear that AI will continue to positively shape the field of human resource management, but human resource professionals should also be aware of the challenges they may face. While human resources departments are generally concerned with making AI easier and safer to use, the most common barriers to employees using AI at work are security and privacy concerns. Survey interviews indicate that respondents would rather interact with people in the workplace than with machines. Going forward, HR professionals need to be prepared to address these issues. For example, employees want organizations to respect their data and get permission before using such technology to collect relevant information, while organizations also want to be protected from data breaches, and human resources professionals must consider appropriate security measures. For the sustainable and healthy development of human resource management, professionals must be aware of current trends in the field and take the necessary steps to lay a solid foundation for human resource management knowledge.

3.1 Employees have a positive attitude towards AI

The rational application of AI technology has had a positive impact on the current social situation, and the way AI employees cooperate in the workplace has had a significant impact. Most employees show a positive attitude towards the arrival of AI. A good human resource management model can enable internal employees to do their best and develop new and higher work efficiency (Fenfang Ye, 2018). AI can help employees drive better organizational innovation and build better, healthier working relationships. Employees want to delegate simple mechanical tasks to AI systems, such as creating expense reports, calculating employee benefits, writing paychecks and vacation applications, and career coaching by AI. Especially during the pandemic, most people prefer to conduct job interviews through AI to reduce the risk of spreading the virus. At the same time, see the growing use of AI in the workplace as an opportunity to acquire new skills and provide organizations with more strategic work.

3.2 AI improves the relationship between employees

Employees are increasingly engaged in research into AI technologies, with a positive impact on both their professional and personal relationships. AI has improved their relationship with colleagues, and the introduction of AI technology in the workplace has helped improve their relationship with their superiors. Employees trust robots more than managers. The growing adoption of artificial intelligence at work is having a major impact on the way employees interact with their managers. As a result, the traditional roles of HR teams and managers are changing. They turn to AI instead of their managers. They think robots can do a better job than their managers.



According to the chart, workers in India (89 per cent) and China (88 per cent) trust AI more than their managers, according to a joint survey by Oracle and Future Workplace. It was followed by Singapore (83%), Brazil (78%), Japan (76%), United Arab Emirates (74%), Australia/New Zealand (58%), United States (57%), United Kingdom (54%) and France (56%).

3.3 Artificial Intelligence technology changes the relationship between people and technology at work

With the deepening of the human resource management research, its function module is more and more refined, and the emergence of artificial intelligence technology, can will more and more management needs to make quantitative processing, after a big data comparison, the background calculation, summarize regularity in the complex transaction, through quantitative means the transaction process simplification, accurate (Hongjin Cheng, 2018), Artificial intelligence technology is being applied more and more widely in the workplace. For example, human resource managers need to analyze the human resource development structure of enterprises and make supply and demand forecasts when planning talent team construction. AI technology can accurately predict supply and demand with the help of models and relevant algorithms.

3.4 Prospects of the application of artificial intelligence technology in human resource management

The impact of AI at work is just beginning. To take advantage of the advanced advantages of AI, organizations need to focus on simplifying, maintaining and updating the AI technologies being used to maintain their competitiveness. The early application of information technology in human resource management mainly includes recruitment resume collection, performance evaluation data calculation, employee contract registration, online teaching and training, etc. (Mu Lin et al., 2018). With the popularization and development of industrial intelligence technology, it will be deeply integrated with each module of human resource management. For example, in the recruitment process, the system will not only receive resumes but also be able to transform a large number of resumes into a unified structured resume in a short period. In the training work, an artificial intelligence training system is established according to enterprise big data. On the one hand, based on the employee's performance appraisal results, arranged for the targeted job skills upgrading training, on the other hand, according to the employee's interests and hobbies, personality traits and other personalized courses recommended, at the same time increase the practice link in the curriculum, not only takes into account the employee's personal experience but also helps to improve the training effect. The application of artificial intelligence technology to human resource management of enterprises is like a "double-edged sword", with both threats and opportunities, which need to be treated didactically (Xingzheng Xiao et al., 2018). The application of artificial intelligence technology in future work has greatly improved the efficiency of human resource management, and also reduced the management cost of enterprises to a certain extent. Some working skills and pride of the human resource management practitioners will no longer have an advantage in front of artificial intelligence technology, enterprise managers are bound to the introduction of artificial intelligence technology to improve the efficiency of management, artificial intelligence will replace gradually more and more pure technical or transaction job, such as salary specialist post, personnel file management, training specialist, etc. (Peijian Xu &Yaohua Li, 2018). In addition, artificial intelligence cannot break through the defects in decision-making and innovation due to its limitations, namely the setting of programming, which puts forward new requirements for the ability of human resource management practitioners in the future. Practitioners' value judgment, decision-making ability and innovation ability will become more and more important.

Advance with the times and help each other

The impact of artificial intelligence technology on the human resource management industry and practitioners is inevitable. Only by constantly adjusting development strategies can we continue to move forward in this change. First of all, the strategic target of enterprise development should be a learning organization with a flat structure. On the one hand, artificial intelligence technology should be widely applied from the perspective of improving efficiency and freeing "human hands"; on the other hand, publicity and counselling should be done to improve the acceptance of artificial intelligence by human resource management practitioners (Ying Luo, 2019). Secondly, for HR practitioners, the first thing is to find their positioning, focus more on decision-making and innovative work, and distinguish themselves from the areas where artificial intelligence is good. Therefore, it is very necessary to realize artificial intelligence in enterprise human resource management. At present, there are still many deficiencies in human resource management in enterprises, which lead to a great waste of human resources and reduce the work efficiency of employees. (Xueqin Zhou &Wei Zhou, 2021)

CONCLUSIONS

The development of artificial intelligence technology, a subversive science and technology, not only brings challenges to the human resource management industry and practitioners but also brings new development opportunities. Digital HR is built on innovation and experimentation, and new approaches are needed in almost every HR field. Human resources have a key opportunity to help lead the transformation of digital enterprises. HR teams embracing digital platforms to meet the twin challenges of HR operations transformation game-changers in the coming years. At the same time, artificial intelligence technology can improve the efficiency of human resource management, reduce the cost of the enterprise, and promote the development of the industry, practitioners should actively adapt to the new career requirements, strive to explore the formation of human and artificial intelligence cooperation and complementary work mode, promote the reform of human resource management. Exploring and investing in agility through constant reinvention has a positive impact on the organization's business results as well as the employee experience. Real-time adjustment is summed up as most suitable for the current environment and form of human resources management mode, for the development of enterprises to provide a strong escort (Huwei Ding, 2020).

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FINANCIAL INNOVATION OF 'CHENGDU DECO DIGITAL GOLD' IN THE CONTEXT OF ARTIFICIAL INTELLIGENCE

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ABSTRACT

In today's increasingly advanced artificial intelligence technology, almost all enterprises, are concerned about the impact of big data on corporate finance work in the artificial intelligence environment. Artificial intelligence can promote the improvement of enterprise productivity, which can reduce the difficulty of enterprise work and accelerate the innovation of enterprise work. Artificial intelligence has the characteristics of high efficiency and accuracy, which can save a lot of costs for enterprises. Just like big data, AI is a socio-economic enabler that helps humans understand and analyze the world. This paper mainly researches the financial innovation of Chengdu Deco Digital Gold Co., Ltd. in the context of artificial intelligence, and analyzes the company's finance by using financial indicators such as profitability and operating capacity, and finds some problems in the company's financial innovation, such as ignoring the influence of non-material factors on the financial development of the enterprise, and the insufficient knowledge reserve of the company's financial personnel. Then some suggestions are targeted, such as the reasonable use of the convenience brought by big data and the strengthening of training for the company's staff. Through the research of this paper, we provide some reasonable suggestions for the company in financial innovation.

Keywords: financial innovation; artificial intelligence; big data; digital economy

INTRODUCTION

1.1 Background and significance of financial innovation

According to Li Xinhe (2000), Human society is gradually changing from the information age to the intelligent age. The trend of regionalization, integration and complexity of economic activities is also strengthening. With the advent of the era of artificial intelligence, in such a general environment, it makes all fields of human society undergo changes. In such a context, the traditional way of working in finance can no longer meet the needs brought about by innovations in other industries. The development of artificial intelligence has had a huge impact on the traditional way and method of financial work. The financial innovation of enterprises and the sharing of financial information are inevitable. If companies fail to innovate with financial intelligence, they will inevitably be eliminated from the trend of development. The financial innovation under artificial intelligence is not only the innovation of financial work methods, but also the innovation of enterprise financial personnel. Nowadays, the simple financial work has been replaced by machines, making most of the financial personnel face the risk of unemployment. To survive in the financial mode under the artificial intelligence environment, they have to improve their financial knowledge and financial skills. In the face of financial innovation in the artificial intelligence environment, enterprises should also update their own financial models and improve the overall quality of financial personnel in a timely manner. In today's context, financial personnel must have the innovative thinking to keep up with the times and face the impact of emerging technologies (Li Xinhe, 2000).

According to Dong Shimin (2001), Financial innovation in enterprises is an eternal topic. The twenty-first century is the era of artificial intelligence, financial innovation has an important role in the long-term development of enterprises, while the intelligence of financial accounting and the improvement of the overall quality of financial personnel are important factors for the sustainable development of enterprises. The significance of enterprise financial innovation is that the intelligent financial era can bring more convenience to enterprises, including investment and financing of enterprises have great convenience. The financial innovation of enterprises can promote the development of enterprises, and the financial innovation of one enterprise can also promote the financial innovation of other enterprises. Nowadays, simple financial work has been replaced by artificial intelligence, and financial personnel will have more time and energy to improve their comprehensive quality, so that they can better handle relatively complex financial work. The significance of enterprise financial innovation is that the financial model under intelligence can reduce wrong financial accounting, and can reduce the basic workload of financial staff, making the development of enterprises with higher stability. (Dong Shimin, 2001)

1.2 Review of domestic and international literature

According to Tian Lei (2017), The innovation of enterprise financial management in the context of the new economy. In the article, he analyzed that China's economy is currently in a state of steady development, so the financial work of enterprises must conform to the requirements of the new economic development and need to make reasonable use of the convenience brought by artificial intelligence technology for our development. At the same time, he also proposed in the article that when exploring new methods of financial innovation, the original financial management model of enterprises needs to be changed in a timely manner, so as to facilitate the management of financial innovation in enterprises. Carrying out financial innovation in enterprises requires constantly enriching its means and methods in order to better promote the development of enterprises. (Tian Lei, 2017)

Digital financial innovation was proposed by Rongsheng Qin in 2020. In his paper, he analyzed the meaning related to digitalization and its characteristics and described some new initiatives in financial innovation. Also in the paper, he mentions that the accounting system is gradually transforming into openness, the financial working model is gradually transforming into integration, the financial services are gradually transforming into personalized services, the financial information is gradually approaching timeliness, the financial analysis is gradually approaching big data analysis, and the office software of finance is gradually developing into intelligence. The authors also reasonably analyze the relevant ideas about digital participation in business, while giving initiatives for cultural and organizational restructuring of the company.

Digital financial innovation was proposed by Zhang Dengzhou et al. (2020). In their article, they studied the characteristics of the era of digitalization. Also, in their article they seek new measures for financial innovation in the new era of companies, such as corresponding innovations in the thinking, organization and working models of companies. These corresponding methods of financial innovation are adapted to the current requirements of digital transformation and provide some references for the financial innovation and transformation of most enterprises.

Financial innovation and WeChat digital payments towards e-commerce success was proposed by Tang Yuk Ming et al. (2021). In their article, they derive the supporting role of big data and financial innovation, etc. by analyzing technologies such as WeChat branch. Also, the article uses WeChat as a case study to identify the influencing factors that affect consumers' willingness to adopt it as a digital payment. Several core influencing factors are identified. Then, through qualitative and quantitative analysis, the factors influencing the adoption of third-party digital payment platforms are explored. This study fully reflects the convenience of mobile payments for people in the big data and artificial intelligence environment. The authors also provide useful suggestions for the improvement of digital payments.

LITERATURE REVIEW AND RELATED LITERATURE

Overview of Financial Innovation

2.1 The concept of financial innovation

According to Liu Yanmei2021, the concept of corporate financial innovation is the development of corporate financial management to a certain extent, coupled with the continuous changes and role of certain related factors, which makes financial management complete a qualitative transformation, this process is the process of corporate financial innovation. Corporate financial management must be reformed at several levels, such as business objectives, capital structure, financial analysis and allocation methods. And several other levels, so as to adapt to the development of the knowledge economy. In traditional finance, the concept of resources generally refers to capital. In the new financial concept, the knowledge economy is a very important factor for companies to change the structure of resources and enrich the content related to resources. The contemporary knowledge economy, on the other hand, includes intangible factors such as artificial intelligence technology. （Liu Yanmei2021）

Artificial intelligence can be, by and large, an intelligent machine, which is created by people. Artificial intelligence is a technology that shows human intelligence with a general computer program. Artificial intelligence is the use of computers to imitate some human thinking and intelligence performance, which includes the use of computers to complete certain technologies, as well as to create computers similar to the brain. Improving the efficiency of computer use. Financial innovation in the context of artificial intelligence is the use of artificial intelligence technology to carry out some aspects of corporate financial innovation so as to improve the efficiency of financial work. For example, using intelligent machines instead of daily financial processing and performing some simple financial analysis.

2.2 Indicators reflecting financial innovation 1. Profitability analysis

The measure of company's profitability includes net profit, net profit, and gross profit margin. The higher the indicator is, the more abundant the profit is. In theory, corporate profitability is the degree of profitability of a company in a certain period of time. The higher its corresponding index, the higher the profit. Business operators should identify the problems in their operations from the analysis of indicators and propose strategies for them in due course.

2.2.1 Operating capacity analysis

The measure of the company's operating capacity includes accounts receivable, inventory and total asset turnover. Higher metrics imply better capacity. Usually, operating capacity is the strength of a company's operations. That is, the level at which the company uses different properties to make a profit. These three indicators are indicators of the speed of turnover of the company's assets, the state of their operation and the effectiveness of their utilization.

2.3. Analysis of solvency

The solvency of the company includes current ratio, quick ratio and current ratio. If the above indicators are high, it indicates that the company has a strong debt repayment capacity. Overall, debt service capacity is the company's ability to pay off its short-term and long-term liabilities. Debt service capacity is a major indicator of a company's financial situation. Starting with a company's debt repayment can reveal its sustainability and prepare it for its future development.

2.4 Summary

According to Li Xiaowen, Wang Jijian 2003, The previous article describes to the financial management of the company to be innovative in terms of financial analysis and other aspects. The three aspects of analysis described above are about the financial analysis of the company. Enterprise financial management is based on financial data, statements and other related information, and uses professional techniques and methods to study the business activities, profitability, operating capacity, solvency and development capacity of the enterprise. In this paper, the financial analysis of Chengdu Deco Digital Gold is used to find out the problems and make reasonable suggestions. As far as the financial analysis is concerned, these relevant indicators are the value indicators reflecting the operation of the enterprise, and the higher the indicators, the better the operation. At the same time, the innovation of enterprise financial management requires the innovation of financial analysis and so on, so the profitability, operation ability and solvency of the enterprise can also reflect the financial innovation status of the enterprise. If we can improve the indicators related to the financial analysis of the enterprise, it will be helpful for the development of financial innovation of the enterprise.

RESEARCH METHODOLOGY

3.1 Basic information of the industry

3.1.1 Overall analysis of the industry

The company studied in this paper is Chengdu Deco Digital Gold, whose main business is value-added telecom business and the industry it is in is the telecom industry. The following is the relevant analysis of the industry: In recent years, China's telecom business has developed rapidly, and its revenue will total 1.36 trillion yuan in 2020, an increase of 3.6% year-on-year. Nowadays, artificial intelligence technology application has led to the expansion of emerging businesses in the industry, driving the growth of telecom business revenue.

As seen in Table 1, the industry's business revenue is on an overall upward trend from 2016 to 2020. By the end of May 2020, the number of companies with value-added telecommunication services in China has reached a new historical level, and the competition pressure of each company is so great that to stand out from the majority of companies, innovation in various tasks must be carried out, and financial innovation is also an important part of it. In financial innovation, artificial intelligence and big data technology should be taken as the main direction of financial innovation.

Table 1 Statistics of telecommunication business revenue Unit: billion yuan

2016	2017	2018	2019	2020
1.18billion yuan	1.26 billion yuan	1.3 billion yuan	1.31 billion yuan	1.33 billion yuan

3.2 Analysis of Industry Representative Enterprises

China Mobile, China Unicom and China Telecom are the leading companies in value-added telecom business in China.

The financial data of China Mobile, the representative of the leading enterprises, is analyzed as follows:

Table 2 Profitability Analysis of China Mobile

Profitability Indicators	2021	2019	2018	2017
Net profit margin from main business	13.69%	14.07%	14.28%	15.87%
Net profit margin	6.64%	6.58%	6.88%	15.58%
Gross margin (%)	28.81%	30.57%	31.25%	32.64%

As can be seen from Table 2, China Mobile's main business profit margin, net profit margin and gross profit in the last four years are in a downward trend, where both main business profit margin and gross profit margin are the lowest in the last few years in 2021, but its net profit margin has rebounded. This indicates that China Mobile's overall ability to earn profits has declined in the last four years, which may be due to the drastic changes in the external environment and the impact of the epidemic in recent years. However, the managers of the company have combined a comprehensive analysis of multiple factors affecting profits and have developed timely strategies and financial policies to cope with them, which has led to a stabilization of China Mobile's profitability-related indicators in recent years.

Table 3 Analysis of China Mobile's operating capacity

Operating Capacity Indicators	2021year	2020year	2019year	2018year
Accounts Receivable Turnover Ratio	21.92	20.75	24.24	26.95
Inventory turnover rate	66.19	69.34	63.33	56.03
Total assets turnover ratio	0.485	0.467	0.482	-----

As can be seen from Table 3, all indicators of China Mobile's operating capacity have shown a fluctuating trend in the past four years. Among them, the turnover ratio of accounts receivable shows a fluctuating decrease, while the turnover ratio of inventory shows an increasing trend, and the total asset turnover ratio is basically stable. Theoretically, the higher the relevant indicators of profitability, the better, and the higher the turnover ratio indicator, the stronger the company's solvency. China Mobile's operating capacity indicators have been variable over the past four years, with the overall trend on a slight upward trend. The company's managers have analyzed the causes and made timely strategies to cope with them and set corporate management goals; at the same time, China Mobile has focused on the training of its employees and continuously enriched the relevant knowledge and comprehensive quality of its managers and staff, which has enabled China Mobile to develop steadily in a difficult environment.

This has enabled China Mobile to develop steadily in a difficult environment.

Table 4 Analysis of China Mobile's solvency

Solvency Indicators	2021year	2020year	2019year	2018year
Current Ratio	1.023	1.121	1.149	1.13
Quick Ratio	1.005	1.105	1.133	1.111
Cash Ratio	0.541	0.595	0.537	0.435

From Table 4, we can see that China Mobile's current ratio and quick ratio show an ups and downs and decreasing trend in the last four years, while the cash ratio shows a volatility and rising trend. Generally, the indicator of current ratio is better at 200%, but China Mobile's current ratio is around 100% in the last four years, and from the current ratio indicator alone, China Mobile's solvency is weak in recent years. In general, the indicator of quick ratio is better around 100%, but China Mobile's quick ratio is higher than 100% in the last four years, and from the quick ratio alone, China Mobile's solvency is stronger in the last four years. In the analysis of the solvency of the enterprise, it is also necessary to combine the indicators of inventory size, turnover speed, liquidity and liquidation value to make a comprehensive analysis of the final analysis policy. When analyzing the solvency of the enterprise, China Mobile managers combined with other related indicators to make a comprehensive analysis of the conclusion, while developing a solvency analysis mechanism suitable for the development of the company.

According to Liao Jiangping2020, in general, due to the general environment of the epidemic, all indicators of China Mobile's financial analysis have declined to varying degrees in recent years, but the overall situation has stabilized. Through the previous analysis, it can be seen that China Mobile has made financial innovations and developed timely responses in financial analysis and management objectives, resulting in a gradual stabilization of the company's relevant indicators in recent years. In a difficult environment, China Mobile's ability to make timely financial innovations and gradually turn back the indicators provides a good example for other companies in the same industry. (Liao Jiangping, 2020)

Basic information of the company 1. Basic introduction of the company

Chengdu Branch of Anhui Deco Digital Gold Technology Co., Ltd. was established on May 27, 2020. Registered address is Chengdu, China (Sichuan) Pilot Free Trade Zone

The registered address is 3F, Building 2, No.189 Tianfu 4th Street, High-tech New Area, China. Business scope includes: the first category of value-added telecommunications services; the second category of value-added telecommunications services; general projects: in the company (affiliated enterprises) within the scope of business engaged in other general business projects.

According to Xing, Huiqiang，2022 Although the Chengdu branch of Anhui Deco Digital Gold Technology Co., Ltd. was established in 2022, the head office is strong, and the branch was still established under the difficult environment, and it has encompassed several value-added telecommunication services in just over a year, and it has developed rapidly, and the scale of personnel has expanded rapidly. The expanding scale of the company also created a demand for the financial aspect of the company, and the company had a high demand for financial professionals and financial innovation technology. Therefore, it is imperative for the company to change the financial concept of the finance staff, improve the knowledge of the finance staff and make reasonable use of the working methods of artificial intelligence technology and big data technology.

The finance department of Chengdu Deco Digital Gold is composed of finance manager, finance supervisor, cost accountant, revenue accountant and cashier. It is mainly responsible for the company's financial affairs, formulating and executing the company's financial strategies, formulating the company's financing and investment plans, formulating tax management plans, improving the company's internal accounting system and financial management-related management systems, and supervising the company's compliance with national financial laws and regulations. The company's staff members each perform their own financial tasks. However, due to the short establishment of the company and the lack of adaptation to the new market environment, coupled with the fact that the company's financial system is not yet perfected as a whole, the financial staff is relatively lacking, the financial staff's knowledge reserve is insufficient, and the managers do not pay attention to the financial department, the company's financial innovation is basically at a standstill at present. If financial innovation can be carried out with reasonable use of artificial intelligence and big data technology, it will certainly benefit the long-term development of the company.

3.3 Analysis of the company's financial data

(1) Profitability Analysis of Chengdu Deco Digital Gold

Table 5 Profitability Analysis of Chengdu Deco Digital Gold

Profitability Indicators	2021year	2020year
Net profit margin from main business	1.22%	4.12%
Net Profit Ratio	1.32%	2.96%
Gross margin (%)	13.40%	13.60%

As can be seen from Table 5, the net profit margin index of Chengdu Dike Digital Gold's main business in the past two years is in a significant downward trend, which indicates that Chengdu Dike Digital Gold's ability to make profit in the main business income in 2021 has decreased, which is affected by many factors, such as the factors of product and service quality, cost, price, sales quantity, period expense and tax will all affect the net profit margin of main business. The net profit margin is also in a declining state, which indicates that Chengdu Dike Digital Gold's assets are used less efficiently and the company's use of funds to increase revenue is less effective. As far as the external environment is concerned, one of the reasons for the decrease of these two indicators of the company is probably the impact of the epidemic in recent years, which led to a significant decrease in the sales volume of the company's products and a decrease in profits; another reason may be the lack of attention to the impact of non-material factors on corporate finance

Another reason may be the lack of attention to the impact of non-material factors on corporate finance, such as the lack of attention to new financial policy changes and the lack of attention to new scientific and technological developments, so that the company cannot keep pace with the industry as a whole. The gross profit margin of the company has a small decrease and the value of the indicator in 2021 is only at 13.40%, its indicator is at a lower level compared to most companies in the same industry. The gross margin of China Mobile is 28.81% from Table 2, and its indicator is much higher than that of Chengdu Deco Digital Gold. From the perspective of corporate profitability, it shows that Chengdu Dike Digital Gold is not very competitive among its peers.

In general, the profitability of Chengdu Dike Digital Gold Co., Ltd. is low, and if the company wants to develop in this environment of rapid changes, it is necessary to change and innovate the company's finance. In financial innovation, managers can pay more attention to policy and technical factors, and make reasonable use of the convenience brought by financial policies and artificial intelligence technology.

3.4 Chengdu Deco Digital Gold Operating Capacity Analysis

Table 6 Chengdu Deco Digital Gold Operating Capacity Analysis

Operating Capacity Indicators	2021year	2020year
Accounts Receivable Turnover Ratio	3.166	3.111
Inventory turnover rate	2.863	3.701
Total assets turnover ratio	0.909	0.891

As can be seen from Table 6, the accounts receivable turnover ratio of Chengdu Deco Digital Gold has slightly improved in the past two years. In terms of individual indicators, the short-term solvency of Chengdu Deco Digital Gold has slightly improved, but the overall solvency still needs to be analyzed comprehensively by combining various factors. In a certain period, the more cycles of accounts receivable recovery, the shorter the recovery time, the more it can improve the company's operational efficiency, and the stronger the short-term solvency. In the past two years, the inventory turnover rate of Chengdu Dike Digital Gold is in a declining state.

The decline of inventory turnover indicates that the company's sales capacity is not strong. If the company wants to expand the sales volume of its products and increase the sales capacity, it must coordinate all the links between production and sales, which brings new requirements to the company's finance staff. The total asset turnover ratio of Chengdu Dike Digital Gold is also in a small decline in the past two years.

If the ratio of this index is low, it means that the company is less efficient in operating with all assets, which ultimately affects the company's operating capacity. From Table 3, we can see that China Mobile's accounts receivable turnover ratio and inventory turnover ratio in 2021 are much higher than that of Chengdu Dike Digital Gold, whose index values are 21.92 and 66.19, which shows that Chengdu Dike Digital Gold's solvency and sales capacity are lower than that of China Mobile.

In order to improve these indicators, the company must improve the business level of financial managers and staff. At present, the company's financial staff's ability is only in simple financial processing, avoiding the more complex ways and methods of financial work. If the company wants to improve its operational capabilities, it must strengthen the training of the company's financial staff and improve their ability to face complex financial issues.

3.5 Chengdu Deco Digital Gold Solvency Analysis Table 7 Chengdu Deco Digital Gold Solvency Analysis

Solvency Indicators	2021year	2020year
Current Ratio	1.630	1.633
Quick Ratio	1.017	0.959
Cash Ratio	0.046	0.009

As can be seen from Table 7, the current ratio of Chengdu Dike Digital Gold has slightly decreased in the last two years, and the current ratio is below 200% in both years, which indicates that the company's short-term solvency is weak in the last two years. The quick ratio of Chengdu Dike Digital Gold is around 100% in the last two years, and it is lower than 100% in 2020 and higher than 100% in 2021. In terms of the quick ratio alone, the company's short-term solvency improves slightly, but the overall solvency is weak. The cash ratio of Chengdu Dike Digital Gold is relatively low in the past two years, only 0.009 in 2020. The cash ratio is an indication of the company's ability to repay current debts with cash, which indicates that the company's short-term debt repayment ability is poor. The cash ratio is the most intuitive reflection of a company's ability to repay current debts. The cash ratio is usually considered to be 20% or more. As can be seen from Table 4, China Mobile's cash ratios in 2020 and 2021 are 0.595 and 0.541, respectively, both of which are higher than 20%, and the indicators are much higher than Chengdu Dike Digital Gold in the last two years. From the viewpoint of solvency, it shows that the solvency of Chengdu Deco Digital Gold is much lower than that of China Mobile.

According to Chen Yuan2018 When analyzing solvency-related indicators, it is also necessary to combine other influencing factors for comprehensive analysis, so there are requirements for the company's solvency analysis mechanism and the ability of relevant staff. If we want to improve the solvency index of the company, we must improve the solvency analysis mechanism and the comprehensive level of relevant staff, apply the big data technology and artificial intelligence technology to the actual work, and use the big data to analyze the relevant data in order to formulate a reasonable solvency analysis mechanism.

RESEARCH RESULTS

4.1 Ignoring the impact of non-material factors on financial development

According to the analysis of the profitability of Chengdu Dike Digital Gold, the relevant indicators reflecting the profitability of the company in the past two years have decreased to different degrees, which means that the company's ability to earn profits in the past two years has decreased. If the company does not make timely financial innovations to improve the relevant indicators reflecting profitability, it will cause a continuous decline in profitability, which will eventually affect the long-term development of the company.

According to Zhang Dengzhou, Li Jier 2020. There are many factors that cause the low profitability, through the observation of the company, there are two main reasons for the low profitability of Chengdu Deco Digital Gold in the past two years, one is the serious epidemic in recent years, resulting in lower net profit and related indicators; the other is the lack of attention to the impact of non-material factors on corporate finance, the company ignores the changes in national policies, modern artificial intelligence technology and expertise and other non-material factors on corporate profitability. The second is the lack of attention to the impact of non-physical factors on corporate finance. As a result, the company is unable to change its financial policies in time to cope with the impact of changes in national financial policies. (Zhang Dengzhou, Li Jier, 2020)

The company's failure to make reasonable use of modern artificial intelligence technology has resulted in the company's efficiency lagging that of most companies in its peer group. In the study of a company's profitability, if a company's financial practitioners focus only on its material aspects and ignore its immaterial ones, they cannot deeply reflect its deeper profit motives. There is also no precise estimation of the future profitability of the company. In the context of artificial intelligence, the financial innovation of enterprises is facing a new challenge, and the traditional financial work model has been difficult to adapt to the new accounting requirements, and it is urgent to enhance the innovation and utilization of information technology in finance in the new period.

4.2 Insufficient knowledge reserve of managers and financial staff

According to the analysis of Chengdu Deco Digital Gold's operational capacity, the company's various asset turnover ratios reflecting operational capacity in the past two years show a fluctuating trend, and in terms of the degree of change of indicators, the company's inventory turnover ratio declines more seriously, which means that the company's sales capacity decreases. If the company does not make relevant financial innovations in a timely manner and improve the comprehensive quality of its managers and financial personnel, its ability to earn profits from its assets will also continue to decline.

For Chengdu Deco Digital Gold, most of the company managers and financial workers still retain the original financial working methods and methods, and only pay attention to the financial account processing, but neglect the financial related analysis, which leads to the company's operational capacity analysis system has been imperfect. The analysis has remained on the surface, and no in-depth analysis of relevant indicators has been conducted, making the results of the analysis not very useful.

After the promulgation of various new financial policies, the company managers and financial staff have not spent time and energy to study and research, so that the company's financial policies and financial work have not been able to keep pace with the majority of peer companies. In the background of artificial intelligence, if the company managers and financial staff only stay in the account processing, they will not be able to comply with the changes and requirements of the development of the economic situation, and it is urgent to improve the company managers and financial There is an urgent need to improve the financial analysis ability of company managers and financial staff.

4.3 Inadequate solvency analysis mechanism

According to the analysis of the solvency of Chengdu Dike Digital Gold, the indicators reflecting the solvency of the company in the past two years also fluctuate and change, the current ratio of Chengdu Dike Digital Gold in 2021 is 0.003, the quick ratio is increased by 0.058, and the cash ratio is 0.037. This means that the short-term debt-servicing ability is weak. From the point of view of Chengdu Dike Digital Gold itself, the analysis of the company's solvency has not received much attention from the managers, coupled with the limited ability of the company's financial staff and the lack of a special position, the company's solvency analysis is made only through the pure financial statement data, ignoring some relevant dynamic analysis. The epidemic in recent years has led to the stagnation of the solvency analysis mechanism which was not perfected by Chengdu Dike Digital Gold, plus the inadequate access to various information, so the analysis of solvency is not complete. Under the background of artificial intelligence, if the solvency analysis mechanism of the enterprise is not perfect, it will not reflect the information related to the solvency of the enterprise correctly, and it is urgent to improve the solvency analysis mechanism of the company.

4.4 Suggestions for the company's financial innovation problems

Rational use of non-material factors affecting the company

According to Li Xiaowen, Wang Jijian，2003， Through the above analysis of the profitability of Chengdu Dike Digital Gold, the company's profitability is at a low level compared with its industry peers, indicating that the company's ability to earn profits is also low. There are two reasons for this analysis, one is caused by the overall environment and the other is that the company ignores the impact of non-material factors on corporate finance. Nowadays, the rapid development of artificial intelligence and big data technology will improve the efficiency of the company's financial staff if these technologies can be used wisely and some simple arithmetic tasks can be done by machines. (Li Xiaowen, Wang Jijian，2003)

Nowadays, new financial policies are emerging all the time, and the management and financial staff of Chengdu Deco Digital Gold should comply with the changes and requirements of the economic situation, grasp the new national policies timely and accurately, understand the trend of development, and make corresponding financial policies in time. For example, timely find out the changes of tax policies and make effective tax planning; use big data to analyze other enterprises suitable for investment and make effective investment.

Chengdu Deco Digital Gold can also learn from the relevant experience of China Mobile, combine multiple factors affecting profits for comprehensive analysis, and then promptly develop strategies and financial systems to cope with them. The company should also increase the financial work responsibilities of tax declaration and preparation of financial statements. Due to the impact of the epidemic, the value-added telecommunications industry is basically in a stagnant industry. However, the various financial policies of the country also give a lot of preferential policies to enterprises, such as lower tax rates and various subsidies. If Chengdu Deco Digital Gold can carry out relevant tax planning and make reasonable use of preferential tax policies to improve the economic benefits. In general, the market has changed a lot in recent years, so it is better for Chengdu Dike Digital Gold to choose a stable and increasing financial strategy.

4.5 Strengthening training for the company's managers and finance staff

Through the above analysis of Chengdu Deco Digital Gold's operating ability, the company's asset turnover ratio is much lower than the index value of the same industry, which indicates that the company's ability to earn profits from its assets is weak. The reason for this is that the managers and financial staff of the company do not have enough knowledge and their work is only in the area of account processing. Therefore, it is an important task for the company's managers and financial staff to enrich their knowledge and improve their ability to analyze various financial indicators. In the era of artificial intelligence and the Internet, which provides new facilities for learning financial knowledge, the managers and financial staff of the company can use Internet technology to learn new financial policies through a combination of online and offline, and be able to watch the corresponding explanations.

According to Liu Xiayun2020, The management of Chengdu Deco Digital Gold should strengthen the relevant financial skills of the finance staff through various channels, ways and means, and improve the comprehensive quality and work competence of the company's finance staff, so that they can become high-quality comprehensive talents who can master information technology, conduct financial analysis and financial innovation from multiple levels, find the defects in financial decisions, and make more rationalized suggestions. Talent. For example, the company can use classes to learn, and let the company's accounting seniors to conduct knowledge lectures, case studies and experience sharing for the training of financial personnel.

The management of Chengdu Deco Digital Gold can also learn from the successful experience of China Mobile to improve the training of employees' knowledge and skills, so that they can constantly adapt to the new environment, learn new knowledge, and improve their ability to evaluate and analyze risks for the long-term development of the company.

4.6 Develop a reasonable solvency analysis mechanism

According to the above analysis of Chengdu Deco Digital Gold's solvency, the company's current ratio has been low in the past two years, and the best current ratio indicator is about 200%, and the quick ratio is slightly improved in 2021. However, the company's short-term debt service capacity is weak. Debt service capability is a major factor in measuring a company's financial position and is also related to the long-term growth of the company. Therefore, strengthening the company's solvency analysis has become a must for the company's financial innovation. In-depth solvency analysis can help managers to manage the company effectively, improve the business situation and enhance the competitiveness of the company.

Nowadays, the rapid development of technologies such as artificial intelligence, whose query and computing power is much higher than that of humans, will facilitate the solvency analysis of companies if used rationally. Through the observation of Chengdu Deco Digital Gold, the company should promptly cultivate relevant analytical talents and combine several influencing factors to come up with a solvency analysis mechanism suitable for the company. At the same time, improving the comprehensive quality of enterprise managers and relevant staff is also closely related to solvency analysis, and highly qualified staff can better and faster adapt to the new solvency analysis mechanism.

CONCLUSIONS

In the current market economy and artificial intelligence environment, the importance of financial work is becoming more and more prominent for enterprises. The focus of financial work is gradually changing from accounting to financial management, and finance departments and finance personnel must innovate the financial management of enterprises within the scope allowed by national policies. The finance department of an enterprise

It is one of the core departments of an enterprise and plays an irreplaceable role in the long-term development of an enterprise. In 2020, under the environment of unusually serious epidemic, Chengdu Dike Digital Gold still insisted on being the first enterprise to resume work and production, and used the Internet technology to implement online office and other working methods. In terms of finance, the company's financial staff did a good job of comprehensive budget management and capital control. Although the external environment was exceptionally difficult, the internal development of the company was exceptionally rapid, and several work projects were added in a short period of time.

For the company, financial innovation is important and necessary, and the innovation of the financial mindset of the company, the innovation of the work of the company's financial department and financial staff, and the innovation of the organization of the company's financial department and financial staff are all very important aspects, all of which are important factors to promote the rapid development of the company in the context of artificial intelligence. In general, in order to not be eliminated in the context of artificial intelligence, enterprises must accept the impact of the new era, and accept the opportunities and challenges brought by the new era in order to develop in the long run.

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STUDY ON THE DEVELOPMENT OF "CHINESE + VOCATIONAL EDUCATION" AT CONFUCIUS INSTITUTES IN THAILAND

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ABSTRACT

With the deepening of Sino-Thai economic and humanistic education cooperation, Confucius Institutes in Thailand are developing "Chinese + Vocational Education" in the new era, and it is necessary to further summarize and refine their development paths and effects, study and analyze their characteristic advantages and shortcomings. This paper investigates the current situation of "Chinese + vocational education" in 16 Confucius Institutes in Thailand, analyzes and summarizes the main problems, and proposes countermeasures for sustainable and high-quality development.

Keywords: Confucius Institutes in Thailand; Chinese + Vocational Education; Development Status

INTRODUCTION

I. Research Background

Since the creation of the "Chinese + Vocational Skills" forum at the 2019 International Conference on the Chinese Language Education, industry insiders have expressed their views and offered their suggestions. Ma Jianfei proposed to promote the high-quality and innovative development of "Chinese + vocational skills" education through multiple measures to effectively enhance global adaptability.(Education Project Research Group,2021) Since the beginning of the new century, successive Thai governments have fully recognized the potential of the Chinese market and are confident that China will become a new value chain center, creating development opportunities for Thailand. The promotion of the Chinese language in Thailand in the past 30 years has laid a good foundation for Confucius Institutes to develop "the Chinese language + vocational skills". However, pure Chinese language teaching is no longer able to cultivate composite talents who know both Chinese and vocational skills to meet the future development of digital economy. In the Sino-Thai cooperation, there is not only a lack of language talents, but also a lack of local vocational and technical talents.

II. Research significance

With the expansion of the connotation and extension of international Chinese language education, "Chinese + Vocational Education" is flourishing. The courses offered by Confucius Institutes in Thailand, such as "Chinese + High Speed Rail, Tourism and E-Commerce", are widely welcomed by Thai people and have initially formed a development model that suits local needs. At present, with the deepening of Sino-Thai cooperation, the development strategy of Thailand's eastern economic corridor and the construction of "One Belt, One Road" have an increasingly urgent demand for talents. etc. Cultivating composite talents who know both Chinese and skills is in line with the economic development needs of both countries and the career development plans of the students,(Wu Yinghui& Yang Jichun, 2008) so the implementation of the "Chinese + Vocational Skills" program is widely welcomed.

In addition, in the new era, Confucius Institutes in Thailand are susceptible to suspicion and misinterpretation when they promote language and culture alone, and "win-win cooperation" is the effective guarantee for better promotion of language and culture.(Yu Bo, 2021) Purely learning Chinese without learning skills is no longer enough to meet the needs of students and society. We should turn the language into economic value and make use of the important value of "Chinese + vocational education" to increase employment opportunities for the Chinese language learners, thus promoting trade between China and Thailand in general.(Wu Yinghui& Yang Qing& Liang Yu& Li Zhiling, 2012)

III. Research ideas, questions and objectives

This study will analyze the work of Confucius Institutes in Thailand in recent years in the area of "Chinese+Vocational Education" to understand the latest development. By summarizing the current situation of "Chinese+Vocational Education" at Confucius Institutes in Thailand, the study will outline the problems of "Chinese+Vocational Education" in the light of the current needs, and propose ideas for further improvement.

The main questions of this study are: 1. What is the latest status of "Chinese+Vocational Education" at Confucius Institutes in Thailand? 2. What are the main problems of "Chinese+Vocational Education" at Confucius Institutes in Thailand? 3.How can we better promote the development of "Chinese+Vocational Education" in Confucius Institutes in Thailand?

The main objectives of the study are: 1. to summarize and refine the development path and effects of "Chinese+Vocational Education" in Thailand, and to study and analyze its special features and shortcomings; 2. to make suggestions for improving "Chinese+Vocational Education" at Confucius Institutes in Thailand, and to form a model of development that can be promoted and replicated; 3. to explore better ways to improve the sustainable and high-quality development of "Chinese+Vocational Education2" in Thailand.

THEORETICAL FOUNDATION

There are two main theoretical bases for this study, one is the theory of synergy, also known as "synergism" or "Synergistic", which is a multidisciplinary research theory. The concept of synergy was introduced in 1971 by Haken, a famous physicist and professor at the Federal University of Stuttgart, Germany. The theory focuses on how open systems far from equilibrium spontaneously emerge as ordered structures in time, space, and function through their own internal synergy in the presence of material or energy exchange with the outside world. According to Haken, synergy is a complex, open system that spontaneously interacts and influences its subsystems to form a new, effective structure when it exchanges matter, information and energy with the outside world. (Zhang Yiwen, 2020) The synergistic effect of the "Chinese+Vocational Education" project of Confucius Institute in Thailand is mainly reflected in three aspects: Confucius Institute and government, Confucius Institute and universities, and Confucius Institute and enterprises.

The second is functionalist linguistic theory, which focuses on exploring the meaning and function of language, studying how language is used, analyzing the relationship between language and society, and the relationship between language functions and language systems. This view of language, which explains language phenomena from a functional perspective, has deeply influenced second language teaching and has had a profound impact on the teaching of Chinese as a foreign language in China.(Chen Jinsong, 2009) Functionalist linguistics views language as a social phenomenon and emphasizes the study of the social functions of language. The Confucius Institute in Thailand offers the "Chinese+Vocational Education" program because of the needs of the times and the practical needs of learners.(Liu Xun, 2000) The program usually refers to students starting from language learning and gradually broadening their knowledge and experience in the "+" field.

OVERVIEW OF THE DEVELOPMENT OF "CHINESE + VOCATIONAL EDUCATION" AT CONFUCIUS INSTITUTE IN THAILAND

As the investment field between China and Thailand continues to expand, the demand for Chinese vocational skills has increased significantly. The Confucius Institute in Thailand, in response to the development of the times and targeting the vocational training gap, has launched the concept of "Chinese+", which has been widely applied to industries with a shortage of the Chinese language professionals, such as high-speed rail, logistics, tourism and e-commerce. (Regional Characteristics,2022) "The Confucius Institute (Classroom) Development Alliance in Thailand, established in September 2021, has laid a good foundation for the better development of "Chinese + Vocational Skills".(Confucius Institute, 2021) In recent years, Confucius Institutes in Thailand have organized "Chinese + Vocational Education" programs, such as seminars, training courses, competitions and agreements, and have achieved many results. Based on the identity of the students trained by Confucius Institutes in Thailand, the implementation of "Chinese + Vocational Education" at Confucius Institutes in Thailand is mainly divided into three models under the guidance of synergy theory: Confucius Institutes and government collaborative development, Confucius Institutes and universities collaborative development, and Confucius Institutes and universities collaborative development. Confucius Institutes and government, Confucius Institutes and universities, and Confucius Institutes and enterprises.(Xu Yuhong, 2021)

In our survey of 16 Confucius Institutes in Thailand, we found that all Confucius Institutes have carried out a variety of "Chinese + Vocational Education" programs, which have achieved good results and are well received by local people. For example, the Confucius Institute at Chiang Mai University has focused on the training program of composite talents with knowledge of the Chinese language and e-commerce, and in 2019, the Confucius Institute led to the establishment of the "Yunnan-Thai Vocational Education Alliance" and successfully implemented the first

Sino-Thai cooperation "Chinese + Vocational Skills" program in Thailand. For example, in 2019, we facilitated the establishment of the "Yunnan-Thai Vocational Education Consortium" and successfully implemented the first Chinese-Thai cooperation "Chinese + Vocational Skills" program and "1+X" e-commerce vocational skills level certificate training for teachers and students, aiming to effectively combine the 20 years of development experience of Chinese e-commerce with local Thai experience, making positive efforts to cultivate composite talents with both the Chinese language and e-commerce skills and promoting Sino-Thai vocational education exchanges. In addition, the Confucius Institute at Chiang Mai University has also created a new program for the development of e-commerce. In addition, the Confucius Institute at Chiang Mai University has also created a number of branded activities, such as the "Zhongqing Cup" Chinese Innovation and Entrepreneurship Competition for Thai university students and the "Bodao Cup" International Invitation Tournament for Sino-Thai Vocational Colleges. Since its establishment in 2015, Maritime Silk Road Confucius Institute has been focusing on cultivating the Chinese language talents for vocational education in Thailand and has cooperated with the world's first "Luban Workshop" to jointly train "Chinese + skills" talents.(Maritime Silk Road, 2019) At the same time, it cooperates with the world's first "Luban Workshop" to jointly cultivate "Chinese+" professionals, and cooperate with Chinese airlines and vocational colleges to launch the "One Belt, One Road" flight attendant special training program. Confucius Institute at Phuket has made "Chinese + Vocational Education" a priority, organizing professional seminars on "Chinese + Vocational Skills", seminars in Thailand for Chinese vocational colleges and universities, and "Chinese + Vocational Education" training. The Confucius Institute at Phuket will focus on promoting Chinese and Thai vocational education. Confucius Institute at Phuket will focus on promoting educational exchanges and cooperation between vocational colleges in China and Thailand, such as training of local Chinese teachers in Thai vocational colleges, selection and recommendation of scholarships for Chinese vocational colleges, accreditation and introduction of high-level courses in Chinese vocational colleges, Sino-Thai "Chinese + Vocational Education" cooperation center, seminars, lectures, etc. The Confucius Institute at KhonKaen University has participated in the Mekong-Lancang River Special Fund project to train talents for high-speed rail. (Cooperation Agreement, 2022) In recent years, the Confucius Institute at KhonKaen University has held six consecutive "China-Thailand

High Speed Railway Chinese Language Courses" and five "Preparatory Courses for Thai Vocational Students to Study in China", providing intensive training and professional Chinese language training for nearly 1,000 students.(Sino-Thai, 2022)

These Confucius Institutes not only provide a more convenient localized talent training system for enterprises in both countries, but also contribute to the promotion of local socio-economic development and make positive efforts to promote people-to-people contact between China and Thailand.

SUGGESTIONS

Suggestions for promoting the high-quality development of "Chinese + Vocational Education" in Confucius Institutes in Thailand

At present, Confucius Institutes in Thailand are actively promoting the development of "Chinese + Vocational Education", but there is a lack of effective preliminary research on "Chinese + Vocational Education", insufficient top-level design, insufficient coordination among Confucius Institutes, and inadequate integration of resources.

(I) Government level

1. Optimize relevant policies

Firstly, policies should be formulated to facilitate the development of Sino-Thai vocational education exchange and cooperation and to create an institutional environment conducive to cooperation and exchange between the two sides. Secondly, relevant education management departments and partner institutions should do a good job in the overall planning of the "Chinese + Vocational Education" program from the perspective of the cooperation strategy between China and Thailand, and then each Confucius Institute should choose to carry out the program according to their respective strengths after coordination. (Yang Qing, 2011)Again, the types of scholarships should be broadened, and scholarships should be given to students who come to China to study engineering and technology and to those who study in domestic vocational colleges, and support should be given to Confucius Institutes in Thailand to carry out "Chinese + Vocational Education" programs. Finally, the development of the "Chinese + Vocational Education" program should be included as one of the criteria for the evaluation of Confucius Institutes, so as to promote the quality and efficiency of Confucius Institutes in Thailand.

2. Integrate multiple resources

The "Chinese + Vocational Education" project involves many subsystems such as the government, universities and enterprises in both China and Thailand.(Wang Shuangshuang, 2021) The education department should coordinate all institutions, accelerate the sharing of information resources through forums and lectures, encourage Confucius Institutes to strengthen in-depth cooperation with other Confucius Institutes, with local governments, with domestic universities and with multinational enterprises, keep abreast of market information and the demand information of Chinese and Thai enterprises, and realize the limited connection between learning and employment.(Liu Biwang, 2022)

(II) Confucius Institute level in Thailand

1. Research the needs of the audience

Since there are some differences in the age, occupation and the Chinese language level of the audiences participating in the "Chinese + Vocational Education" program, Confucius Institutes in Thailand must do a good job of preliminary research when conducting this program. (Lu Fang& Zhao Huixia, 2020) It is important to understand the age, occupation and Chinese level of the audiences, and to divide the classes according to the audiences' situation, so as to better target the teaching activities to their age, occupation and Chinese level and better meet the needs of different learners, so as to realize the organic integration of Chinese and vocational education.

2. Strengthen resource development

Student resources. The Confucius Institute in Thailand needs to integrate the Thai media to make more publicity to let local residents understand the huge market potential of China, publicize the excellent deeds of students who have returned to their home countries after completing their studies, increase the popularity of the "Chinese + Vocational Education" program, create a local brand effect, and make the "Chinese + Vocational Education "The program will reach a wider audience.

Teacher resources. To address the lack of professional teachers, the Confucius Institute in Thailand can hire professional teachers to teach at the Confucius Institute, or domestic vocational schools can provide professional teachers and use incentive mechanisms to encourage relevant teachers to stay in their jobs. In addition, Confucius Institutes in Thailand can invite executives or technicians from Chinese and Thai companies to participate in the "Chinese + Vocational Education" program, with teachers from Confucius Institutes in Thailand acting as interpreters, and train and hire local teachers who are both Chinese and technically proficient.(Li Baogui& Liu, Jia'ning, 2021)

Teaching material resources. In view of the lack of professional teaching materials, Confucius Institute in Thailand can invite experienced teachers, professional teachers and technicians from enterprises to systematically and scientifically explore "Chinese + Vocational Education" teaching materials with language characteristics and vocational skills according to local characteristics.

3.Improve the management system

Confucius Institutes in Thailand should improve the learning level system, form classes of different majors and levels, and recommend institutes to enter the corresponding classes according to students' levels to reduce the loss of students due to not knowing what courses to take next.(Zhao Yan& He Siyu, 2022)

In response to the problem of unprofessional assessment standards, Confucius Institutes in Thailand can broaden the assessment channels and test students' learning outcomes in a variety of ways. For example, in addition to taking the HSK exam, students in the "Chinese + Chinese Medicine" program can also take the Medical Chinese Proficiency Test. In addition, Confucius Institutes can work together to develop other Chinese examinations for special purposes to improve and develop the international Chinese examination system.

4. Innovative ways of implementation

In addition to organizing a variety of delivery methods, Confucius Institutes in Thailand can also intersperse cultural activities with training, which can add interesting cultural experiences to the intense training on the one hand, and reflect the mission of Confucius Institutes to spread Chinese culture on the other.(You Yong, 2021) At the same time, in addition to the course training, Confucius Institutes in Thailand can also actively explore diversified ways of conducting seminars, competitions and lectures. This will give students more opportunities to experience the "Chinese + Vocational Education" program from different perspectives.

In general, Confucius Institutes in Thailand have not been running "Chinese + Vocational Education" for a long time and lack effective organization, coordination and integration of resources.

CONCLUSION

The "Chinese + Vocational Education" program conducted by Confucius Institutes in Thailand has been able to quickly train the talents needed by multinational enterprises according to their needs, which not only relieves the pressure on human resources of enterprises, but also provides a large number of jobs for Thailand. It is necessary to further summarize and refine its development path and effects, study and analyze its characteristic advantages and shortcomings, and make suggestions for improvement, so as to form a model of development that can be promoted and replicated, and to contribute to the development of "Chinese + vocational skills" in Thailand. +It is also necessary to further summarize and refine the development paths and effects, study and analyze their distinctive advantages and shortcomings, and make suggestions for improvement, so as to form a replicable development model and provide effective reference for the sustainable and high-quality development of "the Chinese language" in Thailand.

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CONSUMER BEHAVIOR AFFECTING ON DECISION TO TRAV EL IN GUIZHOU PROVINCE, CHINA

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ABSTRACT

For the tourism industry and tourism market, traditional way of tourism in the national economy at present stage, policies and development bottlenecks encountered in the concept of development, the traditional tourism way already can't simply satisfy personalized needs of people for tourism, forest adventure tourism as a new way of tourism, to some extent, break through the bottleneck of traditional tourism. As the forest resources in guizhou province has a good natural forest resources, and actively explore the forest at the same time, the innovation and development direction of adventure tourism, this article will through the perspective of consumer behavior to analyze the tourism market demand for forest adventure tourism, the feasibility of forest adventure tourism development to do further analysis, forest adventure tourism is conducted to provide advice for the future.

Keywords： Consumer behavior, Innovative forest adventure tourism, Tourism market demand, Consumer motivation

INTRODUCTION

As an important natural resource in nature, forest itself does not have the function of attracting most tourists, but in certain tourism types, forest will become the key resource leading the tourist market. Forest adventure tourism, as a new type of tourism different from traditional tourism, originated in the United States. Under the condition of having a certain economic basis and facing the development bottleneck of traditional tourism market, forest adventure tourism develops rapidly according to the personalized needs of consumers and constantly opens up development direction and development path through value.

Due to the tourism industry in recent years, the adjustment of industrial structure in, relative to traditional mass tourism products have been difficult to meet the personalized needs of tourism market, they are more hope to be able to improve the degree of participation and experience of tourism products, so the tourism market demand for tourism products of deep become the focus of tourism development subject analysis and research. Due to the continuous improvement of human living standard and the gradual saturation of traditional tourism market, forest exploration tourism has become the focus of scholars at home and abroad in recent years. Currently, forest adventure tourism as a new way of tourism, mainly focuses on the theory research and development, domestic forest adventure tourism research is less, is the lack of forest tourism development direction class, only some of the research is only in adventure tourism as a subsidiary of tourism project development, Therefore, at present, most of the forest tourism products provided by domestic forest parks have the same and single problem, which can not really meet the personalized needs of forest tourists. Fundamentally, the reason for this problem is that the characteristics of consumption behavior in the tourism market have not been well analyzed. Therefore, in order to promote the rapid development of forest adventure tourism, we should first analyze and study the characteristics and needs of consumer behavior, and actively explore the innovative development direction of forest adventure tourism. Therefore, this topic as a preliminary exploration of forest exploration innovative tourism model has theoretical significance.

LITERATURE REVIEW

Research background and significance

With the adjustment of tourism industry structure, popular tourism products have been difficult to meet the needs of tourists seeking novelty and exploring new, they are more willing to have a higher degree of participation and experience in tourism products, tourists' deep demand for tourism products is the starting point for tourism practitioners to carry out project research and development. Due to the continuous improvement of human living standard and the gradual saturation of traditional tourism market, forest exploration tourism has become the focus of scholars at home and abroad in recent years. At present, the forest adventure tourism as one of the innovative mode of travel, mainly focuses on the theory research and development, China's forest adventure tourism research is less, is the lack of forest tourism development direction class, only some of the studies also only stay in the adventure tourism as a subsidiary of tourism project development, Therefore, the current forest tourism products provided by many forest parks appear to be similar and simple, and can not really meet the needs of forest tourists. The fundamental reason for this problem lies in the lack of a good analysis of the characteristics of consumption behavior of forest tourists. Therefore, to promote the healthy and rapid development of forest tourism, we must first analyze and study the characteristics of forest tourists' consumption behavior. Therefore, this topic as a preliminary exploration of forest exploration innovative tourism model has theoretical significance.

Research status in China

Forest adventure tourism refers to the use of relevant professional tools as a help to explore the mysterious scenery in the forest, the original landscape, biological vegetation and so on as the purpose of forest tourism. Forest adventure tourism is not only a form of tourism, but also the embodiment of tourists' ecological way and attitude. In the current literature search process of CNKI, there are about 10 literatures on forest adventure tourism, all of which are concentrated in the project development and research stage. There are more than five thousand literatures on the general direction of forest tourism and they are classified in detail, but there are few discussions on how to develop forest adventure tourism in a specific place in China. However, from the perspective of business, Chinese scholars have also confirmed the expected economic value of forest adventure tourism after some research.

Definition of forest adventure tourism

Liu yan, wu three busy, Li Shumin (2008), the author in the urban forest tourism in China: an empirical study of consumer behavior, in xi 'an citizens, for example, in combination with the domestic scholars about the understanding of forest tourism in the clear definition of the concept of forest adventure tourism, forest adventure tourism refers to make full use of and relying on the superior of forest ecological environment and natural conditions, The field trips and various recreational activities carried out in the forest with the main purpose of sightseeing, leisure, exploration, scientific investigation and health care, whether such field trips directly or indirectly utilize the forest, are classified into the category of forest tourism.

Definition of consumer behavior

Wu Bihu (1997) confirmed the important influence of consumer behavior on national travel destination choice through investigation in Research on Chinese Urban Residents' Travel Destination Choice and clearly proposed the concept of consumer behavior. Consumer behavior refers to the various actions taken by consumers to obtain, use and dispose of consumer goods or services, including the whole decision-making process in advance and decision of these actions.

Domestic development status of forest tourism

At the peak, Jin Yingre (2007) on the forest tourism theory research both at home and abroad, puts forward the tourism development projects should be encouraged and the combination of forest sustainable development train of thought, at the same time stresses the management as main way of promoting the value of forest social role, and studied the different ways of management from the Angle of economics to the impact of tourism activities, Further to the obstacles to the development of China's forest tourism. Based on the understanding of the viewpoints of domestic scholars, it is put forward that China's forest tourism is still in the exploration and development of foreign successful cases and experiences. Which reflects this new way of tourism of forest tourism in our country is still not fully developed, at the start and explore a stage, only some of the research is only in adventure tourism as a subsidiary of tourism project development, forest tourism products offered by so many modern forest park, the same phenomenon and simplification, Can't really meet the needs of forest tourists.

Present situation and existing problems of forest tourism in Guizhou

ZhaiWei (2011) the author in the article the forest big province is analysed how to develop forest tourism in explicitly put forward the forest tourism in guizhou started relatively late, the overall economic strength is weak compared with other provinces and the present situation of the forest tourism facilities is relatively backward, is the most concentrated on the infrastructure, the author visited many times of forest tourism scenic area in guizhou, It is found that the roads of many forest scenic spots are dilapidated, and some of them are even inaccessible. In addition, reception facilities and supporting mechanisms are also urgent problems to be solved. Quite a number of scenic spots do not have hardware facilities for tourists to stay, rest and eat. After forest tourism, tourists have to stay, rest and eat in places of dozens or even hundreds of kilometers. Moreover, many scenic spots have no humanized tourist service center, no road guidance, and no tourist service personnel (such as tour guide, etc.). Guizhou province is rich in forest resources, but due to the lack of good publicity, these precious resources have not fully realized their due value and failed to transform resource advantages into economic advantages. Therefore, the author also puts forward some suggestions and opinions on the development of forest tourism in Guizhou aiming at a series of existing problems of forest tourism in Guizhou, and better promotes the development of forest tourism by finding ways to solve the problems.

Zhou Jing and Guan Jiajie (2016) also analyzed the disadvantages of the development of forest tourism in Guizhou province in their Preliminary Study on the Development of Forest Tourism. From the natural resources into consideration, in most areas of guizhou is a typical karst landform, forests and other natural resources has obvious vulnerability, in the process of resources development, mountain, river and forest vegetation such as easy to be destroyed, especially because of the tourism market chaos and appear predatory development, and accelerated the occurrence of karst landscape variation, is likely to lead to the demise of the tourism resources. In terms of cultural resources, the existing primitive ethnic culture in guizhou villages is a relatively fragile and weak culture. The development of forest tourism activities will bring a large number of tourists, making different cultures contact with each other, local culture may be influenced by foreign cultures in traditional customs and values and gradually change, assimilation phenomenon generally occurs. Because of the existing problems of forest tourism in Guizhou, it is necessary to clarify the development ideas in the future development, while solving the existing basic problems, innovate the forest tourism format and explore new development directions.

Feasibility analysis of forest adventure tourism

Yan-yan zhang, Yang Gengxia (2017), the author in the forest park of adventure tourism project development in gansu province to explore the development situation at present, in summary, the main push forest adventure tourism in gansu province were analyzed, the necessity and feasibility of development and puts forward some corresponding strategies to solve the problems of the forest adventure tourism in gansu province at this stage. In addition, the author analyzes the development prospect and possible situation of forest adventure tourism in Gansu province through relevant government policies, not only affirming the feasibility of developing forest adventure tourism, but also puts forward a series of conditions for development.

Li Tao and Zhu Zhaoling (2015), based on the current research status of adventure tourism in forest parks at home and abroad in The development Of Adventure Tourism Projects in Forest Parks in China -- Taking Wuying National Forest Park as an Example, This paper further analyzes the feasibility of developing forest park adventure tourism in China from three aspects: the background of ecological economic development, the deep demand of tourists for adventure tourism and the promotion of local economic development, and further discusses the development and design of forest park adventure tourism projects and the risk avoidance. The author studied the relevant theories of forest adventure tourism at home and abroad and analyzed the feasibility of carrying out forest adventure tourism in Wuying National Forest Park based on the current development situation. The author not only put forward the design idea of project development, but also listed a series of risks that should be avoided in project development.

To sum up, the domestic most of the scholars of forest adventure tourism specialty lies in how the forest adventure tourism and the combination of forest resources and tourism development in our country, most do feasibility analysis, through the present existing problems and future development may encounter problems are reasonable planning and speculation, by some reasonable means to avoid problems and risk, To create a good environment for the development of forest exploration tourism in China.

Forest tourism and sustainable development

Yu Kaifeng and Jin Yingruo (2007) wrote in a Review of Theoretical Research on Forest Tourism at Home and Abroad that the purpose of tourism project development should be to explore a way to combine tourism with sustainable forest development. The author emphasizes the important role of management in enhancing the social value of forests. Management is a key link in controlling the impact of tourists on the environment. At present, the root cause of the negative impact of forest tourism on the environment lies in the lack of in-depth research on the interaction between people and the tourism environment. Scientific and perfect management procedures can well reduce the impact of tourism environment and tourists, and then improve the utilization of resources. The main obstacles to the development of forest tourism in China include environmental deterioration of forest tourism destinations, disconnection between planning and development and resource management, unscientific management mechanism, lack of product innovation and backward scientific research theory. How the tourism management system should adapt to and promote the development of tourism is always a theoretical and practical issue explored by people inside and outside the industry. There are two ways to reform the management system of forest tourism resources. One is to insist on centralized management and manage according to the standards of public institutions. Second, the tourism area as a tourism business unit, enterprise management, the government needs to strengthen management. In general, Chinese scholars have maintained a high degree of attention to the management mode of forest tourism, and most of the proposed management modes have borrowed from the relatively mature management system of foreign countries.

Foreign research status

In the foreign literature on forest tourism, scholars generally pay more attention to the relationship between forest adventure tourism and environmental symbiosis, natural resource management and sustainable tourism mode from the basic development of forest adventure tourism. Compared with domestic, foreign forest adventure tourism is in a higher stage of development. Forest adventure tourism is different from the traditional tourism model, and has many possibilities under different specific conditions, such as forest ecological park or as a subsidiary adventure project development. In the future, forest adventure tourism in Guizhou will develop in a diversified direction for a long period of time, so the relevant research of foreign scholars on forest adventure tourism is also of great reference value. Science of the Total Environment (2020) Forest Resources and Sustainable Tourism, A combination for the Resilience of the Landscape and Development of Mountain Areas takes forest landscape resources as an example to analyze the relationship between sustainable tourism mode and natural resource management. The study highlights how to properly manage public goods and actively create opportunities for environmental sustainability while meeting demand. Sustainable development in modern tourism is not only a simple concept, in the transformation of traditional tourism gradually integrated into the forest adventure tourism as a representative of the new tourism development, and will truly realize the connotation of sustainable development tourism.

Research contents and methods

1. Contents of this subject

1.1 Introduction: This paper introduces the research background and significance, and describes the current research status at home and abroad to extract its essence, to lay a foundation for the later research of this paper.

1.2 Problem raising: Propose the problems to be solved in this paper, analyze the survey results through research methods, and analyze consumers' demand and consumption motivation for forest adventure tourism.

1.3 Conclusion: Based on the analysis results, feasible suggestions are put forward for guizhou forest adventure tourism, and development strategies are discussed.

2. Research methods

2.1 Literature research method: it is a method to obtain information through literature investigation, so as to comprehensively and correctly understand the problem to be studied. The way of this literature research is to consult materials and search literatures in the library, read relevant literatures at home and abroad, and take case studies as the main method to extract the research fruits of domestic and foreign experts, so as to implement the direction of transformation from theory to application, define the concept and provide theoretical support for the research of this paper.

2.2 Questionnaire survey: Based on the professional knowledge of consumer behavior and the data and information needed for research, questions are set up and distributed in the form of online questionnaire. The investigation of this paper will focus on the random survey method, mainly investigate everyone's cognition and understanding of forest adventure tourism, so as to analyze the results of the feasibility of developing forest adventure tourism suggestions.

2.3 statistical analysis of the basic characteristics of the consumer, economic characteristics, behavior characteristics and psychological characteristics of investigation, using descriptive statistics, to organizing the collected data, using statistical charts and statistics shows that consumer characteristics, internal link or transverse comparison results, and in the final analysis system.

THE RELATED THEORY

1.1 Concept of consumer behavior

Consumer behavior refers to the various actions taken by consumers to obtain, use and dispose of consumer goods or services, including the decision-making processes that precede and determine these actions. The analysis of consumer behavior has a very important influence and significance on the research of national travel destination choice.

1.2 Survey Report

1. Research method selection

This paper needs to use demographic knowledge to classify the investigated population so as to get a more detailed consumption motivation of forest adventure tourism. As a large amount of consumer data needs to be further collected, qualitative analysis is also adopted. Quantitative analysis is a qualitative study, which investigates people's reactions and behaviors through observation, questionnaire and experimental methods. Due to the need for a quick and in-depth understanding of tourists' needs and motivations for forest adventure tourism, this paper carried out a questionnaire, and received 470 valid questionnaires. The questionnaire covers a variety of occupations and classifies information such as family status. Thus, it is concluded that tourists have different demands and consumption motives for forest adventure tourism under different conditions.

2. Demographic statistics of survey subjects

A total of 470 questionnaires were collected in this survey, of which 470 were valid, with an efficiency of 100%. According to the analysis results of demographic characteristics of respondents, it can be seen from Table 1 to Table 4 and Figures 1 and 2 that the proportion of males (55.3%) in this survey was slightly higher than that of females (44.7%). In terms of age, the group aged 46-55 is the largest, accounting for 27.4%. In terms of monthly income, the group with income of 3000-5000 yuan/person is the largest, accounting for 32.3%. In terms of education, the number of people with bachelor's degree and junior college is the largest, accounting for 82.1%. In terms of family composition, married people account for the largest proportion, accounting for 55.53%. In terms of occupation, civil servants, institutions and dispatched workers account for the largest proportion, accounting for 44.89%. This survey will further explore the will and views of different types of tourists on forest adventure tourism based on demographic classification.

Table 1

gender

		frequency	The percentage	Effective percentage	Cumulative percentage
effective	male	260	55.3	55.3	55.3
	female	210	44.7	44.7	100.0
	Total	470	100.0	100.0	

Table 2

age

		frequency	The percentage	Effective percentage	Cumulative percentage
effective	18-25	128	27.2	27.2	27.2
	26-35	70	14.9	14.9	42.1
	36-45	110	23.4	23.4	65.5
	46-55	130	27.7	27.7	93.2
	More than 56	32	6.8	6.8	100.0
	Total	470	100.0	100.0	

Table 3

Monthly income

		frequency	The percentage	Effective percentage	Cumulative percentage
effective	3000the following	148	31.5	31.5	31.5
	3001-5000	152	32.3	32.3	63.8
	5001-8000	118	25.1	25.1	88.9
	More than8000	52	11.1	11.1	100.0
	Total	470	100.0	100.0	

Table 4

Education Level

		frequency	The percentage	Effective percentage	Cumulative percentage
effective	Junior high and below	10	2.1	2.1	2.1
	High school/technical secondary school	42	8.9	8.9	11.1
	Junior college/ Bachelor degree	386	82.1	82.1	93.2
	Master degree or above	32	6.8	6.8	100.0
	A total of	470	100.0	100.0	

Figure 1. Family composition

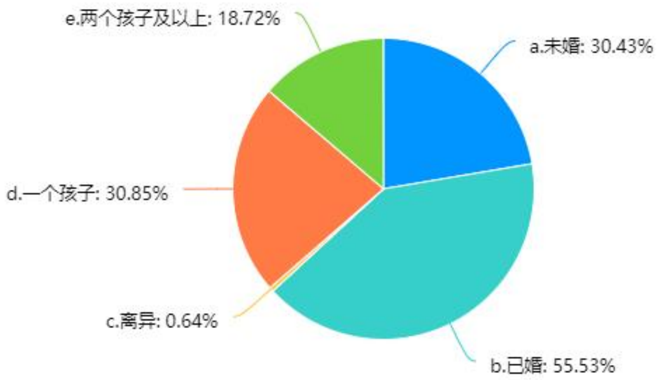
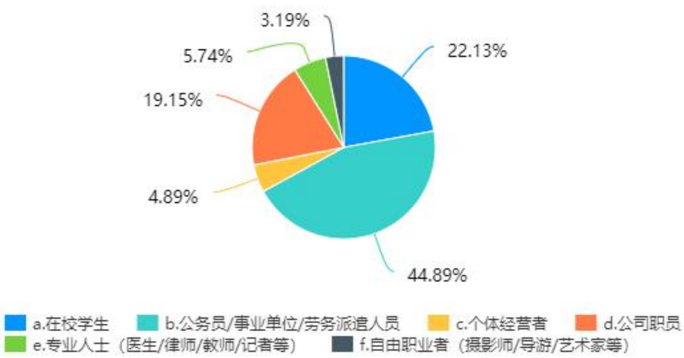


Figure 2. Professional situation

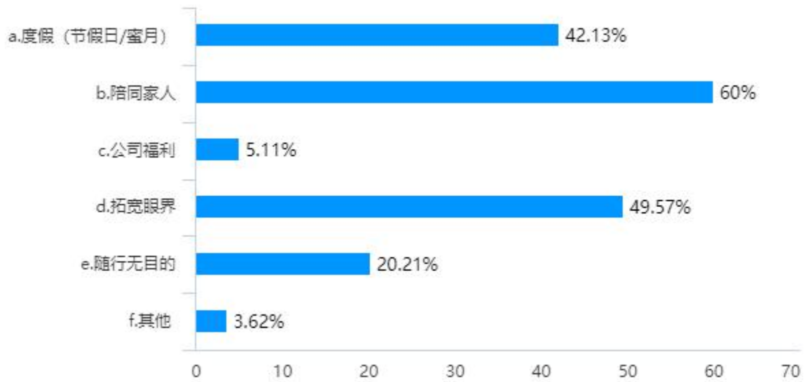


3. Statistical analysis of tourism situation

The clarity of the title of this survey allows for more elaboration according to demographic classifications. The topic covers the motivation of going out to travel, the choice of travel mode, the understanding of forest adventure tourism, the degree of interest and willingness, the impact of forest adventure tourism on the motivation of visiting the way of forest adventure tourism, the motivation of the way of accommodation and the publicity film on consumer motivation and so on.

From the survey results, it can be seen in Figure 3 that the motive of traveling is to accompany family members, accounting for 60%, broaden horizons, 42.13% and 49.57% respectively. According to the results of the survey, most people travel in leisure time to accompany their families, leisure in holidays, and half of them said that they hope to broaden their horizons through travel, indicating that the nature of curiosity in tourism planning is still very attractive.

Figure 3.Travel motivation



It can be concluded from Table 5 that in terms of the choice of travel modes, most people choose free travel and self-driving travel, accounting for 50% and 37% respectively, indicating that most people hope to have a freely planned travel experience.

Table 5

Favorite way to travel

		frequency	The percentage	Effective percentage	Cumulative percentage
	independent travel	237	50.4	50.4	50.4
	self-driving tours	174	37.0	37.0	87.4

effective	Travel agency group	56	11.9	11.9	99.4
	other	3	.6	.6	100.0
	A total of	470	100.0	100.0	

According to the survey results in Table 6, most people know nothing about forest adventure tourism, or have heard about it. Only 12.34% of people say they have a simple understanding of it, indicating that the popularity of forest adventure tourism is still not high, and the majority of people still do not know enough about it.

Table 6

Have you heard of forest adventure tourism?

		frequency	The percentage	Effective percentage	Cumulative percentage
effective	Know nothing about	188	40.0	40.0	40.0
	Heard some	224	47.7	47.7	87.7
	Simple to understand	58	12.3	12.3	100.0
	A total of	470	100.0	100.0	

The results in Table 7 represent the descriptive statistical questions. They score their willingness to learn about forest tourism on a scale of 1-6 from not interested to very interested. The average score is 3.53, indicating that there are still slightly more groups who want to learn about forest tourism.

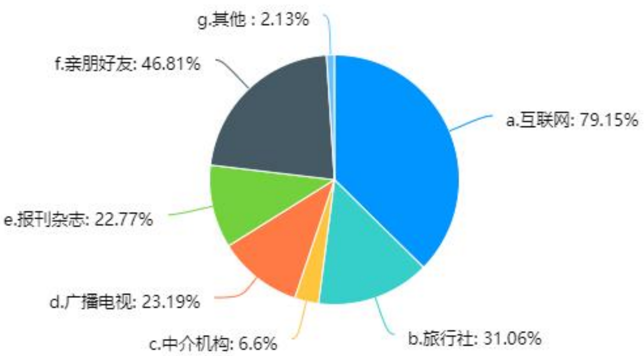
Table 7

Descriptive statistics

	N	The minimum value	The maximum	The mean	Standard deviation
Would you like to know about forest adventure tourism:	470	1	6	3.53	1.650
Number of active cases (column)	470				

According to the survey results in Figure 4, most people know about forest tourism through the Internet, accounting for 79.15%, followed by friends and relatives, accounting for 46.81%.

Figure 4.Understand the channels of forest tourism



According to the results in Table 8 and Table 9, most people hope to learn about forest adventure tourism through on-site explanation by tour guide and free visit, accounting for 41.4% and 40.4% respectively. In terms of the expected time of forest tourism, 54.3% of people expect 2-3 days, and 7.4% of people expect more than 6 days, indicating that most people still expect short-term forest adventure tourism.

Table 8

Hope to be used in the forest adventure tourism sightseeing

		frequency	The percentage	Effective percentage	Cumulative percentage
effective	Visit freely	190	40.4	40.4	40.4
	Field tour	193	41.1	41.1	81.5
	Graphic and audio-visual tour guide	82	17.4	17.4	98.9
	other	5	1.1	1.1	100.0
	A total of	470	100.0	100.0	

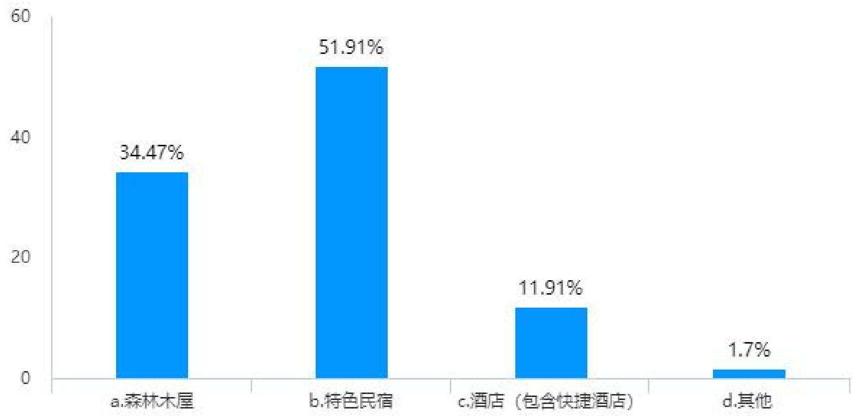
Table 9

The time you wish to participate in the forest adventure tour is:

		frequency	The percentage	Effective percentage	Cumulative percentage
effective	1 day or less	102	21.7	21.7	21.7
	2 to 3 days	255	54.3	54.3	76.0
	4 to 5 days	78	16.6	16.6	92.6
	6 days or more	35	7.4	7.4	100.0
	A total of	470	100.0	100.0	

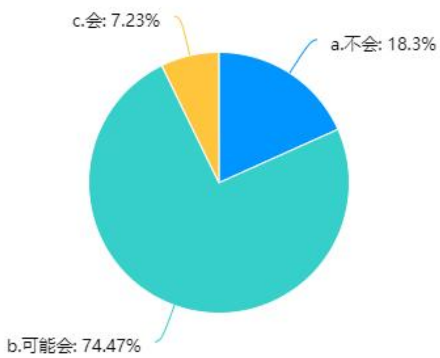
The results in FIG. 5 show that the most people expect to take characteristic home stay as accommodation during forest tourism, accounting for 51.91%, forest wooden house as accommodation, accounting for 64.47%, and hotel as accommodation, accounting for 11.91%. It can be concluded that adopting characteristic accommodation will also affect consumers' travel motivation.

Figure 5.Incentive to stay during forest adventure Tours



At the end of the questionnaire, there is a topic about the tourism motivation of the promotional film. According to the results of Figure 6, 74.47% of people said they might plan to carry out forest exploration tourism after watching the promotional film, which shows that the promotional film has a good influence.

Figure 6. After learning about forest adventure tourism through advertising or promotional videos, do you plan to carry out forest adventure tourism



4. Analyze the influencing factors of forest tourism intention

This analysis will start with the characteristics of interviewees and analyze the factors that ultimately influence whether they want to carry out forest tourism.

Independent sample T test was used to analyze the differences in willingness of men and women to plan forest tourism. According to the results of independent sample T test in Table 10 and Table 11, there was no significant difference between men and women in attitude to plan forest adventure tourism (T=0.520,P>0.05). As can be seen from the average of men and women, there is not much difference between men's average of 1.9 and women's average of 1.88.

Table 10

	gender	The case number	The average	The standard deviation	Mean standard error
Will you plan to carry out forest adventure tourism	male	260	1.9	0.503	0.031
	female	210	1.88	0.483	0.033

Table 11

Independent sample test

		Levine variance isotropy test		Mean isotropy T test						
									95% confidence interval	
		F	significant	t	Degrees of freedom	Sig. (double tail)	Mean difference	Standard error difference	The lower limit	ceiling
Will you plan to carry out forest adventure tourism	Assumed covariance	.000	.999	.520	468	.604	.024	.046	-.066	.114
	We don't assume equal variance			.522	454.065	.602	.024	.046	-.066	.113

According to the one-way anOVA of the classification items of the occupations currently engaged in, the results of Table 12 show that there is no significant difference in the willingness of different occupations to plan to carry out forest adventure tourism (F=0.777,P>0.05), so the data of this time cannot determine whether the plan to carry out forest tourism is related to occupation.

Table 12

One-way ANOVA

Do you plan to go on a forest adventure tour

	Sum of squares	Degrees of freedom	The mean square	F	significant
Between groups	.949	5	.190	.777	.566
Within the group	113.298	464	.244		
A total of	114.247	469			

Spearman correlation was used to test the correlation of the data, and the test results were shown in Table xiII. According to the results in the table, there was a significant negative correlation between the planned adventure tourism and age, with a correlation coefficient of -0.153 (P<0.05). There was a significant positive correlation between planned adventure tourism and tourism budget, with a correlation coefficient of 0.093 (P<0.05). There was a significant positive correlation between the plan to carry out adventure tourism and whether they had heard about the forest adventure tourism, and the correlation coefficient was 0.163 (P<0.05). There was a significant positive correlation between the plan to carry out adventure tourism and the willingness to know about forest adventure tourism, and the correlation coefficient was 0.421 (P<0.05). Correlation test results did not show a significant correlation between planned forest adventure tourism and other factors.

Table 13

		age	Monthly income	Education Level	Travel budgets	Have you heard of forest adventure tourism	Willingness to learn about forest adventure tourism	Will you plan to carry out forest adventure tourism
age	The correlation coefficient	1	.542**	-.191**	.180**	-0.05	-.182**	-.153**
	Sig.(double tail)	.	0	0	0	0.28	0	0.001
	N	470	470	470	470	470	470	470
Monthly income	The correlation coefficient	.542**	1	0.09	.439**	-0.039	-0.074	-0.046
	Sig.(double tail)	0	.	0.052	0	0.395	0.11	0.322
	N	470	470	470	470	470	470	470
Education Level	The correlation coefficient	-.191**	0.09	1	0.087	-0.022	0.031	0.019
	Sig.(double tail)	0	0.052	.	0.06	0.63	0.502	0.684
	N	470	470	470	470	470	470	470
Travel budgets	The correlation coefficient	.180**	.439**	0.087	1	0.036	0.086	.093*
	Sig.(double tail)	0	0	0.06	.	0.43	0.063	0.043
	N	470	470	470	470	470	470	470
Have you heard of forest adventure tourism	The correlation coefficient	-0.05	-0.039	-0.022	0.036	1	.178**	.162**

	Sig.(double tail)	0.28	0.395	0.63	0.43	.	0	0
	N	470	470	470	470	470	470	470
Willingness to learn about forest adventure tourism	The correlation coefficient	-.182**	-0.074	0.031	0.086	.178**	1	.421**
	Sig.(double tail)	0	0.11	0.502	0.063	0	.	0
	N	470	470	470	470	470	470	470
Will you plan to carry out forest adventure tourism	correlation coefficent	-.153**	-0.046	0.019	.093*	.162**	.421**	1
	Sig.(double tail)	0.001	0.322	0.684	0.043	0	0	.
	N	470	470	470	470	470	470	470

** at 0.01 level (two-tailed), the correlation was significant.

* At level 0.05 (two-tailed), the correlation was significant.

In order to further explore the factors influencing the planned development of forest tourism, regression analysis was conducted on the data. The analysis results in Table 14, 15 and 16 showed that the established regression equation was established and effective. The explanatory degree of independent variable to dependent variable was 18.3%. ANOVA test showed that F value was 18.459, $P<0.01$, so the regression model was established and effective. VIF values were all less than 2, and there was no collinearity problem in the data. From the regression coefficient, education level, tourism budget, whether they have heard about forest adventure tourism and whether they are willing to know about forest adventure tourism have a positive impact on the planned forest tourism, while age and monthly income have a negative impact on the planned forest adventure tourism.

Table 14

The model in this paper

model	R	R party	R squared after adjustmen	Errors in standard estimates
1	.439[a]	.193	.183	.446

A. Predictive variables :(constant),

13. Are you interested in learning about forest adventure tourism

7. Your education level is:

4. Your monthly income (RMB)

12. Have you heard of forest adventure tourism

9. If you are going to travel, what is your budget

2. Your age is:

Table 15

ANOVA[a]

model		Sum of squares	Degrees of freedom	The mean square	F	significant
1	Return to the	22.054	6	3.676	18.459	.000[b]
	residual	92.193	463	.199		
	A total of	114.247	469			

A. Dependent variables:

19. Through advertising or promotional learned after the forest adventure travel, you will plan to carry out the forest adventure tourism at https://v.qq.com/x/page/w0716u0l18l.html

B. predictive variables :(constant)

13. Are you interested in learning about forest adventure tourism

7. Your education level is:

4. Your monthly income (RMB)

12. Have you heard of forest adventure tourism

9. If you are going to travel, what is your budget

2. Your age is:

The coefficient of[a]

model		Unnormalized coefficient B	The standard error	Normalization coefficient Beta	t	significant	Collinear statistics Tolerance	VIF
1	(Constant)	1.293	.165		7.843	.000		
	2. Your age:	-.032	.019	-.085	-1.660	.098	.668	1.496
	4. Your monthly income (RMB) :	-.002	.027	-.005	-.085	.933	.600	1.666
	7. Your education level is:	.016	.044	.016	.368	.713	.923	1.083
	9. If you are going to travel, what is your budget?	.046	.028	.077	1.638	.102	.795	1.257
	12. Have you heard of forest adventure tourism?	.062	.031	.085	1.989	.047	.965	1.037
	13. are you willing to learn about forest adventure tourism:	.113	.013	.378	8.697	.000	.922	1.085

A. dependent variable: 19, through advertising or promotional learned after the forest adventure travel, you will plan to carry out the forest adventure tourism: https://v.qq.com/x/page/w0716u0l18l.html

CONCLUSIONS

According to the investigation and research of this paper, the analysis of consumer behavior choice can provide reference value for forest adventure tourism research, and the two belong to the relationship between influence and influence. From the perspective of consumer behavior, this paper subdivides and discusses the will and motivation of different types of consumers for different types of forest adventure tourism. For example, more comprehensive information can be obtained through investigation and analysis based on different ways of sightseeing and accommodation.

1. Reasonably develop forest exploration tourism based on the demand of tourism market

In the development of tourism resources should follow the rules of its own development, without excessive entanglement of the specific conditions of the different nature of tourists, such as age, sex, occupation, etc.) to consider the development mode, can not blindly cater to the tourism market and excessive commercialization, so in the future development of guizhou forest adventure travel should be on the premise of maximum maintain its original scientific means to take appropriate development, And it is supplemented by relatively perfect related supporting facilities, such as the development of characteristic homestand (such as tree house, wooden house, etc.), the personalized choice of tourists' sightseeing mode (such as free sightseeing tour, tour guide on-site explanation, etc.) and the guarantee of traffic conditions, etc.

2. Curiosity will be a long-term motivation for young consumers

Although consumers of different nature have little difference in their choice of forest adventure tourism, in essence forest adventure tourism is a more suitable way for young people to travel, and the analysis results show that most of the subjects with strong willingness to participate in forest adventure tourism are young people. Characteristics of consumer groups of younger to guizhou forest adventure tourism provides the development train of thought, in the development emphasis can be targeted forest adventure, draw lessons from foreign advanced exploration project experience, on the premise of to ensure the safety of tourists appropriate introduction of items such as rock climbing, kayaking, satisfy the personalized needs of young consumers, also can increase the forest adventure tourism development proceeds. In addition, we should grasp the psychological needs of consumers. Forest adventure tourism is not only a simple form of tourism, but also the embodiment of tourists' ecological way and attitude. It is also a demonstration of consumers' sense of faith to challenge and overcome themselves, and a comprehensive test of endurance, confidence and adaptability. Therefore, in the process of developing forest adventure tourism, we should provide as much space as possible for young consumers to play their own initiative, so that consumers really feel the freshness and fun brought by forest adventure tourism.

3. Develop short-term boutique forest adventure tourism projects

In terms of the current market, many consumers of forest adventure tourism tend to choose short-term experience, which requires Guizhou forest adventure tourism to be targeted to create short-term boutique tourism projects (such as camping, forest-themed self-driving camps, etc.), and pay more attention to the comfort of consumers when providing boutique projects. Most of those who choose short-term and take relaxation as the motivation are civil servants, who are under great pressure in daily life and want to adjust their state through forest adventure tourism. Therefore, the intuitive feeling of short-term comfort of tourism projects will be the basis for their evaluation of forest adventure tourism. The focus of the short-term boutique forest adventure tourism project lies in how to make it feel the charm of forest adventure tourism in the shortest time, which requires the development of the main body to carefully explore the routes, develop thrilling and exciting projects, so that the tourists can be convenient and rapid in-depth, to reach the destination, At the same time in the food, housing, travel, travel, shopping, entertainment and other related facilities to ensure comfort experience as far as possible, the needs of consumers as the purpose of development, through the promotion of boutique projects to gradually achieve brand scale.

4. Use publicity to open up the consumption market of forest adventure tourism

The above data analysis shows that at present, most consumers do not have a high understanding of forest adventure tourism, and some consumers have not even heard of forest adventure tourism. Therefore, the development subjects of Forest adventure tourism in Guizhou should strengthen and highlight the role of modern publicity methods, especially the Internet publicity. On the premise of taking targeted photos of some forests to bring high satisfaction to tourists, the recommendation function and possibility of relatives and friends should be expanded. At the same time, adventure tourism propaganda to expand visibility, enhance the willingness to understand or plan to participate in the forest adventure tourism tourism tourism market consumption motivation.

At present, there are many examples of scenic spot publicity using modern publicity methods, and Internet publicity is still developing as the most effective publicity method. To present the vast forests and relatively scattered scenic spot distribution to consumers in a three-dimensional and complete manner, it cannot be achieved only by relying on pictures or recommendations of friends and relatives. Relying on drones and other advanced shooting means to make promotional films has undoubtedly become the best choice. Data shows that more than 70% of consumers will plan to travel after watching promotional films for forest adventure tourism. Besides the promotional films, the Internet publicity can be activated to attract more potential consumers by using the flow and heat of Internet platforms. We can cooperate with well-known video websites at home and abroad or forest adventure network celebrities to realize the three-dimensional marketing communication of scenic spots to conquer target tourists quickly.

It is suitable for the whole forest adventure tourism industry to study the consumption motive of forest adventure tourism from the tourist market. After all, the relevant supporting facilities including characteristic homestay and the modern publicity methods represented by Internet publicity (such as cooperation with well-known video websites, promotional videos, etc.) are necessary and capable for the development of scenic spots by the main body of forest adventure tourism. The national forest adventure tourism industry should also gradually pay attention to the importance of consumer behavior in the future development and development. As the personalized trend of tourism market development gradually strengthens, traditional propaganda means and supporting facilities are difficult to attract more consumers. Therefore, in the future development, we should gradually change the problems and chaos existing in the current tourism market, improve the overall level and quality of the industry, and gradually form a brand effect to attract more tourism consumers. We hope that in the near future, large-scale and branded forest adventure tourism in Guizhou can become an irreplaceable part of the tourism market.

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A COMPREHENSIVE APPROACH TO FOSTER DIGITAL CULTURE USING HRM PRACTICES

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ABSTRACT

The COVID-19 pandemic has sped up digital innovation and transformation as businesses have no choice but to transform and innovate themselves to survive the pandemic. Digital transformation refers to the integration of digital technology in every aspect of the business. This includes changes in business processes, cultures, value delivery, etc. It is crucial for organizations to adopt digital culture as it is the key to transformation. Organizations with digital culture tend to perform better, as it encourages the people to look outside, be bold, value collaboration, plan less and act more. It is submitted that Human Resources Management (HRM) practices play a crucial role in developing and aligning culture. This paper seeks to suggest a comprehensive approach to fostering digital culture using HRM practices, to equip the people with digital mindset, knowledge, and skills to accept and adopt the changes brought by digital transformation and grow together with the organization. Besides, a case study has also been discussed to support the proposed approach. It is believed that the proposed approach could serve as a guideline for HR personnel to initiate or support a transition to digital culture.

Keywords: digital culture, organizational culture, HRM, digital transformation

INTRODUCTION

The rapid development of technologies and the strike of the pandemic have changed the business landscape tremendously. Businesses found it challenging to react to the market changes as consumers nowadays are relatively familiar with advanced technologies and expect a better experience from the organizations. Hence, all huge, medium, or small enterprises are observed to have strategized toward digital transformation to meet customer demand and sustain competitive advantage. However, according to Forbes, 84% of digital transformation projects failed to meet the expected outcome (Lewis, 2019). This raises the question of whether the digital transformation is a mere buzzword – some companies have successfully achieved desirable results that even enable them to become market pioneers while, on the other hand, others have suffered the cost of failure. BCG experts explained that digital transformation is a fundamental change associated with various challenges and pointed out that the main focus should shift towards the people dimension instead of technology because people are the determining factor in the transformation journey (Forth et al., 2020; Tabrizi et al., 2019) Aligned with the previous thoughts, Hemerling et al.(2018) conclude that digital culture is the key to a digital transformation whereby companies that start digital transformation projects and focus on culture have seen a considerable better performance compared to companies that neglect to focus on culture. This is because digital culture increases employee engagement (Singh, 2019) , and highly engaged employees are more likely to contribute to organizations (Nazir & Islam, 2017). A global survey revealed that most senior leaders perceived that culture had played a role in driving competitive advantage and determining the success of various organizational change initiatives (PricewaterhouseCoopers, 2021). It reflects that a positive culture is a game-changing factor in the current market. Although cultural transformation is demanding and challenging, it requires every individual within the organization to understand their roles and take responsibility, thus working together to shape a positive and relevant culture (Lee Yohn, 2021). HRM plays a vital role in preparing the mentality and ability of the people in shaping a new culture. However, to the author's best knowledge, there has not been research which discusses the role of HRM in fostering a digital culture in detail. Hence, this paper seeks to stand in the perspective of Human Resource Management (HRM) to suggest a comprehensive approach to assisting an organization's digital cultural transformation and alignment. It is believed that the discussion and approach proposed in this paper will provide an insight of the potential challenges of cultural transition and guidelines to HR personnel and firms that are planning, or already involved in their digital transformation journey.

LITERATURE REVIEW

2.1 Corporate Culture

Corporate culture, also known as organizational culture and workplace culture, is an area that many researchers in these decades have studied. Studies have provided different perspectives on corporate culture interpretations. Corporate culture refers to a shared set of values, beliefs and behaviors that subconsciously influences the members of an organization (Ortega-Parra & Ángel Sastre-Castillo, 2013). Yirdaw (2016) describes that corporate culture is a driving factor that integrates human and non-human resources within an organization to raise synergy, increase performance and eventually achieve organizational goals. Studies reviewed that the organization's founders and learning experience of management are the primary sources of the corporate culture (Uddin et al., 2012). The literature further explained that founders could impact the direction and strategy at the initial stage of the company's milestone;

hence the founders' vision, assumptions, and personal experience would significantly impact an organization's culture (Andish et al., 2013; Toma et al., 2013). On the other hand, the management could influence corporate culture by enforcing and crafting its cultural attributes after studying the social trends and business environment (Uddin et al., 2012). It is believed that the previous studies of the source of corporate culture are still relevant in the current timeframe through the recent research whereby the management started to redefine corporate culture after analyzing the hyper-trend (digital transformation) and business environment (rapid-changing customer demand) (Freeland, 2018).

Cameron and Quin (1999) introduced a cultural model, also known as the competing values framework, which categorized corporate culture into four types: clan, hierarchy, adhocracy, and market. As shown in Figure 1, the model was constructed according to two dimensions: flexibility-stability, and internal-external focus. Previous researchers and authors have studied the characteristics or traits an organization should adopt to have an influential and positive corporate culture. Robbins and Judge (2019) suggested that leadership, people focus, team focus, and stability are the main traits in corporate culture, while Chang and Lin (2007) proposed that innovativeness, cooperativeness, effectiveness, and consistency could be the cultural traits in improving company performance. However, it should be stressed that in Chang and Lin (2007), a study was conducted to explore the implication of each trait mentioned above toward information security in a Taiwan-based company. As a result, the attributes suggested may be limited to specific conditions and geographical factors.

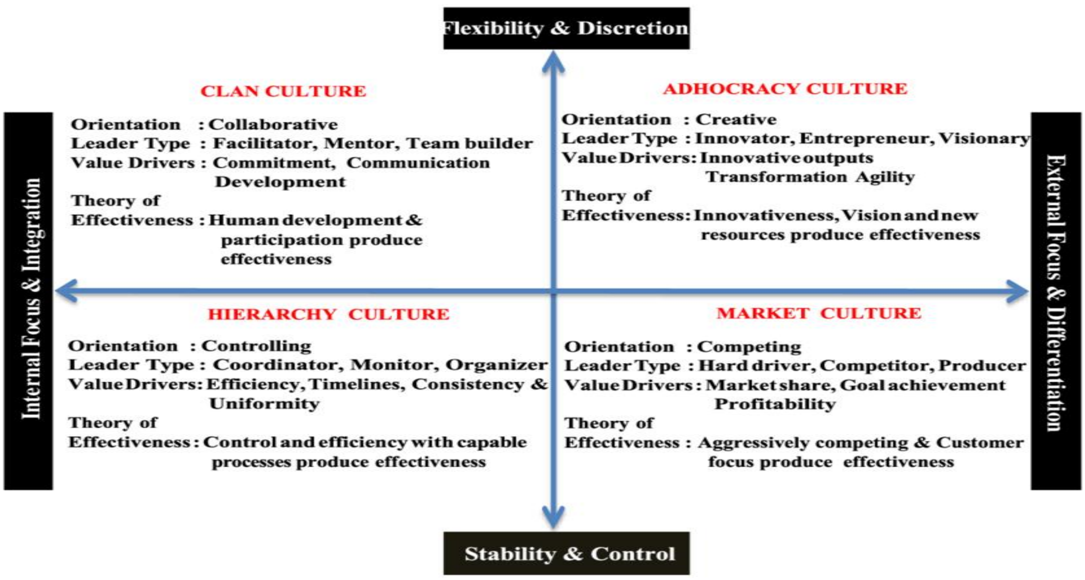

Figure 1: Cameron and Quinn Competing Values Culture Model (Cameron & Quinn, 2011)

2.2 Digital Culture

With the surge of digital transformation, Hemerling et al. (2018) suggest that digital culture is the key in this digital age. Below will discuss the definition and aspects of digital culture. According to GDS Group (2020), digital culture is a concept that illustrates the influence of technological factors shaping human behaviors, thoughts, and means of communication within society. BCG Global (2020) further supports the significance of digital culture by claiming that it empowers faster decision-making, talent attraction and retention, and risk reduction of transformation failure. It suggested several aspects of digital culture: communication, risk-taking, employees' decision-making power, speed, collaboration and transparency. On the other hand, CIGREF (2014) indicated that digital culture has seven dimensions: viability, responsibility, interdependence, trust, agility, knowledge, and openness. It opines that some of the dimensions align with the aspects suggested by BCG Global (2020) as both studies indicated that a thriving digital culture should encourage more communication among employees and customers and grant the employees to make the decision. It motivates employees to be bold in taking risks and take more action to experience failure faster and thus learn from mistakes. This will enable the employees to be agile in solving unexpected situations in the long run. Digital culture promotes transparency to ensure information fluidity and connectivity, thus keeping employees on track. The consistency of cohesiveness and collaboration of the employees among the functional departments will improve the organizational efficiency and eventually achieve the long-term corporate goal. Based on the understanding and theory explained above, the question arises of which category the digital culture falls in the cultural model. It is opined that digital culture is a balance or combination between clan culture and adhocracy culture as it is contemporarily encouraging the internal collaboration of the employees whilst advocating the employees to take risks in receiving external output in continuous learning development. On the contrary, digital culture seeks to break down the hierarchy of the organizational structure to prize delegation and be transparent to the executives. Since it focuses on encouraging employees to take risks in learning mistakes, it is believed that digital culture emphasizes the learning process compared to the outcome. As a result, digital culture would not fall under hierarchy and market culture.

2.3 Human Resource Management (HRM)

Dessler (2018) defines HRM as a process of acquiring, training, appraising, and compensating employees and of attending to their labor relations, health and safety, and fairness concerns. Prior to HRM, the field was known as personnel administration whereby the role was merely about bookkeeping employees' details, designing compensation plans, and recruiting new blood into the organization. The role has evolved throughout the years to meet the need of the fast-changing business environment, shifting from a paper processing role to a contributor or even a creator in tailoring an employee focus workplace where employee value, performance and productivity are the main concerning aspects (Milligan, 2017). Therefore, many organizations adopt strategic human resource management (SHRM) by designing and implementing various HR practices which directly contribute to achieving long-term organizational objectives. A high-performance work system (HPWS) is an outcome of SHRM that aims to advocate employees' skills, talents, motivation, engagement, and performance that enable the organization to gain a sustainable competitive advantage (Tang et al., 2017). The successful precedents of market leaders in innovative technology have fostered the surge of 'talent war' as the fundamental behind innovative technologies is human capital. This explains the rationale of China's organization investing heavily in talent development and providing tremendous benefits in hiring top talent after noticing human capital's significance in sustaining corporate growth.

The role of HR was especially notable during the COVID-19 pandemic as employees were forced to work from home (WFH), which is challenging for organizations to ensure the continuance of the organization operations in the absence of physical monitoring (Bieńkowska et al., 2022) . HR came out with different strategies, e.g., providing training to ensure employees are prepared to work remotely whilst maintaining the work performance, as well as maintaining employees' wellbeing, since wellbeing has a positive relationship with job performance (De-La-calle-durán & Rodríguez-Sánchez, 2021) . This supports the notion that HRM practices affect organizational performance and stability (Bouaziz & Smaoui Hachicha, 2018), as the practices influence the employees' behavior by instilling and building values in them, which subsequently develop into organizational culture.

2.4 Corporate Culture & HRM

The Model of Culture Fit by Aycan et al., (2000) show how cultural orientation influence HRM practices. Although the practices are normally influenced by the culture, HRM practices could also be used to develop or align the culture.

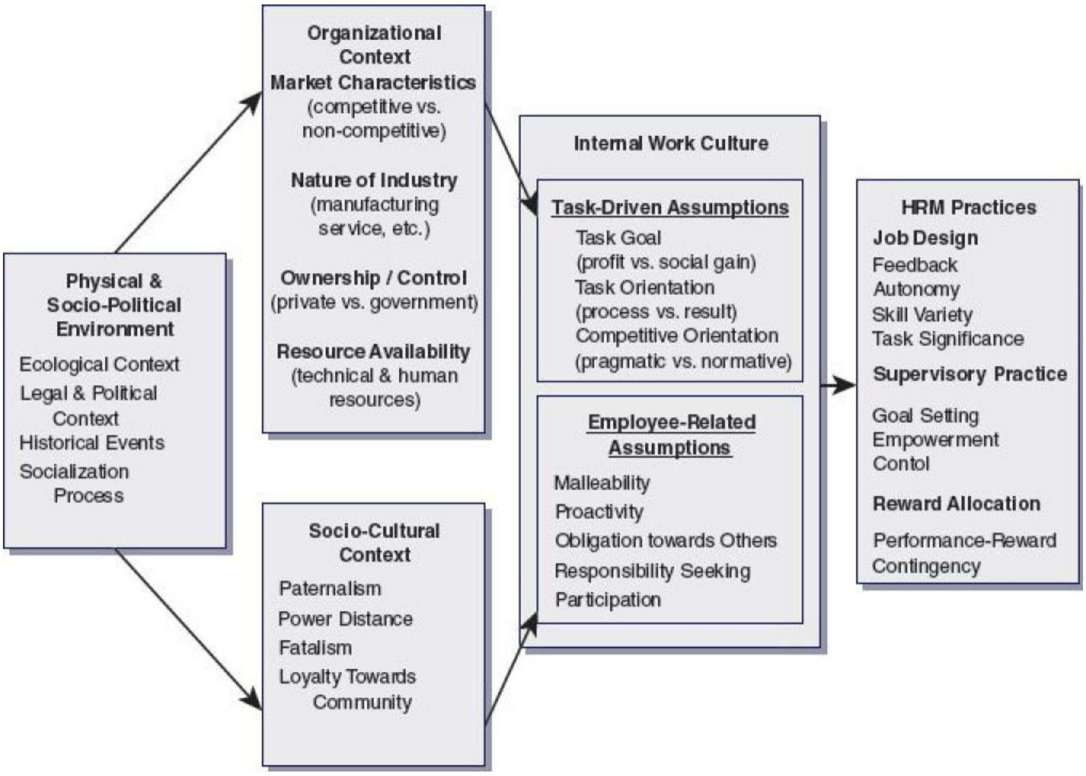

Figure 2 Model of Culture Fit (Aycan et al., 2000)

It has been established that HR is the custodian of the corporate culture and plays a significant role in aligning the culture with its organizational goals (Rao, 2019; Luman, 2016) as it can leverage various HR practices to ensure a dynamic and positive working environment. For instance, leveraging the loyal trait of the Japanese workforce, Japanese HR professionals tend to apply college recruiting strategies to hire the graduates that are best fitted with its corporate culture, so that the organization's values are more easily shared and aligned by its employees through strategic onboarding programs. Hence the turnover rate in Japan is much lower compared to others, and lifetime employment is a common phenomenon in Japan. Although this strategy helps create a stable workforce, it is suggested that the strategy may result in a homogeneous workforce and rigid compensation system, which are the opposite of the de facto standard of global HR practices—market-value-based talent management (Watanabi & Miyadera, 2017) . This instance has clearly shown that one single strategy is unable to develop and foster a sustainable corporate culture, it is necessary to develop different strategies for different situations, and it should be ensured that the strategies could be implemented in synergy with one another to address the concerns holistically.

Luman (2016) highlighted that leadership is essential in cultural adoption as it delivers corporate value to employees. Forbes (2020) agreed that the corporate culture is envisioned by leadership and cultivated by the employees. HR can improve leadership through recruitment and training which will be discussed in detail in Chapter 4. SHRM (2018) suggested that well-designed HR practices in hiring strategy, onboarding process, compensation program and performance management programs can shape and sustain an organizational culture. HR might not have the power to control the overall corporate culture adoption; however, it can ensure the culture is on the right track and provide a positive working environment where employees could find more value than the incumbent job responsibilities.

METHODOLOGY

To understand the perspective of HR in assisting the cultivation of corporate culture, this research is carried out through documentary research and adopted secondary data research method through browsing journals, statistics, whitepapers, articles, reports and databases. The authenticity of this research is highly emphasized, it ensures the source of used documents is credible and reliable. It assessed not only academic journal articles and books but also the articles and reports published by consulting firms to grasp the viewpoints and statistical reports by industry experts.

DISCUSSION

This section suggests several initiatives in assisting an organization in adopting or transforming the culture.

4.1 Identifying the existing and potential challenges

Before suggesting HR practices, HR should assess the current and potential challenges that may be encountered by the organization throughout the cultural adoption journey. An advanced problem exploration is significant in enabling HR to design strategies that consider the challenges and ensure the practices could be successfully and effectively implemented. It should be noted that a rigid organizational structure might be the core challenge every business may face in adopting digital culture. As mentioned above, to successfully adopt a digital culture, the organizational structure must flatten the organizational structure to promote the employee's involvement in the decision-making process (Tabrizi et al., 2019). Traditional businesses which have yet to adopt digital culture are most likely to have a hierarchical structure and are often associated with multiple layers of management and autocratic leadership style (Luo et al., 2018).

An organization with a high hierarchical structure is often siloed. There are clear separations of functions and power, and each functional team or department tends to work toward its own interest, limiting the flow of information and hindering collaboration (Berger, 2019) . This poses the risk of transparency, communication, agility, and coordination issues, and disabling the teams to have a shared goal. Whenever there is an organization-wide strategy, the strategic directives have to compete with the departmental goals, resulting in higher costs, complexities, and gaps (Cassidy, 2017) . In the context of China, although most of the businesses are undergoing a rapid digital transformation by integrating technology into their businesses and adopting a customer-centric management style (Rhodes, 2019) , it is opined that it is more challenging for traditional businesses in China to adopt digital culture due to the decades' influence of Confucian teaching and a solid hierarchical, bureaucratic party structure (Warburton, 2015). Furthermore, China's high Power Distance culture explained that lower-level subordinates accepted the unequal power distribution in the company (Hofstede Insights, 2018). This further gives rise to the pullback of companies' willingness to relax the control and break the legacy power structures, jeopardizing employees’ growth opportunities and decision-making power. It is suggested that the advocate of digital culture has a conflict with the China business culture hence it is understandable that the breakthrough in redesigning the operating model process is more brutal than that of the other country. However, the fact that China has a low score on Uncertainty Avoidance (Hofstede Insights, 2018) suggests that the Chinese are relatively flexible to fit in the ongoing digitalization trend, here is where HRM could play a role to drive such change.

Besides, leadership is a significant aspect of cultivating digital culture. An employee that is under autocratic leadership might be afraid to raise their voice and scared in taking risk. This is supported by Hofstede Insights (2018), which claims that China is a Masculine society where success is a significant criterion in every aspect of daily life. Therefore, employees tend to focus on the outcome instead of the learning process and it would gradually influences the employees to become risk-averse and fear of change. Buvat et al., (2017) found that there is a gap in the perception and behavior toward the digital culture within the organizations between the employee and leadership. Consequently, it leads to a situation in which employees resist and remain status quo to new norms. It is a challenge that HR should take responsibility for closing the gaps by ensuring the leadership could positively influence the rest of the employees.

4.2 Shift to An Active Approach

The role-extending HR should proactively reflect on the challenges faced and suggest appropriate HRM strategies in board meetings to allow the other C-suites to understand the obstacles and critical business indicators of adopting a digital culture. Besides, HR should also present viable suggestions from employees' perspectives after analyzing the employee's concerns and feedback. It enables the board members to understand the circumstances and perceptions held by employees towards strategic cultural adoption. Furthermore, HR should consult the board member's opinions and willingness on reforming the organization structure to be more flattened to become agile. Both agreement and disagreement are expected to be held by the board members, and it is time for HR to take an extra step in convincing others through researching solid evidence to emphasize the necessity of structural changes in the digital culture adoption journey. Freeland (2018) stated that the mutually shared mindset among the top management would act as a solid base for future strategic deployment in adjusting corporate culture. Hence, active participation in discussion with other C-suites about the opinion on driving digital culture and digital values are needed to achieve a cohesive governance mindset within the organization. Apart from communication with C-suites, HR should proactively interact with the subordinates to receive more input. It would effectively facilitate the problem diagnosing process which HR could react faster to either communicate the issue to the respective functional department or fill in the gaps through refining its HR practices. HR should also initiate departmental digital transformation by introducing digital aspects in HR practices and it could benefit the employees in essence. An integrated HR portal that enables the employees to claim benefits, apply for leave, self-track performance and conduct e-learning without going through multiple layers of the procedure should also be introduced. Besides, HR should equip the digital mindset by starting recruitment through social media and running people analytics. Social media recruitment allows the business to reach bigger and more diverse talent pools by actively engaging in social media platforms such as LinkedIn, Weibo, InJobs (China's version of LinkedIn), Zhaopin, etc. This creates an opportunity for the organization to share corporate values which would attract possible applicants. People analytics is considered an imperative for HR to make informed decisions through analyzing the data and eventually formulating a fact-based HR strategy.

4.3 Constructively Ensure the Human Capital Input from the Beginning

4.3.1 Hiring

Effective hiring practices would determine the quality of new blood and the organization’s future. Therefore, HR should well-plan its hiring strategy for hiring and attracting the best talents to the organization. Fortunately, the technology has solved the time-consuming screening process by filtering unqualified applicants, thus increasing the possibility of hiring suitable candidates for the correct position. However, HR should avoid biases (i.e., beauty bias, halo effect, horn effect, and confirmation bias) in the final selecting process to prevent recruiting candidates based on cognitive bias. It could reduce the disappointment of candidates in failing to meet expectations. Besides, HR should remain rational by considering each candidate's strengths, weaknesses, suitability, personality, skills and job experience rather than focus on each criterion. Although cultural fit selection may be a practical strategy deployed, HR should be aware of the consequences associated with this strategy. Kurter (2019) explained that cultural fit might prevent the organization from being innovative and creative due to the toxic monoculture environment for unfit employees. On contrary, a team with diversity, equality and inclusion is more innovative and has higher performance (Lorenzo et al., 2018). It is understood that HR may be concerned about recruiting the 'wrong' person. However, HR could take advantage of the designing interview process to a pre-employment assessment that encompasses behavioral and situational questions to evaluate the candidates. Likewise, an onsite interview could be conducted to determine the candidates' performance in interacting and working with the team.

4.3.2 Onboarding

The onboarding process is critical in ensuring the recently hired talents are productive and outperformed. The onboarding process is often misconceptualized as an orientation that lasted for days (SHRM, 2022) . Industry experts corrected that onboarding is a comprehensive process that could even last up to 1 year as 90% of the employees make the stay-or-leave decision in the first six months (Maurer, 2019). It requires the HR professional and upper management to formulate a plan of action to assist the newcomers in assimilating the company policies and workflow, eventually becoming acquainted thoroughly with the organizational culture. HR professionals should understand the importance and goals of the first day. It is essential because the new employees would craft a corporate image through the first day's experience while understanding the expectations, objectives, job duties and responsibilities. Hence, the onboarding process should be designed in a clear manner and considerate whilst enhancing the employee experience. Consequently, employees who understand the expectations of the corporate and work environment are believed to make informed decisions aligned with the desired practices. While designing the onboarding process, HR should take the initiative to show the employees the digital changes, such as deploying digital files instead of traditional paperwork. For instance, a digital file that encompasses a welcome message, company statements, employee handbook, QnA and others should be given to the new employees. An online onboarding portal that supports e-learning is encouraged to deploy to reduce the geographical restriction for remote working employees and ease the HR in managing the employees' learning and training progress. HR should also consider assigning mentors to guide the new employees and provide constructive feedback that could ramp up employee engagement and productivity.

4.4 Suggestable Initiatives to the Existing Employees

Chapter 4.3 discussed how HRM practices could assist the digital culture adoption from the organization's input. This chapter will discuss some initiatives HR could consider facilitating and leading the cultural adoption for the existing employees.

Leadership plays a significant role in instilling and delivering the values to the other subordinates (Argus & Samson, 2021) , HR should take the initiative in developing and upskilling the leadership through a robust training and development program. The training program aims to ensure the leaders understand the importance, purpose, and attribute of the digital culture, thus further developing the capabilities in assisting the company's digital culture adoption journey. Training such as agile leadership, innovative management and digital literacy are suggested to equip the leaders with the current highly demanded skills set and knowledge.

It is believed that with clear purpose communicated and necessary training provided, the leaders could understand the importance of their roles and can act accordingly in achieving the organization's strategic cultural transformation. However, HR should be aware of the leadership-employee gap mentioned above for which the misalignment of perspectives held by employees and leadership causes a series of disconnected beliefs and behavior. HR could conduct town hall meetings to communicate the company's digital vision and relevant information to keep the employees informed and, most importantly, enhance the cohesiveness of purpose between the leadership and employee. During the town hall meeting, HR should also stress the importance of every individual in the journey and assure that assistance is always ready for the employees, the supportive and 'left no one behind' approach will calm employees' fear and advocate harmony in the management-subordinate relationship. Moreover, HR should provide relevant and practical training to the employees in this digital era that encompasses the digital skills and mindsets needed to be an outperformed employee. Digital skills training such as computer literacy, data analytics and data-driven decision-making allow the employees to increase their work productivity and efficiency. On the other hand, mindset training such as resilience, agility, and innovation would emancipate the employees from the rigid working style. It is believed that with the appropriate training provided, the employees will be delivering the digital culture attribute in their daily jobs. A resourceful company can conduct a personalized in-house training program that explicitly targets its business essence while a less resourceful company could outsource it to an external training provider. Whether in-house or outsourced, HR should ensure that the program is conducted in a way that is engaging, user-friendly, and interactive. In addition, HR should proactively ask for the employee's feedback and recommendation regarding the training program to continually improve the course structure and deliver the best employee experience. Furthermore, HR would need to state the company's expectations and specify the employee's performance metrics. This enables employees to be clear about the values and behaviors stressed by the organization, and most importantly, the employees could experience the organization's effort in cultivating a positive culture.

4.4 Case Study of Chinese Digital Transformation

It is found that the overall China digital transformation index has increased over the years with 16% of 560 companies (known as Champions in the report) successfully transforming digitally in 2020 (Accenture China, 2021). The remaining 84% remains struggling and the gap in terms of digital maturity and performance between the best off and worst off continued to widen.

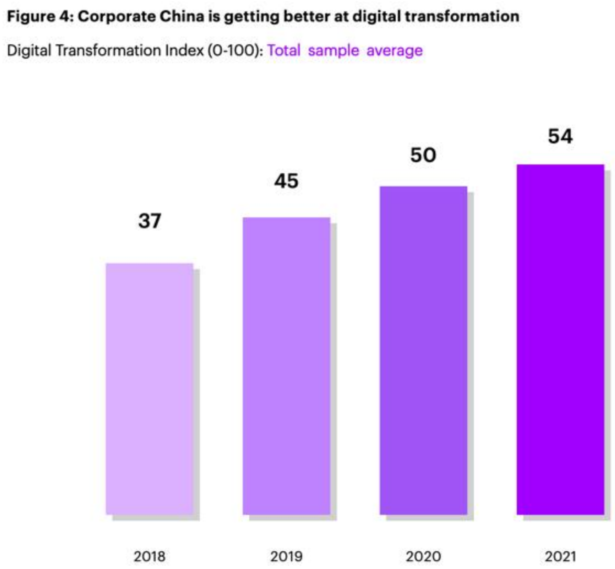

Figure 3: Accenture China Digital Transformation Index

From the interviews conducted, it is found that root causes of transformation failure include a weak digital workforce, limited ROI and most importantly the failure of leaders to lead in the change and transformation. To succeed in digital transformation in China, it is crucial to "get the big-picture right" by redefining the organizational vision for digital transformation to create greater value for the stakeholders; and "master the details" by fully leveraging data strength to enhance experience across the value chain.

Accenture's digital transformation index is measured from 6 aspects – digital marketing and channels, smart manufacturing, intelligent functions, product and service innovation, digital business models, and digital ventures (Accenture China, 2021). To achieve a high score in all aspects, it requires a strong digital workforce that is resilient, agile, and innovative, as well as a strong leadership that could lead the way towards the goal of ultimate transformation. This is where HRM plays a role – to prepare the quality human capital to drive the transformation. The brief case study of Haier Group below has clearly illustrated how organizational structure and HR practices could foster a digital culture.

Haier Group, a Chinese multinational home appliances company, is famous for its digital transformation through the change of business model. The digital innovation model is adopted to promote “intelligent manufacturing” (Li & Yang, 2021) . As mentioned in Chapter 4.1 above, traditional Chinese organizational structure hinders innovation and problem solving which is vital in digital transformation. Aware of this issue, Haier’s CEO Zhang Ruimin introduced the “Rendanheyi” model in 2005 which is essential for “people first”, to empower all employees to play their capacities to the maximum to create values for the users (WTW, 2020). Under this model, the traditional status quo is shattered, everyone is his/her own CEO, and they are responsible for managing and organizing themselves into thousands of micro-enterprises to respond directly to the fast-changing user needs (de Smet et al., 2021). Besides, Haier rewards employees on the basis of performance. All innovative ideas are rewarded by position and remuneration while the non-performing leaders are removed (World Economic Forum, 2020). The organization’s cultures and values are well promoted and attract many talents to the company. To ensure the smooth progress of individual innovation projects, Haier invested heavily in training and development to make all employees well-rounded talents that remain competitive in the market and could lead in the digital age (Jiang et al., 2019). As we can see, there is a high level of trust, responsibility, agility, knowledge, interdependence and openness in Haier’s culture, which correspond with the digital culture articulated in Chapter 2.2.

CONCLUSION

This study concludes that although HR may not have full authority and capability over the organization’s cultural adoption journey, HR could maximize its contribution by considering the potential challenges, shifting its position, and utilizing the HRM practices in building up a positive working atmosphere that crafts motivated, engaged, and resilient employees in this turmoil business environment. Cultural adoption would not be achieved by solely one party’s contributions, it demands the cooperation of every party in the organization to align each other’s beliefs and values to ensure cohesiveness toward achieving long-term organizational goals. The limitations of this study are the lack of quantitative research found regarding the digital culture adoption and therefore lack of quantitative evidence to further support the arguments raised above. Future studies could be conducted quantitatively in researching the impact of HR practices on corporate culture (digital culture) adoption.

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THE APPLICATION STATUS OF ENTERPRISE PATENT INFORMATION MANAGEMENT RESEARCH IN CHINESE CREATIVE INDUSTRY PARK

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ABSTRACT

The patent information resource system have taked as the research platform and the enterprise with the registered patent information resource system as the research object. The article analyzes the application of patent information of enterprises, including the amount of patent search and patent selection of registered users, the classification of the nature of the enterprise, the classification of enterprise scale, the classification of national economic industries, etc..This article points out the importance of patent information to the development of enterprises and puts forward suggestions on how to promote and apply patent information in enterprises. That meet the needs of enterprise scientific and technological development.Through some measure will enhance the ability of enterprises to innovate independently. This article analyzes the enterprise patent protection through the platform registered enterprises. Most enterprises have a weak awareness of patent protection. Through the classification and comparison of enterprises, the article puts forward some corresponding measures to improve the patent protection of enterprises.

Keywords: patent information; Intellectual Property Rights; Enterprises; Scientific and technological development

INTRODUCTION

In recent years, scientific and technological innovation as a national strategy has been elevated to an unprecedented height. As an important carrier and support for developing an innovative country, promoting and applying scientific and technological information is increasingly important. The gradual implementation of scientific and technological information projects has expanded the new field of service enterprise development and enriched and enriched the connotation of serving enterprise scientific and technological innovation. For a long time, Chinese governments have been active exploring ways and channels to serve enterprises. However, the lack of good entry points, patent information service enterprise technology innovation project as an essential part of the service for enterprise innovation, has become the grass-roots level for local enterprises to serve the leading products, by the local enterprises generally welcomed, but also to a certain extent by the local government relevant departments attention and support.

The patent information resource system covers data from many countries and regions worldwide. It is a big data platform for utilizing foreign patent information. It integrates patent resource databases, industry databases, patent litigation databases, industrial design databases, patent management, public services and other modules. Provide enterprises with foreign high-quality patent information resources, enhance core competitiveness, and achieve high-quality development. From 2014 to the present, the author has undertaken the promotion and application service project of scientific and technological information enterprises for many years, carried out scientific and technological information service promotion activities for the actual needs of enterprises with specific innovative capabilities, conducted one-on-one on-site counselling for active enterprise users, helped enterprise scientific and technological personnel master the operation and use the method of the patent information resource system, and effectively improved the level of enterprise application. At the same time, it tracks the application of enterprises, analyzes and feedback on enterprises' innovation results, collects and refines achievements, cultivates typical cases, and improves project output and effectiveness through accurate service to enterprises.

Taking the patent information resource system as the research platform and the science and technology enterprises of the registered patent information resource system as the research object, the article analyzes the application of patent information of enterprises, including the number of patent searches and patent selection of registered users, the classification of the nature of the enterprise, the classification of enterprise scale, the classification of national economic industries, etc.. The article points out the importance of patent information to enterprises and puts forward suggestions on how to promote and apply patent information in enterprises. To meet the needs of enterprise scientific and technological development, enhance the ability of enterprises to innovate independently.

STATUS OF INTELLECTUAL PROPERTY RIGHTS IN CHINA

On September 14, 2021, the 2020 Evaluation Report on the Development of Intellectual Property in China released by the Intellectual Property Development Research Center of the State Intellectual Property Office of China.[1]The report shows that China's IP development level has risen rapidly in the world's rankings, and it is currently ranked eighth. Looking at the output capacity of intellectual property rights alone, China has jumped to fifth place in the world in 2018. Ip performance is ranked 3rd in the world. The rapid growth of the index is the remarkable achievements in the corresponding areas of IP creation indicators. In 2019, the number of invention patents authorized in China was 354,000 (excluding Hong Kong, Macao and Taiwan), that is 4.8 times of 2010.[2] The number of domestic trademark registrations was 6.028 million (excluding Hong Kong, Macao and Taiwan), that is

5.2 times of 2010. The number of copyrights registered in China was 4.186 million, that is 9.5 times of 2010; 56,000 international patent applications under the PCT, 4.8 times higher than in 2010; The number of invention patents is 13.3 / per 10,000 people, which is 7.6 times of 2010. While China's intellectual property rights are booming, there are still some shortcomings in the intellectual property work of enterprises (Feng Xiaoqing, 2010).

First, most enterprises have established corresponding research and development systems in system construction, but the construction of intellectual property work systems is relatively lagging. For many enterprises, intellectual property work is only a formality, not part of the daily management of enterprises.

Second, in terms of organizational structure, for many Chinese enterprises, tiny and medium-sized enterprises, there is no patent business department or even full-time patent business personnel, many of them are part-time personnel, only responsible for docking with relevant administrative departments and patent agencies, and they cannot protect intellectual property rights. Let alone flexibly use intellectual property strategies to enhance the ability of enterprises to innovate independently.

Third, in terms of resource investment, the current science and technology enterprises are paying more and more attention to research and development and have increased investment in research and development funds but insufficient investment in intellectual property management and protection.

Fourth, in terms of talent teams, most enterprises pay more attention to the construction of professional teams, recognize that this is an essential part of enterprise development, and cultivate talents through internal, external, regular or irregular forms. However, the training in intellectual property rights and patents is still relatively small. Intellectual property management talents are still relatively lacking. For most enterprises, the assessment of intellectual property rights and patent work is not included in the enterprise performance appraisal system.

THE IMPORTANCE OF PANTENT INFORMATION RESOURCE SYSTEMS FOR ENTERPRISES

This article's patent information resource database covers patent data from many countries and regions worldwide. It is a big data platform for patent information that integrates a patent resource database, an industry database, patent litigation database, industrial design database, patent management, public service and other modules. Provide enterprises with high-quality patent information resources, and improve the level of scientific and technological research and development and innovation capabilities of enterprises.

The patent information resource system can help enterprises grasp the technological development trends of foreign enterprises, reduce the legal risks of using and borrowing foreign patents, help enterprises find potential partners or predict competitors through patent information, and enhance the ability and level of enterprises to use patent information and protect intellectual property rights of their own technological innovation achievements. Can be used for industry-university-research and technology research, optimize the process, improve product quality, innovate patented technology, and promote industrial technology upgrading; For small and medium-sized enterprises with relatively weak technical strength and weak research and development capabilities, it can be used to absorb and learn from scientific and technological information related to their own products, optimize the original products, develop new products, and enhance the innovation ability of enterprises; For enterprises and individuals that lack investment projects and have investment needs, they can make full use of scientific and technological information resources, organize experts, screen projects, do a good job in market research, and carry out improvements or experiments to adapt to localization, so that they can become projects that can be invested; For colleges and universities, scientific research institutes, you can fully grasp the advanced scientific research achievements of developed countries such as the United States and the European Union, understand the world's most cutting-edge patented technologies in this significant, avoid repeated R&D investment to the greatest extent, save funds and time costs, and improve scientific research and innovation capabilities (HUO Guanyu,PANG Yunyao, 2018).

APPLICATION ANALYSIS OF ENTERPRIS PATENT INFORMATION

4.1 The overall situation of the application of patent information of registered enterprises

From 2014 to the present, the author has undertaken the promotion and application service project of scientific and technological information enterprises for many years, carrying out scientific and technological information service promotion activities for the actual needs of enterprises with specific innovative capabilities, conducting one-on-one on-site counselling for active enterprise users, helping enterprise scientific and technological personnel to master the operation and use of patent information resource systems, and effectively improving the level of enterprise application. The total number of registered patent information resource systems for 1 841 enterprises, and the number of patent searches for registered enterprise users, was 22 454. The number of patent selection was 11 938, of which the number of patent searches was more than 100 times 46, accounting for 2.5%, and 436 users with 10 to 99 patent searches, accounting for the proportion of 3.68% of the users with 1-9 patent searches were 745, accounting for 40.47%. The number of patent searches was 0. The number of users was 614, accounting for 33.35%.

It can be seen from the above data that through the promotion of the patent information resource system in enterprises, some enterprises use the patent information resource system as their research and development resources. However, many enterprises still have not been used after registration, of which only 46 active users with more than 100 patent searches, accounting for only 2.5%. At the same time, 614 enterprises have not been used after registration, accounting for the total number of registered users 33.35%。

Combined with the user's feedback, the main reasons for analyzing it are as follows:

First, the awareness of patent application and layout of some enterprises needs to be further enhanced; the attention to patents is not great, they do not realize the importance of patents to research and development and production, and they do not invest enough in intellectual property work.

Second, the patent information resource system can provide services for multiple modules such as an enterprise patent resource database, an industry database, a patent litigation database, an industrial design database, patent management, and public service. However, for most small and medium-sized enterprises, there is no special patent department and patent staff, usually part-time personnel and patent agencies docking by the patent agency to help enterprises complete the patent-related work; the enterprise itself is less involved in patent work.

Third, many enterprises' technical personnel and patent staff cannot transform intellectual property rights and patent applications, and they are not very proactive in applying patent information resource systems.

Fourth, the enterprise users who push the patent information resource system are not accurate enough, and some enterprises do not need intellectual property rights.

Fifth, the publicity of enterprise intellectual property rights and patent work should be done insufficiently, and it is necessary to strengthen the guidance of enterprise intellectual property work, help enterprise scientific and technological personnel master the operation and use method of the patent information resource system, and conduct relevant training for enterprise R&D personnel and intellectual property commissioners.

4.2 Analysis of the nature of the registered enterprise

Among the 1841 enterprises registered in the patent information resource system, according to the nature of the enterprise, listed companies accounted for 0.6%, limited (limited liability) companies accounted for 36.2%, and state-owned or state-controlled enterprises accounted for 3.7%. Private enterprises accounted for 59.5%. It can be seen that private enterprises and limited (limited liability) companies that have a particular ability to innovate and attach importance to intellectual property rights are the main force of the registered patent information resource system, on the one hand, because the base of private enterprises and restricted shares (limited liability) companies is large, on the other hand, because relative to joint-stock listed companies, state-owned or state-controlled enterprises, private enterprises and restricted shares (limited liability) companies need to have free R&D data resources to meet their own technological innovation needs (Narayanan V K.2000).

4.3 Analysis of the size of registered enterprises

Of the 1,820 enterprises, large enterprises accounted for 4.9 per cent and micro, small and medium-sized enterprises (MSMEs) by size (Huang G Q.2011). It can be seen that dynamic MICRO, SMALL AND MICRO ENTERPRISES account for most of the registered patent information resource system. Analysis of its reasons and the nature of the enterprise analysis is similar, and the main reason is that, on the one hand, the base of small and medium-sized enterprises is significant; on the other hand, some large enterprises already have their research and development information resources. Small and medium-sized enterprises compared to large enterprises need to have their free research and development data resources (Hong S Z,2011).

4.4 Classification analysis of national economic industries of registered enterprises

Among the enterprises registered in the patent information resource system, according to the classification of national economic industries, the top two enterprises account for the manufacturing industry; Information transmission, software and information technology services. Among them, the manufacturing industry accounts for 50%, and the information transmission, software and information technology service industry accounts for 26.29%, ranking in the top two, accounting for most of the proportion, which is basically in line with the layout of China's industrial and industry structure (Unknown, 2022). Manufacturing and information transmission, software and information technology services are two of the most technologically intensive areas.

Classification of registered enterprises in the national economy

Classification of registered enterprises in the national economy	Percentage（%）
Industry Classification manufacturing	50
Information transmission, software and information technology services	26.29
Leasing and business services	6.71
Agriculture, forestry, animal husbandry, fisheries	3
Water conservancy, environment and public facilities management industry	2.43
Construction	2.14
Transportation, warehousing and postal services	1.86
Other (less than 1% of the total number of industries)	7.57

4.5 Analysis of the nature of active enterprises

Of the 1,841 corporate users of the Registered Patent Information Resource System, the number of patent searches was 22,454, and the number of patent selections was 11,938. Among them are 482 active users with more than ten patent searches. Among the active enterprise users, according to the nature of the enterprise, the share limited (limited liability) company accounted for 37.5%, and the state-owned or state-controlled enterprise accounted for 4.17%. The private enterprise accounted for 58.33%.[13]。 Which is close to the proportion of enterprise nature classification of overall enterprise users. It is still a private enterprise with certain technical research and development activities, and a limited share (limited liability) company is the primary user using the patent database.

4.6 Analysis of the scale of active enterprises

Among the active enterprise users, according to the scale of enterprises, large enterprises accounted for 12%, and small and medium-sized micro-enterprises accounted for 88%. It can be seen that technology-based micro, small and medium-sized enterprises account for the majority of active users.

4.7 Analysis of the national economic sector of active enterprises

Among the active enterprise users, according to the classification of national economic industries, the manufacturing industry still accounts for the most significant proportion of 74.29%, the information transmission, software and information technology service industry accounts for 8.57%, the scientific research and technical service industry account for 8.57%. Other industries together account for the proportion of 57%. It can be seen that the use of patent databases in the technology-based manufacturing industry is the most active.

IMPROVE THE PROMOTION AND APPLICATION OF PATENT INFORMATION IN ENTERPRISES

5.1 Strengthen the publicity of the application of patent information

Strengthen the importance of patent information to the technological innovation of enterprises in areas with dense scientific and technological enterprises, such as economic development zones and parks, and improve their awareness of intellectual property rights. According to the characteristics of enterprises in economic development zones and parks, it is targeted to register patent information resource systems for enterprises. Improve the function of the patent information resource database, establish corresponding WeChat public accounts, enterprises can obtain the use of patent information resource system, patent basic knowledge and other related content on the WeChat public account, and at the same time regularly push scientific and technological news, research data, and cutting-edge information on intellectual property rights to enterprises (Yang Xiaofeng, 2013).

5.2 Strengthen training on the application of patents

With science and technology enterprises, independent innovation enterprises and other enterprises with patent and intellectual property rights need as the main body, industrial engineers, patent staff, and relevant responsible persons of enterprises as the key groups, and the local science and technology bureau, intellectual property office, and development zone management committee jointly carry out intellectual property and patent training, so that enterprises realize the importance of patents, so that enterpriseS R & D engineers and patent staff can master more patent business knowledge and skills. Enhance the ability of enterprises to use patent information for scientific and technological innovation (Jian -yun Cao,2018).

5.3 Strengthen counselling for patent work

Invite experts in related fields to visit enterprises on the spot to help enterprises solve intellectual property problems encountered in actual research and development and production so that enterpriseS R&D personnel can master the skills of the patent application, patent drafting, patent application, patent layout, etc., so that enterprises can truly realize the benefits brought by intellectual property protection, patent application transformation, patent layout, etc.,(Jiang N, 2016). enhance the awareness of the patent application of enterprises, let enterprises save funds and time costs, and improve scientific research and innovation capabilities.

5.4 Cultivate typical cases of application of patent information in enterprises

Based on the broad application of the patent information resource system in enterprises, track the application of enterprises, analyze the effectiveness of enterprise innovation, collect and refine the results, cultivate typical cases of enterprise patent information application, and give certain rewards to typical cases enterprises (Chen W,2013). Through accurate service, enterprises improve project output and effectiveness.

CONCLUSION

In recent years, the level of intellectual property development in China has continued to improve, but enterprise intellectual property rights management needs to be further enhanced. The patent information resource system can be used as a scientific and technological research and development resource database for enterprises, helping enterprises to grasp the technological development trend of foreign enterprises, reduce the legal risk of using and borrowing foreign patents, and improving the ability and level of enterprises to use patent information and protect the intellectual property rights of their technological innovation achievements, avoiding repeated research and development investment to the greatest extent, saving funds and time costs, and improving scientific research and innovation capabilities (Mercedes C, Alessandro N, 2015).This article analyzes the activity, patent search volume and patent selection volume of enterprise users of the registered patent information resource system (Unknown, 2022). The number of patent searches of registered enterprises is 22 454, the number of patent selections is 11 938, and the number of patent searches is 46 for users with more than 100 searches <home, accounting for 2.5%, the number of patent searches in 10 to 99 times is 436, accounting for 23.68% The number of users with patent searches in 1-9 times is 745, accounting for 40.47%, and the number of users with patent search volume is 0 614 accounted for 33.35%. Many enterprises rarely use or do not use the patent information resource system after registration, mainly because the company's awareness of patent application and layout needs to be further enhanced, and the attention to patents is not great; Some enterprises entrust patent agencies to help enterprises complete patent-related work, and enterprises themselves are less involved in patent work; Lack of capacity of enterprise technicians and patent workers in the transformation of IP and patent applications; It is not accurate enough for enterprise users who push the patent information resource system; Insufficient publicity was done to disseminate corporate intellectual property rights and patent work. Through the analysis of the nature of the registered enterprise, the scale of the enterprise, the distribution of the industry, etc., it can be seen that private enterprises and limited (limited liability) companies have specific innovation capabilities and attach importance to intellectual property work are the main force of the registered patent information resource system; Dynamic MSMEs account for the majority of the registered patent information resource system; According to the classification of national economic industries, manufacturing and information transmission, software and information technology service industries account for most of the proportion of registered patent information resource systems (Chen W,2015). The article also puts forward suggestions on how to promote the application of patent information in enterprises and promotes the promotion and

application of patent information in enterprises by strengthening the publicity of patent information application, strengthening patent application training, strengthening the counselling of enterprise patent work, and cultivating typical cases of enterprise patent information application, to meet the needs of enterprise scientific and technological development and enhance the independent innovation ability of enterprises.

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APPLICATION OF ARTIFICIAL INTELLIGENCE IN BASIC EDUCATION

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ABSTRACT

2016 is a "milestone" in the development of artificial intelligence. At that time, Li Shishi, a player in the ninth stage of Korean go, was defeated by alphago, which made the public realize that AI technology is no longer science fiction. In the past few years, Google, IBM, Amazon and other global technology giants have successively set up AI laboratories. China has implemented a new round of basic education curriculum reform for 20 years. During this period, it is catching up with the tide of informatization. The development of technology is changing with each passing day. The new curriculum reform has collided head-on with the blowout development of artificial intelligence. The new curriculum reform has been coerced in the rapid development of information technology. In 2018, the Ministry of Education released the "education informatization 2.0 action plan"(eb/ OL,2019). Significant deployment has been made for the promotion and application of artificial intelligence in the field of education in China, opening a new journey of education in the era of intelligence.

Basic education is an educational project related to the national economy and the people's livelihood, and it is also a solid cornerstone for realizing the Chinese dream of the great rejuvenation of the Chinese nation. In the information age, facing the development trend of international basic education that pursues excellence and cultivates global competence, China has made a path choice for the modernization of basic education, paying more attention to the quality and fairness of education. The development of information technology has accelerated the penetration of informatization into all stages of society. The popularity of big data thinking and the expectations of academia for artificial intelligence have made the field of education pay extensive attention to this aspect. Under the guidance of national policies, domestic colleges and universities generally recognize the importance of big data and artificial intelligence, and have discussed the corresponding teaching strategies(Chen Yingbo, Zhang Wenlan,2019). AI education in China has received unprecedented attention. All regions are actively exploring how to carry out AI education in the stage of compulsory education.

Keywords: Intelligence,basic education,educational technology

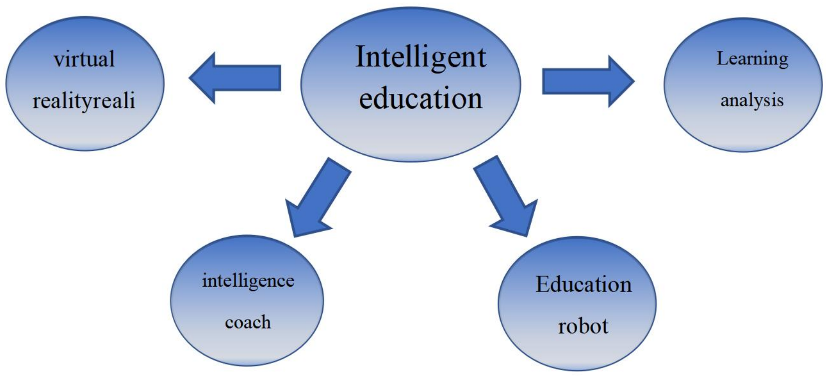
INTRODUCTION

1. Analysis of the background of AI education in china

In the past, artificial intelligence mainly refers to intelligence that simulates human behavior, but now there are a large number of new social needs, such as intelligent education, intelligent medicine, intelligent health and pension, intelligent government, intelligent court, intelligent city, intelligent transportation, intelligent environmental protection, etc. These needs are not individual behaviors, but the systematic behaviors of groups. Only by accelerating the construction of artificial intelligence infrastructure and promoting the deep integration of artificial intelligence technology with various industries, can the intelligence level of the whole society and all regions of the country be significantly improved(Guoshaoqing,2019). In particular, focusing on the rigid needs of people's livelihood such as education, accelerate the innovative application of artificial intelligence in these fields, and provide more high-quality and diversified intelligent services to the public.

With AI technology, the field of education will be strengthened and transformed. The report "artificial intelligence and life 2030" released by Stanford University in September 2018 analyzes the panorama of artificial intelligence in different fields at present. In terms of education, the report emphasizes that virtual reality, educational robots, intelligent tutoring systems, online learning and learning analysis technologies will occupy a prominent position in the classroom in the next 15 years(Chu,2021). Intelligent education in Stanford University.

The structure is shown in Figure 1



Stanford University's "100 years of artificial intelligence" project published the report "artificial intelligence and life in 2030"

The modernization of basic education is a concept of dynamic development, which has different contextual values under different backgrounds. The rapid development of artificial intelligence has put forward new era propositions and challenges to China's basic education, and has a profound impact on its development trend. To realize the modernization of basic education, we must take a modern development path that conforms to China's national conditions.

On July 8, 2017, China issued the "development plan for a new generation of artificial intelligence", and pointed out that we should develop intelligent education, use intelligent technology to accelerate the reform of talent training mode and teaching methods, and build a new education system including intelligent learning and interactive learning(Chen,Zhang,2019(4):43-58). In 2018, the "education informatization 2.0 action plan" issued by the Ministry of education proposed that "intelligence" will become one of the five major directions of the construction of education informatization system, promote the high-level evolution of education informatization from integrated application to innovative development, deeply integrate information technology and intelligent technology into the whole process of education,and promote the improvement of teaching, optimization of management, and improvement of performance. At present, artificial intelligence technology provides new ideas and new means for educational evaluation, and opens and shapes a new form of educational evaluation.The application of artificial intelligence in learning prediction and teaching evaluation can realize dynamic monitoring and intelligent analysis.

In the information age, facing the international basic education development trend of pursuing excellence and cultivating global competence, China has made a path choice for the modernization of basic education, paying more attention to the quality and fairness of education. "China's educational modernization 2035" proposed to accelerate the modernization of education, popularize and improve the level and quality of basic education(Wang Wei,2020). Therefore, on the basis of analyzing the key characteristics of the modernization of basic education in China, we should further think about the supporting factors and action paths of the modernization of basic education, in order to provide useful thinking for realizing the 2035 strategic goal of the modernization of basic education in China.

(1) analysis of the current situation of artificial intelligence teaching

At present, educational artificial intelligence is in full swing, and has achieved some useful results, which is the beacon of the new era of educational development. Its effect, especially the impact on the future development of primary and secondary school students, remains to be tested by time(Xiao Rong, Zhong Yunhua,2021). However, it is indisputable that the successful practice of educational AI needs to be consistent in concept and practice.

①realize students' personalized teaching

The logical starting point and implementation focus of the modernization of basic education is human modernization. The typical feature is that individual differences are accepted, subjective demands are respected, and the development of "personality" is realized, that is, educational personalization. Different students have different learning situations and development directions(Li,2020(1):2).The student-centered education concept requires to meet the personalized development needs of students. Artificial intelligence can, to a large extent, realize the personalized analysis of students and the customization of learning programs, so as to achieve one-on-one career planning and servicev(Zhu,2018 (9): 57-67).

With technical means, AI can collect and summarize rich data resources, comprehensively integrate the existing and latest educational information, and update and upgrade the database system in real time. On the one hand, it goes beyond the traditional classroom teaching of teachers, avoiding the singleness and lagging problems of teachers in teaching knowledge and teaching ability. Moreover, teachers' distance teaching is gradually mature, crossing the limitation of time and space, bringing together a wide range of high-quality educational resources, giving students a new intuitive and emotional experience.

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At the same time, at present, some primary schools have carried out smart campus pilot projects and the first batch of artificial intelligence pilot projects. These colleges took the lead in applying the teaching cloud platform, created artificial intelligence teaching laboratories, and applied real-time monitoring systems in the classroom to help understand students' classroom learning and visualize students' concentration in the learning process. According to the statistical data of the platform, provide personalized feedback to students to achieve personalized support for students. This teaching method combined with artificial intelligence can not only evaluate students' mastery of knowledge, but also evaluate students' problem-solving ability(Chen Yingbo, Zhang Wenlan,2019). This evaluation method is more scientific and instructive, and greatly reduces the workload of teachers. In the process of implementing the new curriculum reform, we should integrate the artificial intelligence education system in primary and secondary schools with the existing whole education curriculum system, take the existing curriculum as the main body, infiltrate artificial intelligence education into the curriculum of various disciplines, and imperceptibly promote the integration of artificial intelligence and knowledge, methods, and skills of various disciplines.

In the stage of basic education, learners of different ages have different cognitive levels and characteristics, and a single AI course content system is obviously insufficient to meet the diverse learning needs of students(Hu,018(6):12-20). Therefore, there is an urgent need to make a scientific and detailed analysis of students of different ages, different personality characteristics, and different interests and specialties, and on this basis, make a reasonable planning and design of the curriculum content system, and build a hierarchical and differentiated artificial intelligence curriculum system in primary and secondary schools characterized by basic experience, interest cultivation and independent exploration.

②improve the level of educational informatization

This era is an information age, and the basic necessities of life are increasingly dependent on the support of information technology. From the microscopic point of view, computing thinking and data processing ability have become the necessary survival ability of every individual. From a deep level, information literacy is a necessary constituent element of national literacy, which helps to improve the overall quality of citizens.

Now, some colleges and universities have applied AI to the daily management of schools and specific forms of education, promoting theoretical research and practical application to form a joint force, and realizing the improvement of educational informatization level(jiang,2020). In educational practice, basic education schools introduce artificial intelligence machines, improve the level of school informatization, and improve the quality of education with the help of modern information technology. In addition, we should use information technology to build an information network platform in the whole social field, provide public education resources, cover all social groups, and meet the needs of the information society for the compound quality of talents.

At the same time,virtual reality environment is now used to allow students to interact with different environments or objects.In 2030,these environments will become more common and complex, and students may immerse themselves in learning different subjects(Zhu,2018 (9): 57-67). According to the 2014 American adaptive education man-machine war data,the independent teaching platform has effectively improved the learning effect of students compared with traditional education. The passing rate of students' grades has increased by an average of 10%, and the time for students to learn new knowledge has been shortened by an average of 44%. This clearly shows that the intelligent teaching method has greatly improved the students' ability to learn and absorb new knowledge, At the same time, it further explains that AI integrates information to a certain extent, making information more acceptable (Zhu,2018 (9): 57-67).

③break through the barriers of urban and rural education

Developing urban and rural education, especially compulsory educational administration, and realizing the integration of urban and rural education are the key measures. Optimizing allocation is the inevitable requirement of realizing educational integration. Artificial intelligence has great potential with its modern means.

On the one hand, artificial intelligence technology can promote the construction of a comprehensive intelligent platform,covering urban and rural areas. The information-based education resources collected by the intelligent platform are available for urban and rural schools at any time. This substantially shortens or even eliminates the turnaround period of information-based education resources in different regions and between different education subjects, and realizes the real-time supply of public education resources(Liu,2019). On the other hand, AI technology, with its powerful information retrieval and data collection capabilities,serves the formulation, implementation, evaluation and adjustment of urban and rural education policies, and helps to obtain first-hand information on Regional Basic Education in a timely manner(hu,018 (6): 12-20). By formulating students' personal files, breaking the original urban-rural student information separation management mode, placing students in the same evaluation system, and generating student development and improvement reports, it is helpful to achieve educational equity.

If the literacy required by AI teaching is called "intelligent" literacy, at present, some township teachers are at a low level in knowledge reserve, technical ability, practical experience and other aspects, and there is a large gap between them and the requirements of AI education for teachers, so they are unable to design teaching contents and choose teaching methods skillfully(Xiao,2020). Some schools have taken science and technology innovation education as a breakthrough, created artificial intelligence maker laboratories,and actively carried out science and technology innovation education(Chen,2021). The school has a special maker laboratory, and gradually carry out AI education related activities from low-level, medium-level and high-level.

THE INFLUENCE OF ARTIFICIAL INTELLIGENCE ON BASIC EDUCATION

(1) Artificial intelligence promotes the innovation of teaching environment. With the wide application of 5g technology, artificial intelligence, intelligent Internet of things and other new generation information technologies, we can realize a perceptible, recognizable and interconnected smart campus, so as to promote a more intelligent teaching environment.

(2) Artificial intelligence promotes the innovation of education and teaching. Intelligent technology is more conducive to promoting the teaching implementation of learner centered, innovative ability training focused, problem oriented differentiated teaching and personalized learning,making it possible to organically integrate large-scale training and personalized education(Zhang,2019), so as to form a new education ecosystem to meet the talent training needs of today's society(Yin,2019).

(3) AI drives the innovation of educational evaluation. The intelligent evaluation system has broken through the limitations of the examination and evaluation function. Relying on the smart campus to gather the whole process of teaching data and objectively analyze students' abilities, it can not only strengthen the longitudinal evaluation of the whole process of students, but also identify and analyze students' moral education, sentiment, attitude and psychology, establish a multidimensional, accurate, dynamic and comprehensive digital file of students' growth, and provide technical possibilities for exploring value-added evaluation(Zheng Yan, Zhou Qian,2019).

(4) AI helps the innovation of educational governance. Artificial intelligence technology is accelerating the transformation of education management from informatization to intelligence. The use of information technology to update the management concept can promote model change and process reengineering, as well as the system integration of business(Jiang Liangjun, Zhang Xuan,2020), data and technology, so as to create a cross level, cross system, cross department, cross business collaboration scenario.

In short, with the rapid development of artificial intelligence technology and its wide application in basic education(Zhang,2019), its profound impact on the formation of basic education will urge us to firmly grasp the development opportunity, promote the in-depth reform of basic education, and lay a solid foundation for the high-quality development of basic education in this round of reform under the guidance of the fundamental ideology of building virtue and cultivating people(Chu Jinling, Xie Zhongxin,2021).

CONCLUSION

In November 2020,the Fifth Plenary Session of the 19th CPC Central Committee clarified the policy guidance and key requirements of "building a high-quality education system". In order to promote the development of high-quality basic education with Chinese characteristics, we should correctly understand and meet the challenges of the information age. Leveraging the impact of AI technology empowering basic education(Li,2022), we should focus on the future oriented curriculum reform of basic education, cultivate new ideas, extend new connotations, and change the new form of curriculum from many aspects(Wei,2019), such as curriculum objectives, values, content, structure, organization,evaluation, environment, and teacher role; Reconstruct the curriculum system from the aspects of curriculum orientation,curriculum structure and content system; Establish a realization mechanism based on value orientation(Liu, 2019), core operation and long-term guarantee to lay a solid foundation for building a new pattern of basic education.

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LIBRARY SERVICE INNOVATION BASED ON KNOWLEDGE MANAGEMENT

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ABSTRACT

Driven by the demand of the information market, the era of knowledge economy with the development of information and data as the core has arrived. Library is an important platform for students, teachers and other groups to acquire knowledge, learn cooperatively, and conduct academic research. The level of knowledge management and service form in libraries determine the degree of development of information resources in colleges and universities. Based on this, the library in the new era should change the original service concept, innovate the user service mechanism from the perspective of knowledge management and development, and find out the development path of the library in the new era of intelligence and digitization. The breakthrough development of information technology and people's diverse needs for knowledge and information have injected new driving forces into the innovation of the library service mechanism in colleges and universities. In the Internet age, the knowledge economy characterized by mobility, generalization and diversity will become an important reformingfield for the development of the digital society. As an important organization of knowledge research and learning cooperation, the library should gradually promote the innovation and reform of knowledge management, optimize the existing service mechanism, and build a smart library that meets the needs of more faculty, staff, and students for differentiated information services. Through the literature research method, this paper sets out to analyze the the problems in library service innovation and provide some reference for libriary management in China.

Keywords: Library management, knowledge management, service innovation

INTRODUCTION

1.1. Research background

With the continuous deepening of the reform of the education system, the direction and focus of talent training in colleges and universities are constantly adjusted to the direction of cultivating useful talents for society and enterprises (Zhou, 2019). At the same time, universities and colleges play an increasingly important role in continuous education, lifelong education, and social education with the development of the knowledge economy. As one of the three pillars of running a university, the library must give full play to its educational function. Therefore, library innovation is not only an inevitable requirement of auxiliary education innovation but also an extension and expansion of education innovation in universities and colleges (Liu et al., 2020).

The library must innovate to create a new situation for serving scientific research. In addition, the continuous progress of society also promotes the continuous updating of people's ideas. In the current stage of economic development and rapid development of science and technology, people have realized the important power that knowledge brings to the development of the people and society. Knowledge growth has also become an important part of enhancing a country's comprehensive national strength and cultural soft power (Charles et al.,2021). At present, China also attaches great importance to knowledge management. As an important place for knowledge management, university libraries have also integrated knowledge management ideas and models for their management. With the accelerated development and progress of information technology, Internet technology has been popularized, penetrating into various fields, as well as promoting the informatization construction of knowledge management and the informatization construction of university library management (Cheng, 2022).

With the advent of the information age, the development status, organizational structure, and even management methods of various industries will usher in a new revolution, and the knowledge management system of university libraries is no exception. As a new trend and new feature of social development, the arrival of the information age provides a new space for optimization of knowledge management methods in university libraries and also makes them confront more new challenges (Qin, 2020).

1.2. Research purpose

The library has always acknowledged the management of knowledge and information as an important responsibility. Therefore, incorporating knowledge management as a new management concept into the modern library service innovation mechanism can better enrich the theoretical knowledge of library management, improve the service quality of the library, and provide personalized services to the public.

1.3. Research significance

1) Practical significance

Based on the concept of university library service and management, this paper clarifies the importance of university library management. In addition, the paper expounds the characteristics of university library knowledge management, and proposes the service innovation path of university library. This paper is expected to provide practical suggestions for relevant industry.

2) Theoretical significance

With the continuous improvement of science and technology, the penetration of Internet technology in various fields, Internet technology can also be effectively used in the management of university libraries, which promotes the innovation of knowledge management methods in university libraries and the reform of work modes. At present, the management of Chinese university libraries still needs to be improved. As an important part of the overall management of university libraries, knowledge management needs to explore and analyze the innovation path of university library management, continuously improve the management work of university libraries and lay a solid foundation for the future development of university library knowledge management.

LITERATURE REVIEW

Wen (2018) believed that the application of information technology provided the possibility for the personalized service of the library. Personalized service is the process of combining information technology and knowledge service based on the specific needs of users. In terms of users' needs, all needs are different, so without personalized service, it is impossible for the library to meet the needs of users to the greatest extent. In the course of the development of the library, the individual needs of users have not been fully emphasized. Satisfaction for individual needs is one of the important evaluation indicators of library service innovation. Kaffashan et al. (2021) believed that library service innovation should be user-centered. The user is the ultimate beneficiary of the service, and the service quality is based on user satisfaction. Users are also an important source of innovative ideas and will play a positive role in the successful practice of service innovation. The user-oriented nature of service innovation is the core that should be adhered to in the service innovation of public libraries. Wu (2019) discussed the library development strategy under the national innovation system theory. Xiao (2018) introduced Schumpeter's innovation theory, technological innovation theory and institutional innovation theory, national innovation system theory, scientific and technological innovation theory, and other series of theoretical frameworks to guide innovation. Xing (2020) introduced the four-dimensional model of service innovation into the field of library and information and believed that the model provided a basic framework for analyzing service innovation in academic libraries.

On this basis, Almahamid et al. (2021) expanded the application institutions to non-profit information institutions to guide the model innovation of the development and utilization of information resources. Cruz et al. (2020) theoretically expounded on the characteristics, goals, obstacles, and innovative ideas of service innovation.

Through service innovation, the service quality of the library can be improved. Wang (2018) believed that knowledge management is the development requirement of modern libraries.Knowledge management can make library services develop to a deeper level and broaden the scope of library services. New concepts of knowledge management promote the innovation of library service concepts. The new technology of knowledge management promotes the innovation of library service technology. Wu (2020) believed that library knowledge management meant that libraries should use knowledge management theory to rationally allocate and use knowledge and related resources. The library should fully meet the ever-changing information and knowledge needs of users, as well as improve the process of modern library functions. Library knowledge management includes explicit knowledge management, tacit knowledge management, knowledge resource management, and knowledge innovation management. Liu (2020) briefly discussed the connotation and characteristics of library knowledge management and pointed out that library service innovation was the inevitable trend of library development under knowledge management. It is necessary to innovate library services with knowledge management concepts, cultivate knowledge-based librarians, and promote the development of library undertakings. Liu et al. (2020) pointed out that there are two main trends in the application of knowledge management in Chinese libraries. One is to correspond all activities of the library to various activities of knowledge, and apply knowledge management to various fields of the library. The other is to correspond knowledge to library management and replace the entire content of library management with knowledge management.

PROBLEMS IN KNOWLEDGE MANAGEMENT OF UNIVERSITY LIBRARIES

3.1. Over-emphasizing hardware over software

At present, colleges and universities attach great importance to the construction of libraries. The hardware facilities of libraries in colleges and universities are updated quickly and the investment proportion is relatively large. However, compared with hardware equipment, the software power of most colleges and universities is relatively weak. Specifically, the book resources, management technology, management software, management system, management culture, and development planning of library knowledge management are all manifestations of the soft power of the library. As far as knowledge management is concerned, its soft power is mainly reflected in the development and utilization of institutional regulations or resources for book management quality, classification methods, sharing modes, query platforms, and technical systems. For colleges and universities, their emphasis on soft power is low, which leads to the fact that books in libraries are mainly transmitted in concrete books with the low popularity of e-books.

3.2. The lack of knowledge-sharing channels for books

The traditional library is mainly based on the lending and returning of books. However, with the acceleration of information updating and the continuous influx of new information, the sharing and updating of information are particularly important. At present, reading apps and platforms are constantly being developed, and people's choices are also increasing. Compared with these fast platforms, libraries have a larger scale of knowledge and have natural advantages in knowledge management. However, due to the lack of knowledge-sharing channels in most university libraries, most of their knowledge is in a single-line transmission mode.

3.3. The lack of knowledge management awareness for librarians

In order to do a good job in knowledge management in university libraries, in addition to clarifying the management content, it should also pay attention to the improvement of the librarian quality. The realization of all management elements and technologies ultimately depends on the librarians. Therefore, it is particularly important to analyze the knowledge management work of university librarians.

From the perspective of the requirement for colleges and universities, some positions in the library have relatively loose requirements for academic qualifications and low requirements for professionalism. Therefore, the professional and technical level of librarians is relatively weak. In addition, library knowledge management service innovation needs to be supported by knowledge management technical talents. Combined with the background of the times, the Internet thinking should be integrated to carry out management innovation. However, for colleges and universities, their Internet technology talents are mainly concentrated in traditional information management departments. For library management departments, there are relatively few talents in Internet technology and big data. In short, the knowledge management awareness of library staff is relatively weak.

3.4. The lack of supporting platform of information technology

The innovation and reform of library services lack a carrier platform. In daily management work, the common application of management information system platforms is mostly aimed at the field of office systems and financial management. For the specialized library work platform, its function mode is relatively simple, the user experience is poor, and the utilization rate is not high. In addition, the library does not have corresponding positions for system design, operation, and post-maintenance, and the informatization innovation of its knowledge management services is unpractical. Compared with traditional management methods, the electronic environment has great convenience, but it is also accompanied by greater hidden risks. Once there are special circumstances such as network disconnection and hacker attacks, the knowledge management work of the library will break down, even facing greater risks such as information leakage, theft, and tampering. The outcomes of these hidden dangers are often difficult to bear for efficient management. Therefore, the informatization innovation of library knowledge management work still needs to be continuously explored and optimized.

EFFECTIVE STRATEGIES FOR UNIVERSITY UNIVERSITY LIBRARY MANAGEMENT SERVICE INNOVATION EFFECTIVE

4.1. Strengthening the construction and optimization of library software

As for organizational management, it should not only focus on hardware construction and ignore soft power (Sharma, 2019).Therefore, the management of university libraries should also be gradually improved in terms of soft power. University libraries should strengthen the establishment of their knowledge management systems, continuously optimize the knowledge management environment of their collections, pay attention to the control of the risk of information leakage of teachers and students in colleges and universities, strengthen the supervision of knowledge management platforms, and constantly standardize their business service processes (Kumar, 2022).

4.2. Providing personalized services

In the management and service of university libraries, the diversification of service objects makes it necessary to improve the service quality through personalized services (Kohi Rostami et al., 2019). However, the management service work under the traditional model cannot provide precise service. Under the effective support of Internet technology, the construction of library resource management platform can help college teachers and students make rational use of college and educational resources under the big data. At the same time, this real-time platform construction also provides teachers and students with resource pushes that meet their own needs, so that they can grasp every information resource (Kim et al., 2021). It can be seen that the management service work of university libraries in the Internet environment can provide precise and personalized services in combination with the different development needs of diverse groups, thereby effectively improving the quality of library management services.

4.3. Strengthening the professionaltraining of library informatization personnel

As far as the library is concerned, its knowledge management informatization refers to the change of the way of preservation and transmission. With the advent of big data, industry and model digitalization is becoming more common. Especially since the COVID-19, Informatization transformation of workflow has been advocated. According to the direction of unified deployment and the trend of the times, the digital transformation of public institutions is already on the way, but the transition from traditional models to information-based models is still difficult. However, due to the lack of digital talents in the library management department, the post setting should be adjusted as much as possible to attract talents in related fields such as digitalization and big data. In addition, the informatization and digitization training of knowledge management staff in university libraries should be strengthened.

Through the establishment of professional training courses to strengthen their computer operation ability, the staff can not only master the corresponding computer operation knowledge, but also use the knowledge management business process to realize the evaluation of the nature of their own work, ensure the improvement of their comprehensive skills, and meet the needs of knowledge management in colleges and universities under the current digital background.

4.4. Optimizing and upgrading the knowledge management platform

The university library platform is often integrated into the university's official website interface, supplemented by the query management of WeChat Official Account. However, the common knowledge management functions of its platform are mainly online borrowing, extension of deadline for returning, and other common practical functions, and the application scope is relatively limited. With the advancement of information technology, it is necessary to establish the online and offline requirements of knowledge management sharing, communication, and transmission in university libraries. Therefore, the development and maintenance of knowledge management platforms in universities are also essential. Colleges and universities should deepen their cooperation with the IT industry or system development companies to make reasonable system construction plans according to the actual work needs of libraries and the status quo of their knowledge management, actively research and develop or purchase corresponding platforms. Under the platform, the informatization innovation connotation of library knowledge management can be enriched.

CONCLUSION

At present, digital, intelligent, networked technology have exerted a wide and profound influence on university libraries, making the service mechanism, which centered on user needs, become an important direction of library reform in the new era. In the process of building a modern information service mechanism, university libraries should start from the perspective of library knowledge management, combine rigid and flexible management, build an intelligent independent service platform, realize knowledge sharing, and innovate to build a modern knowledge service management model, to provide users with a more professional and diversified service experience.

The knowledge management service of most university libraries has been constantly explored. With the arrival of the information age, the connotation of traditional knowledge service in universities also has greater space for optimization.For colleges and universities, they should combine the background of the times to explore a new way of developing knowledge management services from the aspects of improving the construction of soft power of university libraries, including developing personalized services, training information librarians, and optimizing and upgrading knowledge management platforms. In this way, itcan greatly improve the quality and efficiency of the comprehensive management of university libraries, play an important role in the knowledge management of university libraries, break the traditional management mode of university libraries, provide readers with more accurate and timely knowledge information andgive full play to the value of knowledge, which will bring the future development of university libraries to a new level.

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WHETHER HOUSEHOLD EDUCATION DEBTS WILL LEAD TO THE SOLIDIFICATION OF SOCIAL CLASS–EVIDENCE FROM CHINA

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ABSTRACT

Education is an important way to achieve social class crossing. However, the increasingly education prices will make families face a long-term loan constraint. Will it reduce the family's investments in children's non educational factors and then reduce the inter-generational mobility of social strata is the core of this paper. Different from the existing literature, this paper will introduce education debt constraints into the theoretical analysis framework of family utility maximization, and establish an optimization model of family economic behavior. Theoretically deduce that education loan constraints will squeeze out family education investment, and verify the impact of education loan constraints on social stratum consolidation. Moreover, based on the survey data of China Household Income Survey (CHIPS) project in 2021, the above theoretical analysis results are empirically tested. Further sample regression results show that education debt will weaken the inter-generational liquidity of low-income families, and the impact on high-income families is not significant.

Keywords: Education debts; Inter-generational liquidity; Non-education investment; Survey data

INTRODUCTION

As we all know, education is an important way for the upward mobility of social strata. However, with the continuous rise of education prices in China, high education prices make knowledge changes destiny becomes slim. Especially for low and middle-income families, buying education means that families will face a long-term debt constraint, which is likely to reduce parents investment in education for the next generation, and then affect the future personal achievements of their children. We know that education is the core factor of talent training, so the research on inter-generational mobility is of great significant. If inter-generational mobility is insufficient, it may lead to a series of serious problems, such as the solidification of social strata, the stagnation of economic growth, and the widening gap between the rich and the poor. Compared with the fairness of results in terms of income and wealth, inter-generational mobility is the most direct measure of social equity and justice. Dont suffer from oligopoly but inequality. The fairness of opportunity helps to build a reasonable rising channel of society. In particular, in recent years, second-generation phenomena such as rich second generation and people second generation have been widely concerned. In this period of rising house prices, does education debt constraints hinder families investment in education for their children, thereby reducing inter-generational liquidity? Therefore, studying the impact of education loan constraints on the social mobility of urban residents can explain the important reasons behind the solidification of social strata to a certain extent. At present, most studies mainly focus on inter-generational mobility at the economic level, that is, inter-generational income mobility. Inter-generational income elasticity is the most commonly used indicator to measure social mobility, which usually refers to the extent to which the personal income of the offspring is related to the income of their parents. The greater the inter-generational income elasticity, the weaker the social mobility; On the contrary, the smaller the inter-generational income elasticity, the stronger the social mobility.

Some scholars have calculated the inter-generational income elasticity. For example, Deng and Li (2013) estimated that the inter-generational income elasticity of urban households in China in 1995 and 2001 were 0.47 and 0.53 respectively based on chip data, which was much higher than that of other high-income countries in the same period, similar to Brazil and Chile, which were caught in the middle-income trap. Cai and Chen(2015) empirically analyzed the inter-generational income elasticity and the inequality of income, educational resources and social class distribution in China. Some scholars have also discussed the influencing factors and transmission mechanism of China inter-generational income elasticity. For example, Yang R(2010) believe that political relations, especially the rent-seeking effect, have a significant effect on inter-generational income mobility. Chen and Yuan (2012) pointed out that the impact of social capital is showing an upward trend, and household wealth represented by education assets and fifinancial assets will distort the investment in the economic capacity of children. Li and Zhou (2014)proposed that public education expenditure can alleviate the lack of human capital investment at the household level and improve the inter-generational mobility of education level. Yang(2015) pointed out that compulsory education is the main stage that affects the gap and inter-generational mobility. Li (2017) found that the role of economic development in promoting generation income mobility is mainly reflected in middle-income groups. Song and He (2018) pointed out that increasing fiscal expenditure in the stage of compulsory education helps to improve inter-generational mobility. Zhang and Wan (2019) found that financial liabilities play an important role in improving the liquidity of family education. Liang and Li (2019) proposed that resource endowment constraints inhibit social inter-generational mobility. Becker and Tomas (1979) introduced the theory of human capital into the study of inter-generational income mobility, and constructed the most basic theoretical analysis framework for the discussion of inter-generational income mobility in economics. Further, Becker and Tomas (1986) introduced the loan constraint into the theoretical model, indicating that parents investment in their childrens human capital and non-human capital will affect their childrens future income. On the one hand, low-income families are constrained by borrowing constraints, unable to make optimal human capital investment, and their children continue to suffer poverty due to insufficient human capital; On the other hand, high- income families are less affected by loan constraints, and their children gain an advantage in the competition. These two factors lead to the increase of inter-generational income elasticity and the weakening of social mobility. Different from the existing literature, the innovation of this paper is to introduce education debt constraints into the theoretical analysis framework of household utility maximization and establish an optimization model of household economic behavior. Theoretically deduce the role of mortgage constraints on household human capital investment, and verify the impact of mortgage constraints on inter-generational income elasticity. Secondly, this paper will use the survey data of China Household Income Survey (chip) 2021 for empirical research. The results show that, on average, education debt will reduce household human capital investment and improve inter-generational income elasticity. Considering the different intensity of education debt constraints faced by different income families, this paper further estimates the impact of education debt and education on inter-generational income elasticity in urban middle, low and high-income families. The results show that education debt reduces the inter-generational mobility of low-income families, but the impact on high-income families is not significant.

The rest of this paper is structured as follows: The second section brings the mortgage constraint into the theoretical analysis framework of family economic behavior, and deduces the mechanism of the impact of mortgage constraint on family human capital investment and inter-generational income elasticity; The third section will conduct empirical test based on the survey data of chip2021; Section V Conclusion and put forward relevant policy recommendations.

THEORETICAL ANALYSIS

Assuming that society exists in the family as a unit, the subscript indicates the generation in the family, and the subscript indicates the children of the generation in the family. The utility of each generation not only comes from its own consumption, but also depends on the future achievements of children. It may be assumed that the next generation has the following form of utility function:

(1) Ut (Ct , It) = LnCt + ρLnwt+1

Where Ct represents parental consumption, Wt+1 refers to the income of children, ρ indicates the preference of parents for their children (altruism) and 0 < ρ < 1. It may be assumed that parents affect their childrens future income through their investment in their childrens human capital, and the determinant equation of income has the following form:

$$(2) \quad w_{t+1} = \gamma_t I_t + \upsilon_{t+1}$$

Where I_t refers to the human capital investment of parents in their children. γ_t represents the return rate of human investment. υ_{t+1} refers to the talent, opportunities and other factors of the offspring. Suppose there is an exogenous education debt constraint in the family budget constraint, this debt constraint comes from the education demand for life. The income of the parents generation is used to pay for their own consumption, family education loans and investment in the next generation:

(3) Ct + It = wt - dt

The decision faced by representative families is to choose consumption Ct and investment I in their children on the premise of maximizing utility:

(4) max{ LnCt + ρ Lnwt+ 1 }

According to the first-order condition, the optimal human capital investment of the family is:

$$(5) \quad \text{It} = \frac{\rho\gamma_t(w_t - d_t) - \nu_{t+1}}{\gamma_t + \rho\gamma_t}$$

It can be seen that family education debt constraints reduce the optimal educational investment of parents to their children. Substitute equation (5) into equation (2) to get the inter-generational elasticity of income:

$$\frac{\partial \ln w_{t+1}}{\partial \ln w_t} = \frac{\gamma_t w_t}{\gamma_t(w_t - d_t) + \upsilon_{t+1}}$$

We obtain that education debt constraints will partially squeeze out parents human capital investment in their children, thereby increasing inter-generational.

ECONOMETRIC MODEL

Education is the main way of human capital investment. In order to empirically test the relationship between human capital investment, education debt and inter-generational income elasticity in the theoretical model, this paper will establish the following two measurement models respectively:

(6) $edui,1=\beta0+ \beta1\ di,0 + \beta2\ edui,0 + \beta3\ edui,0 \times di,0 + controls + \nu i,1$

(7) $LnWi,1=\alpha0+\alpha1LnWi,0+\alpha2edui,1+\alpha3di,0+\alpha4edui,1\times Lnw i,0+\alpha5di,0\times LnWi,0+Xi,1+\varepsilon i,1$

Formula (6) will test the impact of household mortgage constraints on the human capital of children. edui,1 refers to the education years of the i-th familys children. di,0 represents the education debt constraint of the i-th family. edui,1 refers to the educational years of the parents. The relevant control variables in equation (7) will test the impact of household mortgage constraints and education on inter-generational income elasticity. LnWt,1 represents the logarithm of the annual income of the i-th familys offspring. LnWi,0 represents the logarithm of the annual income of the father of the i-th family. In order to reduce the error of omitted variables in the model, the control variable Xi,1 of offspring is also added to the model. Including gender, marriage, age, province, etc. εi,1 represents the random disturbance term.

EMPIRICAL ANALYSIS

4. 1 Description of sample data for empirical analysis

The China Household Income Survey (CHIPS) project is a large-scale nationwide sample survey project initiated by Beijing Normal University and the National Bureau of statistics. The core theme of the project is residents income distribution. The survey collected detailed residents income, expenditure and related information. Since its inception in 1988, five rounds of national surveys have been conducted. CHIPS2021 is the fifth nationwide survey conducted from July to August 2021. The sample covers 126 cities and 234 counties in 15 provinces. In order to study the impact of mortgage constraints, the data used in this paper are from the urban household database in CHIPS2021.

Measuring the constraint of family education debt has always been a difficulty in studying family decision-making, especially the lack of information about whether children are constrained by family education debt during their education. This paper uses household education debt balance in chip2021 database as the main basis for education debt constraints: household education debt balance is a stock, which can correctly reflect the education debt situation of households before 2021; For most families, buying a house is a long-term process. For a long time before buying a house, families need to reserve the down payment for the purchase; After buying a house, families have to make mortgage repayment for a long time, and education debt constraints have a long impact on families. Therefore, taking household debt balance as a binary variable can distinguish whether households are affected by education debt constraints when making decisions.

Previous studies have shown that the education and income levels of a large number of older women in China are relatively, their education and income do not represent their family and social status, and their childrens education and income levels are more affected by their fathers.

Table 1: Descriptive statistics of variables

Variables	Sample size	Mean	Standard deviation
Child Gender	513	0.55	0.47
Child marriage	513	0.33	0.27
Child nationality	513	0.08	0.21
Child occupation	513	0.78	0.59
Child age	513	26.35	4.36
Education years	513	13.47	2.42
Annual income	513	10.22	0.79
Mothers education years	513	9.77	3.11
Fathers education years	513	9.87	3.02
Fathers age	513	52.35	6.22
Fathers income	513	10.43	0.77
Education debt	513	0.198	0.35
Region	513	0.47	0.41

Note: (1) Among the gender variables, 0 represents male and 1 represents female. (2) In the marriage variable, 0 means unmarried and 1 means married. (3) Among the ethnic variables, 0 represents Han nationality and 1 represents other ethnic minorities. (4) The occupation of children is divided according to the national 51 category occupation code, 0 refers to state-owned enterprises and institutions, and 1 refers to others. (5) Household education debt balance comes from the education debt balance item of questionnaire. In the education debt variable, 0 means no net education debt, and 1 means there is net education debt. (6) As the education debt of households is mainly affected by education prices in different regions, this paper introduces regions as control variables, where 1 means that the samples are from municipalities directly under the central government and 8 provinces in the eastern region, and 0 means other provinces.

Therefore, the study of inter-generational income elasticity in this paper will adopt the father child matching method, in which the father of the family refers to the father, and the child includes the son and daughter. In order to reflect the real income level, only the samples with work income in 2021 are retained. The children are between 18-45 years old and the father is between 40-65 years old. The samples with missing information are deleted. The descriptive statistics of the data are shown in Table 1.

4 .2 The impact of education debt constraints on Education

First, based on model (6) and OLS, this paper estimates the impact of education debt on children education years and inter-generational relevance of education. The results are shown in Table 2. Among them, column (1) does not include control variables, and column (2) includes child sex, child age, child age square, father age, father age square, compulsory education, and region as control variables. The results show that the direct impact of family education debt on the education of their children is significantly negative, which reduces the human capital investment of families to their children; At the same time, the cross item of education debt and father education is significantly positive, which strengthens the impact of father education on childrens education and reduces the inter-generational mobility of education.

Table 2: The influence of education debt constraint on the education of offspring

Childrens education		
	(1)	**(2)**
Fathers education years	0.614***	0.532***
	(0.143)	(0.121)
Education liabilities	-0.314***	-0.661**
	(0.105)	(0.22)
Education liabilities × Fathers education years	0.002	0.017***
	(0.155)	(0.002)
Child sex		-0.522**
		(0.254)
Father age		-0.231
		(0.19)
Father age square		-0.007
		(0.011)
Child age		1.441***
		(0.162)
Child age square		-0.036**
		(0.022)
Child gender		-0.355
		(0.311)
Childrens registered residence		0.775***
		(0.113)
Region		0.971***
		(0.001)
R^2	0.25	0.33

4.3 The impact of education debt and education on inter-generational social mobility

Further, we will study the impact of education debt constraints on inter-generational income elasticity in the sample of urban residents based on model (7). We are also interested in the mechanism of its impact, that is, education. It is not easy to identify the impact of education on personal income, mainly because the endogeneity of omitted variables such as ability will lead to bias in OLS estimation. Individuals with high ability are more likely to receive higher education and thus obtain higher income. In the existing literature, Plug (2003) compared the biological and adopted children of parents, and found that about 55 % of the parental abilities were inherited through genes. Oreopoulos (2006) shows that the probability of children repeating grades will be reduced by 2-4 percentage points if the parents education years are increased by one year. Meng and Zhao (2013) studied the causal relationship between parental education and childrens education. The results showed that if parents were affected by the Cultural Revolution to reduce the number of years of education by one year, the number of years of education of their children would also be reduced by 0.27-0.38 years, and the impact of mothers education on childrens education was greater than that of fathers. Therefore, in the literature, fathers education and mothers education are often used as instrumental variables of childrens education. This paper also uses these two variables as the instrumental variables of childrens education years. The test of instrumental variables is also given in the estimates in tables 3 and 4. The Cragg Donald Wald F statistic shows that the length of education of parents is not a weak instrumental variable.

Table 3: The impact of education debt and education on inter-generational income elasticity

annual income of children		
	(1)	**(2)**
Ln fathers annual income	0.399***	0.397***
	(0.15)	(0.18)
education liabilities	-0.314***	-3.961**
	(0.11)	(1.26)
Childrens education years	0.342***	0.313***
	(0.05)	(0.16)
education liabilities × Ln fathers annual income	0.332***	- 0.5383**
	(0.14)	(0.19)
Childrens education years × Ln fathers annual income	-0.029	-0.031**
	(0.12)	(0.015)
Child gender		0.109
		(O.12)
Child marriage		0.013
		(0.03)
Child age		0.208
		(0.17)
Childrens age square		0.002
		(0.005)
Occupation of children		-0.974***
		(0.233)
Whether the children receive college education		0.165***
		(0.12)
region		0.26***
		(0.09)
R^2	0.18	0.22

Cragg- Donald Wald F statistic	26.55	33.64

4. 4 Analysis of the impact on families of different income classes

Considering the different constraints of education debt constraints on families of different income classes, we analyze them based on model (7) and quantile regression model, in which the quantiles of 20%, 50% and 80% represent low, medium high-income families. The results are shown in Table 4. It is not difficult to see that for the three types of families, education debt has significantly improved the inter-generational income elasticity; Education has no significant impact on the inter-generational income elasticity of low-income families and high-income families, but education can significantly reduce the inter-generational income elasticity of middle-income families. The impact of education debt on inter-generational mobility of families is a common problem. High education prices will not only affect low-income families, but also cause great pressure on high-income families. Generally speaking, the main reason for the high inter-generational income elasticity of low-income families and middle-income families of urban residents is that education liabilities reduce the investment of parents in low-income families in the capital of children and women, which makes it difficult for the income growth of children in low-income families; High income families occupy rich social high-quality resources, and are relatively less affected by the constraints of family education loans in the process of inter-generational inheritance, thus showing the characteristics of low inter-generational income elasticity.

It can be seen that education cannot explain the high inter-generational income elasticity of urban residents, and family education debt constraints have become an important factor behind the impact of inter-generational income mobility. The rising high education prices in cities make most urban residents affected by the constraints of education liabilities, so it is difficult to achieve the leap of social strata in the process of inter-generational inheritance.

Table 4: The impact of education debt in different income families

annual income of children	Low income	Middle income	High income
Ln fathers annual income	0.399^{***}	0.397^{***}	0.022
	(0.16)	(0.07)	(0.09)
education liabilities	0.64	-2.31^{***}	-2.22^{***}
	(1.65)	(0.75)	(0.94)
Childrens education years	0.04^{**}	0.03^{**}	0.07^{***}
	0.02	(0.01)	(0.02)
education liabilities	0.05^{**}	0.034^{***}	0.21^{***}
× Ln fathers annual income	(0.02)	(0.01)	(0.09)
Childrens education years	-0.04	-0.013^{**}	-0.007
× Ln fathers annual income	(0.11)	(0.005)	(0.006)
Child gender	0.18	0.017	-0.012
	(0.11)	(0.52)	(0.07)

Child marriage	-0.01	0.05	0.06
	(0.94)	(0.05)	(0.05)
Occupation of children	-0.47***	-0.74***	-0.81***
	(0.14)	(0.08)	(0.15)
Child age	0.41**	0.24***	0.25**
	(0.04)	(0.05)	(0.07)
Childrens age square	-0.006**	-0.003***	-0.003***
	(0.002)	(0.001)	(0.001)
region	0.19	0.16***	0.17**
	(0.11)	(0.05)	(0.06)
R^2	0.25	0.23	0.25
Cragg- Donald Wald F statistic	13.33	15.86	13.88

CONCLUSIONS

In the framework of equilibrium analysis of household utility maximization, this paper introduces the constraint of household education debt, and theoretically deduces that education debt will squeeze out household human capital investment and reduce inter-generational income mobility. The empirical analysis results based on CHIPS2021 survey data verify the above relationship. That is, education debt constraints have become an important factor affecting the length of education. Inter-generational correlation of education and inter-generational elasticity of income. This paper further considers that low-income families usually face tight education debt constraints when investing in human capital for their children, while high-income families do not face tight education debt constraints. The research results of sub sample regression show that education debt reduces the inter-generational mobility of low-income families, but has no significant impact on high-income families.

As high education prices will not only squeeze out the consumption of urban residents (Li and Liu, 2014), but also the mortgage constraints it brings will squeeze out the human capital investment of low and middle-income families in their offspring, making it difficult for poor families to have expensive children again. Therefore, the government should establish a long-term regulation mechanism for urban education as a whole, adhere to the principle of education without speculation, and pay particular attention to low-income families that are most affected by education loan constraints. On the other hand, education is still an important way to improve social mobility, which can alleviate the adverse impact of education debt constraints on the social mobility of low-and middle-income groups. Therefore, the government can strengthen public education and make up for the family human capital investment squeezed out by education liabilities, which is not only conducive to increasing social mobility, but also conducive to improving the quality of workers.

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TECHNOLOGICAL INNOVATION OF SMES

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ABSTRACT

At present, SMEs have become an indispensable part of Huzhou's national economy, and play an irreplaceable positive role in driving technological progress, promoting international trade, stabilizing economic growth, and reducing unemployment. After entering the new century, facing the new situation that the market competition intensifies and the market competition turns to technology competition after China's entry into the WTO, the quality and structural contradictions of the SMEs in Huzhou are increasingly emerging. Therefore, studying how to promote the technological innovation and development of SMEs and improve their technological innovation ability and competitiveness has become an important subject to promote the rapid economic growth and leapfrog development. This paper analyzes the problems existing in the process of technological innovation of SMEs in Huzhou, and puts forward countermeasures to promote technological innovation of SMEs in China from the perspectives of SMEs themselves and the government, hoping to enlighten the technological innovation of SMEs in China.

Keywords: Small and medium-sized enterprises, technological innovation, innovative countermeasures

INTRODUCTION

1.1 Research background

As the source of human wealth and the fundamental driving force of economic development, technological innovation has received more and more attention from the theoretical circles, business circles and governments of various countries (Nie, 2020). Many influential economic experts and scholars in China regard technological innovation activities as the main indicator for evaluating a country's economic growth and its ability to participate in international market competition. Governments all over the world emphasize the theoretical research of technological innovation and the macro-guidance to the practice of technological innovation. Governments of all countries are actively carrying out technological innovation activities, and take technological innovation as the strategic focus of economic development (Vanhaverbeke, et al, 2018).

With the continuous improvement of world economic integration and China's accession to WTO, Chinese SMEs are facing strong challenges from international enterprises (Ge, 2018). Therefore, in today's situation of emerging new products, increasing technological content, and increasingly fierce technological competition, technological innovation has become an important guarantee for enterprises to improve their core competitiveness and achieve better survival and development (Chen, et al, 2020). The advantages of small and medium-sized enterprises include flexible organizational structure, high degree of product simplification, short decision-making cycle, etc. Therefore, the efficiency of technological innovation of SMEs is often higher, and they are more willing to engage in technological innovation. SMEs have become the most important subject of technological innovation (Huang, et al, 2021). Many SMEs in China are the important achievements of the reform of the economic system and the scientific and technological system, and occupy an extremely important position in the national economic system. These SMEs play an extremely important role in creating employment opportunities, increasing national wealth, promoting technological innovation, increasing export earnings, and promoting the development of large enterprises (Bocquet, et al, 2019).

Zhejiang Province is an economically powerful province and a province where SMEs gather. Huzhou is one of the major cities in Zhejiang Province and plays an important role in promoting the economic development of Zhejiang. Since the reform and opening up, Huzhou's economy has developed rapidly and steadily, and has gradually formed an economic development pattern with small and medium-sized enterprises as the main body. SMEs in Huzhou have certain advantages in technological innovation. SMEs in Huzhou have certain advantages in technological innovation. However, there are also problems such as insufficient funds, poor financing channels, insufficient investment in research and development funds, weak independent innovation capabilities, lack of high-level talents in technological innovation, and unbalanced sources of technological innovation information.

1.2 Research purpose

To systematically study the technological innovation of SMEs in Huzhou has high theoretical value and extremely important practical significance for further exerting the advantages of small and medium-sized enterprises in Huzhou and enhancing the technological innovation ability of small and medium-sized enterprises in Huzhou.

Based on the above macro and micro background, this paper selects the technological innovation of SMEs in Huzhou as the starting point, and discusses the countermeasures to further promote the technological innovation of small and medium-sized enterprises in Huzhou.

1.3 Research significance

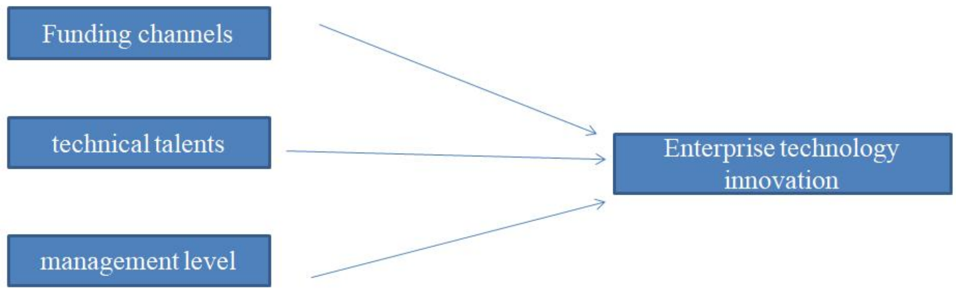
In view of problems in the technological innovation of small and medium-sized enterprises in Huzhou, this paper proposes some effective strategies to further promote the technological innovation of small and medium-sized enterprises in Huzhou, which can be used as a reference for the relevant departments of the Huzhou Municipal Government to formulate relevant policies, and a reference for the small and medium-sized enterprises in Huzhou to establish a technological innovation system suitable for their own characteristics.

LITERATURE REVIEW

Hervas-Oliver, et al (2021) mentioned that economic development depends on technological progress and innovation, focusing on the social function of scientific and technological progress. Rahman, et al (2022) found that SMEs are more inclined to develop new products. Taking Australia as an example, Indrawati (2020) believed that the technological innovation investment of SMEs is higher than that of large enterprises. He empirically studied the correlation between R&D investment and technological innovation. Bagheri, et al (2019) pointed out that the speed of R&D and improvement innovation of SMEs was faster than that of large enterprises. Liu, et al (2021) believed that technology-oriented enterprises were good at using technical knowledge to solve the existing needs of customers, and could develop products that were more novel, high-performance, and more acceptable to customers. Due to the high barriers to imitation, such technological advantages are more likely to form the core advantages of enterprises themselves. Li (2019) believed that technology orientation was the way to generate breakthrough innovation. Existing research believed that technology-oriented companies usually used the most advanced new technologies and invested a lot of R&D resources in the development of new products. Therefore, most of these companies have strong R&D resources. Technological proficiency and flexibility are more likely to generate breakthrough innovations. Donbesuur, et al (2020) believed that companies that focused more on technology orientation were more likely to develop breakthrough products and were more receptive to production process innovations. Donbesuur, et al (2020) emphasized that technology-oriented companies often tried to obtain the most advanced technology in the industry, and at the same time had the flexibility to produce products of different specifications through process innovation, thereby improving the speed of new product development and production.

Lu (2020) expounded various aspects of the economics of technological innovation. He not only revealed the process and mechanism of technological innovation and the relationship between technological innovation and market mechanisms, enterprises, industrial evolution and economic growth, but also analyzed innovation policy, the theory and method of technological innovation economics and other issues. Wang (2021) systematically expounded all aspects of SMEs' technological innovation and government policy, and constructed a theoretical framework for SMEs' technological innovation and government policy research. Li and Huang (2018) focused on the role of SMEs in economic growth and social development. Secondly, they discussed the basic situation and theoretical basis of technological innovation of SMEs, as well as the policies and measures adopted by governments to support technological innovation of SMEs. Finally, they put forward some policy suggestions on how the Chinese government should support the technological innovation of SMEs.

To sum up, the specific research model of this paper for the problems existing in the technological innovation environment of small and medium-sized enterprises in Huzhou is as follows.



PROBLEMS IN THE TECHNOLOGICAL INNOVATION ENVIRONMENT OF SMES IN HUZHOU

Huzhou's SMEs have improved their scale and operating efficiency, and they all have certain technological development capabilities. However, in the process of technological innovation of small and medium-sized enterprises in Huzhou, some common deeper problems are also emerging, which restricts the rapid development of technological innovation of SMEs in Huzhou. Some are the problems of the SMEs themselves, and some are the problems of the external support system of the SMEs' technological innovation.

3.1 Insufficient funds and poor financing channels

Funding is still the primary obstacle to technological innovation for SMEs. The source of funds for technological innovation of enterprises is mainly self-raised funds. Most of the small and medium-sized enterprises in Huzhou are private enterprises or joint-stock enterprises, and it is very difficult for these enterprises to obtain financing directly. SMEs generally find it difficult to obtain loan guarantees from state-owned banks or other financial institutions, and it is also difficult to obtain indirect financing. These enterprises lack funds, so they cannot carry out high-risk technological innovation activities. In the process of technological innovation, many small and medium-sized enterprises can only obtain funds from informal capital markets at high costs and risks. The lack of funds required for technological innovation by SMEs prevents them from developing quickly.

3.2 Lack of high-level talents

Small and medium-sized enterprises in Huzhou generally lack high-level technical personnel engaged in scientific research and development. There is also a shortage of senior management talents who master the concepts and methods of modern enterprise management and high-level foreign trade talents who understand the operation of the international market. In recent years, the private high-tech small and medium-sized enterprises in Huzhou have rapidly absorbed a number of high-tech talents. However, due to the lack of effective incentive mechanisms for many small and medium-sized enterprises, it is difficult for talents who flow into small and medium-sized enterprises to stay in small and medium-sized enterprises for a long time, which makes it difficult to form the core competitiveness of small and medium-sized enterprises. In the acquisition of innovative personnel, the local labor market has played an important role and is the main source of innovative personnel. However, the local labor market basically provides low-level innovative talents, and it is difficult to obtain high-level innovative talents. In the acquisition of high-level talents, enterprises rely more on the introduction of talents from the government and from universities and research institutes and entrusting parties in the United Kingdom and the United States. From the inside of SMEs, the incentive system for technological innovation is not perfect. Operators are unwilling to actively develop the innovation potential of employees, making it difficult to form an innovation incentive mechanism for technology participation and distribution. At the same time, the lack of hierarchical and standardized material incentives and spiritual incentives cannot effectively mobilize the enthusiasm and initiative of internal technical innovation personnel, and even causes the loss of senior technical personnel.

3.3 The low management level of technological innovation

Technological innovation has many characteristics such as risk and complexity, which determines that technological innovation is not a simple technical activity, but a comprehensive activity including economic and management. It is of great strategic significance for a country to strengthen the scientific nature of technological innovation management both at the macro level and at the micro level. An enterprise must rely on continuous technological innovation to maintain its strong competitiveness, which requires the enterprise to strengthen the management of technological innovation and continuously improve the ability of technological innovation. Some private entrepreneurs in Huzhou usually have rich practical experience, but due to the influence of this experience, they do not pay enough attention to standardized management. Due to the existence of a family management method in which one person makes decisions and one person takes risks, small and medium-sized enterprises lack a sound technological innovation management system. As a result, these small and medium-sized enterprises fail to seize innovation opportunities, nor can they formulate scientific technological innovation strategies. The technological innovation behavior of enterprises is often judged by the operators based on experience, which makes the technological innovation decision-making of enterprises very arbitrary, and also increases the innovation risk of enterprises.

TECHNOLOGICAL INNOVATION COUNTERMEASURES OF SMALL AND MEDIUM-SIZED ENTERPRISES IN HUZHOU

In recent years, the Huzhou Municipal Government has also paid great attention to the technological innovation of SMEs, and adopted a series of policy measures, which have promoted the in-depth development of technological innovation activities of SMEs. However, like most SMEs in the UK and the US, SMEs in

Huzhou also face many obstacles to technological innovation. Therefore, the efforts of SMEs themselves are the key factors to promote technological innovation. Both the government and enterprises must take practical measures to actively face the excellent historical opportunities and fierce market competition, and play their respective roles in promoting the technological innovation of SMEs in Huzhou.

4.1 Actively expanding financing channels and increasing investment in technological innovation

The financing environment is critical for technological innovation in SMEs. To solve the serious shortage of technological innovation investment, they must first improve the financing environment (Radicic and Djalilov, 2019). Small and medium-sized enterprises have great risks due to their reputation, financial status and technological innovation, so banks generally rarely lend to small and medium-sized enterprises. However, this situation is gradually improving, but it will take time to fundamentally solve the problem of financing difficulties for SMEs. Therefore, it is imperative to provide credit guarantee for the technological innovation of SMEs. Credit guarantee is an effective way to improve the financial reputation of SMEs and solve the difficulty of loan and mortgage. The practice of credit guarantee for small and medium-sized enterprises in Huzhou started in 1996, and has also accumulated certain experience. At present, there are nearly 10 credit guarantee institutions in the city, but the guarantee institutions for small and medium-sized enterprises in Huzhou do not have a complete set of operational procedures and lack scientific management. Therefore, it is necessary to accelerate the pilot work of establishing a credit guarantee system for SMEs. By establishing various forms of credit guarantee systems for SMEs to share the financing risks of SMEs, it can effectively guide general banks to provide loans to SMEs and promote technological innovation of SMEs.

4.2 Attaching importance to the cultivation of innovative talents

Talent is the main body of technological innovation work. Whether SMEs have high-quality talents and whether they can give full play to the enthusiasm and creativity of talents will be directly related to the effectiveness of technological innovation work (Garzella, et al, 2019). The shortage of talents has become one of the important reasons affecting the technological innovation of SMEs. Therefore, first, a good environment for technological innovation within SMEs should be created to give full play to the ingenuity of existing scientific and technological talents and management talents. They should also send promising young workers to universities in China, the United Kingdom and the United States for further study, do a good job in technical training for business backbone as well as use scientific methods to manage talents. Second, they should develop a mechanism of talent training, talent use, talent evaluation and talent incentive to stimulate their enthusiasm for work and improve the innovation ability of scientific and technological talents. Third, they need to pay attention to the introduction of key talents and to attract talents widely. It is necessary to attract more outstanding talents to actively participate in the technological innovation activities of SMEs. Fourth, as an operator, they must actively study, strive to improve our own quality, and cultivate an innovative spirit. The operators of small and medium-sized enterprises are not only the organizers of innovation activities, but also the direct bearers of innovation risks. Therefore, their knowledge quality and value concept play a decisive role in the innovation behavior of enterprises.

4.3 Strengthening technological innovation management and improving scientific management level

The vast majority of SMEs in Huzhou are still in the stage of experience management and paternalistic management, lacking the concepts and methods of modern technology innovation management. Therefore, how to further strengthen the management of technological innovation and improve the level of scientific management has become an urgent problem to be solved in the process of technological innovation for SMEs in Huzhou. The technological innovation management of SMEs is to coordinate and organize all elements and links of technological innovation to form the overall synergy of technological innovation, so as to achieve the expected goals of technological innovation projects with high quality and high efficiency. Under the guarantee of the system, small and medium-sized enterprises in Huzhou should pay attention to the scientific management of technological innovation, continuously improve the level of technological innovation management, and emphasize the following aspects. First, they should strengthen the process management of technological innovation. Due to the complexity and uncertainty of the technological innovation process, it is necessary for SMEs to strengthen the technological innovation process management. Technological innovation process management mainly involves three aspects: the formulation of innovation plans, the formation and evaluation of innovative ideas, and the organization and control of research and development activities. Second, they need to strengthen the risk management of technological innovation. For small and medium-sized enterprises, due to their limited capabilities and strengths, they sometimes encounter small risks, which may lead to the failure of enterprise technological innovation. Only by correctly analyzing the risk factors of technological innovation of enterprises, can the risk of technological innovation of enterprises be controlled to a minimum. Third, they need to strengthen the management of elements of technological innovation. It is necessary to establish the information management system of technological innovation and the management system of expenses and capital investment.

CONCLUSION

After long-term exploration and development, the technological innovation of SMEs in Huzhou has accumulated certain experience and has its own unique advantages. However, there is still a certain gap compared with the technological innovation of SMEs in the United Kingdom and the United States. If SMEs in Huzhou really want to become the backbone of economic development, they need to do the following aspects. On the one hand, enterprises themselves should formulate effective countermeasures for technological innovation activities through continuous exploration. On the other hand, it is necessary for the Huzhou Municipal Government to vigorously expand the financing channels for SMEs, speed up the pace of talent introduction, vigorously develop higher education, and build an innovative exchange platform. It is hoped that this paper can be used as a reference for the majority of SMEs in Huzhou to undertake technological innovation activities, and can also provide a reference for the Huzhou Municipal Government to formulate technological innovation policies for SMEs.

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IMPROVEMENT OF TEACHING ABILITY OF YOUNG TEACHERS IN UNIVERSITIES BASED ON PDCA

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ABSTRACT

In recent years, China's higher education has encountered many problems in realizing the leapfrog development. University teachers are getting younger and younger, there are great differences in teaching ability, ability level is high or low. The application of PDCA cycle principle to the improvement of teaching ability of young teachers aged 20-30 is conducive to teachers' self-perfection and innovative teaching, as well as enhancing the teaching impact. The main purpose of this research is to explore how to improve the teaching ability of young teachers in colleges and universities, so as to improve the teaching quality of colleges and universities.This study examines the teaching ability of young teachers in colleges and universities based on literature review and research on the teaching quality of young teachers in colleges and universities. Based on the PDCA analysis method and the eight realization steps, this paper analyzes the current situation of young teachers' teaching ability under the guidance of the basic idea of teachers' self-improvement and self-drive, points out the influencing factors of young teachers' teaching ability, and puts forward the thinking and operation path of upgrading young teachers' teaching ability based on the PDCA principle. To recognize the self-promotion of the teaching ability of young teachers. This paper points out that teaching quality is an essential means to improve teaching ability and promote comprehensive education, and an important aspect to promote modern information of teaching quality in colleges and universities.

Keywords：PDCA Management,College Teacher,Teaching Ability,Teaching Quality

INTRODUCTION

1.1 Research background and importance

Information-based environments have brought about changes in teaching mode, learning mode, educational concepts, teaching methods, etc., and have posed new challenges to the ability of educators. In the information environment, educators are getting younger and younger. According to statistics from the Ministry of Education, ordinary colleges and universities have a high degree of youth. Teachers aged 30 and below account for 28.4% of the total number of teachers, and teachers aged under 40 account for 68%, more than 2/3 of the total number of teachers in ordinary colleges and universities (Ministry of Education,2004). The general youth of educators has brought new challenges to the management, education and teaching quality of teachers in colleges and universities. How to quickly adapt to the work of new young teachers is an immediate problem. Connotation of the growth of young university teachers, with the change and development of higher education, in continuous development and improvement, for college teachers, not only understand the discipline, more to understand the teaching, and put the two organic combinations, enhance the quality of teaching level, coordinate the relationship between the teaching and the information age, the growth of young teachers is the real meaning. How to improve the teaching quality effectively in the process of teaching, to gain the goal of training educators is the core problem of contemporary college education and teaching quality.

1.2 Research significance

The research on the framework of teaching ability of young teachers in colleges and universities is an urgent and innovative work worth doing in the current teaching technology of young teachers in colleges and universities. The research and development of young teachers' teaching ability can provide effective guidance and assessment for teachers' self-development, so that teaching ability can be confirmed in teaching objectives, teaching methods, content and evaluation. Therefore, it is practical to conduct research to improve the teaching ability of young teachers in colleges and universities.

RESEARCH METHODS AND SCOPE

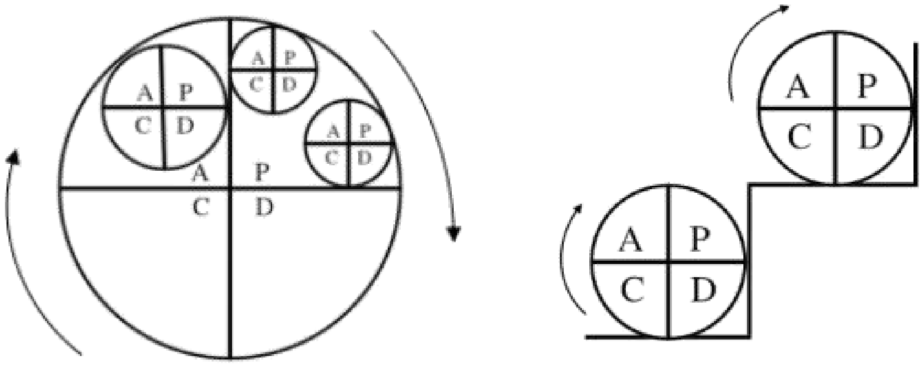
The PDCA model analysis method is used to analyze the teaching ability and teaching quality of young teachers aged 20-30 in colleges and universities, so as to better explore the problems of teaching quality of young teachers and help improve teaching ability.

RESEARCH FINDINGS

Research theoretical basis - PDCA cycle management

The cycle process of PDCA mostly revolves around: analyzing the current situation and finding problems. Investigate the influencing factors of quality problems. Discover the main causes of quality problems. For the main reasons, propose solutions and implement them. Check that the results of the execution have achieved the intended goals. Sum up the successful experience and develop corresponding standards. Transfer unresolved or emerging problems to the next PDCA cycle.

Figure 1: PDCA cycle working diagram



The four processes of the PDCA cycle do not run once, but over and over. Through the continuous rotation of each small cycle, promoting the next level of cycle and even rotating the entire cycle, is a continuous process of the system. Each cycle, the quality level and management level of PDCA are improved by one step. It is not a simple cycle of operation, but a step up, through each PDCA cycle, to summarize, put in new goals, and then the succeeding PDCA cycle, which means that each cycle, a batch of problems resolved, the quality level of each new improvement. (Tang, X.B. and Yu, M.Q.,2011)

There are four stages for PDCA: The first stage is the Plan stage, that is, through the analysis of the current situation, to discover the main problems in teaching quality, and calculate the teaching quality goals and corresponding plans and measures, specifically including the problem discovery, analysis of the cause, discover the main cause and make a Plan;The second stage is the implementation (Do) stage, that is, the implementation of the teaching quality improvement plan and measures formulated in the first stage. The third stage is the check stage, that is, the implementation of the plan is checked. The fourth stage is the Action stage, which is to manage the results of the implementation of the plan, including the standardized treatment of the experience summarized in the implementation of the teaching quality improvement plan.

PDCA eight steps: in the planning phase (Plan), contains the first four steps in the analysis of the status quo, discover the problems of the teaching quality, and aiming at the problems analysis of causes and factors, discover the key influence factors, through the above premise to improve the quality of teaching measures, bring forward a Plan of action, and expected results.Implementation stage (Do) corresponds to the fifth step, which is the process of striving to reach its goals on the basis of implementation in accordance with the scheduled schooling plan, and the implementation process also involves the adjustment of the work plan. In addition, at this stage, data collection should be established at the same time, collecting the original record data and other documents of the implementation plan.The check phase corresponds to the sixth step, which uses the gathered data to check the impact and verify whether the target has been gained. The last stage (action) contains two steps, summing up experience, dealing with the various problems checked out, affirming accurately, summarizing and writing, and formulating standards. End steps to put in unresolved problems, through the inspection, the impact is not meaningful, or the effect does not meet the requirements of the measures, as well as the quality problems have not been resolved, in the spirit of seeking truth from facts, reflected in the next cycle.

Present situation of teaching ability of university teachers under PDCA management

(1) Stage P

Most young teachers graduated on the platform, to teach the course of the teaching material is not familiar, it is difficult to seriously study, not the course most of the market out of the teaching material to see again. Teaching theory system on the hard macro grasp, content cannot reach "understand, transparent," state, some concepts and even they are not detailed understanding and grasp, the lack of the understanding of curriculum subject areas where the latest research results, the latest research in the field of this subject can't stimulate students' interest, lead to obsolete teaching content is not in time, Not even as well as some students' grasp of the latest developments in the field. (Zhu Ye,2017) Teaching is only limited to textbooks and can not have some beyond, or even read from textbooks, resulting in insufficient information of teaching, its teaching is tasteless, lack of interest and appeal.

(2) Stage D

The young teachers are unfamiliar with the curriculum system, their teaching goals are vague and unknown, who leads to their teaching usually wandering outside of the teaching goals. There is no in-depth research on what students should learn, what purpose they need to achieve, and what quality and ability they need to strengthen. Therefore, young teachers do not spend time thinking about how to improve their teaching ability before teaching.

The ability to select and arrange the teaching content is insufficient. Some young teachers only review the textbooks they choose before teaching. (Jiang Guiying&Liu Jiangguo,2019) Therefore, they cannot precisely grasp the logical system of the teaching content and the key points, difficulties and key points of the teaching content, leading to the lack of systematic coherence and emphasis of teaching. Lack of understanding of the basis and standard of teaching method selection cannot appropriately choose the scientific teaching method. There are many teaching methods, such as case teaching methods, people-oriented teaching methods, and scenario simulation methods, but most young teachers are limited to book theory and have little classroom interaction. Young teachers are comfortable with the use of new technologies and the Internet and have natural advantages over older teachers. (Zhong B L,Wang X Factor,2019) However, improper use of advantages or excessive reliance on modern technology has become a disadvantage. The application of too many modern technologies weakened part of theoretical knowledge and could not reflect personal thoughts. The courseware is very dazzling and the students cannot take it all in.However, from the perspective of the course effect, students often do not react well.

(3) Stage C

By investigating the reasons for the poor teaching ability of young teachers in colleges and universities, it can be concluded that teaching and scientific research cannot be balanced. Both scientific research and teaching are the tasks of young teachers. One of these two tasks relates to their own interests and the other relates to the interests of students. Some young teachers with unstable ideological and ethical concepts normally have various problems when coordinating the two tasks. (Chen Xiaoye, 2011) The most common problem is that many young teachers are dedicated to scientific research and want to improve their professional titles and get rich bonuses for scientific research achievements. However, they are not serious enough about teaching. If a teacher does not set out to improve his teaching ability, it will be difficult to improve his teaching ability. Problems are inevitably caused by certain reasons, and only by understanding the causes of these problems can we find targeted measures to solve these problems.

(4) Stage A

In this link to solve the problems of young teachers, consolidation measures and the next step. The evaluation performance of young teachers' teaching quality is summarized, successful teaching experience and teaching quality are included in the standard as far as possible for standardization, and the remaining problems or new problems are transferred to the next PDCA cycle to resolve.

ANALYSIS AND RESULTS

5.1 Factors influencing the improvement of young teachers' teaching ability

(1) The policy orientation of highlighting scientific research and neglecting teaching

At present, many colleges and universities pay more attention to scientific research than teaching in policy making, paying too much attention to scientific research achievements and not enough attention to teaching evaluation. For example, in professional title evaluation, job promotion, year-end allowance awards, the college assessment is focused on scientific research indicators: the level of the subject, the number of published papers and impact factors;Teaching evaluation is comparatively straightforward, most of which is reflected in the workload. The requirements for teaching quality are vague, and some of them are only designed to prevent teaching accidents. Under the policy guidance, the young teacher is elementary to form the scientific research supreme extreme idea, they just next to the podium, from the platform is not very rich experience in teaching, so many time and energy on scientific research, treat teaching a matter of routine, is not to implement the teaching reflection, in the long run, it will be to improve the young teachers teaching ability have a negative impact.

(2) Lack of systematic professional training system

The teaching ability training system of young teachers can be divided into three stages: pre-service, in-service and post-service. Pre-service education is primarily in the postgraduate stage, while young teachers in colleges and universities are essentially graduates of non-normal majors. They have not received systematic ordinary education at this stage and primarily receive the study of subject and professional knowledge. Secondary vocational education refers to the formal work before school pre-service training of young teachers, but most of the colleges and universities pre-service training form, content, training content is mostly higher pedagogy, psychology, and teachers' professional ethics course of theory teaching, such as lack of study of teaching practice, because the training effect is not optimal. Post-service education refers to the improvement of the teaching ability of young teachers through various training measures after they start teaching. Nevertheless, the development and quality of post-teaching work in colleges and universities are severely affected by factors such as the emphasis on scientific research over teaching and the inadequate investment in teaching and training funds.

(3) Teaching evaluation is a mere formality

Teaching assessment plays an important role in encouraging young teachers to improve their teaching skills. At present, the forms of teaching evaluation in colleges and universities mainly include students' evaluation, peers' evaluation, specialists' evaluation and leaders' evaluation. Among them, students' teaching assessment has attracted more and more attention, because students, as the object of teachers' teaching, are the most direct witnesses and examiners of teachers' teaching and have the most say on teachers' teaching quality. (Zheng Min,2019) Therefore, student teaching assessment is the most effective evaluation method to reflect the teaching impact of educators. However, at present, the actual impact of student assessment is not optimal. Some colleges and universities usually conduct assessment at the end of the semester, only paying attention to the formal process, teaching evaluation and quality results did not give due attention and attention, making teaching activities become a mere formality, did not have a real effect.

(4) The consciousness of independent development

The motivation of autonomous development refers to the internal motivation and driving force for achieving a certain goal or some needs. It has consciousness and excitement. For young teachers, it means to continuously enhance and develop their own teaching ability through their own active learning and teaching practice activities, relying on the awareness and desire of independent development. Studies have shown that without the active participation of young teachers from the heart, all educational reform and training efforts will be mere formality and will end in failure. Only with a strong sense of independent development will teachers study hard and actively reflect and analyze teaching practice in order to make considerable progress in teaching ability.

Table 1: Factors affecting the teaching ability of young teachers

School factors: The inherent shortcomings of the incentive mechanism of teachers in colleges and universities, most of whom value scientific research and invest enough in teaching; Teachers' teaching ability encourages the lack of mechanism and training mechanism lags behind; The bias of the teacher evaluation system, many evaluation systems become a mere formality, the evaluation process is subjective, the evaluation results are not dealt with.
Personal factors: Teachers' teaching experience is insufficient, young teachers' teaching ability is lacking; young teachers' own "knowledge foundation" is weakened, "knowledge structure" is unfair; Some young teachers have poor awareness of independent development and their teaching ability cannot be improved.

5.2 Young teachers' reaction to the problems of teaching quality in practical teaching work

Table 2: The teaching quality of young teachers reflects the problem

(1) Young teachers' understanding of the abstract system and knowledge of the curriculum needs to be further strengthened, which affects the thoroughness of their teaching;
(2) Some young teachers lack a sense of responsibility and professional consciousness in the teaching process, and their professional ethics are relatively weak;
(3) Young teachers have the problem of following the script in teaching, not paying attention to the guidance of thinking, and lack of classroom communication and interaction;
(4) The content taught cannot relate to the reality of life, which is blank and unconvincing.

5.3 PDCA analysis to improve the teaching ability of young teachers in colleges and universities

5.3.1 PDCA four stage analysis

P: The planning stage——Young teachers recognize problems and make lesson plans. First of all, the interpretation of the teaching plan, syllabus, curriculum, textbooks, etc., and strive to discover new problems and teaching theories in the process, such as new teaching concepts, curriculum standards, teaching methods, etc., based on which to develop new teaching plans. Educators need to carefully analyze their own advantages and disadvantages, make full use of their advantages, and avoid their disadvantages in the teaching process. In the process of making teaching plans, young teachers should have a clear understanding of the curriculum goals and a comprehensive interpretation of the teaching goals. Special attention should be paid to actively establishing the conditions that can smoothly achieve the teaching goals, such as teaching methods, teaching time allocation, teaching mode, etc. Through the above process, educators complete the overall teaching design.

D: Execution (Do) phase——Educators adjust teaching behavior and implement teaching plans. Encourage old teachers to explain and train young teachers; we will launch teaching competitions for young and middle-aged teachers to stimulate young teachers to master advanced teaching concepts, successfully enhance the effectiveness of classroom teaching, and improve the quality of teaching. Through teaching competition, young teachers can transmit and learn from each other and promote each other. Actively arrange teaching research and scientific research activities, mix teaching with teaching research and scientific research, and promote teaching with scientific research.

C: Check phrase——Young teachers independently observe the teaching process and check the teaching effect, that is, let teachers independently check the teaching plan and check whether the teaching goal has achieved the predicted goal.

A: Action phase——The young teachers can improve the teaching process individually and complete the PDCA of the next round of teaching. If the teaching plan does not gain the predicted teaching impact, or there are problems in the implementation of the teaching plan, a timely summary is required to provide a reliable basis for the next round of PDCA cycle.

5.3.2 PDCA eight steps detailed analysis

Step 1: Investigate the situation and determine the problem. Through the teaching syllabus, combined with the characteristics of students, analyze the classroom and find their own advantages in the actual teaching process. (Li Guoru,2014) Let young teachers further understand their own teaching situation and self-reflection. Based on the actual situation, evaluate and formulate the teaching objectives conducive to the realization of the teaching syllabus, and analyze the problems existing in the process of carrying out teaching activities.

Step 2: Set the teaching goals of young teachers, evaluate the existing problems in the teaching process, and list the corresponding reasons according to the existing problems.

Step 3: Put in the plan that is conducive to achieving the teaching goal, calculate the best plan. In order to achieve the teaching goals smoothly, young teachers should formulate corresponding teaching plans, prepare several teaching plans, and select according to the actual situation.

Step 4: Prepare plans and countermeasures. Establish rules and regulations, standardize the training of young teachers, formulate classroom teaching design, definite implementation of classroom teaching steps. Teaching architecture should reflect the goals and implementation measures to be achieved by improvement, and bring forward concepts and countermeasures to improve the teaching ability and professional skills of young teachers, so that young teachers can construct independently.

Step 5: Educators use flexible teaching methods, such as making scientific multimedia courseware, reasonable design of blackboard writing, effective application of practical models, interactive links, and successfully organizing classroom teaching.(Zheng Huiping, 2014) Through the following measures to improve the level of teaching: give full play to the role of experienced teachers, build a teaching team to collectively discuss the course, collective lesson preparation, young teachers and aged teachers make up for each other, jointly improve the teaching ability.

Step 6: Evaluate the teaching effect by students' response in class; By assigning homework and correcting errors after class, help students stabilize thinking knowledge points and test the teaching effect; hold regular discussions with students, summarize students' evaluation of the teaching process and teaching methods of young teachers, and discover the gap between young teachers in the process of achieving the same teaching goals; The college conducts teaching supervision and inspection, controls and proposes suggestions on the teaching process, and improves the teaching ability of young teachers.

Step 7: Solidify teaching standards and form standards. Summarize the effective teaching measures in the practice process and form the corresponding teaching standards for future reference and further promotion of young teachers.

Step 8: Summarize the problems and dispose of the remaining problems. A PDCA cycle cannot resolve all the problems existing in teaching at one time, it is bound to leave some problems, which need to be transferred to the next teaching process, starting the next round of PDCA cycle, cycle back and forth, helix. In terms of the teaching quality of young teachers, the teaching plan and teaching scheme have not reached obvious effects, or the problems in the teaching process need to be summarized to provide a basis for the development of the next round of PDCA cycle.

CONCLUSIONS

The PDCA cycle is used to point out the teaching ability and quality level of young teachers in colleges and universities, which is conducive to the formation of a whole-process, all-round and sustainable teaching quality management system. Teaching quality improvement is a quality improvement activity that includes a wide range of areas and is complex. Colleges and universities should pay attention to the participation of young teachers, whose participation will integrate education and information. Therefore, every classroom teaching, every educational reform project and the training of young teachers and other outstanding talents are incorporated into the PDCA cycle of different levels, forming a three-dimensional cycle pattern, comprehensively enhancing the teaching ability of young teachers in colleges and universities, promoting the overall cycle of teaching quality improvement in colleges and universities, and continually improving the quality of teaching.

In this research, the basic theory of PDCA plays a good role in improving the teaching ability of young teachers. Educators should actively implement PDCA into teaching links, infiltrate PDCA concepts in every teaching link, continuously improve the control ability of the teaching process, successfully improve teachers' teaching ability, and guarantee teaching quality. To achieve the goal of training outstanding young specialist teachers.

The PDCA management cycle method is a management method of gradual improvement and improves the effect of management, not only applied in the field of teaching management, the enterprise management, management of medical institutions also apply, can effectively improve the teaching management status, to promote increase of teaching achievements, auxiliary colleges cultivate more excellent talents. It should be taken seriously and applied by university management.

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RESEARCH AND SUGGESTIONS ON THE APPLICATION OF COMPREHENSIVE INNOVATION MANAGEMENT MODE IN INTERNET ENTERPRISES

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ABSTRACT

As we all know, innovation is the source of modern enterprise and economic vitality, technological innovation and institutional innovation has always been the basic driving force of economic development and productivity growth. In essence, the competition between contemporary enterprises is ultimately the competition between their innovation capabilities. In the modern highly complex, rapidly changing and risky business environment, enterprises must carry out technological innovation and non-technological innovation effectively according to their internal and external environment and business objectives, and make them coordinate and complement each other in order to remain invincible in the competition for a long time. Foreign research data show that only about 25% of enterprises that only pay attention to technological innovation and ignore other non-technological factors achieve good performance. At present, the innovation management concepts of many Internet companies are backward, which affects the improvement and development of their innovation capabilities. Therefore, this paper combines the content of the comprehensive innovation management system to analyze the types, requirements and existing problems of current Internet companies' innovation, and analyzes the application of comprehensive innovation management system from the practical level, in order to improve the innovation management mechanism of Internet enterprises. It is hoped that while enriching the relevant theories, this paper can provide some references and suggestions for Internet enterprises to apply comprehensive innovation management systems.

Keywords: Comprehensive Innovation Management, Internet Enterprise, Practical Application

INTRODUCTION

The main point of comprehensive innovation management is: around one center, relying on two basic points, to achieve one goal. That is, it is centered on cultivating the core competence of the organization and improving its sustainable competitiveness; the two key points are strategic orientation, and the organic combination and collaborative innovation of various innovation elements (such as strategy, culture, organization, technology, market, system, etc.). , through effective innovation management mechanisms, methods and tools, strive to achieve innovation in everyone, in everything, innovate at all times, and innovate everywhere, and ultimately realize the value creation and value-added goals of the enterprise.

As we all know, innovation is the source of modern enterprise and economic vitality, technological innovation and institutional innovation has always been the basic driving force of economic development and productivity growth. In essence, the competition between contemporary enterprises is ultimately the competition between their innovation capabilities. In the modern highly complex, rapidly changing and risky business environment, enterprises must carry out technological innovation and non-technological innovation effectively according to their internal and external environment and business objectives, and make them coordinate and complement each other in order to remain invincible in the competition for a long time.

1.1 Elements of comprehensive innovation management

The elements of comprehensive innovation management include all-factor innovation, all-time and space innovation, all-staff innovation and comprehensive collaboration. The overall innovation management centres around one centre, which is to cultivate and improve the core capabilities of the enterprise; all-staff innovation is the foundation of all-factor, all-time and space-time innovation; total-factor innovation is an organizational environment and platform to promote and enhance all-staff innovation; In order to integrate innovation resources on a larger scale (Chang Qingqing & Liu Haibing.2022).

1.1.1 Total factor innovation

Total factor innovation means that innovation requires a synergistic view and a comprehensive view, and requires that elements closely related to innovation performance, such as technical elements and non-technical elements, achieve comprehensive synergy to achieve the best innovation performance. Based on the research results of domestic scholars, from macro to micro, innovation elements include: first, dual core theory: technological innovation, management innovation; second, three-dimensional model: technological innovation, market innovation, management innovation; third, six elements theory: Strategic innovation, technological innovation, market innovation, organizational innovation, cultural innovation, system innovation (Chen Yifan. 2015). In fact, the elements of these three theoretical models are the same, but the granularity of the content is different.

Total factor innovation builds an environment and platform that enhances innovation of all employees. All-staff innovation is the basis for the realization of total-factor innovation, and total-factor innovation is the support environment for the realization of all-staff innovation, both of which are mutually conditional and supportive.

1.1.2 Innovation in all time and space

Full-time innovation is divided into full-time innovation and full-space innovation.

Full-time innovation is an innovation strategy, an idea, and a concept, which is an organic combination of improvisational innovation, immediate innovation (including rapid innovation), and continuous (that is, 7 days a week, 24 hours a day) innovation. Improvised innovation is the flash of inspiration on a specific issue; immediate innovation is timely and requires rapid response to market demand; continuous innovation is to innovate all the time, making innovation the eternal theme of organizational development, and making innovation anessential competency across departments and employees, not just incidental events (Dai Xianzhe & Zhan Chengyan. 2018).

All-space innovation (or globalization, all-regional innovation) means that under the background of global integration and network, enterprises should consider using innovation space (including internal space and external space) to effectively integrate innovation resources on a global scale to realize the internationalization and globalization of innovation, that is, to innovate everywhere. It also includes full-value network innovation, full-process innovation, etc (Huang Yi & Kang Lanying. 2012).

All-time and space innovation should be based on the diversification of innovation subjects. With the increasing systematization of enterprise innovation activities and the continuous extension of management in the field, the innovation subjects of enterprises are increasingly diversified, including all internal employees and external stakeholders such as users and suppliers. The diversification of innovation subjects promotes the development of open innovation of enterprises, enabling enterprises to use the network environment to conduct full-time innovation with external innovation subjects, such as customers, suppliers, and collaborators. The participation of different innovation sources in innovation extends the scope of innovation to every moment, every place, every event, and every link of the enterprise; and through the Internet, it focuses on optimizing global innovation resources, thereby improving the efficiency of resource utilization.

1.1.3 Innovation of all staff

All-staff innovation means that innovation is not only the patent of enterprise R&D and technical personnel, but should be the common behavior of all employees. From R&D personnel, sales personnel, production personnel to after-sales service personnel, management personnel, financial personnel, etc., everyone can become an outstanding innovator in their own post. In a broad sense, all employees also include stakeholders such as users, suppliers, and shareholders. All-staff innovation is the basis for the success of comprehensive innovation. The extensive participation of employees can not only reduce the resistance of enterprise innovation and ensure the success of innovation, but also give full play to the wisdom of each employee, improve the commitment of employees, and then improve the level of innovation. For example, for the rationalization suggestion activities often carried out by enterprises, according to the suggestions made by employees to improve their work, corresponding rewards will be given

(Jiang Chunyan. 2019). For example, the QC group activities (including management matters) carried out by the enterprise give ordinary employees the opportunity to share responsibilities, discuss various practical problems, find out the end causes of the problems, and finally solve the problems. For example, in the brainstorming activities carried out by the enterprise, employees are encouraged to speak freely and put forward opinions on some major matters and important issues of the enterprise, which is conducive to the formation of a sense of ownership.

The implementation of all-staff innovation promotes the innovation of core elements such as corporate strategy, culture and structure. The practice of full-staff innovation at the business level is bound to change the innovation pattern dominated by market, technology or management experts, and expand to general employees, emphasizing the comprehensive collaborative innovation of different functional departments, such as the three-dimensional fields of market, technology, and management (Liu Hongwei & Wang Shengyuan. 2016). These innovations can not only promote the realization of corporate innovation goals, but also lead to innovations such as coordination, autonomous power, and resource allocation that hinder employee innovation, making companies develop in the direction of flat organization and networking, and redefine how different employees participate in innovation. Rights and obligations, as well as the rules and regulations for the handling of related rights, responsibilities and interests among employees. At the same time, all-staff innovation can also be understood as the reshaping of all staff's behavioral norms and ideology, which will certainly help to establish a corporate culture that encourages innovation and the construction of a new system of norms and incentives for staff.

1.1.4 Comprehensive collaboration

Comprehensive coordination refers to the comprehensive coordination and matching of various innovation elements (such as strategy, technology, market, organization, culture, system, etc.) "2+2>5" synergy effect, thereby promoting the improvement of innovation performance. The difference between "comprehensive synergy" and "synergy" in the traditional sense is:

First, there are more synergistic subjects covered and the interaction relationship is more complex. The traditional concept of “synergy” mostly refers to the synergistic effect of the interaction between two or three subjects, such as the synergy between technology and market (Liu Yiqun. 2014). Synergy includes but is not limited to strategy, culture, organization, system, technology and market, etc. It is more comprehensive and systematic, and the relationship is complex, and its comprehensive synergy effect will be more obvious.

Second, it emphasizes the importance of all-staff and all-time-space innovation. This study believes that all innovation elements must be fully involved in a full-time and space-time framework in order to truly achieve all-round and comprehensive synergy, which is not covered by the traditional concept of "synergy".

1.2 Significance of comprehensive innovation management

Comprehensive innovation management is not a generalization and a simple extension of the original innovation management theories and methods, but a revolutionary breakthrough. It has changed the original thinking mode of innovation management based on mechanical view and linearity, and takes ecological view and complex system theory as its theoretical basis and starting point (Mao Wuxing. 2017).

No matter in terms of theoretical basis, goals, strategy, structure, elements, time and space scope or management style, there are essential differences from the traditional innovation management paradigm, especially the emphasis on full-time innovation, global innovation and global innovation under the new situation. The importance of personnel innovation greatly expands the main body, elements and time and space scope of innovation. The significant difference between the comprehensive innovation concept and the traditional innovation concept is that it breaks through the previous pattern of isolated innovation by R&D departments, highlights the people-oriented innovation ecological concept, and greatly expands the elements and time and space of innovation.

1.3 Basic characteristics of comprehensive innovation management

The basic characteristics of comprehensive innovation management include purpose, breadth, novelty and mass.

1.3.1 Purpose.

As a new paradigm of strategic innovation in the new century, comprehensive innovation management has a clear strategic goal, that is, based on a solid mass base, by integrating all available innovation resources on a global scale, the goal is to continuously improve the core of the enterprise. Ability to gain sustainable competitive advantage, enable the enterprise to develop continuously, and add value to customers and stakeholders.

1.3.2 Extensiveness.

Comprehensive innovation management is not based on innovation based on a certain aspect or a certain factor, but through mobilizing and relying on all employees, relying on the strength of various aspects inside and outside the enterprise, to carry out all-round innovation in all aspects of innovation elements, including strategy, Innovation in all aspects of culture, organization, technology, markets and institutions (Miao Lei. 2016).

1.3.3 Integrity.

The integrity of comprehensive innovation management stems from the integrity of things, the integrity of enterprises and the integrity of innovation activities. The realization of any innovation activity includes various activities (such as production, supply, marketing, human resources, etc.), and there is an inherent organic connection between these activities, which is carried out by many employees distributed in different departments (Quan Ying & Yue Junhui. 2015). The lack of work in a certain department or a certain employee will affect the effective progress of the entire innovation activity. Therefore, the innovation activity must be regarded as an overall activity that must be kept in step. Power is twisted into a rope, turning all innovation resistance into innovation power.

1.3.4 Mass nature.

Comprehensive innovation management is based on scientific philosophy, humanistic theory and ecological theory, and considers that an enterprise is an organic and unified living body. In the era of open innovation, the masses are no longer limited to the internal employees of the enterprise, but go beyond the original enterprise boundaries, including community members, all stakeholders, upstream and downstream enterprises connected in the enterprise value chain, and strategic partners, etc. (Wang Hongjun. 2012). There is huge innovation vitality and potential among the masses, and the majority of employees have rich differences, which is an inexhaustible source of innovative thinking. Only by mobilizing the masses, relying on the masses, and treating employees as the main body of enterprise innovation, can innovation develop sustainably, and enterprises can remain invincible. Mass nature is the first essential of comprehensive innovation management which is different from traditional innovation paradigm.

TYPES AND REQUIREMENTS OF INTERNET ENTERPRISE INNOVATION

2.1 Strategic innovation

Strategic innovation puts forward the direction of innovation for all employees and tasks at each stage according to environmental changes and the vision of Internet companies; strategic management and innovation assign tasks of Internet companies to each department, each group, and even each employee; strategic planning and its Manage innovation and allocate resources required for innovation to departments, groups and employees; innovate long-term planning work and its management of plans to improve innovation (Xie Zhangshu, Xu Qingrui. 2004).

2.2 Cultural innovation

Cultivate a culture of innovation, including a culture of risk and tolerance; cultivate a culture of learning; cultivate a culture of cooperation and collaboration between Internet companies and departments; cultivate a culture of knowledge sharing, etc (Xu Q R, Gu L F. 2004).

2.3 Structural innovation

Flattening the organization of Internet companies is conducive to the creativity and enthusiasm of employees; decentralization, delegating power to the lowest level, so that each employee has the responsibility and power to actively engage in innovation; organize self-management teams; expand employee autonomy, Make employees feel like they are the real owners (Xu Q R, Liang X R, Zheng G. 2004).

2.4 Market Innovation

Develop new markets and new customers; marketing mix strategy; establish marketing incentive mechanism; marketing information management system (Xu Q R, Zheng Gang & Chen Jin. 2006).

2.5 Technological innovation

Product and process innovation; establish information system; establish the required information and accounting culture for all staff innovation, including input-output and profit and loss accounting; network sharing, etc (Xu Q R. 2009).

2.6 Institutional innovation

Establish an innovation work system to enable innovation work to be carried out effectively; establish an innovation incentive system to reward innovative employees who have contributed in a timely manner; establish a patent management system to protect corporate intellectual property rights; establish a learning and training system to enhance employees' innovation capabilities, etc (Xu Qingrui, Wang Haiwei, 2004).

EXISTING PROBLEMS OF INTERNET ENTERPRISE INNOVATION

3.1 Insufficient technology independent research and development capabilities

For a long time, the state has been promoting the innovation and development of Internet companies. Many Internet companies do not have the ability to innovate independently. This is because the risk of independent innovation is high and the independent research and development of technology is insufficient. Therefore, many Internet companies do not strive to innovate. . Therefore, it leads to the lack of independent research and development capabilities of Internet companies, which hinders the innovation and development of Internet companies.

3.2 Lack of innovative talents

Many Internet companies in our country generally lack innovative talents. Only with talents with innovative spirit can the development of Internet companies be promoted as a whole. At present, the talents lacking in the innovation and development of Internet enterprises in my country mainly fall into the following two categories: First, Internet professional and technical talents. Second, management talents. With the increasing pressure of market competition in my country, many enterprise managers are unable to do what they want. Therefore, it is very important for Internet companies to cultivate management talents.

3.3 Insufficient funds for innovation

For a long time, my country has mainly implemented a state-based Internet technology development and investment system, and many Internet companies are funded through self-raised or bank loans. Judging from the current situation of my country's Internet Enterprise Innovation Exhibition, many Internet companies mainly solve financing problems in the following ways: first, direct financing by issuing stocks and bonds; second, using bank loans to receive financing Way. In addition, due to the imperfect innovation investment system of Internet companies and the high threshold of the securities market, it is difficult for many Internet companies to raise funds publicly through the capital market.

3.4 The innovation environment and service system need to be improved

Many Internet companies are very small in scale, with poor foundation and simple management. Therefore, innovation and development are strongly dependent on the environment and service system. The innovation environment and service system of many Internet companies need to be improved, the overall evaluation of the external environment is not high, and there is a lack of intermediaries that provide comprehensive services. At the same time, many Internet companies still use traditional service methods, and there is a serious lack of intermediary service organizations for market information, exhibitions, information transmission and other content. At the same time, the tax policy and the role of Internet industry associations have not been effectively brought into play, which makes the evaluation of Internet intermediary services not very satisfactory.

THE APPLICATION OF COMPREHENSIVE INNOVATION MANAGEMENT IN INTERNET ENTERPRISES

The comprehensive innovation management system is to manage the innovation activities and innovation capabilities of Internet companies. The objects of innovation management and control include not only innovation activities, but also the innovation goals, innovation environment, innovation organizations, innovation resources, innovation models, and innovation capabilities of Internet companies. important content. As a modern enterprise, Internet enterprises should formulate an innovative strategic goal, show the courage and courage to innovate, create an environment and atmosphere for innovation, improve the ability and level of innovation, boldly explore and practice, and actively build an all-staff, all-time-space and all-element Innovation management system (Xu Haidong.2022).

4.1 Set comprehensive innovation goals

Comprehensive innovation must be guided by goals. Innovation without goals is like finding no direction for development. Only luck can find a way out. The setting of goals can enable Internet companies to concentrate various resources for innovation, which will greatly improve the success rate of Internet innovation. Without goals, it is like using the limited resources of Internet companies on unlimited innovation possibilities. Many plans are It may not be able to proceed smoothly due to lack of resources. Internet companies should pay attention to the following aspects when formulating comprehensive innovation goals (Yu Yang. 2020): First, innovation goals should be an important part of the corporate strategic goal system. Enterprises are in different stages of strategic development, and their innovation goals should be different. Second, the innovation strategic goals are decomposed on an annual basis, that is, according to the annual business plan arrangement, the innovation goals and action plans for the year are formulated. Third, the setting of innovation goals should be reasonable and appropriate, not too high, too high to reach and affect employee morale; not too low, too low to have no incentive effect, and at the same time, it should be in line with the actual situation of the enterprise and the market demand.

4.2 Create an ideological and cultural environment

Thought is the guide of all actions. If innovative ideas are not formed, the formation of relevant systems and the construction of material environment are all "castles in the air". Common values and outlook on life are the foundation for forming mutual trust and connecting organizations; the Internet entrepreneurial spirit is an inexhaustible driving force for innovation; innovation is risky, and a cultural environment conducive to innovation is also required. In general, innovation must be based on the ideology and culture of Internet companies. The following aspects should be paid attention to when creating an ideological and cultural environment for Internet companies: First, Internet companies should strengthen the leading role of senior leaders. Whether an Internet company is innovative or not depends largely on whether the leadership has innovative ideas and awareness. The cultivation of innovative ideas begins with leadership and ultimately forms an open innovation environment of mutual trust. Second, Internet companies should cultivate a cultural atmosphere of innovation among all employees. To innovate, we must update old ideas and break old frameworks. To improve innovation ability, we should start from cultivating innovation culture of all employees, strengthen innovation training for employees, develop employees' innovative vision and ideas, provide employees with a fully free innovation environment and good innovation conditions, and allow employees to take the initiative to develop their innovation potential. , forming a strong cultural atmosphere of innovation. Third, Internet companies should carry forward the Internet enterprise spirit of continuous innovation. The entire Internet enterprise must have a spirit of continuous innovation, especially the leaders. Their spirit greatly affects the existence and development of the innovation spirit of the entire Internet enterprise. The spirit of Internet enterprise is "entrepreneurship, innovation, striving for the first, and leading", which is formed by long-term tempering, which is inseparable from the spirit of insisting on development and pursuing the first in the leaders of Internet enterprises. Fourth, Internet companies should establish an open and tolerant innovation atmosphere. The innovation of Internet enterprises lacks living space in the mandatory and rules-based culture. In this culture, people respect stability rather than innovation and change. And a culture of openness, freedom, and support for new ideas fosters innovation. Innovation means risk. If there is no tolerance, innovative ideas will be imprisoned. Failure is allowed in practice, and failure is also an accumulation.

4.3 Establish an innovative organizational system

Innovation is a systematic and complex process, and mistakes in any department or link will affect the efficiency and speed of innovation. To this end, an effective innovation organization guarantee system must be established. The following aspects should be paid attention to in the establishment of the innovation organization system of Internet enterprises: First, Internet enterprises should establish an enterprise innovation leadership organization headed by the top managers, and at the same time establish an internal innovation promotion organization and an innovation evaluation organization organization of Internet enterprises to form a top-down organization. The innovative organization network really takes innovation work as a systematic project. Second, Internet enterprise innovation is different from individual innovation. The basic cell of Internet enterprise innovation is the innovation activity group. Therefore, innovation work should pay special attention to the role of the innovation task force. The team members can come from different departments, implement self-management, and be given greater autonomy. In this way, the innovation group can exert its own advantages when implementing group innovation. Third, Internet companies should establish a system of responsibility for innovation organizations and professionals at all levels, and clarify the responsibilities and obligations that should be performed in innovation work from management to departments, from departments to posts, from innovation network teams to members, etc., to ensure innovation. effective work.

4.4 Reasonable arrangement of innovation resources

Without input, there will be no output. The innovation of Internet enterprises requires the input of related resources such as human, financial, material and information. Therefore, in order to ensure the realization of innovation goals, the annual innovation resource investment plan must be properly arranged. The rational arrangement of innovation resources of Internet enterprises should pay attention to the following aspects: First, the investment of human resources. People are the first element. Whether they are leaders, managers, technicians or ordinary employees, they are the most valuable assets of Internet companies. The effect of innovation is greatly affected by the quality of talents, and the innovation ability of the invested personnel directly affects whether the innovation of the enterprise is successful. In terms of resource investment, Internet companies should pay special attention to the cultivation of talent quality and ability. Second, the investment of financial resources. The innovation of Internet enterprises is a long-term process full of risks, which requires superhuman resilience, long-term vision, perseverance, and continuous investment of financial resources. Therefore, preparing for long-term investment has a great impact on the ultimate success of innovation. Capital investment is an indispensable and important condition for innovation. Many projects fail because of the interruption of capital investment, resulting in the inability to continue the innovation process. Third, the input of material resources. For technological innovation, sufficient material resources are essential, otherwise it is impossible for ideas to be transformed into commodities, and Internet companies will fail in the ever-changing competition. On the one hand, it is to ensure the test equipment and test bases required by technological innovation projects, and on the other hand, it is necessary to ensure the construction of information technology and network and communication technology, which is indispensable in today's knowledge-based society. The former is the basic material basis of technological innovation, and the latter is the main means of providing technological information flow for innovators.

4.5 Building an innovative management and control model

The innovation goal is the direction, the innovation thought and culture are the foundation, and the innovation organization and resources are the guarantee. After satisfying these basic conditions, Internet companies need to build an innovation management model to ensure that innovation is carried out in an orderly and efficient manner. Internet companies need to pay attention to the following aspects when building an innovation management and control model: First, Internet companies should establish and improve innovation management systems and processes, and form a scientific management system. Specifically, it is necessary to clarify the relevant management processes, management content and methods, reports and records of the project establishment, implementation, inspection, declaration, review, commendation, reward and other aspects of innovation work. Efforts shall be made to realize the standardization, standardization and professional management of innovation work of Internet enterprises. Second, Internet companies should strengthen the whole-process management of innovation work (Xu Qingrui et al.,2003). According to the PDCA cycle, that is, the four stages of planning, implementation, inspection and summary, the whole process of innovation projects should be controlled, so that the progress and effect of the project are always under control. The whole process control should also pay attention to the management of innovation achievements, such as the establishment of a supervision and release mechanism, a reward and incentive mechanism, and a consolidation and promotion mechanism, so as to realize the closed-loop management of the innovation process. Third, Internet companies should play the role of innovation collaboration platforms. Comprehensive innovation management and the coordination among all employees, all time and space, and all elements must rely on a good innovation collaboration platform.

CONCLUSION

This paper firstly introduces the definition, elements, meaning and basic characteristics of comprehensive innovation management. Then, according to the innovation goals of Internet companies, this paper analyzes the types and requirements of innovation: strategy, culture, structure, market, technology and system. In addition, this paper analyzes the existing problems of many Internet companies according to their innovation status. Finally, in response to these problems, this paper puts forward many suggestions for Internet enterprises to apply comprehensive innovation management system: First, formulate comprehensive innovation goals. Second, create an ideological and cultural environment. Third, establish an innovative organizational system. Fourth, rationally arrange innovation resources. Fifth, build an innovative management and control model. Hope to provide some effective reference for Internet companies.

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THE INFLUENCE OF KNOWLEDGE MANAGEMENT ON INNOVATION ABILITY OF SMALL AND MEDIUM-SIZED ENTERPRISES

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ABSTRACT

AS the science and technology develops fast, big data, artificial intelligence and knowledge economy have influenced human society. In the past, knowledge was the promotion role in the development of the society and economy. However, at present, knowledge has transferred its role to promote the development of the economy. In today's society, technology-based SMEs are playing an increasingly important role in promoting new technologies, research and development of new products, upgrading of industrial structures and social and economic development. Innovation ability, as an important weight to ensure the advantages of technology-based SMEs in the fiercely competitive market, has gradually been known and recognized by the majority of enterprises. In the era of knowledge economy, innovation ability is derived from knowledge, applied to practice, and influenced by knowledge management. Based on this, this paper adopts the literature research method to study the influence of knowledge management on the innovation ability of technology-based SMEs, which has theoretical and practical significance.

Keywords:knowledge management, SMEs, innovation ability

INTRODUCTION

1.1 Research background

Innovation has always aroused great concern from both the practical and theoretical circles (Peng, 2020).As China progresses to 21st century, its social and economical development has been accelerated (Li et al., 2020). In the new century, China's economic volume has surpassed that of Japan, making China among the second largest economies in the world (Xu et al., 2018). Science and technology is one of significant factors in promoting China' success, indicating that knowledge economy has the great creativity(Ma, 2018).

Based on data from the Ministry of Industry and Information Technology in 2020, China's technology-based SMEsoccupied 99% of the total number of enterprises in China, created 65% of China's invention patents, occupied 75% of company innovation, and covered over 80% of new product R&D. Technology-based SMEs have gradually become the main force and new innovation force of scientific and technological innovation, which guides the development direction of high-tech industries, and playing an important role in the construction of an innovative country.

In the knowledge economy, with the connotation of products and services as well as the complexity and specialization of production procedures, the competition among enterprises has become more and more intense. In USA, new SMEs just have less than 7 years of lifespan on average, and new SMEs have the survival rate of50% in 3 years as well as just 20% in 5 years. The mortality rate of technology-based SMEs is even higher, and their survival rate in 3 years is only 30%. In Japan, only 18.3% of SMEs can sustain for over 10 years, only 8.5% for over 20 years, and less than 5% for over 30 years. In China, the life expectancy of technology-based SMEs is even shorter, only 2.9 years, and nearly 1 million enterprises close down every year (excluding individual industrial and commercial households).

This is not just a matter of quantity, but the essence of the problem is the quality of technology-based SMEs. Only by making continuous efforts to build and cultivate the core competitiveness of enterprises to improve the knowledge structure, cultivate market awareness, improve management concepts and other technology-based SMEs can break through the bottleneck of development (Xing,2021). As a significant source, knowledge helps companies acquire and maintain their core competitiveness. Theknowledgedissemination, utilization, sharing and acquisition have become a strong driving factor in contributing to the company development. Economic growth relies more on the effective utilization of knowledge rather than the expansion of physical assets. Therefore, enterprises need to establish and maintain effective knowledge management in order to continue the life of technology-based SMEs.

The ability of enterprise survival and development relies on the ability of technological innovation of companies, so the process of enterprise economic structure adjustment is fundamentally the process of enterprise technological progress. Only by continuously achieving technological progress can an enterprise continuously promote its economic structure to meet the market requirements (Wang, 2019). Thus, technological innovation capability is the inexhaustible source of enterprise vitality, the root of market competitiveness, the key measure to realize industrial structure upgrading, and an effective way to adjust and optimize the economic structure of the industry. Therefore, improving the ability of technological innovation plays the key part in promotingthe long-term development and innovation efficiency of technology-based small and medium-sized enterprises.

1.2 Purpose of the study

Enterprises need to establish and maintain effective knowledge management to extend the life span of SMEs. Studying the relationship between knowledge management and the technological innovation capability of SMEs will provide a theoretical reference for other innovation studies, and enrich the existing theories of knowledge management and technological innovation.

1.3 Research significance

Theoretical significance: there are many studies on knowledge management and innovation capability in academia, which has achieved fruitful results and is relatively mature, but not enough attention has been paid to the knowledge management and technological innovation capability of technology-based SMEs. Technological innovation capability is a comprehensive capability of enterprises, which is related to the overall strategic deployment of enterprises and regarded as the key capability of an enterprise to obtain long-term profits.

Practical significance: knowledge management is a process in which an enterprise uses information technology as a means to organically combine knowledge resources with other resources of the company through the process of knowledge learning, knowledge acquisition, sharing, integration, innovation and knowledge application in order to maximize long-term benefits and achieve the effective allocation of resources. Through knowledge management enterprises help to enhance the ability of technological innovation, obtain the desired sustainable competitive advantage, and then narrow the technological gap between enterprises to avoid technological imitation and shorten the learning cycle.

LITERATURE REVIEW

Cheng and Wu (2018) argued that the complementarity and substitution of knowledge structures was the focus point to enhance the innovation capability of enterprises, and that the lasting technological innovation capability of enterprises dependedon the structural optimization of the knowledge base and the renewal of innovation strategies. Wu et al. (2019) proposed that the input and output of knowledge wereactually the re-integration of certain knowledge elements, and the technological development process of enterprises wasthe reallocation of knowledge elements. In order to maximize the competitive advantage of the technological innovation process, enterprises should carry out structured knowledge management. From the perspective of knowledge management, Wang and Chu (2019) proposed the process of technological innovation wasrelated to the process of knowledge sharing and knowledge innovation, and the change and renewal of knowledge wereaccompanied by the whole process of technological innovation. Wu et al. (2020) believedthat knowledge itself was different from other resources of enterprises and belongedto heterogeneous resources, which had unique characteristics, weak substitution and weredifficult to imitate. The advantages that enterprises brought to enterprises when they carry out activities such as knowledge acquisition, knowledge integration, knowledge sharing and knowledge innovation hadbecome a strong support for enterprises to occupy market share. Li and Ma (2018) argued that knowledge management innovation wasrelated to the success or failure of the new product development process of discontinuous innovation enterprises. Based on the macroscopic perspective of enterprises, Wu (2020) believed that the technological innovation capability of enterprises couldbe enhanced by means of horizontal or vertical industrial alliances. Duan et al. (2019) argued that technological innovation capability couldbe analyzed by innovation decision-making capability, manufacturing capability, marketing capability, as well as R&D capability, which couldsummarize the criteria of technological innovation capability as a whole.

Wang (2019) considered that knowledge management includes different activity aspects and understood knowledge management from different perspectives. It is considered that knowledge management not only contains the connotation in the narrow sense but also in the broad sense: First, the processing, transfer and dissemination of knowledge among employees in enterprises and the re-creation of knowledge are regarded as knowledge management in the narrow sense; while knowledge management in a broad sense is further expanded on the basis of the connotation in a narrow sense, and the management activities carried out by technology, personnel and organization are regarded as 360-degree management of knowledge. Su (2018) believed that knowledge management can achieve the strategic objectives and innovative performance of enterprises, continuously realize the competitive advantage of knowledge in enterprises, and promote the implementation of various activities of knowledge management by enterprises and individual employees. Zhang et al. (2021) believed that knowledge management can tap the knowledge and skills stored in employees' brains and experiences in enterprises and apply them to the process of enterprise development and achieving organizational goals, so that enterprises can achieve maximum benefits. According to Zhong (2018), technological innovation capability is a comprehensive capability of an enterprise to explore its own potential and continuously drive the enterprise forward. Qi (2018) argued that technological innovation capability is based on information technology, and enterprises make full use of available resources as an effective support to improve technological innovation, so as to promote the overall quality of employees and expand market ownership and competitiveness, andfinally achieve the Pareto optimal state of the market. Cheng (2019) believed that technological innovation capability includes R&D capability of R&D output and input in enterprises, decision-making ability by perceiving market information, marketing ability to promote new products after R&D, production scale and production equipment production capacity and various organizational capabilities. He and Qi (2018) proposed that technological innovation capability runs through the whole process of technological innovation, from obtaining market demand information to commercializing innovative products as a unity of effective synergy of capabilities in each sub-process.

PROBLEMS IN KNOWLEDGE MANAGEMENT OF SMALL AND MEDIUM-SIZED ENTERPRISES

3.1 Lowering the attractiveness of the job itself and lacking incentives for employees

Mark, an American psychologist, once did an experiment to compare and discover the different psychological feelings brought by the presence or absence of incentives. First of all, a class of children was chosen for the comparison experiment, and a group of children was given a certain amount of tasks every day, and a certain reward was given after completion, while the other group would also do the same tasks, but there was no reward after completion. After a few days, the experimental group would complete the task on time and in the right amount and would be good at it. In contrast, the other group, at the beginning with the experimental group is not obvious, in the next time, that is, the numberof completed tasks, but not in quality. The same experiment with adults led to the same conclusion. Once there are no rewards, the work itself loses its attractiveness, there is no hope for work, there is no creativity, and the quality of work is greatly reduced.

3.2 Weak awareness of implementing knowledge management

In China, the application of knowledge management is not popular, and it is only applied in manufacturing industries or large-scale enterprises, because these enterprises feel the efficiency of knowledge management and the achieved results. However, private enterprises or technology-based SMEs do not recognize the profits brought by the implementation of knowledge management to the enterprises. First of all, the senior management of the enterprises only pays lip service to knowledge management. There is not too much research on which employees need what kind of knowledge, when they need knowledge, and whether knowledge is useful or not. The blindness of enterprise executives in knowledge management and incomplete understanding lead to the stagnation of the implementation of knowledge management. Some do not give due attention to knowledge, although the experience accumulated by enterprises over the years has been transformed into explicit knowledge and become a mandatory manual for employees, which there are many company's commercial secrets, and enterprises do not realize the importance of knowledge management, or the seriousness of the loss of knowledge to the company. Therefore, the lack of awareness of knowledge management will lead to the subsequent loss of the company's wealth.

3.3 Uncertainty about department to which knowledge management belongs

At present, there are not many enterprises carrying out knowledge management, especially for SMEs, one of the reasons is that companies do not set up special departments to manage knowledge, on the other hand, unlike the functional departments such as Finance Department, HR Department, IT and so on, they have a detailed division of labor and obvious workflow. However, no matter which department is placed, enterprises up and down for knowledge management should firstly have relevant professional knowledge and secondly know how to share knowledge. For small and medium-sized enterprises with few people and few functional departments, some companies have knowledge platform systems, but some do not have corresponding systems, and the company's knowledge management is blurred and the management boundaries are unclear, resulting in problems that employees do not know how to find a previous experience to solve.

3.4 Vague awareness about their responsibilities in knowledge management

In the knowledge economy, it is impossible to compete with other enterprises in the market without knowledge management. Management in enterprises cannot promote knowledge management activities if they are in a vague state about their responsibilities in knowledge management. Some enterprises do not have positions such as chief knowledge officer, knowledge manager, or knowledge director, or have set up relevant positions.

At the end of 2003, Zhang Houqi, the former vice president of Lenovo Group in China, launched a knowledge management project and set up a knowledge management committee. The members of the committee have a detailed division of labor and clear responsibilities, which ensures the progress of knowledge management activities. Compared with the state of knowledge management of technology-based SMEs, the ambiguity of employee responsibilities hinders the progress of technological innovation activities, resulting in the reduction of income and affecting its competitive position in the market.

STRATEGIES TO ENHANCE THE TECHNOLOGICAL INNOVATION CAPABILITY OF SMES TO INTRODUCE KNOWLEDGE MANAGEMENT

4.1 Taking advantage of mass innovation to build an innovation platform

Mass Innovation originates from mass entrepreneurship and innovation, which is more of an innovation and creativity transformation space. The threshold of mass innovation space is low, in which some learning platforms are built to comprehensively improve the efficiency of technological innovation in enterprises, and the patent application procedures are no longer complicated. Mass innovation space can also provide additional patent protection services and apply for relevant certificates. SMEs should establish a reciprocal partnership with medium and large enterprises in the mass innovation space, and this open communication greatly enhances the efficiency of technological innovation. Driven by the mass entrepreneurship and innovation environment, SMEs will be able to enhance their technological innovation capabilities to a higher level.

4.2 Cultivating a culture of knowledge sharing and creating an atmosphere of innovation

The culture formed by knowledge subjects can promote the good operation of knowledge management system. It can be seen that an enterprise losing its culture is equivalent to losing its soul. First of all, knowledge subjects must be able to see and benefit from the work convenience brought by knowledge management.Secondly, it should let employees feel the return of knowledge sharing, and knowledge acquisition for the enterprise to achieve the benefits, so that knowledge workers in the enterprise focus on the accumulation of experience and skills.

4.3 Setting up a knowledge management team

The key to the success of implementing knowledge management lies in the comprehensive grasp of the business needs of the enterprise, one of which is to analyze the needs of the personnel in the enterprise for the kinds of knowledge; the other is to transform the knowledge obtained from outside or inside into its own useful knowledge. The tasks of the knowledge management team are as follows. The enterprise should establish the knowledge map and knowledge base.The enterprise should maintain the update of the knowledge base or knowledge map, form a corporate culture of sharing knowledge in the enterprise regardless of superiors and subordinates, and help to cooperate with management to establish a knowledge-based business and make knowledge a part of the work of each employee in enterprises. Inthe beginning, the focus of the knowledge management team should be on promoting knowledge flow and knowledge sharing incentives, and when the goal is achieved, the focus will shift to access and acquisition of knowledge assets.

4.4Strengthening the mode of industry-university-research cooperation and realizing collaborative innovation

The enhancement of the technological innovation capability of SMEs requires an effective combination of industry-university-research cooperation and knowledge management. As the core link of knowledge management activities, cooperation can realize enterprise value appreciation and enhance innovation capability through the sharing and transfer of knowledge among organizations. Therefore, SMEs should focus on establishing an industry-university-research cooperation model with the government as the pioneer and universities, research institutes and enterprises as the active participants, give full play to the synergistic effect of the three and realize collaborative innovation.

CONCLUSION

From the perspective of knowledge management and technological innovation capability of SMEs, the conclusions of this paper are as follows.

(1) In this paper, we analyzed the relationship between knowledge management, technological innovation, technological innovation capability and both knowledge management and technological innovation capability by scholars in China and the United Kingdom and the United States, and also analyzed the defects or problems of knowledge management implementation in Chinese SMEs, which are caused by the small scale of the enterprises themselves and the seriousness of family enterprises on the one hand, and the awareness of employees in the enterprises about knowledge management on the other.

(2) In this paper, the countermeasures for the identified problemsareput forward in the hope that they can play a better role in improving the technological innovation capability of SMEs and achieve the objectives of this paper.

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BRAND COMMUNICATION AND CONSUMERS' BRAND PURCHASE INTENTION IN SOCIAL MEDIA AND BRAND LOYALTY

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ABSTRACT

This article aims to brand image, brand awareness, association, and brand loyalty on brand communication and purchase intention in social network brand communication. In addition, through the connection between the social media platform and consumers, to gain their recognition, let memories and associations increase purchasing preferences. Finally, brands can also build and maintain brand loyalty through social media to increase consumers' product stickiness, thereby influencing consumers' purchasing decisions. However, Brand equity is a developing concept, although there has been solidarity on the importance of brand equity among the scholars still there has not developed any universally accepted definition and measuring standard of it. Social media marketing is a fantastic way to build brand loyalty, but can only be effective when it dedicate the time to engage with customers.

Keywords: social media communication, communication brand image, Brand association

INTRODUCTION

With the development of new media, as new media substitutes for existing media, the content of information and the behavior of audience groups have also changed (Jang & Park, 2016). They believe that audiences no longer only obtain information by reading paper newspapers or watching terrestrial broadcasts. The emergence of social media has transformed the traditional one-way communication into multi-dimensional, two-way and peer-to-peer communication (Berthon et al., 2008). The personalized two-way service provided by Internet users to generate and share information by themselves, and people have more choices and communication with each other. On social media, such as Twitter and Facebook. Social media has an impact on the brand's marketing strategy as well as its communication channels (Jamali & Khan, 2018). This revolutionary way of communication has made social media have a huge impact on consumers' buying intentions.

Over the past two decades, the Internet has changed the way consumers go shopping, and more convenient e-commerce sites prefer consumers to choose e-shopping. Customers can use the network to obtain information about the products, such as efficacy, effects, price, and so on, when shopping online. In the process, social media provides shoppers with an information source and voice that enables consumers to share and interact with others globally (Yadav, & Rahman, 2017). With the development of new media, new media as an alternative to existing media, the content of information and the behavior of audiences have also changed (Jang & Park, 2016), and audiences no longer obtain information only by reading paper newspapers or watching terrestrial broadcasts. Social networks are changing traditional marketing methods. The traditional brand communication controlled and managed by brand and marketing managers in the past has gradually been replaced by consumers, and the content of the communication has also been reshaped by consumers (Schivinski & Dabrowski, 2016). Social media has altered a brand's communication medium as well. Consumers of any brand better understand and connect with one another, and spend more time sharing their brand experience with others, much like a community. In this era, brands can communicate directly with consumers on these social media platforms. (Jamali, & Khan, 2018).

According to the product differentiation theory in economics and marketing, companies provide differentiated products to attract specific consumer groups. The degree of differentiation is an important determinant of the degree of similarity of users to various media and the degree of overlap in market segments.(Jang & Park, 2016) These factors can be pursued by the Theory of Rational Action (TRA) and the Product Evaluation Model (PEM). TRA was proposed by Fishbein and Ajzen (1975) and is widely used in consumer behavior literature and purchase intention research (i. e., Botha & Atkins,2005; Beadnell, Baker, Gillmore, Morrison, Huang & Stielstra,2008; Alsughayir & Albarq,2013).

CONCEPT OF BRAND COMMUNICATION

Brand communication is an important part of brand management strategy, which promote consumers buy products mainly through provide comfortable product experience. Only after consumers have a good experience that will make them have choose. In new media era, enterprises must face this challenge to develop a new brand communication strategy. Because the word-of-mouth marketing in this new situation is more powerful than traditional word-of-mouth marketing (Ertimur & Gilly, 2012). Therefore, it is very important to evaluate brand communication in social media to influence consumers' purchase intention. With the rise of social media, it is difficult for enterprises to effectively establish or maintain consumer brand loyalty and association in social media. In social media activities, the drivers of consumer attitudes are always unpredictable (Jamali, M., & Khan, R. 2018).

People's understanding of the brand image initially basically focused on the various factors affecting the brand image, such as the brand attributes, name, packaging, price, reputation and so on. A brand image is a collection of images and concepts of the various elements of the brand that exist in people's psychology, and it mainly is the brand knowledge and people's main attitude towards the brand.

Social media marketing has become a major research direction, highlighting the changing aspects of customer relationships. The importance of social media is evidenced by the number of active users Facebook had in the month of December 2016 (Facebook, 2017). If that 1.86 billion is seen as a number, then Facebook has surpassed the most populous country (China-1.48 billion). However, with the rise of social media, it is difficult for enterprises to effectively establish and maintain consumers' brand loyalty, brand association and brand equity in social media. The drivers of consumer attitudes in social media campaigns are always unpredictable (Jamali & Khan, 2018). Today, social media plays an important role in two-way communication. Companies need a new brand communication strategy to help them effectively digital marketing on social media sites and thus increase their brand equity content.

In addition, effective brand communication enables consumers to pay attention to the information of the brand and are willing to communicate with it, which is conducive to giving consumers a relaxed, pleasant cognitive or emotional response when recalling the brand (Petek & Ruzzier, 2013).However, to build a strong brand, the right knowledge structure must exist in the minds of consumers to respond positively to a different way of marketing campaigns and plans (Keller, 2009).Brand communication plays a vital role in shaping this knowledge. Effective brand communication can form a brand awareness and a positive brand image (Keller, 2003). However, due to the changes in the shopping environment and way of online consumers, the online consumers' willingness to buy also has their own characteristics. Online consumers mainly obtain information about goods or services through virtual channels such as browsing online stores and communicating with sellers. Many virtual factors will affect the willingness of online consumers to buy (Gil et al., 2007). Therefore, the intention of online consumers to buy refers to the possibility that consumers can buy a certain commodity or service through the Internet.

Today, consumers of any brand live in the social media community. They share all types of experience about the brand. Whether positive or negative. In today's era, brands must respond quickly and be ready to handle any specific situation (Harshini, 2015). If consumers share a positive experience about the brand, it is highly likely that such ads will spread across the social media community and have more support than the company generates. With this in mind, the brand is more committed to a good consumer experience to attract more consumer advertising to the consumer community, a new form of word of mouth, but it is stronger than the traditional word of mouth (Ertimur & Gilly, 2012).

Brand communication over the years has developed to be one of the most important components for the development of positive brand equity. Unlike the traditional communication methods, social media and technology have revolutionised the whole concept of brand communication, making it a tool for the company to aware, educate, persuade, attract, market their brands to the relevant stakeholders.

There are numerous options or media of brand communication, among the most popular is advertising. Although it is not the only means of communication, conventionally it is the most famous and considered very effective. Many global brands have been successful even by not involving conventional advertising as the core of marketing communication strategy. They focused on brand associations and environmental concern, which was visible in the manufacturing and packaging of the product. Therefore, the mode of communication is not important, what's important is the effect on the consumer’s mind. Every mode of communication has different striking areas and strengths, owing to this fact only Keller emphasised on having a mix of communication options that would individually contribute to the development of brand equity.

BRAND COMMUNICATION ON SOCIAL MEDIA

Social media have become an important part of consumers’ daily lives. It has been estimated that in 2018, 2.62 billion people worldwide used a social media platform at least once a month, and the average time spent amounted to 135 minutes per day (Statista 2018a). In an attempt to capitalize on this intense usage, almost every consumer brand is present on social media and advertisers and marketers are eagerly integrating social media in their digital strategies. Brand presence on social media can take many forms, including paid display advertising (paid media), brands participating in social networks as a brand persona, publishing branded content (owned media), and branded engagement opportunities for consumer participation (earned media) (Ashley and Tuten 2015). According to the 2018 CMO Survey, the longest-running noncommercial survey among top marketers in the field of marketing, social media spending now accounts for 13.8% of brands’ total marketing budgets (Moorman 2018).

Given the ongoing evolution and proliferation of social media consumption, budgets, and research, this is the right moment to give an overview of the previously published research and to develop an agenda for future research based on the theoretical, conceptual, and practical challenges of brand communication in social media. In this article, a theoretically and a practically grounded approach are combined to formulate an agenda for future research. The starting point is a broad keyword search within top-tier advertising and marketing journals to identify previous scholarship in the field. The second step is a discussion of the theoretical and conceptual social media research challenges related to the key factors that shape consumers’ responses toward brand communication in social media: source, message, and channel characteristics (McGuire,1989). The third phase is a discussion of expectations and needs of the media (planning) industry with respect to brand communication in social media. This is based on a brief survey that was conducted among key players at media agencies to find out what they consider to be the major developments and challenges for the future. Finally, six concrete directions for future research that tie into the theoretical challenges and industry expectations are discussed.

Many different conceptualizations of social media exist in the literature. In this article, social media are broadly defined as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and allow the creation and exchange of user-generated content” (Kaplan and Haenlein 2010). Although social networking sites are probably the most prominent type of social media (Boyd and Ellison, 2007), many variations and types of social media exist. Mangold and Faulds (2009) distinguished blogs, forums, business networks, photo-sharing platforms, social gaming, microblogs, chat apps, and social networks. The social media landscape is extremely dynamic, with new applications springing up almost daily (Phillips ET AL., 2014). By the beginning of 2019, the most popular social media worldwide are Facebook, YouTube, WhatsApp, Facebook Messenger, WeChat, and Instagram (Statista, 2019). Table 1 lists some popular social media, along with a description and the number of active users.

To identify the key areas from the 144 papers, each paper was read and assigned descriptive keywords. The keywords were then analyzed and further combined across the entire set to identify key areas. This is in line with procedures described in the grounded theory approach (Braun and Clarke, 2013). Six key areas were identified: attitudes toward social media and social media advertising; motivations for and antecedents of using social media; content characteristics; electronic word of mouth (eWOM)/virality of brand messages; user-generated brand content; and engagement with brand communication. Table 1 provides a set of example articles for each area. Some observations about previous scholarship serve as direct input for the future research directions that are discussed later in this article, but it is first necessary to discuss theoretical and conceptual challenges of brand communication in social media.

Table 1: Key Areas and Sample Article on Brand Communication in Social Media

Key Area	Key References (Chronological Order)
Attitudes toward social media and social media advertising	Kelly, Kerr, and Drennan (2010) Taylor, Lewin, and Strutton (2011) Jung et al. (2016)
Motivations for and antecedents of using social media	Chi (2011) Minton et al. (2012) Chu, Windels, and Kamal (2016) Sung, Kim, and Choi (2018)
Content characteristics	Smith, Fischer, and Yongjian (2012) De Vries, Gensler, and Leeflang (2012) Phillips, Miller, and McQuarrie 2014 Wen and Song (2017)
eWOM/virality	Chu (2011) Chatterjee (2011) Liu-Thompkins and Rogerson (2012) Fang et al. (2018) Kim et al. (2018) Seo et al. (2018)
User-generated content	Muntinga, Moorman, and Smit (2011) Vanden Bergh et al. (2011) Steyn et al. (2011) Liu, Burns, and Hou (2017) Kim and Song (2018)

Engagement	Tsai and Men (2013) Hollebeek, Glynn, and Brodie (2014) Pagani and Malacarne (2017) Pentina, Guilloux, and Micu (2018) Voorveld, van Noort, et al. (2018)

Social media channels provide new ways for companies and customers to communicate with each other. The company wants to interact with loyal consumers and influence how individuals perceive their products, disseminate information, learn from their audience and understand their audience (Roderick et al., 2013).Among traditional sources of communication, social media has been established as a popular phenomenon with broad demographic appeal (Kaplan & Haenlein, 2010). Instead, consider focusing on the "Big Four" of social media, which includes Facebook, Twitter, Google+, and Pinterest. While it's never a bad idea to market on other social sites, focusing largely on the Big Four ensures the greatest possible marketing ROI. Moreover, the 7 Top social media sites in 2022 such as instagram, youtube, facebook, twitter, tiktok, pinterest, snapchat.

Social media influencers is needed because they are becoming increasingly more common. This strategy taps into the unique nature of the source in social media, yet academic research is scant (Domingues Aguiar and van Reijmersdal 2018). Although the use of social media influencers by brands is widespread, many important questions remain unanswered. First, social media influencers should be systematically compared with other forms of endorsers on which a solid base of academic knowledge already exists, such as celebrities or experts. Potentially important differences include the fact that social media influencers are more similar to the social media users they target than celebrities or experts and that they are more credible or authentic because social media users believe that they produce genuine content (Domingues Aguiar and van Reijmersdal 2018). The relative impact of these different types of endorsers should be tested to investigate whether social media influencers affect consumer responses in a different way to ultimately answer the question whether the existing base of knowledge on other types of endorsers can be applied to social media influencers.

To develop theories on the effectiveness of social media influencers, the mechanisms, such as similarity or credibility, explaining consumer responses to influencer marketing need to be investigated. Also, the conditions under which social media influencers have an impact on users are important. Future research on social media influencers is needed because they are becoming increasingly more common. This strategy taps into the unique nature of the source in social media, yet academic research is scant (Domingues Aguiar and van Reijmersdal 2018). Although the use of social media influencers by brands is widespread, many important questions remain unanswered. First, social media influencers should be systematically compared with other forms of endorsers on which a solid base of academic knowledge already exists, such as celebrities or experts. Potentially important differences include the fact that social media influencers are more similar to the social media users they target than celebrities or experts and that they are more credible or authentic because social media users believe that they produce genuine content (Domingues Aguiar and van Reijmersdal 2018). The relative impact of these different types of endorsers should be tested to investigate whether social media influencers affect consumer responses in a different way to ultimately answer the question whether the existing base of knowledge on other types of endorsers can be applied to social media influences.

BRAND EQUITY IN BRAND COMMUNICATION

Brand equity is a marketing term that describes a brand's value. That value is determined by consumer perception of and experiences with the brand. If people think highly of a brand, it has positive brand equity. Brand equity has four dimensions—brand loyalty, brand awareness, brand associations, and perceived quality, each providing value to a firm in numerous ways. Once a brand identifies the value of brand equity, it can follow this roadmap to build and manage that potential value. However, brand equity helps build the relationships between the perceived benefits and perceived costs that people relate to that product. For example of a brand with high brand equity is Apple. Although Apple's products are very similar in terms of features to other brands, the demand, customer loyalty, and company's price premium are among the highest in the consumer tech industry.

Brand equity is not merely a marketing term, it is considered to be the utmost valuable asset that a company can acquire. There are unlimited options for customers to choose from and it is the brand perception and brand loyalty that results in its choice of one specific brand among the others. “The brand image allows the customer to recognise their relevant needs and understand the effective mechanism for achieving fulfilment through the brand.” (Hossain, Anthony, Beg, Hasan, & Zayed, 2020). How can a brand differentiate it from others and how its products can be differentiated from their generic equivalent are all the play of brand equity.

Brand equity is considered as one of the most crucial asset or resource for the companies of the 21st century. Scholars have been interested in this topic since the 1980s; this period of almost 4 decades has focused on different trends and different factors which either negatively or positively impacted the brand equity of a company. There is still no universally accepted definition of brand equity, but it is considered to be a social valuation of a brand. The brand image, it’s positioning and its recognition all depend on how the brands presents itself; how well and personally it can communicate with its customers. “Brand equity is very important in the increasingly fierce competition of the market particularly for similar products, which require companies to survive” (Saidarka & Rusfian, 2019). A customer is willing to buy any product that has the logo of your brand on it and is willing to pay a premium price for your product offerings, instead of the fact that a better price is being offered by the competitors. This is a competitive advantage in the true sense and is only possible through positive brand equity.

Integrated marketing communication plays a very important role in developing brand equity as it focuses on contacts. Contacts are basically the consumer experiences with the brand which is then utilised for maintaining brand equity, they can be of two types, brand equity contacts and brand identity contacts. IMC ensures that all the contacts must reach the relevant customer at the right time, over time it has been presented as a strategic component for enhancing brand value. The first step before moving forward towards the implementation of the IMC strategy is the process of presenting a brand image in the mind of the customer. An effective brand image strategy creates a path for the implementation of the IMC strategy through brand identity contacts. Brand identity shows the aspirations of the brand and the means to achieve it, every goal and ethics of the brand must be depicted in its image. “Brand identity helps in establishing a relationship between the brand and the customer by generating a value proposition involving functional, emotional, or self-expressive benefits” (Aaker, 1996). Therefore, an effective and well-defined brand identity is the key to expressive integrated business communication, which in terms enhances brand equity. “Brand equity is not merely built through independent forms of brand communication (such as advertising or public relations), but is generated by managing brand equity contacts via IMC” (Schultz, 2004). The synergy among the vehicles of communication is very crucial to generate a high level of persuasion among the consumers. Brand equity is a vast concept with different components to satisfy, a single mode of communication is not capable of targeting every component. As a result, synergy among the various modes of communication through IMC can be used to target specific focus areas such as brand identity creation, brand recognition, and brand associations. Therefore this is evident from the abovementioned reviews of the scholars that brand equity has turned out to be at the centre of business. There have been numerous researches towards this concept; various scholars have developed different models for building brand equity. Still, there is no proper definition to define the term brand equity and with the evolution in technology and increasing digitisation, various new opportunities and challenges have emerged for the brands to communicate and connect with the customers (Tanmoy De, 2021).

Customers waiting in queue to lay their hands on the new phone are the greatest example of positive brand equity. It is essential for the managers and the companies to perform a brand audit once in six months to analyse their brand reputation in the market amongst the customers. This audit would enable the companies to be adaptive towards the changes in the market and technological developments. The increasing digitisation and mobile use have created a different space of interactions among the customers and the brands. This increases the importance of brand communication, which would help in communicating better and effectively with the customers. There have been various researches focused on highlighting the importance of brand communication in brand positioning and creating positive brand equity. Social media brand communication is a new fresh concept; it offers a platform for the brands to target consumers of all ages globally. The increasing trust of individuals on social media. is creating a great opportunity for the brands to position themselves in the customer’s minds and create a positive digital presence. (Ebrahim, R., 2019, Tanmoy De, 2021).

BRAND LOYALTY IN SOCIAL MEDIA

Building and maintaining brand loyalty are one of the central themes of research for marketers for a very long time (i.e, Oliver, 1997; Chaudhuri and Halbrook, 2001; Bennett and Rundle-Thiele, 2002). Brand loyalty can be conceptualized as the final dimension of consumer brand resonance symbolizing the with a brand (Keller, 2008). For users with brand loyalty, it is basically equivalent to a group of free communication channels, or even better than any known channel (Allaway et al., 2011). Because these users are real and vivid examples and intuitive spokesmen, if there are influential KOL or stars among these people, the effect is even more obvious. Therefore, it is often said that the old user operation can be divided into many levels, among which the users who produce high brand loyalty are the most worth thinking about. Brand loyalty is the core dimension**.** of brand assets (Koniewski, 2012). Having a loyal customer base means barriers to entry, potential price advantage, reaction time to competitors' innovative behavior, and barriers to resist vicious price competition (Allaway et al., 2011). There is good reason to use customer loyalty as a standard variable, the basis for evaluating other potential measures (Grigorovici & Constantin, 2004). If companies make mistakes in brand assets and reach the core of the customer relationship, they will also affect brand loyalty. These mistakes often break the brand's core customers first, because they are closely related to the brand and care about everything about the brand. Brand loyalty is a key factor to consider when valuing a brand facing transactions, as highly loyal consumer groups are able to generate predictable sales and profit traffic (Allaway et al., 2011). In fact, brands without a loyal consumer group base are very vulnerable, in other words, only valuable when brands have the potential to create a loyal consumer base. Brand loyalty has a huge impact on marketing costs (Koniewski, 2012); maintaining old customers is much less expensive than trying to attract new customers (Sharma & Pandey, 2011). One mistake company often make is to rely on luring new customers to seek growth while ignoring existing customers. Thus, it can be said that social media helps firms to build brand loyalty through networking, conversation, and community building (McKee, 2010). Social media marketing is different than traditional methods of marketing; therefore, it requires special attention and strategy building to achieve brand image and loyalty.

Marketers have utilized various means to maintain the brand loyalty of their customers, including brand elements, classical marketing mix variables, and new methods of marketing such as events, sponsorships, one-to-one marketing activities, Internet marketing and social media marketing (Keller, 2008; Kotler and Keller, 2007). The ever-evolving social media platforms have become powerful tools to build and maintain customer relationships and brand loyalty. Most brands nowadays operate accounts on multiple social media platforms, such as Facebook, Instagram, YouTube, Twitter, and Snapchat, to reach different segments of customers and engage with customers in real time.

CONCLUSION

This article provides an agenda for future research on brand communication in social media. Based on an overview of the current state of research, a discussion of the theoretical and conceptual challenges of brand communication in social media, and a survey about the expectations of the media and advertising industry, I present six key directions for future research. These six key directions include research on (1) social media influencers, (2) personalized brand content in social media, (3) ethical concerns about the nature of social media content and consumer empowerment, (4) platform characteristics rather than on Facebook, (5) the integration of social media in the media mix and the consumer journey, and (6) using real social media data. Together these six key directions help to shape the social media research agenda. In the future research should also investigate what determines whether people perceive social media influencers as too commercial or unacceptable and how this affects consumer responses toward the promoted brand. Research should further examine if these effects will subside or if the use of social media influencers will become even more common in the future.

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CRISIS MANAGEMENT OF PUBLIC HEALTH INCIDENTS IN A SCENIC SPOTS

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ABSTRACT

The core of tourism activities is tourist attractions, which carry all the behaviors that occur in tourism activities in time and geographical space. At the same time, the tourism economy is also defined as an important part of the economic system in economics. The development of tourism can bring economic and social benefits to tourist attractions. However, as a secondary industry in the economic industry, the fragility and sensitivity of tourist attractions themselves make them prone to fluctuations in the face of various emergencies, resulting in various losses. Emergencies may occur at any time and space, and their suddenness will quickly turn into hazard for tourist attractions. Since the Covid-19 in 2020, strengthening research on crisis management of public health emergencies has become a must-answer question. The crisis management of public emergencies in tourist attractions has always been a difficult point in the crisis management of scenic spots. Because emergencies are common in the crowded area of scenic spots, and the tourist scenic spots are relatively closed, once a crisis occurs, it is easy to spread quickly, which will bring economic losses and brand collapse to the scenic spots. As a tourist attraction in a densely populated area, it should be at the forefront of the research on crisis management of public health emergencies, and explore a feasible path for the tourist attractions themselves and the country.

On the basis of crisis management, it has become an important topic to be solved urgently by integrating the crisis management of public health emergencies with the management of tourist attractions, and further subdivided research on the crisis management of public health emergencies in tourist attractions. This paper exposes the problems existing in the crisis management mechanism of public health emergencies in Scenic A, and proposes improvement strategies.

Keywords: Public Health Incidents, Crisis Management, A Scenic Spot

INTRODUCTION

1.1 Research Background

As the center of tourism, tourist attractions carry various behaviors in tourism in time and space (Chen, 2021). At the same time, it plays a major role in tourism economic activities. In today's economic globalization, once a crisis comes, the "butterfly effect" is more likely to introduce external crises into China (Xiao and Liu, 2021). The tourist attractions are sensitive and fragile and contain high risks (Ruan et al., 2020). They are deeply affected by various emergencies (Xu and Song, 2020). The crisis of tourist attractions will have a great negative impact on the image and business development of the scenic spots (Li, 2021).

The crisis management of public emergencies in tourist attractions has always been a difficult point in the crisis management of scenic spots. Due to the relatively closed area of tourist attractions, once a crisis occurs, it is easy to spread and spread quickly, which will bring economic losses and brand collapse to the scenic area (George, 2017). In this context, the local government as the administrative department behind China's tourist attractions should work with tourist attractions, tourism enterprises and social forces to cultivate crisis awareness, establish crisis management mechanisms and formulate crisis management plans. Thereby reducing or avoiding the adverse consequences of the crisis.

With the spread of the "covid-19" epidemic in 2020, China's tourist attractions are still struggling to copeeven after the "SARS" crisis in 2003. The root cause is that China's research on crisis management of tourist attractions is still in the exploration and improvement of theories. At the level of theoretical research, it follows the old path of Western capitalist countries and does not carry out crisis management research with the characteristics of "socialism with Chinese characteristics" in combination with the characteristics of China's own market conditions and social system. Compared with the past, the crises faced by China's scenic spots in the development process will be more complex, more changeable and more impactful (Wang, 2004).If China's scenic spots are still responding to the crisis in their current state, the situation will be extremely severe. The tourism crisis has the characteristics of universality, suddenness, urgency, destructiveness and coherence, so it is extremely vulnerable. In the current society, survival needs and safety needs are the first priorities of human beings. In the face of emergencies in tourist attractions that may threaten life and health, tourists will definitely choose to abandon their travel plans without hesitation. As a "tertiary industry", tourism is just in need of development. Therefore, tourist attractions should have a sense of crisis management, and upgrade the emergency crisis management and crisis management mechanism to the same important position as the marketing of scenic spots as the focus of tourist attractions.

1.2 Research purpose

On the basis of crisis management, it is necessary to integrate the crisis management of public health emergencies with the management of tourist attractions and conduct further subdivided research on the crisis management of public health emergencies in tourist attractions, so as to bring reference to other scenic spots when public health incidents occur.

1.3 Research significance

At present, human society is in a period of a high incidence of public health crises. With the changes in biology and chemistry, global warming, ecological changes and other natural factors and human-induced public health emergencies are increasing. It is imperative to strengthen the research on public health crisis management.

At present, the improvement of the legal level has not brought about a significant improvement in the crisis management of public health emergencies in scenic spots. The reason is that there are other important problems in the process of public health emergency crisis management in China.

(1) The investment in public health emergencies in tourist attractions is small, and the medical staff with professional knowledge is insufficient, and professional medical supplies are not available.

(2) The early warning system for public health emergencies in tourist attractions has not been established, and the tourism resources of tourist attractions in different places are not the same. The development of tourist attractions across the country depends on the support of local governments.

To this end, increasing investment in public health, strengthening early warning and monitoring, and improving the health security system are the key issues that should be addressed in tourist attractions at present.

LITERATURE REVIEW

Li et al. (2020) showed that family groups played a key role in disaster prevention and mitigation. Strengthening family groups' ability to cope with risks was a necessary process in the process of implementing disaster prevention and mitigation. Lan and Yang (2022) showed that both the emergency response and risk response capabilities of the community could be enhanced through effective communication between residents. At the same time, to enhance the emergency response capacity of the community, it was necessary to maintain a highly centralized community resource. After in-depth exploration and analysis of the school's emergency management system, Xu (2020) showed that schools could enhance their ability to prevent and respond to disasters to a certain extent by building corresponding emergency teams. Zhu (2021) observed from the perspective of sociology, and pointed out that the emergencies themselves were caused by the reasons of human beings, and could affect and threaten the life and survival of human beings, and these events were also the events that human beings must face. The research of Wang (2020) shows that emergencies will not only have a greater impact on social public rules, public order, and social development, but also at the same time, emergencies were difficult to monitor and predict. After analyzing the process of SARS, Deng (2021) believed that in order to solve public health emergencies, some special methods must be implemented. In the process of implementation, some experiences and lessons were drawn. It could also play a more positive role in the overall development and progress of society.

Liu et al. (2020) classified scenic crises into two types: internal crises and external crises according to the spatial factors of the crisis. Its essence was to define the scenic spot crisis according to the artificial and non-human factors of the scenic spot crisis. Entrusted by the National Social Science Foundation, Chen and Jiang (2021) took the Maijishan Grottoes scenic spot as an example, and used the improved hierarchy method to further study and define the connotation of crisis management in the scenic spot. He et al. (2021) used economic principles to take the expected return rate and standard deviation of tourist attractions as evaluation criteria. In this way, the relationship between the degree of influence of various economic indicators of tourist attractions and the types of crisis events was studied when a crisis occurs in Luoyang tourist attractions. Tian (2021) planned five aspects of the construction of the scenic spot's crisis management system in the research on the construction of the scenic spot, namely strengthening the awareness of crisis management, establishing a long-term crisis management agency, formulating crisis management plans, building a crisis monitoring and early warning system, and post-crisis crisis management scenic restoration strategy. Zhang (2020) further supplemented the crisis management model, which is embodied in the pre-crisis latent stage, the crisis outbreak stage, and the post-crisis recovery stage. Xing Jichun (2003) systematically summarized the main problems in the construction of China's public health system. According to the crisis management mechanism, the public health mechanism was not perfect. According to the government crisis management, the government budget investment was insufficient. Weak response capacity was raised in accordance with the disease control system.

PROBLEMS OF PUBLIC HEALTH EMERGENCIES CRISIS MANAGEMENT IN SCENIC A UNDER THE NEW CROWN EPIDEMIC

3.1 Not rigorous in management organization system

Scenic Area A was officially listed in 2007 and has never experienced public health emergencies like "SARS". At the same time, since Scenic Area A is a subordinate unit of the Administrative Committee of Scenic Area A, there is no strong sense of crisis and no public health emergency crisis management mechanism has been established. This is a common situation in China because most scenic spots are attached to the existence of the scenic spot management committee. But for Scenic A, the biggest problem is the role of the management committee of Scenic A. The functions of various government departments in Scenic A and how to coordinate are unclear and even in a state of confusion. Mainly in:

(1) The level of each department in Scenic Area A is determined by the number of economic benefits that the department brings to the scenic area to determine the number of department staff and the number of resources obtained. Generally speaking, the management and control of public health emergencies is a systematic project. It consists of a number of related departments and institutions.

Under the leadership of the government, they cooperate with each other, perform their duties and operate effectively, but the current management system is difficult to achieve the ideal work goals.

(2) It is difficult to integrate various resources and form a joint force. For example, before the public health emergency of the "covid-19" epidemic, there was a lack of unified and efficient collaborative leadership among various departments in Scenic Area A. Basically, marketing planning was only responsible for marketing planning and the ticket center is only responsible for ticketing. It is difficult to exert the full strength of Scenic A in the face of a crisis.

3.2 Lack of early warning capabilities for crisis management

The early warning capability in the crisis management of public health emergencies in tourist attractions is an indispensable and important part of each scenic spot. Whether it is based on the Chinese theory or the theory of British and American countries, the early warning monitoring capability is placed first in the crisis management of scenic spots. A good early warning capability can help the scenic spot to make accurate judgments and predictions about the impending crisis, help the district management to make targeted decisions, handle the crisis in the scenic spot smoothly, and ensure the continuous and stable operation of the scenic spot. Even the early warning ability can help scenic spots avoid the crisis to a certain extent.

3.3 Imperfect crisis management plan is not perfect

The crisis management plan is a vague plan that integrates many emergencies, and it only solves the problem of whether there is a plan in scenic area A. There is no detailed description of the pre-preparation, mid-term strategy and post-crisis measures. The rescue team in the scenic spot can only deal with minor safety incidents, and the medical and health personnel of the customer service center in Scenic area A said that they can only deal with emergency safety incidents such as minor trauma. For emergencies and critical health events, you can only request a rescue from a nearby health center or an urban superior hospital within 500 meters.

3.4 Imperfect public health emergencies crisis management system

Scenic A was established in 2003, and at the beginning of its establishment, it also avoided the "SARS" epidemic in 2003. Even in the "covid-19" epidemic in 2020, Scenic A, as a district unit of the Management Committee of Scenic A, has the policy and institutional guarantee of the Management Committee of Scenic A. There is no complete establishment of the system for crisis management of public health emergencies.

MEASURES TO IMPROVE THE CRISIS MANAGEMENT MECHANISM OF PUBLIC HEALTH EMERGENCIES IN SCENIC A

Combined with the practice of Scenic A in response to public health emergencies and the problems existing in the crisis management mechanism of public health emergencies, and on the premise that Scenic A is an ecological scenic spot, it is necessary to avoid ignoring the heterogeneity of scenic spots in the process of constructing the mechanism and avoid the lack of clear internal logic and goals of mechanism construction. Therefore, we should start from the following aspects:

4.1. Improving the crisis management system

The command power of the public health emergency crisis management system in Scenic Area A belongs to both the Administrative Committee of Scenic Area A and the Tourism Development Co., Ltd. of Scenic Area A. The advantage of this setting is that in general, the handling of public health emergencies in the scenic area is handled by A on its own. Once the scale and harm of public health emergencies exceed the capabilities of Scenic A, it can be quickly taken over by the Management Committee of Scenic A.The Crisis Management Information System shall be set up by the management committee of Scenic Area A with specific leadership and personnel arrangements. Its advantage is that the management committee of A scenic spot has more accurate information sources and more efficient information processing channels in the environment of government-led public governance. In terms of information processing and decision-making, information and decisions can be distributed to the comprehensive management office of Scenic A and the Office of the Management Committee of Scenic A at the same time, which ensures the two-way transmission of information and multiple guarantees for decision-making. In addition, the Office of the Management Committee of Scenic Area A can conduct secondary information distribution to the outside world in a unified manner, linking more external resources.The action system is under the responsibility of the Tourism Safety Crisis Rescue Leading Group under Scenic A, and is composed of various departments in Scenic A: the crisis management office can coordinate with the local public security department in addition to completing the organization and coordination of crisis management. In addition to the rescue work at the crisis site, emergency linkage with the local health department can be carried out, and the traffic coordination team can cooperate with the local traffic police department in addition to completing the transportation guarantee work in the crisis rescue.The purpose of this setting is that once the crisis exceeds a certain limit, each team can quickly introduce foreign aid to suppress the crisis while reporting to the superior, so as to prevent the crisis from further expanding.

4.2. Building an early warning system

The purpose of the early warning system for public health emergencies in Scenic A is to provide early warning and prevention of public health emergencies that have occurred or have not yet occurred in the early stages of a crisis. It is necessary to control and eliminate public health emergencies in a state where the harm of public health emergencies is still weak, or to eliminate public health emergencies directly (Zhu et al., 2020).

Crisis early warning in scenic spots is an important task (Yang et al., 2021). It is difficult for human air defense and human control to respond to the monitoring and early warning of various public health emergencies (Wen, 2021). A single high-tech technical means also needs to be integrated. For example: At present, Scenic A has an epidemic prevention and control command. If, like the 110 Crisis Command Center, various subsystems can be integrated into an information platform to collect information, analyze the causes and the direction of disaster development, etc., the early warning capability of Scenic Area A will be greatly improved.

A scenic spot crisis early warning should adhere to the five aspects of specialization, long-term, stability, diversification and clarification as the main work requirements (Zhou et al., 2020). After the hardware is equipped and the personnel is perfected, the crisis early warning mechanism needs the following two aspects of support:

Monitoring system in early warning mechanism.The key to early warning lies in the long-term, all-weather real-time monitoring of various data and characteristics related to public health emergencies. Signs of a possible public health emergency can be identified and confirmed within the surveillance system immediately after being caught. Once identified as an inevitable feature of a public health emergency, the surveillance system can respond in a timely manner and provide early warning to relevant crisis management departments.

Advisory system in early warning mechanism.The main function of the consultation system is to be able to issue an overall development report within 1 to 5 years for public health emergencies that have occurred and handled properly, summarize the signs and probabilities of various public health emergencies, and provide consulting functions for the crisis management decision-making level.

4.3. Improving the public health emergency plan in Scenic A and conduct regular exercises

4.3.1. Contents of preparation of public health emergency plan for scenic spot A

That is an introduction to the plan, which introduces the types of events involved in the public health emergency plan, the specific handling methods, the departments that need to be coordinated, the purpose of the plan, and related crisis management theories and medical laws and regulations. At the same time, it introduces the division of labor in department management, the division of responsibilities of personnel, and the distribution and guarantee of materials.

The goal of the plan is to protect the life, health and property safety of tourists in the scenic spot. It is necessary to ensure the stable operation of the scenic spot and the safety of the environment.The responsibility requirement of the plan is to clarify the division of management and responsibilities of various departments and staff.

Emergency Response.According to the laws and regulations on public health emergencies stipulated by the state, the corresponding level of response is activated for public health emergencies that occur in scenic spots, and the work of public health emergencies crisis management is clear and orderly without blind obedience.

4.3.2. Implementation and regular drills for public health emergencies in Scenic A

(1) In the crisis awareness training, it should compare the importance of the plan with the harm of public health emergencies, and give employees a clear concept. They should be aware of the seriousness of the harm of public health emergencies, and also realize that the plan is in the level of importance when dealing with public

health emergencies. When a public health emergency occurs in the future, employees can recall the plan and implement it at first.

(2) After the plan is formulated, departments and personnel should be organized to conduct tests to verify the scientific, integrity and operability of the plan, and adjust the parts that do not conform to the actual situation of Scenic A.

(3) Mandatory and periodic measures are adopted to ensure the drill of the plan. All staff of Scenic Area A must participate in more than 8 drills of the plan each year, which cover more than 4 kinds of public emergencies.

4.4. Improving the rules and regulations of crisis management

There are no relevant laws and regulations as a basis and guidance for the regulation of crisis management systems in Chinese scenic spots. Most of the rules and regulations of scenic spots are derived from the management rules and regulations on the Internet. Therefore, in order to make the relevant systems and regulations for the management of public health emergencies in Scenic Area A meet the requirements of China's society under the rule of law, Scenic Area A can work with the Administrative Committee of Scenic Area A to institutionalize the personnel organization and division of labor in the management of public health emergencies. And material readiness calls are institutionalized to ensure rule of law requirements for crisis management.

The institutionalization of the personnel organization can ensure the long-term and stable operation of the organization. At the same time, aclear organizational setting can eliminate the bad impression of "temporary workers" psychologically for the staff and ensure the enthusiasm of the crisis management staff. At the same time, the clear institutional setting also prevents crisis management staff from being able to deal with public health emergencies with a sufficient attitude due to their multiple roles. In addition, the clear institutional setting also guarantees the right to speak in the face of the need for linkage with other departments, and the crisis management organization can formulate an effective crisis management plan in the name of an independent institution.

CONCLUSION

The occurrence of public health emergencies such as "SARS", "H5N1", and "COVID-19" epidemics has brought about a destructive force far exceeding the emergencies in general tourist attractions, making tourist attractions aware of public health emergencies. It is a crucial part of crisis management. In general, the level of emergency crisis management in China's tourist attractions is relatively low, and it is still in its infancy. In order to reduce the losses and improve the crisis management ability for emergencies in tourist attractions, it is urgent to introduce new ideas and new technologies to improve the existing crisis management of emergencies in tourist attractions.

In the post-epidemic era under the global epidemic of "covid-19", strengthening the research on the crisis management of public health emergencies in China has more practical significance than theoretical significance for the country and individuals. On this basis, feasible countermeasures are put forward, which have strong practical reference significance for the crisis management of public health emergencies in China's small and medium-sized tourist attractions.

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THE RELATIONSHIP OF BUSINESS MODEL INNOVATION AND THE SUSTAINABLE DEVELOPMENT IN NON-PROFIT SOCIAL ENTERPRISES

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ABSTRACT

The sustainable development of the world's non-profit organization is related to the preservation and inheritance of the heritage of human civilization. Business model innovations to build non-profit organizations to respond to the current precarious living environment. More specifically, this article proposes a new framework for innovation for nonprofit organizations called business model innovation for nonprofit organizations. Several key findings highlight business model innovation and the direct and indirect benefits of business external partners, nonprofit organization staff and volunteers are key to revenue and sustainability, and recognition also influences innovation and revenue general. The organizational and technological innovation and value creation innovation can improve economic, market, and social performance, which will facilitate the practice and sustainable development of future non-profit organizations. However, nonprofits are business enterprises as well, built on an underlying business model that makes the programs and organizations operate and succeed. Business models at nonprofit organizations have never been static. The structure and composition of revenues, expenses, and capital evolves over life stages and in response to external events and internal strategy.

INTRODUCTION

From an economic point of view, the economic value of nonprofit organization's collection is contradictory. McNichol (2005) sees funding as a further differentiating element for nonprofit arts organizations. It enriches the assets of nonprofit art organizations, but they cannot be liquidated like commercial enterprises because the ethics of nonprofit art organizations prevent the sale of collections. Nonprofit social enterprises innovate their business models; however, little is known regarding why they do this, nor what capabilities they need to innovate their revenue generating activities. In this qualitative exploratory research, we examined five nonprofit social enterprises in South Australia, and found that these organisations consciously innovate their business models for two key reasons: to remain financially viable, and to expand the delivery of important services to the community. In addition, we identified six capabilities that enable nonprofit social enterprises to support their business model innovation.

The nonprofit sector makes a significant contribution to the Australian economy, and performs functions that government and the private sector are either unwilling or unable to provide (Australian Government, 2010; Salamon, 1993). Recognised as an outcome of social entrepreneurship (Mair & Marti, 2006), social enterprises are part of the nonprofit sector, and adopt business models (Austin, Stevenson, & Wei-Skillern, 2006; di Domenico, Haugh, & Tracey, 2010; Zahra, Gedajlovic, Neubaum, & Shulman, 2009).Innovation in social entrepreneurship is enacted with the aim of fulfilling a primary social mission to create social value (Weerawardena & Mort, 2006), and also to remain competitive (Weerawardena & Mort, 2012). In response to the growing emergence of social enterprises globally, and the positive social impact these organisations deliver, there are increasing calls for empirical research to investigate the 'business models' of social enterprises (Certo & Miller, 2008; Yunus, Moingeon, & Lehmann-Ortega, 2010; Zahra et al., 2009).

Nonprofit organizations face an era of austerity, and how to balance their mission and economic needs is an urgent question. Although the relevance of business models for nonprofit social enterprises has been established (Bagnoli & Megali, 2011;), and a business model framework for social business has been proposed (Yunus et al., 2010), the mechanisms employed by such enterprises to innovate their business models have not been clarified. This gap in the literature makes it difficult to ascertain which skills or capabilities nonprofit social enterprises must acquire in order to develop and innovate their business models, and to provide guidance to nascent nonprofit social enterprises to increase their chance of organizational survival. (Eva Balan-Vnuk and Peter Balan,2016). At the centre of any business model is the company's 'value proposition' — the products and services that yield tangible results for the company's target customers. A company's value proposition distinguishes it from its competitors. Two broad areas for possible adaptation and innovation of a business model are production and marketing. The production side comprises the set of activities, mechanisms and relationships for providing a good or service — in other words, 'creating value'. The marketing side comprises the activities, mechanisms and relationships for selling that good or service — in other words, 'capturing value'. Business models for sustainable development aim to deliver economic, social and environmental benefits – the three pillars of sustainable development –through core business activities. In these models, the value proposition includes social,environmental and economic values, while value distribution within the whole market chain is a key feature. In creating business models for sustainable development, the two broad areas for possible adaptation and innovation are production and marketing. The production side comprises the set of activities, mechanisms and relationships for providing a good or service –in other words, creating value. The marketing side comprises the activities, mechanisms and relationships for selling that good or service – in other words, capturing value.

Business models drive a company's core business activities and influence the management of contractors and suppliers. So by integrating sustainable development goals into business model design, a company is more likely to successfully deliver sustainable development outcomes. In traditional customer social responsibility approaches, efforts to address local environmental and social issues are relegated to the margins of company activity, and support for such projects is frequently short-term and ad hoc. These efforts may be a response to local political agendas, and frequently remain unrelated to the core activities of the company – and as such are not seen as integral to the business. Companies whose customer social responsibility approaches merely amount to 'peripheral philanthropy' may also end up withdrawing their support in times of economic uncertainty.

Innovation, as described by Porter (2011), is an effort of establishing competitive advantage by finding innovative ways to compete in business and bring it to market. Pullan,De Weerd-Nederhof, Groen, Song, and Fisscher (2009) claimed that the internal characteristics, including policy, method and organisation is essential in making the decision about developing the types of innovation. By developing and improving existing goods and service, conventional strategy focuses on gradual innovation. On the other hand, radical innovation is promoted by technology strategy and by emphasizing on recent technologies. These new value propositions are proving worthwhile for the early adopters and are driving innovation. But there will always be trade-offs among different elements of sustainable development. It is important to ensure that social and environmental considerations are given as much thought as the financial imperatives of business (Wilson, E., MacGregor, J., Macqueen, D., Vermeulen, S., Vorley, B., Zarsky, L., 2020). In demanding economic times, this is particularly important, as motivation in the private sector is more likely to favour financial returns over other less tangible benefits. While there are many cases of successful pilot initiatives, a bottleneck to long-term sustainability is how to scale up and replicate initiatives. In some cases, partners in the business model can finance scaling up and attract further investors. In other cases, supplementary donor finance or government subsidies may help to stimulate replication and adaptation. However, in the longer term, business models need to be self-sustaining. Scaling up is acknowledged to be an area that needs particular attention and support, and will demand close documentation (Wilson, E., MacGregor, J., Macqueen, D., Vermeulen, S., Vorley, B., Zarsky, L., 2020).

CONCEPT OF NONPROFIT SUSTAINABILITY

Over the years, nonprofit arts organizations are facing an increasing need to accommodate a variety of public roles, while some nonprofit arts organizations are trying to reinvent and innovate. Innovation and Process Innovation, Technological Innovation and Administrative Innovation (Camiso'n et al. 2009) there is a difference between them. Among nonprofit arts organizations, the most common innovations are changes in certain services and advances in the technology used (digital catalogs, virtual access, or web publications). Few studies of the economics of nonprofit arts organizations provide practical fundraising strategies. In the study of the earnings of nonprofit art organizations, the main concerns are ethics and specific income. The effectiveness of funding for nonprofit arts organizations is rarely mentioned. The limitations of current research on this topic, and the urgent need for more work in this area, prompted me to start this research. Another source of inspiration is the question of financial viability. This paper considers whether it is possible to determine the economic viability of a nonprofit arts organization. Different events and complex financial structures seem to make the assessment difficult. So, regardless of the size or resources of its operations, it seems more appropriate to focus on topics that can have a positive impact on the revenue of nonprofit arts organizations. The combination of business and business model innovation generates revenue to provide a wide range of customizable studies. This article is of great value for future research into the income of art non-profit organizations

Success and failure are attributed to the composition and configuration of business models that either react and capitalize on environmental dynamics or fail to make appropriate changes. However, as Barton and Court (2012) point out, many organizations are unsure how to proceed with BMI, and there is still a lack of clarity as to the exact makeup of these new business models and how companies can reconfigure their own business models. Therefore, the concept of business model will be a useful tool for analyzing and comparing art management practices. People often lack entrepreneurial and business thinking to achieve economic success. Currently, cultural entrepreneurs see themselves only as creative forces, not managers who need to provide services to the market at the right price. What's more, researchers of all kinds in the field of management doubt whether management principles can be transferred directly to the social enterprises.

In addition, the study shows the concept of testing business models in practice, underscoring the scientific community's interest in the innovative design of business models, and that the components in business model innovation must be consistent with each other: "An interesting study from a configuration problem, focusing on the dimension of the reference arrangement business model is compatible. affects economic performance" (p. In addition, Margreta (2018) and Muller-stewens & Fontin (2019) advocate continuing to discuss the concept of business models. They emphasized the importance of configuring individual dimensions in the business model based on the overall strategic direction. For example, negative interdependencies can occur if the revenue model and service model are inconsistent (Gemunden and Schulz (2018) mention these interdependencies. Kieser and Nicolai (2017) support this, saying that "success factor studies are considered a model approach to readjusting rigor and relevance" (p. Academic efforts can have three research objectives: identify/describe, interpret, and evaluate (Tomczak & Dyllick, 2017, p. 67). This article will begin to discuss these goal. In summary the purpose of this paper is to generate knowledge about the appropriate business model configuration of the social enterprises.

A business model is a structure, design or framework that a business follows to bring value to its customers and clients. However, there are at least three measures of the success of a business model—its ability to generate profit for its owners, its ability to generate positive change in the world, and its ability to achieve a balance of profit and positive change. The first approach applies to traditional for-profit companies; the second approach applies to traditional charities; and the third approach (a balance between profit and positive change) applies to social enterprises. Given the definition above, a social business model is a structure, design or framework that a social business follows in order to bring about a positive change while maintaining healthy financial returns. Yet despite sharing this basic framework, social entrepreneurs have a wide spectrum of viable social business models to choose from.

To help shed light on that spectrum, in 2012 Wolfgang Grassi (aka W. Grassi) identified nine types of social business models. He began his analysis with three factors guiding any social business: the mission, the type of integration, and the target population. He then explored the way in which these three factors intersected with the three traditional categories of business (for-profit, not-for-profit and hybrids) to generate the nine specific types of social business models that any social enterprise could adopt.

CONCEPT OF THE ENTREPRENEUR SUPPORT MODEL

This model of social enterprise (SE) sells business support services directly to the entrepreneurs in its target population. In other words, this type of SE helps entrepreneurs get their businesses off the ground. Support can come in the form of consulting services, training, micro financing or technical support. he low-income client model where a social enterprise generally offers social services directly (as in the fee-for-service model) while focusing on low- income clients The service subsidization model that funds social programs by selling products or services in the marketplace. This model of social enterprise (SE) sells business support services directly to the entrepreneurs in its target population. In other words, this type of SE helps entrepreneurs get their businesses off the ground. Support can come in the form of consulting services, training, micro financing or technical support.

Organizations that belong to this category may include economic development organizations, business development service organizations and micro financers.

In addition, Hull and Lio (2006) argue that process innovation is better suited to the interests of these organizations than product innovation because they are shown to be less risky and less costly. It is not only conducive to organizational management innovation, but also proven in the practical application of art organizations. In an environmental context, "sustainability" generally means finding a way to use resources in a manner that prevents their depletion. For charitable nonprofits, the phrase “sustainability” is commonly used to describe a nonprofit that is able to sustain itself over the long term, perpetuating its ability to fulfill its mission. Sustainability in the nonprofit context includes the concepts of financial sustainability, as well as leadership succession planning, adaptability, and strategic planning.

The increasing pressure on people to do something for society, in combination with the need for financial turnover in order to survive, is seen as one of the dominant factors for the rise of social enterprises (Gandhi, T.; Raina, R., 2018). This combination of having a social impact on society but also the need for certain economic revenue to sustain in the future is what defines a social enterprise and separates these organizations from non-profit organizations (Sacchetti, S.; Tortia, E, 2019). This balance is also reflected in their organizational characteristics. On the one hand, there are economic characteristics (e.g., continuous production, economic risk), but on the other hand, there are social elements, for instance, that they produce benefits for society, haveinclusive governance and that profits are distributed in a limited fashion (Sacchetti, S.; Tortia, E, 2019).

This paper is to generate knowledge about the appropriate business model configuration of art institution.

Research area	Finding
Business models (BMs) George and Bock (2011)Zott et al. (2011)	Use of business models • Organizational design • Resource-based view • Narrative and sense making • Nature of innovation • Transactive structure • Opportunity facilitator Three themes of BM literature • E-business • Business models and strategy • Innovation and technology management
Business model innovation	Schneider and Spieth (2013)BMI) Three streams of BMI research: •Prerequisites of conducting BMI • Process and elements of BMI • Effects achieved through BMI Spieth et al. (2014)

Table 1: Selection of innovation in related research

Innovation and Opportunity Business models determine how value is created, delivered, and captured (Zott, Amit, & Massa, 2011). A well-developed and adaptable business model is closely linked to an organization's long-term financial success and sustainability strategy. The fundamentals of business model development and innovation can be applied to any organization (for-profit or non-profit) that provides value to customers, constituents and stakeholders, and applied to guide the deployment of entity resources to create and deliver value in a cost-effective and financially sustainable manner. Traditionally, business models have been studied from the perspective of achieving and maintaining a competitive advantage (Teece, 2010), or as an entity can take advantage of its innovative mechanisms (Teece, 2010, 2018). However, business models are not just the domain of "traditional" for-profit enterprises. Non-profit organizations, many of which are designed to meet social needs that businesses or governments cannot meet (IETM, 2016) also have business models. Although their social purpose is clear in their mission statement (MacDonald, 2007) (Weerawardena et al., 2010), nonprofits receive relatively little production value from those whose value is passed on (e.g., beneficiaries of local food banks). Instead, other stakeholders voluntarily supplement the shortfall in fee-for-service revenue. Regardless of the source of these funds, revenue inflows must exceed the total cost of creating and delivering social value (the organization's mission), or the organization's survival will be threatened (McDonald et al., 2015) (Topalogluet al., 2018). Research into the business models of nonprofit and social purpose organizations is still emerging. In exploratory research, Cooney (2011) found that slow growth, cross-subsidies, and diversification are critical to these organizations because they balance social missions and business outcomes. Grassl (2012) transcends the dichotomy of mission and money to embrace the hybridity of social enterprise. By analyzing various combinations of organizational elements, such as mission, composition, and market, he was able to identify different types of business models and subsequently came up with a framework for categorizing these entities. Based on the experience of microfinanciers, Grameen Bank et al., (2010) discussed the five elements of social organization business model innovation (BMI): challenging traditional thinking, finding complementary partners, conducting ongoing experiments, recruiting social profit-oriented stakeholders, and specifying social profit targets clearly and early on.

Early initiatives by nonprofit organizations in crowd sourcing and revenue generation included webinars organized by Creative Models (2014). In addition to these workshops, research into corporate crowdfunding is still in its infancy. This is an interesting contrast to the United States, where Brabham (2016) and other academics began to discuss the impact of crowd funding on public arts funding. . Given the successful crowd funding campaign, the lack of research in China is also noteworthy. One example is the "Innovative Business Model" of the Kunming Contemporary Art Nonprofit Art Organization, which, despite these successes, has yet to be studied as a source of revenue. Powell (2016) advocates the creation of a copyright forum for nonprofit art organizations to discuss image licensing. In addition to Powell (2016), there are other studies in the field based on Chinese non-profit arts organizations. Online Collections, Creative Commons 1 (Heritage 2014) studied the online collections of art institutions. Some international research on online collections is also noteworthy.

CONCLUSION

Business models are important for both new and established businesses. They help new, developing companies attract investment, recruit talent, and motivate management and staff. Established businesses should regularly update their business plans or they'll fail to anticipate trends and challenges ahead. However, to be useful, a business model must be simple, logical, measurable, comprehensive and meaningful. A successful business model generates feedback loops that have a self-enhancing effect. This means: Decisions lead to consequences, which in turn enable new decisions, etc. This process creates growth cycles that strengthen the business model and develop a dynamic that resembles network effects.

Nonprofits are appropriately viewed primarily as mission-driven organizations. Evaluations of success focus on an organization's impact in the community, such as job placements, academic achievement, and family stability. However, nonprofits are business enterprises as well, built on an underlying business model that makes the programs and organizations operate and succeed. Business models at nonprofit organizations have never been static. The structure and composition of revenues, expenses, and capital evolves over life stages and in response to external events and internal strategy.

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THE ROLE OF SERVICE QUALITY AND UNIVERSITY BRAND IMAGE TOWARD STUDENT SATISFACTION

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ABSTRACT

The trend in universities today is shifting towards an engagement in marketing and branding programs. The purpose is often to enhance the reputation of the university and to have a positive influence on university ranking. Greater competition existing today is to attract the best and brightest students. A university is no longer just an institution of higher learning but also a business. Millions of dollars are spent by universities trying to burnish their image and enhance their position in these rankings. Good service quality leads into customer satisfaction and, therefore, makes the firms more competitive in the market. Not only does it improve performance, it also promotes student population's mental health and stability, which are conducive to both short-term learning goals and long-term character building and social inclusion. Service quality in higher education is defined as the difference between what a student expects to receive and their perceptions of actual delivery. By far the factor identified as contributing most to quality was graduation and retention. Considering that the higher education institution is in the business of education, it makes sense that completing that education would be important. Likewise, retention of students is necessary to seeing completion.

Keywords: Service Quality, University Brand Image, Student Satisfaction

INTRODUCTION

Nowadays, universities must accept their dual identity in order to survive. The normative identity which is the traditional, ideological image and the other identity is the utilitarian which is cost-effective image. A positive image should be generated with the various publics with whom a relationship is established and cultivate positive lines of communication with each. Although organizational image has been studied frequently with the regard of the corporate sector, it has been rarely examined in the non-profit arena.

In a competitive marketplace, where organizations vie for customers, client satisfaction becomes an important differentiator of marketing strategy. Customer satisfaction largely depends on the degree with which a product supplied by an organization meets or surpasses customer expectation. By measuring customer satisfaction, organizations are able to get indication of how successful they actually are in providing products to the market. he aim of the marketing concept holds that the goal of the organizations is to satisfy its customers and publics. Although many organizations have adopted this concept, many have failed in assessing and evaluating the consumers' satisfaction level.

CONCEPT OF UNIVERSITY IMAGE

The trend in universities today is shifting towards an engagement in marketing and branding programs. The purpose is often to enhance the reputation of the university and to have a positive influence on university ranking. Greater competition existing today is to attract the best and brightest students. A university is no longer just an institution of higher learning but also a business. Millions of dollars are spent by universities trying to burnish their image and enhance their position in these rankings.

Kotler (2014) also defines brand image as the sum of beliefs, attitudes, stereotypes, ideas, relevant behaviors or impressions that a person holds regarding an object, person or organization. However, Brand Image for institutions and academics (mostly recognized as institutional image) was mentioned by Panda and Pandey (2019) and they defined it as the total impression of images, emotions, experiences and facts that a university has created in the public mind. In a broad-spectrum, stakeholders' brand experiences (for instance, students) drive an institution's image, which explains how the overall corporate or university image is formed (Abratt & Kleyn, 2012).

Authors further stress that university image represents the overall perception of a university (Alves & Raposo, 2010). According to Quintal and Phau (2014) students gather personal and emotional impressions from numerous experiences and promotional information they receive from a university. Image has a high determining international students' university choice (Quinta et al., 2012). Azoury (2014) also suggests that in this highly competitive age, university image is necessary, and that image branding methods should be implemented. As a result, the image denotes the university's ability to meet student needs, as well as the development of trust in the university's ability to provide better services to students (Chen & Chen, 2014). Nevertheless, Alwi et al. (2020) argue that students select a university based on more than just the program or location; they also consider the institution's values, which is an important aspect of image distinctiveness. This is to imply that university image is multidimensional.

University image being a multidimensional construct is hard to measure. Therefore, we conceptualize university image along three dimensions – university heritage, trustworthiness and service quality. University heritage: The history of an institution is an important aspect of its image. University heritage is divided into material and immaterial assets (Panda, 2019). University buildings, libraries, archives, regalia, and other forms of material heritage are examples. Intellectual heritage, culture, morals and ethics, rites, and so on are all examples of immaterial heritage

(Panda, 2019). The influence of university background on cognitive, emotional, and intentional attitudes is significant (Merchant & Rose, 2013).

The credibility of the university (trustworthiness) is another important factor that can contribute to the establishment of a favorable image which brings the level of trust that the institution has for its students. In the university setting, students' perceptions of trust are based on their own interactions with university personnel as well as the university's management policies and practices when it comes to keeping commitments (Brodie et al., 2009). The higher the level of trust in faculty, staff, and administrative resources, the fewer complaints students will have, resulting in a positive impression of the university.

THE CONCEPT OF SERVICE QUALITY

Service quality is viewed as a crucial aspect of competitiveness (Ali et al., 2016). It is often discussed in the literature of services marketing. Ali et al. (2016) proposed a different definition of service quality, describing it as meeting needs and requirements. In this regard, it is claimed that service quality is typically driven by the customer, making it challenging for service providers to comprehend, apply, and define "service quality" in a uniform manner (Zeithaml, 2017).

Other researchers have investigated the idea of service quality proposed by Parasuraman et al. (1988) in other domains of service. These five aspects of tangibility, responsiveness, reliability, empathy, and assurance are still often employed to measure service quality in educational research (Afridi & Khan, 2016;; Calvo-porral & Novo-corti, 2013; Kanakana, 2014 ; Quintal et al., 2012), which has been considered satisfying as an outcome. Gronroos and Seebaluck (2019), conceptualize technical service quality as transformational quality in higher education since it is related to the outcomes of a service (Gronroos & Seebaluck, 2019). They also consider functional service quality as it refers to a customer's subjective view of how a service is given and defines the interactions that occur throughout service delivery (Martı & Martı, 2010).

In consideration to this dimension, Teeroovengadum (2019)found that higher education service quality (HESQUAL) scale since it consists of a hierarchical and holistic model of service quality in higher education and the HESQUAL scale considers both the functional and technical aspects of higher education service quality (Gronroos and Seebaluck, 2019). The level of service quality that the institution provides is the third essential feature that adds to the university's image. Academics, teaching, research, administration and staff, sports and extracurricular activities, the overall environment, and the numerous facilities offered by the university can all be measured in terms of service quality. For instance, the overall teaching quality, the quality of their research, their empathy with students, their responsiveness to student enquiries, and other factors can all be used to assess the service quality provided by the faculty.

CONCEPT OF STUDENT SATISFACTION

According to Appuhamilage and Torii (2019), students' levels of satisfaction are an indicator of how well teachers and the university satisfy their expectations and ambitions. Student satisfaction in universities is influenced by a number of crucial elements such as the quality of facilities, the quality of degree programs, and the university's image (Weerasinghe & Fernando, 2018). Students who are satisfied are more likely to be loyal (Appuhamilage & Torii, 2019), propose study programs to other students, and provide financial support to their. As a result, universities must determine the factors that have a significant impact on student satisfaction. A higher degree of perceived service quality has been linked to increased student satisfaction in several research (Annamdevula & Bellamkonda, 2016). Furthermore, Latif et al., 2021) discovered that student satisfaction had a significant beneficial impact on student loyalty in a survey of postgraduate students at Spanish universities.

THE RELATIONSHIP BETWEEN UNIVERSITY IMAGE AND STUDENT SATISFACTION

In the context of marketing theory, the image of the institution is valued more than the quality of service in providing student pleasure (Chandra et al., 2019). Andreassen (2014) argues that customers create image in their minds based on prior knowledge gained through indirect communication or direct experience. In the setting of Australian universities, Azoury et al., (2014) suggest that in this highly competitive age, university image branding is a prerequisite for implementing image branding tactics. Masserini et al. (2018) discovered that image is a robust predictor of student satisfaction. As a result, the brand denotes the university's ability to meet student needs, as well as the development of trust in the university's ability to provide better services to students (Chun Fu Chen & Chen, 2014). However, in the current conditions due to the coronavirus lockdown, students' satisfaction levels may be impacted by online sessions rather than real classes. Masserini et al. (2018) found evidence of image being a strong predictor of student satisfaction in the higher education context.

However, image has also been found to influence customer loyalty in several studies. In a higher education context, Alves and Raposo (2007) found image to be a strong determinant of students' loyalty. Similarly, perceived value has been found to be an important determinant of loyalty. The positive influence of value on loyalty of customers has been tested across different service settings by Cronin et al. (2000) who argued that it was necessary to integrate the concept of perceived value in predictive models of satisfaction and loyalty so as to gain a more holistic understanding of the interrelationships between these distinct but related variables. Their study revealed that perception of value had a positive and significant effect on behavioral intentions irrespective of the service context.

RELATIONSHIP BETWEEN FUNCTIONAL SERVICE QUALITY AND STUDENT SATISFACTION

According to Anderson et al. (2012), despite the fact that studies on the relationship between service quality and satisfaction are abound in the marketing literature, the link remains unclear. However, Initial research studies attempted to identify whether service quality leads to contentment or satisfaction leads to service quality (Bitner, 1990; Bolton & Drew, 1991; Cronin & Taylor, 1992; Parasuraman et al., 1985, 1988). Nevertheless, the majority of contemporary articles recognize service quality as an antecedent to customer satisfaction, a credit to improvements in the conceptual foundation and empirical evidence.

Service quality in higher education comprises functional and transformative aspects (Teeroovengadum et al., 2016). While the functional component of service quality relates to the transformative quality in education, relates to the technical aspect of service quality (Teeroovengadum et al., 2016). An important goal of higher education institutions is the transformation of learners through teaching and learning (Leibowitz and Bozalek, 2015).One would have expected researchers to have assessed the transformative dimension of service quality in higher education as part of quality assessment exercises. Surprisingly, studies have omitted this dimension, making existing measurement scales and models of HESQUAL incomplete and theoretically limited. Using the HESQUAL scale proposed by Teeroovengadum et al. (2016), the study considers the technical and functional aspects of service quality as two theoretically distinct concepts and analyzes their unique influence on image, perceived value and satisfaction.

UNIVERSITY BRAND IMAGE AS COMPETITIVE ADVANTAGE

Panda (2019) studied “University brand image as competitive advantage”. The aim of this study was to investigate the relationship between university image and student satisfaction by conceptualizing university image as its heritage, service excellence, and trustworthiness. Results show that in both the United States and India, a distinct image plays a vital role in student satisfaction. Gronroos et al. (2019) conducted research on “Higher education service quality, student satisfaction and loyalty”. The objective of this study was to test an improved structural model that predicts student loyalty from image, perceived value, satisfaction, and service quality using a confirmatory approach and to verify the higher education service quality (HESQUAL) scale using a confirmatory technique. This study happens to be useful to the current study since the researcher aims to discover the association of Thai university image with student satisfaction and loyalty which happens to be an area predicted by the previous study as far as university image and loyalty are concerned. Ali et al. (2016) studied “Does higher education service quality effect student satisfaction, image and loyalty”. The findings reveal that all five characteristics of higher education service quality influence student satisfaction, which influences institutional image, which in turn influences student loyalty. This study is perceived to be of paramount importance to the current study since international students are specified as an area of concentration and satisfaction; reputation and Image associate with loyalty.

CONCLUSION

Good service quality leads into customer satisfaction and, therefore, makes the firms more competitive in the market. High service quality can be achieved by identifying problems in service and defining measures for service performances and outcomes as well as level of customer satisfaction. Students' satisfaction can be defined as a short-term attitude resulting from an evaluation of students' educational experience, services and facilities. Earlier it was measured by common satisfaction frameworks but later higher education specify satisfaction models were developed. Student satisfaction has also been measured based on the assessment of faculty credentials, financial performance, and the achievement of learner outcomes; comparison with other programs; benchmarking and questionnaires; and most recently, by hybrid models of both satisfaction and facilities. In the modern, highly competitive business world, the key to sustainable competitive advantage lies in delivering high quality service that will, in turn, lead to satisfied customers.

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INFLUENCING OF UGC ON CONSUMER BUYING INTENTION IN SOCIAL PLATFORMS

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ABSTRACT

With the continuous development of market economy, knowledge economy gradually reflects an important role. In the era of knowledge economy, human resource is an important part of society, in order to adapt to the progress of the society, the domestic most enterprises human resources management begins with reform and innovation, which promotes, to some extent, the scientific nature and rationality of human resource management, promote the human resource optimize configuration, Improve the overall work efficiency of the staff in the institution. In the modern economic era, knowledge is the most critical factor of production for enterprises, while talents are the carrier of knowledge. Therefore, the key to the competition of enterprises lies in the competition of talents. Human resources are wealth and capital, the first resource and the key element of enterprises. Modern enterprise human resource management needs continuous innovation and advancing with The Times. This paper will elaborate the significance of enterprise human resource management innovation, and combined with the current problems in enterprise human resource management put forward relevant strategies for reference.

Keywords: enterprise; Human resources; Management innovation;

INTRODUCTION

Human resource management is an important basis for the development of an enterprise. It means that the enterprise manages its employees in certain effective ways, fully arouses their enthusiasm and potential, thus promoting the orderly operation of various departments of the enterprise, and thus promoting the overall development of the enterprise. With the arrival of the information age, enterprise human resource management needs to change the old management mode, and gradually form a human resource management system with its own characteristics through continuous innovation, so as to optimize the internal management system of enterprises and improve the effectiveness of human resource management.

1. The significance of enterprise human resource management innovation

If an enterprise wants to develop more smoothly in the market economy, it must achieve socialized production on the whole, which also needs the enterprise to optimize its own management system constantly. First of all, enterprise human resource management is an important part of the whole enterprise management, improving the quality of human resource management, improve the service consciousness of personnel, is conducive to improve the overall competitive advantage of the enterprise. With the development of The Times, the management of enterprise human resources can improve the service level of enterprise employees to some extent, and then promote the common progress of management level of other departments of the enterprise. The attitude of employees towards work can directly reflect the level of human resource management of an enterprise. Therefore, it is very important to continuously optimize and innovate the human resource management level of enterprises to improve the overall competitive advantage of enterprises.

Secondly, enterprise human resource management innovation, can effectively avoid the loss of enterprise talent. With the continuous development of market economy, the problem of brain drain is becoming more and more serious. In order to effectively avoid the difficulties of enterprise operation caused by brain drain, enterprises should strengthen human resource management, constantly optimize the human resource management system, ensure the human force of the enterprise, combine the personal goals of employees with the strategic goals of the enterprise, and then promote the realization of the strategic goals of the enterprise.

PROBLEMS FOUND IN ENTERPRISE HUMAN RESOURCE MANAGEMENT INNOVATION

2.1 Lack of innovative ideas in human resource management

With the development of economy, the new situation has put forward new requirements for human resource management in China, and also brought new challenges to the human resource management department of enterprises. However, the human resource management department in the current enterprise does not realize its importance in the enterprise, which leads to the current human resource management mode is too traditional. Human resources work is still limited to the salary treatment of employees and the sorting of employee files. Human resource management departments of enterprises lack innovation and ignore the people-oriented concept, which will not only reduce work efficiency, but also hinder the development of enterprises.

2.2 Imperfect human resource management system

At present, in China's enterprise human resource management, employee recruitment and salary adjustment are decided by enterprise managers, which leads to the lack of corresponding standardization and scientific human resource department. As a result, the form of human resource management is too single, and the rules and regulations of some enterprises are not perfect, but also lack of scientific nature. This form of human resource management cannot meet the needs of employees, nor can it improve the human resource management system according to the will of employees, which will greatly reduce the enthusiasm of employees, thus hindering the sustainable development of enterprises.

2.3 Lack of reward and punishment system norms

Through the relevant investigation, it is found that most enterprises blindly pursue the economic benefits of enterprises, ignoring the management of human resources of enterprises, and ignoring the will of employees. In order to achieve the ultimate strategic goal, the enterprise needs to align the goals of employees with those of the enterprise. Therefore, the enterprise needs to understand the will of employees and formulate the corresponding reward and punishment system, so as to greatly improve the enthusiasm of employees. The lack of reward and punishment system in the enterprise leads to the boring work of employees and prevents them from realizing their potential in the enterprise.

3. Enterprise human resource management innovation strategy;

3.1 Innovation of enterprise human resource management concept

The enterprise's human resource management concept needs to advance with The Times. First of all, the enterprise should gradually establish the people-oriented management concept. Only by setting up the people-oriented management concept can we give full play to the enthusiasm of employees, understand the fundamental will of employees, and combine the work goals of employees with the goals of enterprises, so as to promote the sustainable development of enterprises. Therefore, the establishment of people-oriented concept is the basis of enterprise human resource management concept. Secondly, with the advent of the information age, enterprises need to transform themselves into knowledge-based economies so as to improve their comprehensive strength. Enterprises should keep up with the pace of The Times, and continue to learn and absorb new knowledge to further improve the human resource management of the enterprise, and constantly innovate the concept of human resource management of the enterprise, to promote the stable development of the enterprise.

3.2 Develop relevant training mechanisms

In order to continuously promote the innovation of human resource management, enterprises should formulate relevant training mechanisms and regularly carry out professional knowledge training. In the current era of knowledge economy, enterprises need to regularly charge their employees with knowledge so as to improve their business capabilities. The training content should include relevant business knowledge, enterprise culture, service standards and strategic goals of the enterprise era, so as to comprehensively improve the comprehensive quality of the enterprise staff. The improvement of the comprehensive quality of employees can greatly improve the work efficiency, so as to master professional business knowledge, and accumulate many useful talents for the enterprise through training, so as to promote the development of the enterprise. At the same time, on the premise of gradually improving the comprehensive quality of employees through regular training, it also enables employees to clarify the strategic goals and efforts of the enterprise, which is very important for the development of the enterprise.

3.3 Establish a sound employee incentive system

At present, in the process of human resource management innovation, enterprises should formulate a perfect employee incentive system and combine individual interests with enterprise interests. In order to improve the enthusiasm of employees, the human resource management department of the enterprise needs to understand the will of employees and provide them with satisfactory salary treatment. Therefore, the enterprise should formulate the relevant appraisal system and incentive system, and regularly to the employee's job performance evaluation, and according to the employee's performance and performance to adjust the employee's salary level, for the good performance of enterprise employees to give material and spiritual reward, for the performance of the relatively backward employees also should have certain punishment, to promote staff towards common goals. When formulating the relevant incentive system, the human resource management department of the enterprise should fully understand the inner intention and salary target of the employees, so as to make the employees have the space to improve their efforts, improve their enthusiasm for work, and then promote the realization of the strategic goal of the enterprise.

CONCLUSION

To sum up, the innovation of the enterprise human resources management is crucial for the whole enterprise development, with the development of The Times, to the enterprise human resources management puts forward new requirements and challenges, enterprises should through continuous improvement own existence insufficiency, and continuous innovation, increase the competitive advantage of enterprises in market economy. Through the continuous innovation of enterprise human resource management for enterprises to strive for greater space for the rise, and then promote the sustainable development of enterprises.

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SIMPLE ANALYSIS OF PINDUODUO BRAND INNOVATION

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ABSTRACT

In recent years, with the popularity of smartphones, social software and short videos, social e-commerce has also emerged in traditional e-commerce rapidly and the sudden COVID-19 epidemic has made rapid progress. Alibaba Corporation is the definite leader of the e-commerce market, and the other e-commerce platforms are also seeking a place to survive with their own different characteristics. Pinduoduo compared with other e-commerce is a rising star.Launched in April 2015, it was not only young, but also has created many miracles. It takes only three years to launch successfully , focusing on the sinking market. The main product is the multi-category product with strong competitiveness. Pinduoduo was able to enter the market successfully and became the second largest e-commerce platform after Alibaba in a very short time. Thus it can be seen that studying the innovation problem of Pinduoduo brand has a high reference value for the latecomers in many industries. According to the SWOT model as the theoretical basis for the research, first through the study of the advantages and disadvantages of the internal and external environment, to determine the unique competitive advantages and opportunities.Then it analyzes the substantive problems and direction of Pinduoduo in the development process and puts forward feasible reference suggestions for the late-comer enterprises represented by Pinduoduo accordingly.

Keywords: Pinduoduo; Social e-commerce; Innovation; SWOT; sinking market

PINDUODUO BACKGROUND INTRODUCTION

Currently,Pinduoduo (called Buy Together on the attached wechat platform) is one of the mainstream social e-commerce platforms in China.Social e-commerce platform focusing on C2M (Customer-to-Manufacturer) group shopping is Founded in April 2015. The transaction volume has exceeded 10 millions in February 2016 and in July of the same year, the users have exceeded 100 millions. On July 26,2018, it was listed on NASDAQ with a market value of $24 billion. According to Baidu Baike, since its establishment, the annual active users have reached more than 880 millions as of March 2022.In terms of user scale, it is second only to Alibaba and occupies a very important position in the big market of e-commerce platform. Users can through the spell of APP, WeChat platform, friends to share links and even the big data push platform, share their want to buy goods, invite friends to participate in "spell", "bargain", together at a lower price to buy both sides need to buy goods, so as to experience more online shopping benefits and fun.At the same time, the background of Pinduoduo will also recommend and match the real needs of users through intelligent big data through each user's order or purchase situation accurately, so as to make users shopping more worry and convenient in the later stage. Pinduoduo uses innovative business models to provide low-cost and high-quality goods, which occupies a place in the Red Sea market of e-commerce rapidly and successfully.

ANALYZE THE COMPANY'S BUSINESS STATUS WITH THE SWOT TECHNOLOGY

1. Strength

1.1 Precise market positioning

Spell of main market positioning for sinking market, the target consumer groups by spelling founder nicknamed "outside the five ring", most of these people in the middle class and mostly from the outer suburbs of second-tier cities, three, four lines and other urban or rural areas, more consumption power is not high in the workplace, or have free time no income in school students, etc.They are more price-sensitive and tend to be practical in the product itself. So they are willing to spend time and connections and they are also willing to forward it to their relatives and friends to bargain for a lower price.

The sinking market has a large population base and large consumption potential. Coupled with the further improvement of the network and logistics infrastructure and the relevant government support, the sinking market is like a vast ocean, containing unlimited development potential.

1.2 Low price advantage

One of the core competitiveness of Pinduoduo is the low price. Pinduoduo enables merchants to achieve small profits and quick sales through the mode of single group purchase. The low price itself will stimulate users' consumption desire, even if it is non-rigid demand consumption.In addition, the low-price goods mainly promoted by Pinduoduo are mainly basic daily necessities and some leisure consumption, such as agricultural products, fruits, snacks, paper towels, etc., which are easier to give users a good and cheap shopping experience that they can earn even when they buy them.On the other hand, starting from the source, direct factory connection, shorten the supply chain, realize the C2M (Customer-to-Manufacturer) mode, reduce the links of intermediate merchants, avoid the phenomenon of middlemen making a price difference, but also let users experience the real affordable price from another perspective."Tens of billions of subsidies" is also one of the reasons for Pinduoduo's low price. In other e-commercial deposit, full reduction and other routines of consumer consumers, fight more with billions of subsidies, simple and direct subsidies and price reduction, really let consumers get tangible benefits, played a solid and beautiful price battle.

1.3 The fission advantage of social interaction

At present, the overall growth rate of online user scale began to slow down and traffic is the king. The major e-commerce platforms have joined in the contest of traffic and the cost of traffic has also increased significantly. Interpersonal social communication is simple and convenient and it is not limited by media and other conditions and it is more targeted. Starting with this, Pinduoduo uses the social order and group purchase mode of "social + e-commerce" to realize social fission acquire users by relying on social networking and low price quickly . Stimulate users share through low-price goods and spread group links on various Internet platforms actively , while acquiring users and realizing low-cost drainage rapidly ."Bargain for 0 yuan to purchase" looks quite attractive, as long as there are enough relatives and friends to help you bargain, you can take away the goods you want for free. This model is not profitable, they just realize the fission and realization of traffic through the advantages of social fission which is the core value of Pinduoduo. This model not only provides consumers with great benefits and benefits, but also strengthens the emotional interaction between consumers when shopping. While the platform enjoys the benefits of fishermen steadily .

1.4 A good image of poverty alleviation and helping agriculture

Pinduoduo is also very active in the field of poverty alleviation and helping agriculture. The C2M model connects with farmers and assists farmers to complete agricultural products sales directly.It not only reduces the cost for itself but also improves the platform reputation and corporate brand image furtherly . This is so-called "killing two birds with one stone". Therefore, the public welfare marketing that Pinduoduo is spreading not only opens the popularity but also wins the goodwill of consumers and accumulates a certain reputation .So that it can drive the brand communication effect and establish a good social image of the enterprise.

1.5 Positive policy-oriented encouragement

Starting from 2020, the national policy began to emphasize the activation of the sinking market and encourage the e-commerce industry to enter rural towns ,in order to boost the economy of the sinking market, revitalize rural development and the battle against poverty. These policies just meet the needs of major e-commerce platforms for traffic resources in the sinking market and provide them with strong policy support.

2.Weakness

2.1 Low entry threshold

Too low entry threshold is one of the reasons for lowering the product quality of platform merchants. In the early stage of Pinduoduo's launch, most of the settled merchants entered were small manufacturers and some farmers. Pinduoduo used the supply sources of these manufacturers to provide them with a low threshold of entry and trading platform. The implementation of this strategy at the same time, although the introduction of countless traffic, but also in the product quality buried a major hidden danger.

2.2 Commodity quality needs to be improved

In the e-commerce platform market, product quality is absolutely the core issue that cannot be ignored. But if you want to ensure the "quantity", you can not protect the "quality", and no one will take up the benefits of the left, but also enjoy the benefits of the right. Due to the low threshold of the initial entry, the large number of merchants coupled with the light supervision let the merchants take advantage of the loophole in dealing with inferior commodities. The strength of merchants is uneven making Pinduoduo "fake storm" wave after wave .The fundamental cause of poor product quality, false publicity and misleading consumers is caused by the quality of the goods themselves. Although Pinduoduo carries out anti-counterfeiting actions to solve the problem of these fake goods actively, it also brings many negative effects to Pinduoduo. Many consumers are very controversial about the quality of Pinduoduo. When users receive inferior goods after consumption, they will not only have a poor impression of the merchant but also affect the distrust of Pinduoduo platform which leads to the trust crisis of a large number of customers.

2.3 Imperfect after-sales service

After-sales service is an important part of the sales of goods and affects the adhesion of customers to the platform directly. Pinduoduo platform has received a lot of after-sales complaints and one of the high proportion is that problems cannot be solved in time. After-sales problems cannot be solved at that time, which are delayed, and finally failed.Although Pinduoduo has been making efforts to improve its after-sales service, many consumers do not buy it. It is difficult for the platform to give a satisfactory answer in the end. It can be seen that Pinduoduo's after-sales service system is not perfect. Product quality problems occur frequently and the after-sales service system is not perfect.Continuous failure will inevitably make users lose confidence in the platform.

2.4 Low-end brand image

First of all, it should be noted that although Pinduoduo's "low price + Pinduoduo" model is recognized by consumers and the market.It is mainly for profit purposes and many consumers only buy it at low prices. The low end of the product is deeply rooted in the impression of users, because the low price leads to a decline in the brand image.On the other hand, the image of the low-end platform is also difficult to cooperate with some existing brands, because the brands cannot correctly price them on Pinduoduo and do not fit with the boutique image of some brands. Another reason is that the negative image of Pinduoduo's "fake goods scandal" will also cause a crisis of trust with the brand side.

2.5 Lack of logistics system

E-commerce and logistics are dependent on each other. Every transaction of Pinduoduo needs the support of logistics which has a great demand for logistics. At present, Pinduoduo logistics costs account for 9% of the total cost, while Taobao and JD are about 3%, because they have independent logistics.As far as Pinduoduo is concerned, whether it is self-built or the logistics system will consume huge capital and resources of enterprises. Late enterprises use this business model, the cost will be higher, continue to be competitive when the low price model. Secondly, the current cooperation established by Pinduoduo and logistics stops at the surface and fails to conduct in-depth cooperation which leads to the lack of logistics services. The imperfect logistics system will also become a stumbling block to the future development of Pinduoduo.

2.6 Mode is easy to replicate

Due to the fierce competitive environment of e-commerce platforms, Pinduoduo's innovative model is easy to be imitated by other e-commerce companies. When the new model is accepted by the market public, other e-commerce platforms are easy to launch similar models, including "Taobao" Group "," Jingdong "Shopping", netease Kaola "Tuan Mall" and so on.Although giants such as Alibaba will not take group shopping as the main business, the purpose is mainly strategic defense, but if the user engagement is not so high in the short term, then it will easily be replaced.

3.Opportunity

Although the e-commerce market will currently present a flat period, the target users and active users accumulated in the early stage will still have a positive impact on the platform. No matter what kind of marketing methods and strategic measures are adopted by e-commerce, users always recognize high-quality products based on low prices,.So the early quality and cheap goods and efficient after-sales service are the key.On this basis, if we can find a better way to improve user viscosity, bring new design a series of check-in games and activities to increase interest and social to maintain their own advantages. In addition, the external macro environment of Pinduoduo is also considerable and the sinking market has broad development prospects.In the future, Pinduoduo should take the initiative to seek the connection of internal and external environment under the market policy environment. While making reasonable use of internal resources constantly break free of the shackles of external environment, with the help of the efficient operation of internal and external environment and make its own advantages become an important source of self-competitiveness growth.

4.Threat

In essence, social e-commerce is an innovation of a marketing model separated from the traditional e-commerce. The "group booking" of Taobao and JD's "Spell purchase" are all similar to it .So this model is easy to be copied.Compared with Pinduoduo, Taobao and JD have a long operation time. Their trust and user engagement are better than Pinduoduo. Therefore, such a model cannot serve as the backbone of Pinduoduo. In addition, as the rapid development of social e-commerce, more and more competitors want to get a share of the market torrent. It will slowly make the pressure of the platform in the development of all aspects of one after another. Compared with other online shopping platforms, Pinduoduo focuses on social shopping and sinking market coupled with billions of subsidies.Competitors are unable to pose a great threat to Pinduoduo in the short term.But in the long run, once e-commerce giants like Alibaba and JD start to focus on the sinking market where Pinduo focuses.Then the market is likely to form a new pattern. From the development process of Pinduoduo, we can find that in the face of strong competitors, Pinduoduo has no first-mover advantage in the early stage of marketization. But only it relies on model innovation to break through the market,In order to enter the market, the choice of low price strategy to obtain the sinking market share method cannot be sustained. And because the spell a lot of main traffic users for the low-end consumers itself is insufficient economic strength. spell in order to maintain and grow active users, have to subsidize, promote low model, a lot of investment, through capital injection, quality and price, establish customer confidence in the platform.But the low price strategy subsidy model, high cost and not long-term solution.It will also bring some adverse factors to the future development of Pinduoduo. Therefore, on the basis of gaining a certain market share, we must think about how to improve the consumer engagement degree and enhance the credibility of the platform.We also think about give full play to the innovative business model and improve the platform supervision mechanism and establish a safe and reliable platform and jointly promote the vigorous development of the e-commerce industry.

RESEARCH ON DEVELOPMENT COUNTERMEASURES

1 **Precise market positioning**

Precise market positioning continue to occupy the sinking market and improve the adhesion of users to the platform .It makes good use of the advantage of low price and strengthen the low price advantage of Pinduoduo through the single group purchase and ensure the product quality and service at a low price.

2 **The quality of product**

We should adhere to the quality is king, real-time sampling inspection and rectification of the goods on the shelves. The quality of goods should be controlled by the source to be effectively improved. In addition to improving the supervision of businesses, we should also strengthen the supervision and formulate relevant regulatory regulations and procedures and open a variety of channels for reporting and supervision.

3 **After-sales problem**

Formulate after-sales service rules as the index of store assessment and the after-sales service stores that fail to meet the after-sales service standards or receive many complaints and have a high rate of disputes should be punished accordingly. Using AI and other technologies, we can ensure that the customer service robot is online 7 * 24 hours, reduce labor costs, and optimize and subdivide the problem module to provide services for users with some special needs and improve efficiency.

4 **Brand image**

If Pinduoduo wants to develop in a better enterprise ecological level, it should not only pay attention to social influence and social responsibility, but also build the brand image of the platform actively. In the final analysis, consumers' shopping not only pursue low prices, but also pay great attention to the quality of goods. Cost performance is an important factor in shopping decisions and Pinduoduo fake goods and infringement issues have been criticized by the public.In the future it should crack down on fake and shoddy products strictly to strengthen the control of product quality, strengthen the audit and supervision of the platform and improve the products and services can be fundamentally recognized and supported. Through participating in poverty alleviation, love and public welfare activities to show the social care of enterprises to improve the enterprise brand image.

5 **Enter the logistics market**

The vast majority of goods on Pinduoduo platform are free shipping. However, such a platform with a huge transaction amount does not have its own unique logistics system. Whether the commodity transportation costs are borne by the platform or the seller. They will eventually be transferred to Pinduoduo's own profits and losses.With the support of relevant national policies, the government, the platform and logistics, it can build a complete and innovative logistics system for agricultural products transportation and research and develop cold chain logistics, constant temperature storage and other related technologies, to save logistics costs and improve profits for farmers from the source.

6 **Model innovation**

The continuous investment of AI is conducive to promoting the C2M model, through which the model can estimate whether the product complies with the market, so as to optimize the supply chain. Pinduoduo should give full play to its potential and innovation capabilities to incubate more successful products and projects that can attract users and adapt to the market. A lot of effort is devoted to technology research and innovation to cope with the growing number of users and trading volume.

CONCLUSION

In today's e-commerce market, Pinduoduo has achieved such a dazzling achievement in just a few years. As for the current situation, Pinduoduo has outstanding advantages, but its disadvantages are also obvious. The test that the platform needs to face in the future is still quite severe.It is still a long way to go whether the future track and pinduoduo can become a tide setter in the e-commerce industry. In the future, spell more can use its unique innovation model and business philosophy, growing through continuous innovation and optimization of development strategy, continue to play its unique core competitive advantage, by constantly improve policies and regulations mechanism, strengthen the innovative business model, for the majority of consumers have higher quality goods, more perfect service, a better shopping experience， break open a way through bramble and thistle， Open up the road of Chinese social e-commerce to Take advantage of the wind and waves!

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THE COMPETITIVE POWER OF SMALL AND MICRO ENTERPRISES AND TECHNOLOGICAL INNOVATION OF ENTERPRISES

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ABSTRACT

Small and micro enterprises are an important force in China's economic development. They have made outstanding contributions and played an indispensable role in activating the market economy, increasing employment rates, and creating tax revenue. Small and micro enterprises are mostly concentrated in labor-intensive, service-oriented, low-tech industries, etc., and have poor ability to resist market risks. Once they encounter a market downturn, they will be affected to a greater extent. Small and micro enterprises are effective carriers of social services, and their development and growth can play the role of social stabilizers. Due to the short establishment cycle and low threshold of small and micro enterprises, in recent years, small and micro enterprises have sprung up and moved into the market. Facing the severe market situation, their development problems have become increasingly prominent. If small and micro enterprises would to survive in the cracks, they need to improve their competitiveness to achieve sustainable development, and technological innovation has become an inevitable choice. As the lifeline of small and micro enterprises, technological innovation can bring cost advantages and development space to enterprises. Technological innovation has been proven by many scholars to be the source for enterprises to obtain sustainable core competitiveness and the internal driving force for survival and development. In an increasingly competitive market, technological innovation is very important if small and micro enterprises want to survive in the cracks.

This paper discusses the development of small and micro enterprises, and then provides corresponding strategies. The research of this paper has important theoretical value and practical significance, and is greatly significant to improve the current situation of small and micro enterprises, enhancing technological innovation capabilities, and enhancing market competitiveness.

Keywords: Small and micro enterprises, technological innovation, competitive power

INTRODUCTION

1.1. Research background

Small and micro enterprises can be designed as family workshop enterprises, micro enterprises, small enterprises, as well as individual industrial and commercial households (Jia,2021). Small and micro enterprises play a significant role in social and development as well as the service industry, small commodity supply industry, and supporting production for large enterprises (Lv,2019). Small and micro enterprises have strong service performance and wide coverage, showing unlimited advantages in employment, people's livelihood, and social and economic development (Zhang et al., 2020). Most of the small and micro enterprises are established by one or more aspiring entrepreneurs who start their own business or operate in partnership (Shen,2019). Small and micro enterprises involve various industries and have strong ability to absorb employment (Liu,2020). Based on the survey conducted by the Institute of Labor Science of the Ministry of Labor and Social Security, one self-employed person can provide 2 jobs on average, and one small startup can provide 13 jobs (Shang,2021).

Small and micro enterprises are effective carriers of social services, and their development and growth can play a role in social stability (Lu,2018). Small and micro enterprises have weaker technical strength than large enterprises, and generally only master or specialize in one technology and produce a series of products (Liu,2018). Small and micro enterprises are more flexible in organization, and enterprises with good benefits can achieve product refinement, specialization, and specialization, which can be close to customer needs, improve people’s living standards and quality of life, and meet people’s more and wider demands and high demands on service (Chen,2019). Due to the short establishment cycle and low threshold of small and micro enterprises, in recent years, small and micro enterprises have sprung up and moved into the market. In the face of the severe market situation between China and the UK and the US, their development problems have become increasingly prominent (Jie,2019).

1.2 Research purpose

In view of the indispensable importance of small and micro enterprises in the national economy, they have become the focus of common attention at the policy level and academia. How to make small and micro enterprises operate in a healthy way has become a problem before us. Therefore, this paper takes small and micro enterprises in Jiangsu province as a research object to provide reference for other related researches.

1.3 Research significance

As an important and active force in the development of the national economy, small and micro enterprises are widely distributed in all walks of life and all fields, not only promoting economic growth, but also solving many social problems such as employment, and making great contributions to China's economic development.

As the science and technology as well as the economic globalization develop rapidly, more brutal market competition is coming. If small and micro enterprises would like to survive in the cracks, they need to improve their competitiveness to achieve sustainable development. And technological innovation has become an inevitable choice. As the lifeline of small and micro enterprises, technological innovation can bring cost advantages and development space to enterprises.

The significance of the topic selection of this paper is to provide some practical references for the development of small and micro enterprises. The research of this paper has important theoretical value and practical value and significance, and is greatly significant to improve the current situation of small and micro enterprises, enhancing technological innovation capabilities, and enhancing market competitiveness.

LITERATURE REVIEW

Xu and Cui (2020) believed that evaluating industrial competitiveness was crucial for companies to formulate R&D strategies, design processes and marketing strategies. Zhang et al. (2018), based on the theory of resource capabilities, analyzed the reasons for the formation of competitiveness. These tools involved the technical aspects of their field of study, and considered organizational management, manufacturing, marketing, and industry environments. Li et al. (2018) believed that the main source of competitive advantage was technological innovation capability. Fan and Du (2018) believed it was essentially competitive to have the capacity in introducing new products as well as employing new processes in shorter time. Han et al. (2018) expounded the economic analysis of technological innovation on competitiveness, arguing that based on the assumption of a perfectly competitive market structure, with the development of technological innovation, the marginal cost of enterprises decreases, and product prices decrease with marginal costs, resulting in the withdrawal of some enterprises and allowing firms to gain a larger market share.

Cheng et al. (2018) verifies the importance of technological innovation in the company's core competitiveness as well as believed that technological innovation with the autocatalytic effect can carry out low-cost diffusion and amplify profits, and can enhance the overall strength of enterprises. On this basis, the article analyzed how to use technological innovation to build the core competitiveness of enterprises from six aspects. And it is recommended to evaluate the core competitiveness of enterprises from their market, technology and management. Fan and Li (2018) believed in a general sense, technological innovation could improve industrial competitiveness, but technological progress was not the higher the better, nor the faster the better. Li, et al. (2019) developed a framework and system for judging the capability of technological innovation and competitiveness of enterprises. Through a survey of 200 manufacturing enterprises in Zhejiang, they used statistical methods, like regression analysis, correlation analysis and descriptive analysis, to examine the relationship of the two. The result indicated that technological innovation positively and significantly correlated with competitiveness. The stronger the competitiveness of enterprises, the stronger the technological innovation ability, which proved that technological innovation ability was the driving force and source of companies to enhance their competitiveness. Sukumar et al. (2020) examined the relationship between competitiveness and the ability of technological innovation, as well as verified the correlation between the technological innovation based on the manufacturing industry and the competitiveness. Ivanová and Čepel (2018) believed that technological innovation can make for improving companies' core competitiveness. Through the process of Philips' product upgrading, it is proved that technological innovation is the backing to maintain and enhance the competitiveness of enterprises, and is the inexhaustible driving force for the sustainable development of enterprises. Hermundsdottir and Aspelund (2021) selected the high-tech industries as samples, made an index system of competitiveness as well as technological innovation, and undertook the research of their relationship with the empirical method.

THE PROBLEMS OF SMALL AND MICRO ENTERPRISES IN JIANGSU

Because small and micro enterprises are at the low end of the value chain, their industrial structure is not optimal, the added value of their products is low, their technological innovation ability is not strong, and their anti-risk ability is weak, and their management is not sufficient, disorderly competition is shown in the market and small and micro enterprises confront themselves with unprecedented difficulties. For small and micro enterprises in Jiangsu, due to regional differences in the social and economic development level, policy orientation and industrial layout, there are also certain differences in the development level and characteristics of small and micro enterprises in different regions.

3.1 The increasing number of canceled accounts

In recent years, 1,198 individual industrial and commercial households and 222 private enterprises have been cancelled on a daily basis in Jiangsu Province. In 2011, the number of individual industrial and commercial households and private enterprises that were cancelled increased by 11.3% compared with 2010. Because of the large number of new enterprises, the proportion of the present year is roughly the same as that of previous years. The figures show that small and micro enterprises, dominated by private enterprises as well as individual industrial and commercial households, have outstanding operational difficulties.

3.2 Financing difficulties of small and micro enterprises in Jiangsu

As far as bank funds are concerned, the actual financing cost of small and micro enterprises is relatively high because of the increase in loan interest rates, guarantee costs and wealth management fees. Bank credit resources generally give priority to medium and large-sized enterprises because of low credibility in small and micro enterprises, objectively having a crowding-out effect on small and micro enterprises. In terms of private funds, many small and micro enterprises rely on the short-term liquidity to raise loans, leading to the increasing rate of private loans. Currently, the weighted average interest rate of private loans in the province has reached more than 20%. It can be seen that small and micro enterprises still face difficulties in financing aspect.

3.3 The unreasonable management of small and micro enterprises

Some small and micro enterprises still haven't got rid of the traditional family management model, their ownership structure is relatively simple, their management level is low, they have no supporting management system, and their financial system is not sound enough. Most small and micro enterprises do not have core technologies and independent brands, and mainly rely on price competition and labor, and their growth methods are relatively extensive. At the same time, they lack the understanding of their own growth goals, and there is a phenomenon of blindly following the trend in capital investment, which increases the risks as well as difficulty in company operation.

3.4 The unsatisfying effect of supportive policies

In recent years, the state and Jiangsu Province have successively introduced many measures and policies to help develop small and micro enterprises, including taxation and finance, and reduction and exemption of administrative fees. However, some supporting policies still failed to keep up in time, and some good policies lacked operability, failing to achieve good results. In terms of the market, the threshold of some industries has been continuously lowered, but the "hidden threshold" in reality is still serious. In the field of private investment, the effect of allowing private capital to enter into some monopoly industries is not obvious.

MEASURES FOR ENHANCING TECHNOLOGICAL INNOVATION CAPABILITIES AND COMPETITIVENESS

4.1 Changing business philosophy

Taking into account the companies' long-term development, and vigorously promoting companies to have its own foothold in the fiercely competitive market, small and micro enterprises should have a sense of modern enterprise management. They need to abandon the family management model, abandon the owner-dominated model, and abandon the concept of relying on the market rather than thinking about business concepts such as change. Besides, they must resolutely avoid the phenomenon of casually following the feeling of business management and market control.

Small and micro enterprises should have a sense of modern corporate governance structure from the beginning of their establishment, and pave for the subsequent development of the enterprise. Small and micro enterprises should establish a sound company system, and internally control personnel management and financial management well. They should have a modern enterprise management awareness that separates ownership and management rights, and set up corresponding decision-making, supervision, and operation management institutions in accordance with the corporate governance structure model. For major decisions of the company, members of the decision-making body should be consulted, and external experts should be hired for consultation when necessary. Small and micro entrepreneurs should attach importance to the management of company membership, the construction of corporate culture, and the recognition of employees, and strengthen communication and coordination at work. Besides, they should show fairness in different affairs, should not make decisions based on personal preferences, and form a positive state and a good company atmosphere for all members of the company.

4.2 Establishing an effective corporate governance structure

For an enterprise, the corporate governance structure is like the foundation of a high-rise building. It is an issue that must be considered and constructed before the building starting to be constructed. Similarly, enterprises should consider how to build an effective and reasonable corporate governance structure at the beginning of their establishment. Because of lack of professional team management, small and micro enterprises generally do not have a sound corporate governance structure.

Small and micro enterprises should establish a system of board of director in accordance with the provisions of the company law, in accordance with the procedures, and on the premise of adhering to the corporate governance structure of modern enterprises and in combination with the characteristics of the company itself. Small and micro enterprises should allow the board of directors to decide the operation of the company's management, financial and internal control systems, so that the correctness of decision-making can be improved. Small and micro enterprises should continuously optimize the structure and functions of the board of directors, enhance the comprehensive business quality as well as management level of directors, and define the powers and responsibilities of the board of directors. They should establish and improve information disclosure system of the board of directors to make information open and transparent, so that shareholders can better understand the situation

Independent directors, who are outside the main body of the company's interests, can play the role of a bystander and use professional knowledge to analyze problems more objectively. If the members of the board of directors of small and micro enterprises lack sufficient professional technical knowledge and business management knowledge, in view of the major decision-making power of the board of directors and for the better development of companies, it is recommended that small and micro enterprises can introduce independent directors when necessary to play the role of expert consultation and avoid the appearance of decision-making problem.

4.3 Improving the internal innovation incentive mechanism of enterprises

Technological innovation originates from the innovative ideas of internal technical personnel, and managers' keen grasp of market information and decision-making which makes for promoting the development of the enterprises and is driving force for improving their competitiveness Small and micro enterprises should perfect the internal incentive mechanism of the enterprise, create a learning organization, and cultivate an innovative enterprise culture. Using the system to motivate management, managers should pay attention to market demand, capture the latest industry information in a timely manner, encourage technical personnel to continuously innovate, improve and optimize existing technologies, and promote the research and development of new processes and new products, so as to optimize product performance, reduce production costs, and obtain more market recognition.

Small and micro enterprises should establish a knowledge exchange platform. Through the internal innovation incentive mechanism, general technicians are encouraged to continuously improve their technical knowledge and grow rapidly into professional technicians: And small and micro enterprises should encourage skilled technicians to actively share technical knowledge, so that technology can be precipitated and promoted and technology innovation can be improved. The technical exchange platform can expand the team of technical personnel, improve the level of technical personnel. For example, the platform allows them to discuss common strategies in the professional field, carry out brainstorming on a regular basis, and stimulate technical innovation ideas.

Small and micro enterprises can take a variety of incentive methods and combine material incentives, spiritual incentives, emotional incentives and other methods to improve the enthusiasm of technical personnel to innovate. Material incentives require enterprises to formulate a sound institutional system to achieve a reasonable inclination of the distribution of interests based on the principle of fairness and justice. However, a single material incentive is not a panacea. Rewards will bring side effects. It will make everyone block each other's news as well as affect the normal development of work. Therefore, according to the level of individual needs, appropriate spiritual incentives can sometimes mobilize the enthusiasm of R&D personnel at a higher level.

4.4 Increasing support for small and micro enterprises

Preferential fiscal as well as taxation policies are an important means for governments to protect and promote the development of small and micro enterprises, and have great practical significance in the development of small and micro enterprises. Jiangsu Province should formulate and improve preferential fiscal and tax policies for small and micro enterprises on the basis of learning from foreign experience, and give them the greatest support for technological innovation.

Fiscal and taxation policies should appropriately favor small and micro enterprises, special funds for the development of small and micro enterprises should be set up, the implementation and supervision of supporting policies should be increased, and the actual implementation of policies and the smooth availability of funds should be guaranteed. For fees and taxes, the government is supposed to increase the reduction and exemption of taxes and fees, and make small and micro enterprises the main object of tax reduction. Tax incentives make for accumulating funds and reducing the growth pressure of small and micro enterprises, which is a relatively direct form of assistance. As far as Jiangsu is concerned, the proportion of tax paid by small and micro enterprises is not high. Under the conditions of financial permission, more flexible policy measures can be adopted for small and micro enterprises in terms of taxation. Jiangsu should standardize the law enforcement of fiscal and taxation, unify the standard of law enforcement. ,and strictly implement the decision of the Ministry of Finance and the National Development and Reform Commission to exempt some administrative fees for small and micro enterprises. According to the financial situation, other fees may be further reduced or exempted as the support for the development of small and micro enterprises, so that the market environment for the development of small and micro enterprises will be fully optimized.

CONCLUSION

Small and micro enterprises function as a significant part in the national economy and have an irreplaceable position in a series of issues such as people's livelihood and employment. However, due to institutional problems, small and micro enterprises are relatively fragile in the complex and changeable market environment, especially in the context of the world financial crisis, and their ability to resist market risks is low. Some small and micro enterprises in emerging industries have relatively good overall benefits. The reason for this is mainly that the products of small and micro enterprises have low technological content, are mostly concentrated in the downstream of production, and have a low level of technological innovation. Small and micro enterprises with good strength focus on the market benefits brought by technological innovation, entrepreneurs have a sense of technological innovation, and have strong adaptability and risk-resistance ability in the face of shocks. It can be seen from this that technological innovation makes difference to the production and development of small and micro enterprises.

In order to survive and develop, small and micro enterprises rely on the technological innovation to realize their development in a long time. The development status of small and micro enterprises throughout the country is manifested with a downward trend, and the situation of small and micro enterprises in Jiangsu Province is slightly better, especially the development of emerging industries is relatively stable and has a strong ability to resist shocks. According to the successful experience of small and micro enterprises in Jiangsu Province, it is an inevitable choice for small and micro enterprises to enhance their competitiveness by accelerating upgrading and transformation, strengthening scientific and technological innovation, changing business ideas and corporate management, attaching importance to corporate culture, and relying on the alliance with the large enterprises.

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ENTERPRISE INNOVATIVE MANAGEMENT MODE IN THE ERA OF BIG DATA

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ABSTRACT

Big data resources have great economic value, and enterprises must realize the application value of such technologies. This kind of data is deeply mined and flexibly used to promote the leapfrog development of enterprise economy. According to the actual needs of enterprises, managers can use effective information management means, give full play to the advantages of big data technology, and further promote the transformation of enterprise management mode. Optimize the core management structure of the enterprise, promote the healthy development of the enterprise, on the basis of fully understanding the development trend of the industry and the needs of most users, formulate a perfect business plan, optimize the specific management process, improve the management efficiency, and ensure the scientific decision-making. This study mainly analyzes the objective conditions affecting modern enterprise management, and points out the internal attributes and basic characteristics of big data and its application value in modern enterprise management activities, and summarizes the correct methods of using big data technology to strengthen enterprise management efficiency and promote the sustainable development of enterprises.

Keywords: big data technology; modern enterprise management; business value; information transmission; mutually beneficial coexistence

INTRODUCTION

The development of information technology is the most important technological breakthrough in the 21st century, which not only effectively promotes the development of the Internet and computer fields, but also permeates the information thinking into all aspects of social life and production. The rapid development and change of information technology are greatly promoted. It has changed the way people obtain, extract, statistics and analyze information. The era of big data has come.The introduction of big data theory brings to enterprises not only a change in thinking, but also a great change in business and management. The advent of the era of big data is both an opportunity and a challenge for enterprises, which puts forward higher requirements for enterprise management. In the context of the era of big data, the key to enterprises to achieve sustainable development and improve their competitiveness is to realize the innovation of enterprise management mode.

1.1 Background of the study

Entering the era of big data, the enterprise management mode needs innovation and development. The previous traditional model has no longer met the needs of the current enterprise management, and only active innovation can really help to promote the good promotion of the management work (Liu Quanxiu, 2021). The era of big data has posed greater challenges to the development of enterprise management. At the same time, there are also opportunities to optimize the enterprise management mode in a highly competitive market environment, which has become a topic that enterprise leaders need to pay attention to.

In the background of the rapid development of big data technology, data technology has been widely used, creating economic benefits for enterprises, improving the utilization efficiency of information technology, and solving common management problems.It is necessary to gather available technical resources to structural optimize and improve the existing data analysis system and management mode, fully integrate the data with unique utilization value, provide information support for the long-term decision-making of enterprises, and ensure that enterprises achieve sustainable development goals. Enterprise managers must clearly realize the commercial value of big data technology, make full use of all kinds of information contained in big data, promote the reform of management mode, and improve the level of enterprise management.In the era of big data, enterprises must do a good job in management if they want to become bigger and stronger. Under the social background of economic globalization and regional economic integration, the enterprise management mode is closely related to the development space and profit growth rate of enterprises. Therefore, it must use big data to carry out enterprise management activities.

1.2 Problem Statement

The main problems encountered in the modern enterprise management activities in the era of big data.

1.2.1 The number of specialized data analysis talents is relatively small.

In the modern enterprise staff team, there are few talents who understand big data technology and master high-level data analysis skills, and insufficient professional and technical personnel are available, so enterprises cannot raise necessary human resources in a short time. Due to the lack of professional technical personnel and equipment maintenance personnel in the data management department, the accuracy of data collection and analysis activities decreases, the cost of equipment use increases, and the big data analysis results shift, and the existing technical management team cannot timely correct the data analysis standards and classification principles.Some technical position employees lack the independent consciousness of research and development of algorithms and learning of equipment maintenance skills, and can only complete the tasks with low difficulty and lack of technical content, so they cannot guarantee the effectiveness and professionalism of the data analysis results.The enterprise fails to recruit professionals with high-level data analysis technology from all social strata, and the vocational training mechanism is relatively backward, which cannot cultivate new employees who do not understand big data technology into high-quality professional and technical personnel.Enterprise managers have ignored big data technology for a long time, and the available technical force is relatively weak, do not pay attention to the accumulation of technical resources and technical personnel, and cannot give full play to the special advantages of big data technology in enterprise management activities.

1.2.2 Weak awareness of innovation at the high-level management of enterprises.

Some enterprise managers did not realize the importance of big data technology, failed to focus technical resources to explore the commercial value of data analysis and classification technology, some managers can only grasp the surface value of big data technology, namely the industry data and three-dimensional information model, the use of data analysis technology only in the information of an economic project and classification level, did not find big data technology in the long-term strategic decisions, past profit channel evaluation, economic risk prediction and other application value. In the era of big data, modern enterprises must take the initiative to update their management concepts, learn to correctly use the data technology in the management practice, gain a favorable position in the competition, and promote the sustainable development of enterprises.However, part of the domestic enterprise informatization, digital construction only stay in financial and asset management departments, failed to popularize data analysis technology to all departments and subordinates, multiple departments in the enterprise management system appear information transmission speed, information standard confusion, make the correct application of big data is hindered, it is difficult to realize the rapid flow of important information data, real-time collection and in-depth analysis and research.

1.3 Research questions

1.What are the objective conditions that affect the operation of modern enterprise management?

2.What about the internal attributes and basic characteristics of big data and their application value in modern enterprise management activities?

3.How to use big data technology to strengthen the enterprise management efficiency and promote the sustainable development of enterprises?

1.4 Research objectives

1. To identify the objective conditions affecting the management of modern enterprises.

2. To point out the internal attributes and basic characteristics of big data and its application value in modern enterprise management activities.

3. To summarize the correct method of using big data technology to strengthen enterprise management efficiency and promote enterprise sustainable development.

1.5 Scope of the study

Under the background of the current era of big data, the management mode of Chinese enterprises is innovated.

1.6 Research significance

The practical significance of using big data technology in modern enterprise management activities.

1.6.1 Promote the transformation of employee working mode.

Modern enterprises after the introduction of advanced data technology, must make comprehensive adjustment of management mode, internal control mechanism, let different departments of employees cooperate with each other, to deal with common data analysis error problem, let employees correctly understand the enterprise business model and development strategy, to understand the enterprise production department operation mechanism, strengthen the staff and department managers, superior leadership interaction frequency, close the grass-roots worker and senior leadership psychological distance.The popularization of big data technology and supporting data positioning, the application of online transmission equipment, fully stimulated the modern enterprise staff work enthusiasm and potential, can promote the enterprise organization structure, management system of flat, unified development, omit unnecessary management link and data processing process, eliminate relatively backward hierarchical management system, promote the formation and development of plane, one-way management system. Under this new enterprise management system, employees can directly have dialogue and consultation with the department leaders, hold regular online staff meetings, actively put forward their own opinions and improvement plans, and obtain tasks matching their work ability. In the era of big data, the hierarchical management mode has problems such as slow data transmission speed and decreasing information authenticity. Therefore, it is necessary to rebuild the employee management mode, reiterate the internal management discipline, make employees at all levels responsible for screening valuable information, and do a good job in information transmission from bottom to top (Zhang Haiming, 2019).Employees can rely on enterprise purchase big data equipment, control the digital application and management system for automated information mining, play the subjective initiative and personal ability, accurately according to the information provided by the data analysis system, assess the business environment trend, help enterprise managers to play their own unique management advantages and management system and defects, on this basis, through the optimization of management structure to eliminate the risk factors affecting the enterprise development.Enterprise information management work can be further optimized by perfecting the internal structure of the existing hierarchical management system and reconstructing the management framework。

1.6.2 Build a fine management mode.

Before the advent of the information age, most industry data and market information collected and collated by most domestic enterprises were obtained through traditional fixed channels such as newspapers, TV and radio.At present, in addition to receiving such data, enterprises also need to receive a large number of unstructured data, a large number of unstructured data to the enterprise data management work, information processing work brings challenges.In order to ensure the efficiency of information processing, it is necessary to adjust the management mode, establish a dynamic management mechanism that can comprehensively analyze the market environment in a short time, eliminate the unstable factors that may cause economic losses, and use the gradually mature big data technology to do a good job in market trend analysis and industry information exploration. The traditional enterprise management mode can only avoid linear risks with less risk, pay too much attention to the causal relationship between different types of variables, and cannot correctly analyze the change rules of such economic variables in different market environments. Such management mode cannot play a role in promoting the healthy development of enterprises and eliminating potential risks.In order to timely find the economic risk, the objective factors affecting the normal operation of enterprises, must use big data technology to find the key information, grasp the risk node, improve the rationality and scientific of the management plan and project construction scheme, evaluate the key conditions affecting the normal development of the enterprise and internal factors, from the micro perspective, analyze the rationality of the different stages of enterprise management scheme, maintain the core interests of the enterprise, expand the enterprise profit channels, let the enterprise obtain sustainable rapid development.

LITERATURE REVIEW

2.1 Related concepts and theories.

The connotation and basic characteristics of big data.

Big data can be summarized as large and massive data stored in cloud servers, local databases and cyberspace. In order to do a good job in data analysis and processing and predict the future development trend of various industries, we must make reasonable use of such data to highlight the special advantages of big data and general data forms.Big data contains data storage terminal equipment and transmission data relay equipment and receive data of the server, technical personnel can use professional special algorithm to analyze the big data, and transfer the analysis results to the professional server, through to all available, accessible data for in-depth analysis, get more reliable analysis results. Big data has more data content, various data, data analysis activities implement fast special advantages (feng & zhao, 2021), technical personnel can according to the relevant industry data use demand, different types of data are divided into multiple subsets for storage, with the help of Internet technology transmission data analysis results, and gather data from different servers. With the rapid popularization of the application of mass storage media or cloud servers, the processing scale of big data is gradually expanding, and the data types are constantly increasing.Since entering the new era, China's Internet technology has achieved rapid development, data storage has gradually increased, data types have changed, from the original structured digital data to various types of unstructured data, such as pictures, animation, video, recording and other forms, the difficulty of analysis has been greatly improved.Big data has many types of manifestations, which can gather information from different fields and industries, such as military, political, cultural, social education and so on. The generation and iteration speed of information is relatively fast, and it has more prominent flexibility and variability. Big data technology has gradually become an indispensable important tool in modern enterprise management activities, can provide technical support for the modern development of the enterprise, to software or operating system as the carrier, collect data and further analysis, predict the future industry and market environment trend, help enterprises to cope with the increasingly fierce market competition, build three-dimensional data model, reasonable application of data collection, data transmission, information recognition and other advanced technology. Digital technology, led by big data technology, has changed the existing industrial form and spawned an innovative user economy, making obtaining economic profits no longer the only goal of the enterprise (Yu Wenhao & Wang Xiaonan, 2020). Enterprise managers can use big data technology to analyze and predict the changes in the product needs of most users in the market, to create a better experience for users, create higher social value, and let enterprises achieve sustainable development

2.2 Analysis of Objective Factors affecting Modern Enterprises.

2.2.1 External factors.

The operation and management activities of enterprises are limited by the market management system and administrative regulations, and they must carry out business activities within the scope permitted by the existing national laws, pay taxes on time in accordance with the relevant tax regulations, and distribute the operating dividends and dividends in accordance with the industry rules, so as to make the operation and management activities legal and compliant.Enterprise executives in the long-term strategic plan, for each department specific work management, must consider the regional economic development level, labor average salary and other basic elements, make development positioning, based on market development trend and reliable industry information to make reasonable decisions, and take measures to further optimize the existing management mechanism, choose the right investment target and product technology development path.High level of science and technology, capital intensive industry management level is higher, the management mode is relatively mature, after the test of economic crisis in different periods, with strong resistance to risk and long-term planning ability, can support to establish a more perfect fine management mode, highlight the flexibility of management mode, enterprise managers can take the initiative to introduce advanced information technology equipment, establish a diversified management mechanism.The external market scale, product demand and raw material supply capacity of an enterprise will have a different degree of impact on the management activities. The management efficiency of an enterprise depends on multiple external factors, and has instability and volatility.

2.2.2 Internal factors.

The main internal factors that determine the actual effect of management activities are the organizational form and management structure of the enterprise. The economic activities of the enterprise are completed under the cross-field cooperation and cooperation of different departments. The number of employees, internal spiritual culture, performance appraisal indicators and data processing standards will all affect the enterprise management activities. In order to improve the efficiency of enterprise management, managers must take the initiative to introduce more advanced information processing equipment and professional tools to timely process a large amount of information and data generated by daily work.The labor cost of enterprises will gradually increase with the expansion of the employment scale, so we must do a good job of upgrading the production technology, use the advanced information technology, create more and more economically valuable knowledge flow, and improve the material treatment of knowledge workers.

RESEARCH METHODS

Research on the Innovation Path of Modern Enterprise Management Mode in the Era of Big Data.

3.1 Innovate the employee cultivation mechanism and allocate high-quality human resources.

In order to promote the normal development of modern enterprise management activities, sufficient human resources should be deployed based on the actual situation, and the cultivation of data analysis talents and equipment maintenance personnel should be set as the primary goal of talent cultivation.Adjust the existing talent recruitment standards and entry ability test content.Focus on the candidates' data analysis ability and mastery of modern information technology (Li Xijing, 2019). Expand the evaluation index system of professional and technical personnel, and cultivate a group of talents who master high-level data analysis skills and can independently maintain technical equipment by organizing and carrying out vocational training activities. A data analysis team and scientific research team that can independently develop equipment and update algorithms will be established to strive to occupy a favorable position in the increasingly fierce market competition (Zhao Jingjing, 2021). While introducing data talents, explore more available market information and talent recruitment information, and do a good job in the basic work such as talent introduction and technical expert training (He Mei, 2021). Managers must consciously strengthen enterprises and colleges and universities, domestic high level talents between research institutions, establish long-term cooperation, build the integration development mechanism, using enterprise platform for the growth of talent internship, let big data professional college students get more professional career development opportunities, form long-term depth cooperation mode, to ensure the stability of talent supply, make universities to modern enterprises continuously input excellent technical personnel, rich enterprise talent reserves.

3.2 Innovate the management concept and choose the correct management objectives.

Enterprise managers must recognize the changes in the social environment and business business model in the era of big data, and learn to actively use valuable information tools to analyze and solve problems in practice (Ye Weifang, 2021). Take the initiative to strengthen the application ability of information analysis technology of the employees at all levels, so that the workers in charge of data analysis can give full play to their personal talents, and quickly classify, process and edit the massive data.In the information age, the development and progress of enterprises depends on their ability of data collection and analysis. Enterprise managers must effectively use all kinds of data to transform the data into clear and clear information.In order to improve the market competition ability of the enterprise, the enterprise must begin to develop perfect long-term development strategy and short-term investment strategy, with the help of specialized software equipment, collect data from different fields and in-depth analysis, establish a strong explanatory digital model, predict the future industry development prospects and enterprise investment project profit space, grasp the market information and enterprise own business information.Based on reliable data analysis results, enterprise managers flexibly adjust their development strategy and make correct business decisions in line with the actual situation.

3.3 Optimize the enterprise management mode and reconstruct the decision-making mechanism.

Information age, the development of modern enterprises must be in the market most consumer demand as the guide, with the help of big data technology to improve the existing management system, optimize the decision-making process, promote human resource management mode, production mechanism, financial information processing process innovation, through the promotion of big data technology, cloud computing technology and other advanced technology, improve enterprises.

RESULT AND FINDINGS

4.1 Opportunities for enterprise management mode innovation in the era of big data.

The era of big data also brings new opportunities to the innovation of enterprise management mode. In the actual process of management and development, we should pay full attention to the innovative application of management mode, so as to make enterprises occupy an advantage in the market competition and development.And in the era of big data, the opportunities of enterprise management mode innovation are reflected in the following three points:

4.1.1 Pluralism of data.

Big data plays a positive role in the innovation of enterprise management mode. Only by giving full play to the development of big data technology can it really lay a solid foundation for improving the quality level of enterprise management.With the mature development of "Internet +", the information and data source channels have also been actively expanded, and the enterprise data sorting and integration have become an important guarantee for the improvement of enterprise management quality (Zheng Huihui, 2021). The management of the enterprise itself should pay attention to the good use of big data, and the use of diversified data has helped to lay a solid foundation for the effective development of the enterprise management work, so as to play a positive role in promoting the quality of the actual management work.

4.1.2 Timeliness of big data analysis.

Under the application of big data analysis technology, the innovation of enterprise management mode can be quickly optimized in the huge data group, improve the quality of data analysis, so as to provide data support for the development of enterprise management work, and ensure the standardized development of various management work.

4.1.3 Provides the impetus to strengthen the technical team strength.

In the process of innovation and development of enterprise management mode in the era of big data, through the application and support of big data technology, enterprise managers should also constantly improve their own professional quality level, so as to truly play the role of management in specific work (Zhang Liqiong, 2019). The application of big data technology become an important guarantee to improve the quality of enterprise management, and strong management team can really help to be able to effectively promote management mode (wang xia, 2022), promote good management work, so in the process of actual management mode innovation, enterprise management team construction will be more and more powerful, big data era has become an important driving force of enterprise management team construction.

4.2 Measures for enterprise management mode innovation in the era of Big data.

The innovation of enterprise management mode in the era of big data needs to be emphasized from many aspects:

4.2.1 Innovation of management mode.

The innovation point of the enterprise management mode in the era of big data is multifaceted.It is more important to innovate from the management mode. Traditional management is mainly dominated by leaders, but under the background of the current big data era, the way of enterprise management should pay attention to the democratization and the timely change of business philosophy. Only by strengthening these basic aspects can we really help to improve the quality level of management.Big data under the era of enterprise development facing competitive pressure is outstanding, guarantee long and stable development, need to pay attention to and era background effectively, pay attention to the change of management concept, apply big data in the management, strengthen the consciousness of big data management, toward the direction of service-oriented transformation (Zhao Linyong, 2019). Only from the way of management of innovation, can help to promote the good development of enterprises.

4.2.2 Management mode information innovation.

The innovative application of enterprise management mode in the era of big data should be fully considered from various aspects. Management information innovation is relatively important, which can be closely combined with the actual development needs of enterprises. The enterprise leadership should realize the value and role of the application of big data technology, as well as the demand for enterprise development.Only when these basic levels are strengthened can it really help to improve the quality level of enterprise management.In the development of traditional management work is mainly independent, the smooth flow of information is not strong, it is difficult to form the integration advantage.Under the background of the era of big data, to do a good job of enterprise management is to achieve the innovation goal of informatization. From the perspective of overall planning thinking, the various systems can be integrated and pay attention to the comprehensive management of information, so as to truly help to improve the quality level of management (Ma Ziyi, 2021).

4.2.3 Innovation in talent management.

The innovation of enterprise management mode needs to pay more attention to the innovation of talent management, and the development of enterprises needs the support of professional talents. In the context of big data era, enterprises should pay attention to the transformation of talent management (Su Huanhuan, 2021), and pay attention to the use of big data technology to implement management. Enterprises should carry out knowledge learning and network channels to achieve a learning management team and promote the role of big data technology to establish an intelligent knowledge base. Division of enterprise information resources, do a good job of classification management, and pay attention to hierarchical exploration, and realize the knowledge value of the economic era on the whole. Only by paying attention to the innovative development of talent management mode can we really play a positive role in promoting the good management of the enterprise.

4.2.4 Build a data security protection system.

In order to ensure the efficient development of enterprise management work, it is necessary to actively broaden the source of enterprise data. And we should pay attention to ensure the security of data, and the corresponding data can be used scientifically. From these basic levels have been strengthened, to ensure the good progress of all the work. Through the application of network technology, managers can ensure the security of data and information in enterprise operation through the application of network technology (Fan Xiangnan, 2022). To do a good job of information security protection, we must establish a data security protection system, which has been strengthened from these basic levels, so as to truly ensure the good development of various work and contribute to the security protection of data and information.

CONCLUSIONS

With the advent of the era of big data, the network technology and intelligent terminals are rapidly updated in a short time, and the data and information scale generated presents an exponential growth trend.Through further excavation and effective use of such data, enterprise managers can according to the user experience the feedback analysis product economic value, conform to the development trend of The Times, timely innovation management mode, clever use based on big data technology, online transmission technology of the cloud information network, contact several industry partners, on the principle of mutual benefit coexistence, meet the actual situation of modern comprehensive management mode.Using the large amount of data resources produced daily, collect all kinds of information and data generated in the operation, production and development of competitive enterprises in the same industry, find out the internal differences and correlations of different types of data and information, timely correct the loopholes and defects in the existing management system, and eliminate potential management risks.Technical personnel must be deep mining all kinds of key data and industry information has the economic value, predict possible management problems and technical failure, for data processing team and technical personnel skills training activities, so as to continuously improve the management efficiency and quality, constantly improve, innovation enterprise management mode, to meet the actual situation of management standards, solve the system problems affecting the normal operation of enterprises and technical problems.

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RESEARCH ON THE INFLUENCING FACTORS OF THE ENTREPRENEURSHIP INTENTIONS OF GRADUATE STUDENTS IN GUANGXI, CHINA

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ABSTRACT

This paper takes graduate students as its research object, selecting four colleges in Guangxi as the sample for investigating the influencing factors of the entrepreneurial intentions of college students. The following research discoveries were made: 1) Of all the background factors affecting graduate students, grade, major, and entrepreneurship experience all exhibit an obvious positive influence on entrepreneurship intention. However, gender, age, and work experience do not impact entrepreneurial intention. 2) Graduate students, colleges, families, societies, and government factors all have an obvious positive influence on entrepreneurship intention. On this basis, the five aspects of college, family, society, government, and students are used for developing effective strategies for the cultivation of entrepreneurship intention among graduate students.

Keywords: entrepreneurship intention, influencing factors, graduate students

INTRODUCTION

Research background

Due to the continuous changes as a result of COVID-19, the rate at which the global economy grows has slowed down, and stimulating the new kinetic energy of economic development is now a major focus for the economic development of many countries worldwide.

Economic development in China has transformed, and the adjustment of product structure is in a critical stage. In addition, the need for innovation and entrepreneurship talent is increasing on a daily basis. Entrepreneurship intention and the behavior of graduate students influence the development of the Chinese economy.

The independent entrepreneurship of graduate students decreases social employment pressure, but it is also beneficial for economic growth, the acceleration of technological innovation, and the transformation of scientific and technological achievements.

Problem statement

According to the Blue Book of Employment: China Graduate Students Employment Report 2022 that was published by Mycos Research Institute, the proportion of independent entrepreneurship graduates in the class of 2021 was 3.1%, significantly behind the 20% figure for independent entrepreneurship graduates in Europe and America (Mycos Research Institute, 2022).

The level of economic development in Guangxi, China is relatively low, and its employment capacity for graduate students is quite limited. In 2021, the ratio of delivery number to recruitment number in Guangxi was 17.9, employment competition was relatively fierce, and a contradiction existed between supply and demand in the employment market (Zhang, 2021).

Understanding the basic situation and influencing factors of entrepreneurship intention in Guangxi is essential for conducting innovative and entrepreneurship education for graduate students, providing reference for the formulation of relevant employment and entrepreneurship policies by the government, and improving the contradiction between the employment supply and demand structure (Zhang, 2021).

Research question

American scholar Brid believed entrepreneurship intention to be the psychological state of entrepreneurs who focus their attention and behavior towards a specific goal (Brid, 1988).

In 1993, Krueger suggested that entrepreneurship intention is the best predictor for entrepreneurship behavior, and that it can efficiently guide potential entrepreneurs to gradually identify and seize entrepreneurship opportunities (Krueger, 1993).

Thompson noted that entrepreneurship intention refers to the belief that an individual wishes to start a company and intends to put it into action at a certain point in the future (Thompson, 2010).

It has been proven that only by improving the entrepreneurship intention of graduate students can they exhibit entrepreneurship behavior (Trivedi, 2016).

Does gender impact the entrepreneurship intentions of graduate students?

Does a positive correlation exist between internal factors and the entrepreneurship intentions of graduate students?

Does a positive correlation exist between external factors and the entrepreneurship intentions of graduate students?

Research objectives

This study investigates the current situation of entrepreneurship intentions of graduate students in Guangxi, comprehensively examining the influence factors from five aspects: graduate students, colleges, families, society, and government.

Significance of the study

Studying the influence factors of the entrepreneurship intentions of graduate students in Guangxi is conducive to effective innovation and entrepreneurship education among graduate students.

By studying the influencing factors of the entrepreneurship intentions of graduate students in Guangxi, the entrepreneurship quality of graduate students can be improved.

Studying the influencing factors of the entrepreneurship intentions of graduate students in Guangxi will provide reference for the formulation of relevant employment and entrepreneurship policies by the government while also improving the contradiction that exists between the employment supply and demand structure.

LITERATURE REVIEW

In recent years, a large number of scholars have analyzed the factors that influence the entrepreneurship intentions of graduate students from a variety of perspectives.

Research by scholars such as Han, Wilson, and Kickul found that entrepreneurial self-efficacy can help individuals overcome multiple barriers to entrepreneurship and lead to positive entrepreneurial intentions. This finding has also been confirmed by many studies on college students. (Yan & Song, 2022).

Based on the characteristics of economic and social development in the Yangtze River Delta and the current situation of innovation and entrepreneurship education among graduate students, Xu Zhenhao constructed a model of entrepreneurship environment, entrepreneurship willingness, and entrepreneurship value, finding entrepreneurship environment to have a significantly positive impact on the entrepreneurship willingness of graduate students (Xu et al., 2020).

Lu and Zeng analyzed the factors that influence the entrepreneurship intentions of graduate students from the perspective of entrepreneur gender, and found gender roles to have a negative correlation with the entrepreneurship intentions of female graduate students (Lu & Zeng, 2022).

Shi and Yao analyzed the factors that influence the entrepreneurship intentions of graduate students from a regional perspective, using ten graduate students from Fujian and Taiwan as the research objects. A comparative analysis method was used to study the influencing factors of the entrepreneurship intentions of graduate students in Fujian and Taiwan (Shi & Yao, 2018). In addition, Zhang et al. examined the environment of various cities in Guangdong, exploring the factors that influence the entrepreneurship intentions of graduate students in Guangdong from the perspectives of schools and local governments (Zhang et al., 2021).

Some scholars have studied the influencing factors of the entrepreneurship intentions of graduate students in ethnic areas, including Wu and Xu, who investigated the entrepreneurship intentions of Tibetan graduate students in Tibet and the influencing factors (Wu & Xu, 2020).

Some scholars have analyzed the influencing factors of the entrepreneurship intentions of graduate students from the perspective of their majors. Liu and Zhang mainly focused on graduate students who majored in physical education, finding the entrepreneurship intentions of those majoring in physical education to be mainly influenced by factors including their comprehensive abilities (Liu & Zhang, 2022).

Xu Bo took students who were majoring in economics and management at higher vocational colleges as the object, finding the background and resources of certification entrepreneurship to significantly impact the entrepreneurship willingness of higher vocational graduate students (Xu, 2021).

Some scholars have analyzed the influencing factors of the entrepreneurship intentions of graduate students based on the background of the times. For example, under the background of "internet plus", Zhang Xiashuang studied the positive correlation that exists between innovative and entrepreneurship activities and the innovative and entrepreneurship intentions of graduate students (Zhang et al., 2021).

To summarize, a great deal of research has been conducted on the influencing factors of entrepreneurship intention, and different conclusions have been reached, which may have been caused by the regional differences of samples. In addition, most research has only considered the influence of a certain factor on entrepreneurship intention, without combining the interrelated factors or considering the interaction effect on entrepreneurship intention.

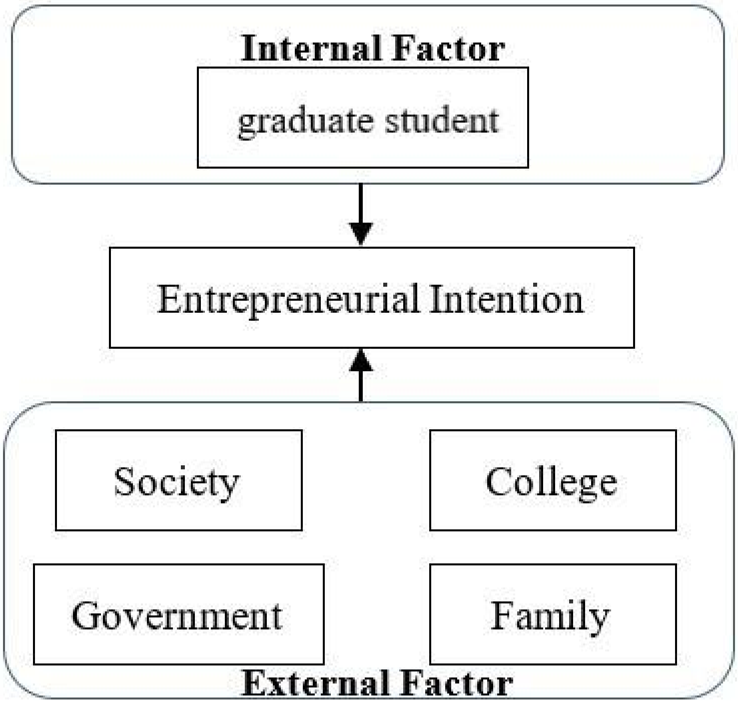
Therefore, based on a questionnaire survey of graduate students in Guangxi, China, this study uses multi-factor variance analysis as a means of testing the interaction and main effects of the six background factors of gender, age, grade, professional background, entrepreneurship experience, and work experience, in combination with graduate students, colleges, families, society, and the government for proposing suggestions for more targeted innovation and entrepreneurship education and employment and entrepreneurship policies.

THEORETICAL FRAMEWORK

Some scholars have studied the influencing factors of the entrepreneurship intentions of graduate students using the two-factor model, which divides the factors that affect this into two parts: personal factors (also called internal factors) and environmental factors (also called external factors) (Tian, 2014).

Therefore, this study constructs a model of influencing factors of the entrepreneurship intentions of graduate students based on the two-factor model. Details of the model of influencing factors of the entrepreneurship intentions of graduate students can be seen in Figure 1.

Figure 1: the model of influencing factors of graduate students entrepreneurship intention



Hypotheses

H1: The background factors of college students, gender, age, work experience grade, professional background, and entrepreneurial experience all have a significantly positive impact on entrepreneurial intentions.

H2: College students, college factors, family factors, social factors, and government factors all have a significantly positive impact on entrepreneurial intentions.

RESEARCH METHODOLOGY

Research strategy

Based on existing research, this research obtained data from a quantitative analysis perspective from a large number of documents and questionnaire surveys, using regression analysis for the analysis of the interaction of college students, colleges, families, society, and the government on the five levels of entrepreneurial intentions. The main effects were tested, and targeted suggestions were provided in relation to innovation and entrepreneurship education and employment and entrepreneurship policies.

Data collection methods

As a means of ensuring the representativeness and reliability of the data, 200 graduate students from four colleges in Guangxi were surveyed using stratified random sampling, and 198 valid questionnaires were collected, with an effective rate of 99%. The sample situation can be seen in Table 1.

Table 1: Basic information of survey samples

Items	Categories	N	Percent (%)	Cumulative Percent (%)
Gender	Man	94	47.47	47.47
	Woman	104	52.53	100.00
Age	Under 20	90	45.45	45.45
	Between 20 and 25	108	54.55	100.00
Grade	Freshman	33	16.67	16.67
	Sophomore	fifty-two	26.26	42.93
	Junior	66	33.33	76.26
	Senior year	47	23.74	100.00
Professional background	Science and Engineering	60	30.30	30.30
	Humanities	83	41.92	72.22
	Economics and Management	30	15.15	87.37
	Others	25	12.63	100.00
Have you ever had an entrepreneurial experience	Yes	110	55.56	55.56
	No	88	44.44	100.00
Have any work experience	Yes	103	52.02	52.02
	No	95	47.98	100.00
Total		198	100.00	100.00

Questionnaire of influencing factors of entrepreneurship intention

On the basis of in-depth analysis of relevant influencing factors of entrepreneurship intention (Lin & Wang 2018; Ge & Wang 2010; De 2018;Li 2012), according to the model of influencing factors of entrepreneurship intention of graduate students in Figure 1, the questionnaire of influencing factors of entrepreneurship intention of graduate students is designed from five aspects: graduate students themselves, colleges, families, society and government. There are 27 questions in the questionnaire, all of which are scored by Likert's 5-point scale.

As can be seen from Table 2, the Alpha coefficient values of Cronbach corresponding to the six dimensions of the scale are all greater than 0.7, indicating that the internal consistency of the questionnaire is good, so the reliability of the survey results is very high.

Table 2: Reliability Statistics (Cronbach Alpha)

Items	Corrected Item-Total Correlation(CITC)	Cronbach Alpha if Item Deleted	Cronbach α
A1 I THINK MY SELF-LEARNING ABILITY IS VERY HIGH	0.878	0.872	0.905
A2 I THINK I HAVE A HIGH DEGREE OF SELF-CONFIDENCE	0.746	0.888	

A3 I THINK I CAN ANALYZE AND CONSIDER PROBLEMS CALMLY AND MATURELY	0.668	0.897	
A4 I THINK I HAVE A STRONG SENSE OF PROFESSIONALISM AND RESPONSIBILITY	0.686	0.895	
A5 I THINK I HAVE A STRONG DESIRE TO START A BUSINESS	0.664	0.897	
A6 I THINK I HAVE ORGANIZATION AND LEADERSHIP	0.709	0.892	
A7 I THINK I HAVE THE ABILITY TO TAKE RISKS	0.678	0.896	
B1 I THINK THE SCHOOL PROVIDES NECESSARY TRAINING FOR COLLEGE STUDENTS TO START A BUSINESS	0.837	0.872	
B2 I THINK THE ENTREPRENEURSHIP COURSES ON CAMPUS WILL HELP ENTREPRENEURS SUCCEED	0.666	0.892	
B3 I THINK THE SCHOOL PROVIDES GOOD SERVICE GUIDANCE FOR COLLEGE STUDENTS	0.701	0.888	
B4 I THINK THE IMPROVEMENT OF COLLEGE EDUCATION SYSTEM IS HELPFUL TO ENTREPRENEURS	0.707	0.888	0.902
B5 I THINK THERE IS A GOOD ATMOSPHERE OF INNOVATION AND ENTREPRENEURSHIP IN THE COLLEGE	0.685	0.890	
B6 THE SCHOOL REGULARLY ARRANGES STUDENTS TO PARTICIPATE IN ENTREPRENEURSHIP TRAINING IN THE COMPANY	0.690	0.890	
B7 I THINK THE SCHOOL HAS A SERIES OF POLICIES TO SUPPORT ENTREPRENEURSHIP	0.688	0.890	
C1 I HAVE RELATIVES AND FRIENDS WHO HAVE SUCCEEDED IN STARTING A BUSINESS	0.743	0.709	
C2 I THINK FAMILY ENCOURAGEMENT IS VERY IMPORTANT FOR COLLEGE STUDENTS TO START A BUSINESS	0.641	0.800	0.826
C3 I THINK THE FUNDING FOR THE FIRST STARTUP COMES MAINLY FROM THE FAMILY	0.695	0.756	
D1 I THINK THE STRONG ENTREPRENEURIAL ATMOSPHERE IN SOCIETY HELPS COLLEGE STUDENTS TO START THEIR OWN BUSINESSES	0.748	0.655	0.811

D2 I THINK A GOOD MARKET ENVIRONMENT CAN IMPROVE THE ENTHUSIASM OF COLLEGE STUDENTS	0.601	0.799	
D3 I THINK THE SOCIETY'S TOLERANCE ATTITUDE TOWARDS COLLEGE STUDENTS' ENTREPRENEURSHIP FAILURE WILL HELP COLLEGE STUDENTS START THEIR OWN BUSINESSES.	0.670	0.743	
E1 THE GOVERNMENT PROVIDES SUPPORT POLICIES FOR COLLEGE STUDENT ENTREPRENEURS	0.719	0.716	0.809
E2 THE GOVERNMENT HAS SIMPLIFIED THE APPROVAL PROCESS FOR COLLEGE STUDENT COMPANIES TO APPLY FOR REGISTRATION	0.654	0.748	
E3 THE GOVERNMENT PROVIDES SKILLS TRAINING FOR COLLEGE STUDENTS TO START THEIR OWN BUSINESSES	0.570	0.787	
E4 THE GOVERNMENT HAS STRENGTHENED THE PROTECTION OF INTELLECTUAL PROPERTY RIGHTS	0.585	0.780	
F1 I THINK I WILL START A BUSINESS	0.711	0.675	0.803
F2 I THOUGHT ABOUT RUNNING MY OWN COMPANY	0.643	0.746	
F3 I THINK EVEN IF I ENCOUNTER DIFFICULTIES, I WILL CHOOSE TO CONTINUE TO START A BUSINESS	0.623	0.760	

Data processing

A questionnaire survey was used for the collection of data. The data was processed using SPSS22.0 statistical software, including variance analysis, correlation analysis, and regression analysis.

Table 2: Reliability Statistics (Cronbach Alpha)

Items	Corrected Item-Total Correlation(CITC)	Cronbach Alpha if Item Deleted	Cronbach α
A1 I THINK MY SELF-LEARNING ABILITY IS VERY HIGH	0.878	0.872	0.905
A2 I THINK I HAVE A HIGH DEGREE OF SELF-CONFIDENCE	0.746	0.888	
A3 I THINK I CAN ANALYZE AND CONSIDER PROBLEMS CALMLY AND MATURELY	0.668	0.897	
A4 I THINK I HAVE A STRONG SENSE OF PROFESSIONALISM	0.686	0.895	

AND RESPONSIBILITY			
A5 I THINK I HAVE A STRONG DESIRE TO START A BUSINESS	0.664	0.897	
A6 I THINK I HAVE ORGANIZATION AND LEADERSHIP	0.709	0.892	
A7 I THINK I HAVE THE ABILITY TO TAKE RISKS	0.678	0.896	
B1 I THINK THE SCHOOL PROVIDES NECESSARY TRAINING FOR COLLEGE STUDENTS TO START A BUSINESS	0.837	0.872	
B2 I THINK THE ENTREPRENEURSHIP COURSES ON CAMPUS WILL HELP ENTREPRENEURS SUCCEED	0.666	0.892	
B3 I THINK THE SCHOOL PROVIDES GOOD SERVICE GUIDANCE FOR COLLEGE STUDENTS	0.701	0.888	
B4 I THINK THE IMPROVEMENT OF COLLEGE EDUCATION SYSTEM IS HELPFUL TO ENTREPRENEURS	0.707	0.888	0.902
B5 I THINK THERE IS A GOOD ATMOSPHERE OF INNOVATION AND ENTREPRENEURSHIP IN THE COLLEGE	0.685	0.890	
B6 THE SCHOOL REGULARLY ARRANGES STUDENTS TO PARTICIPATE IN ENTREPRENEURSHIP TRAINING IN THE COMPANY	0.690	0.890	
B7 I THINK THE SCHOOL HAS A SERIES OF POLICIES TO SUPPORT ENTREPRENEURSHIP	0.688	0.890	
C1 I HAVE RELATIVES AND FRIENDS WHO HAVE SUCCEEDED IN STARTING A BUSINESS	0.743	0.709	
C2 I THINK FAMILY ENCOURAGEMENT IS VERY IMPORTANT FOR COLLEGE STUDENTS TO START A BUSINESS	0.641	0.800	0.826
C3 I THINK THE FUNDING FOR THE FIRST STARTUP COMES MAINLY FROM THE FAMILY	0.695	0.756	
D1 I THINK THE STRONG ENTREPRENEURIAL ATMOSPHERE IN SOCIETY HELPS COLLEGE STUDENTS TO START THEIR OWN BUSINESSES	0.748	0.655	
D2 I THINK A GOOD MARKET ENVIRONMENT CAN IMPROVE THE ENTHUSIASM OF COLLEGE STUDENTS	0.601	0.799	0.811
D3 I THINK THE SOCIETY'S	0.670	0.743	

TOLERANCE ATTITUDE TOWARDS COLLEGE STUDENTS' ENTREPRENEURSHIP FAILURE WILL HELP COLLEGE STUDENTS START THEIR OWN BUSINESSES.			
E1 THE GOVERNMENT PROVIDES SUPPORT POLICIES FOR COLLEGE STUDENT ENTREPRENEURS	0.719	0.716	
E2 THE GOVERNMENT HAS SIMPLIFIED THE APPROVAL PROCESS FOR COLLEGE STUDENT COMPANIES TO APPLY FOR REGISTRATION	0.654	0.748	
E3 THE GOVERNMENT PROVIDES SKILLS TRAINING FOR COLLEGE STUDENTS TO START THEIR OWN BUSINESSES	0.570	0.787	0.809
E4 THE GOVERNMENT HAS STRENGTHENED THE PROTECTION OF INTELLECTUAL PROPERTY RIGHTS	0.585	0.780	
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F3 I THINK EVEN IF I ENCOUNTER DIFFICULTIES, I WILL CHOOSE TO CONTINUE TO START A BUSINESS	0.623	0.760	

Defining variables

According to the theoretical analysis and research hypothesis, the influencing factors of entrepreneurship intention can be summarized as five levels: graduate students, colleges, families, society, and the government. From Figure 2, it can be seen that for each variable, entrepreneurship intention is the dependent variable, and the variable name is business. The variables of the other five levels are independent variables.

Figure 2: Data Variables

	Name	Type	Width	Decimals	Label	Values
1	Q1	Numeric	8	0	Gender	{1, Man}...
2	Q2	Numeric	8	0	Age	{1, Under 20...
3	Q3	Numeric	8	0	Grade	{1, Freshma...
4	Q4	Numeric	8	0	Professional background	{1, Science ...
5	Q5	Numeric	8	0	Have you ever had an entrepreneurial experience	{1, Yes}...
6	Q6	Numeric	8	0	Have any work experience	{1, Yes}...
7	A1	Numeric	8	0	A1 I think my self-learning ability is very high	{1, 1}...
8	A2	Numeric	8	0	A2 I think I have a high degree of self-confidence	{1, 1}...
9	A3	Numeric	8	0	A3 I think I can analyze and consider problems calmly and maturely	{1, 1}...
10	A4	Numeric	8	0	A4 I think I have a strong sense of professionalism and responsibility	{1, 1}...
11	A5	Numeric	8	0	A5 I think I have a strong desire to start a business	{1, 1}...
12	A6	Numeric	8	0	A6 I think I have organization and leadership	{1, 1}...
13	A7	Numeric	8	0	A7 I think I have the ability to take risks	{1, 1}...
14	B1	Numeric	8	0	B1 I think the school provides necessary training for college students to start a business	{1, 1}...
15	B2	Numeric	8	0	B2 I think the entrepreneurship courses on campus will help entrepreneurs succeed	{1, 1}...
16	B3	Numeric	8	0	B3 I think the school provides good service guidance for college students	{1, 1}...
17	B4	Numeric	8	0	B4 I think the improvement of college education system is helpful to entrepreneurs	{1, 1}...
18	B5	Numeric	8	0	B5 I think there is a good atmosphere of innovation and entrepreneurship in the university	{1, 1}...
19	B6	Numeric	8	0	B6 The school regularly arranges students to participate in entrepreneurship training in the company	{1, 1}...
20	B7	Numeric	8	0	B7 I think the school has a series of policies to support entrepreneurship	{1, 1}...
21	C1	Numeric	8	0	C1 I have relatives and friends who have succeeded in starting a business	{1, 1}...
22	C2	Numeric	8	0	C2 I think family encouragement is very important for college students to start a business	{1, 1}...
23	C3	Numeric	8	0	C3 I think the funding for the first startup comes mainly from the family	{1, 1}...
24	D1	Numeric	8	0	D1 I think the strong entrepreneurial atmosphere in society helps college students to start their ow...	{1, 1}...
25	D2	Numeric	8	0	D2 I think a good market environment can improve the enthusiasm of college students	{1, 1}...
26	D3	Numeric	8	0	D3 I think the society's tolerance attitude towards college students' entrepreneurship failure will hel...	{1, 1}...
27	E1	Numeric	8	0	E1 The government provides support policies for college student entrepreneurs	{1, 1}...
28	E2	Numeric	8	0	E2 The government has simplified the approval process for college student companies to apply for ...	{1, 1}...
29	E3	Numeric	8	0	E3 The government provides skills training for college students to start their own businesses	{1, 1}...
30	E4	Numeric	8	0	E4 The government has strengthened the protection of intellectual property rights	{1, 1}...
31	F1	Numeric	8	0	F1 I think I will start a business	{1, 1}...
32	F2	Numeric	8	0	F2 I thought about running my own company	{1, 1}...
33	F3	Numeric	8	0	F3 I think even if I encounter difficulties, I will choose to continue to start a business	{1, 1}...
34	Student	Numeric	6	2		None
35	College	Numeric	6	2		None
36	Family	Numeric	6	2		None
37	Society	Numeric	6	2		None
38	Goverment	Numeric	6	2		None
39	Business	Numeric	6	2		None

RESULTS AND FINDINGS

Correlation analysis between different variables and entrepreneurship intention

From the above table, correlation analysis can be used for studying the correlation between graduate students and college, family, social, and government factors, and entrepreneurship intentions. Pearson correlation coefficient was used to indicate the intensity of correlation. The concrete analysis found that graduate students, family, society, government, and entrepreneurship willingness are all significant. The correlation coefficient values were 0.335, 0.437, 0.362, 0.433, and 0.540, respectively. All correlation coefficient values were greater than 0, which means that there was a positive correlation between graduate students and college factors, family factors, social factors, government factors, and entrepreneurship intentions.

Table 3: Pearson Correlation

	Mean	Std. Deviation	Student	College	Family	Society	Goverm ent	Business
Student	3.217	0.943	one					
College	3.247	0.921	0.335**	one				
Family	3.284	1.058	0.437**	0.452**	one			
Society	3.256	1.001	0.362**	0.312**	0.417**	one		
Goverment	3.319	0.872	0.433**	0.341**	0.304**	0.500**	one	
Business	3.315	0.923	0.540**	0.479**	0.520**	0.544**	0.500**	one

* p <0.05 ** p <0.01

Regression analysis of the influence of different variables on entrepreneurship intention.

Table 4: Hierarchical regression

	Model1	Model2
constant	1.128** -2.636	-0.209 (-0.599)
Gender	-0.043 (-0.367)	-0.013 (-0.139)
Age	0.204 -1.75	0.04 -0.438
Grade	0.262** -4.593	0.139** -3.026
Professional background	0.352** -5.827	0.163** -3.3
Have you ever had an entrepreneurial experience	0.292* -2.464	0.066 -0.71
Have any work experience	0.056 -0.486	-0.073 (-0.792)
Student		0.214** -3.755
College		0.154** -2.689
Family		0.142** -2.663
Society		0.172** -3.069
Goverment		0.171** -2.67
N	198	198
R^2	0.255	0.571
Adjusted R^2	0.232	0.546
F	*F (6,191)=10.904, p =0.000*	*F (11,186)=22.518, p =0.000*
$\triangle R^2$	0.255	0.316
△ F	*F (6,191)=10.904, p =0.000*	*F (5,186)=27.409, p =0.000*

DV： Business

* p <0.05 ** p <0.01 ()= t

Hierarchical regression was used for studying the change of the model when the independent variable (x) increased. This is generally used for testing the stability of the model, and the mediation or adjustment effect. As the above table shows, this hierarchical regression analysis involves two models. The independent variables in the model were gender, age, grade, professional background, entrepreneurship experience, and work experience. Secondly, based on the first model, the graduate students, and college, family, social, and government factors were added. The relevant variable in this model was entrepreneurship intention.

The above table shows that gender, age, grade, professional background, entrepreneurship experience, and work experience were used as independent variables, while entrepreneurship intention was used as the dependent variables for linear regression analysis. The R-square value of the model was 0.255, indicating that gender, age, grade, professional background, and entrepreneurship experience, and working experience can explain 25.5% of the change of entrepreneurship intention. When the model was tested using F-test, the model was found to have passed the F-test ($F = 10.904$, $P < 0.05$), indicating that gender, age, grade, professional background, entrepreneurship experience, and work experience had at least one influence on entrepreneurship intention. The formula for the model can be expressed as follows: entrepreneurship intention = 1.128-0.043 * gender+0.204 * age+0.0.

The gender regression coefficient was -0.043, and the difference was not significant ($t = -0.367$, $P = 0.714 > 0.05$), which indicates that gender does not influence entrepreneurship intention. The regression coefficient of age was 0.204, and the difference was not significant ($t = 1.750$, $P = 0.082 > 0.05$), which indicates that age does not influence entrepreneurship intention. The regression coefficient of the rank was 0.262, which is significant ($t = 4.593$, $P = 0.000 < 0.01$), meaning that the rank will have a significantly positive impact on entrepreneurship intention. The regression coefficient of major was 0.352, which is significant ($t = 5.827$, $P = 0.000 < 0.01$), which indicates that major background has a significantly positive impact on entrepreneurship intention. The regression coefficient of entrepreneurship experience was 0.292, which is significant ($t = 2.464$, $P = 0.015 < 0.05$), meaning that entrepreneurship experience has a significantly positive impact on entrepreneurship intention. The regression coefficient of work experience was 0.056, which is not significant ($t = 0.486$, $P = 0.627 > 0.05$), and indicates that work experience does not influence entrepreneurship intention.

Conclusion and analysis show that the professional background of graduate students and whether or not they have any entrepreneurship experience will have a significantly positive impact on entrepreneurship intention, while gender, age, and work experience do not influence entrepreneurship intention.

With the second model, based on model 1, and following the addition of the factors of graduate students, colleges, families, society, and the government, the F value changed significantly ($P < 0.05$), meaning that graduate students, colleges, families, society, and the government can explain the model. In addition, the R-square value increased from 0.255 to 0.571, meaning that graduate students, and college, family, social, and government factors can explain 31.6% of entrepreneurship intentions. More specifically, the regression coefficient of graduate students was

0.214, which is significant ($t = 3.755$, $P = 0.000 < 0.01$), meaning that graduate students will have a significantly positive impact on entrepreneurship intention.

The regression coefficient of college factors was 0.154, which is significant ($t = 2.689$, $P = 0.008 < 0.01$), meaning that the college factor will have a significantly positive impact on entrepreneurship intention.

The regression coefficient of family factors was 0.142, which is significant ($t = 2.663$, $P = 0.008 < 0.01$), meaning that family factors will have a significantly positive impact on entrepreneurship intention.

The regression coefficient of social factors was 0.172, which is significant ($t = 3.069$, $P = 0.002 < 0.01$), meaning that social factors will have a significantly positive impact on entrepreneurship intention.

The regression coefficient of government factors was 0.171, which is significant ($t = 2.670$, $P = 0.008 < 0.01$), meaning that government factors will have a significantly positive impact on entrepreneurship intention.

DISCUSSION AND CONCLUSION

The entrepreneurship intentions of graduate students are the result of both internal and external factors.

(1) Background factors, including grade, professional background, and entrepreneurship experience, have a significantly positive impact on entrepreneurship intention, while gender, age, and work experience do not influence entrepreneurship intention.

(2) Graduate students, college factors, family factors, social factors, and government factors all have a significantly positive impact on entrepreneurship intention.

CONCLUSION

Regarding innovation and entrepreneurship education, it is suggested that colleges strengthen their combination of theory and practice while also establishing a platform for innovation and entrepreneurship education practice.

The multiple-party coordination of colleges, families, societies, and government is also suggested as a means of providing entrepreneurship support, particularly for local government, targeted towards the innovation and entrepreneurship of graduate students, and relevant support policy can be implemented to ease the entrepreneurship bottleneck of capital and technology.

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JD SUPPLY CHAIN MANAGEMENT INNOVATION —TAKE THE SUPPLY CHAIN FINANCE BUSINESS AS AN EXAMPLE

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ABSTRACT

With the gradual deepening of the international division of labor, it has become a necessary way for enterprises to promote inter-industry and intra-industry cooperation by connecting core enterprises with upstream and downstream enterprises on the base of supply chain. However, the supply chain itself has some factors restricting its development due to the large gap among the status of different enterprises on the chain. Besides, the core enterprises on the chain often use their own advantageous position to encroach on upstream and downstream enterprises in terms of price, account period, payment methods, etc., that is, the interests of small and medium-sized micro enterprises on the chain, making the upstream and downstream enterprises have an excessively long account period. The third factor includes serious problems such as credit accounting. In recent years, the state and governments at all levels have successively issued a number of policies to regulate and promote the development of supply chain finance, thus promoting the supply chain industry. Based on this background, this paper takes JD Finance as a case study. And on the basis of introducing the financial innovation model of JD Financial Supply Chain, the overall analysis of the advantages of JD Financial Supply Chain Financial Model is conducted, the merits are summarized, and the relevant development opinions and suggestions are given by drawing on the development experience.

Keywords: JD.com; Supply Chain; Finance; Innovation

INTRODUCTION OF JD.COM'S SUPPLY CHAIN FINANCIAL BUSINESS

1.1 Introduction of JD finance

Since the establishment of JD Finance, its supply chain financial business has gradually shifted from providing self-operated financial services to providing financial services with financial technology as the core. In the first quarter of 2018, JD Finance achieved a net profit of 21.4 million yuan, while in 2017, JD Finance reached 1.652 billion yuan and net profit was -2.087 billion yuan ce's revenue (Li Yating, Wang Xiao, 2020). This also means that JD Finance has successfully achieved a turnaround after undergoing restructuring.

JD.com currently has financial licenses including factoring, loans and payments, etc., and has been gradually expanding its business territory. Besides, it has established eleven major business sectors, namely corporate finance, consumer finance, payment, securities, crowd-funding, insurance, wealth management, rural finance, financial technology, overseas business and urban computing, of which consumer finance is its current main business income. According to JD financial report, in 2017, jd.com's consumer finance, payment and corporate finance business had revenues of 5.527 billion yuan, 1.785 billion yuan and 1.527 billion yuan, respectively. The contribution rate to the group's revenue was 53.48%, 17.27% and 14.78% respectively(Du Jun et al.,, 2019).

1.2 The traditional model of JD.com's supply chain finance

JD.com's initial supply chain financial model was the traditional "bank-enterprise cooperation" model. JD.com is a credit bridge between financing companies and banks, dominating the model. The specific model classification is basically consistent with the previous discussion, including accounts receivable financing, electronic order financing, electronic warehouse receipt financing and entrusted loan financing proposed by JD Finance.

1.2.1 Accounts receivable financinc mode

The participants in this model include JD Finance, commercial banks and suppliers, that is, the three main entities of borrowing enterprises. After borrowing enterprise supplies the commodity, the accounts receivable are generated, and the borrowing enterprise can use the accounts receivable certificate as a pledge for the loan to the bank (Weng Xuanjun, Long Guixian, 2021). The specific process (see Figure 1-1) is as follows:

a. After JD.com purchases goods from upstream suppliers (borrowing enterprises) and promises to receive them, the borrowing enterprise can obtain a receivable document, which can be used as a certificate to prove its claim;

b. The borrowing enterprise submits the corresponding financing application to JD.com;

c. JD.com communicates the financing application of the borrowing enterprise with the commercial bank, and then the three parties jointly sign the financing agreement;

d. JD.com transfers the accounts receivable of the borrowing enterprise (supplier) to the cooperative bank as a certificate of creditor's rights;

e. The bank conducts the relevant qualification review according to the materials. After the review is passed, the bank will provide funds to the supplier according to the allowed application amount.

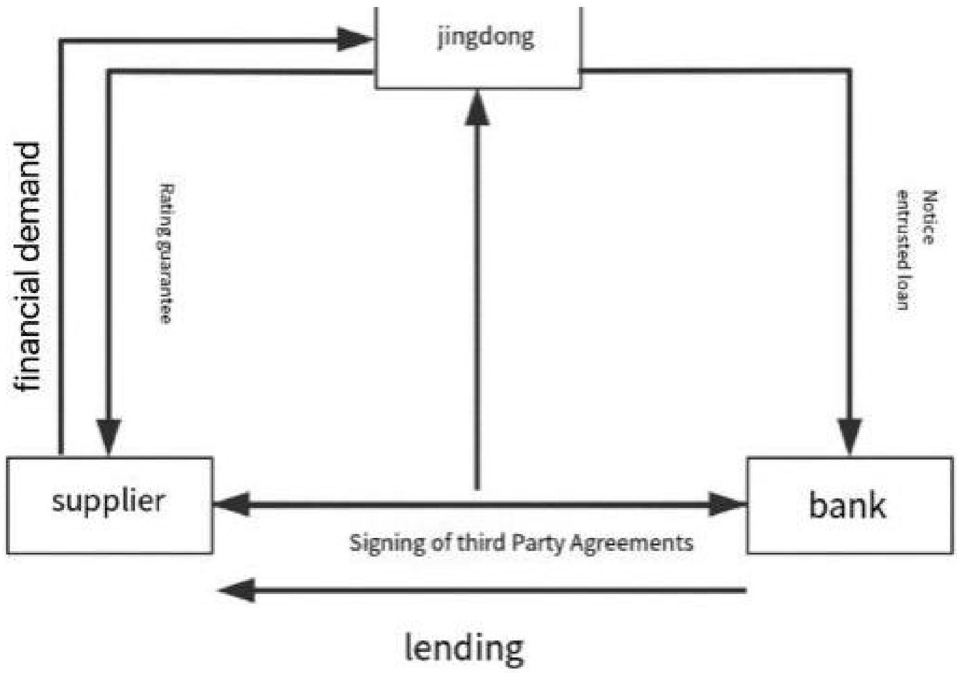

Figure 1-1 Flow chart of JD.com's accounts receivable financing model

1.2.2 Electronic order financing model

The electronic order financing model is consistent with the process described in the third subsection of Chapter 2, and will not be repeated here. The specific process is shown in Figure 1-2.

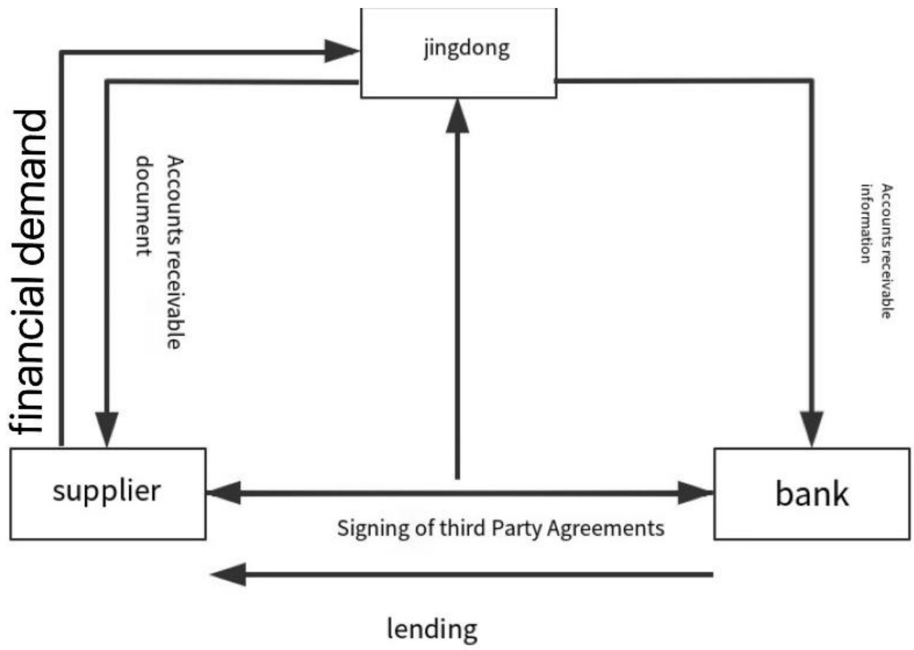

Figure 1 - 2 FLOWCHART OF JD Electronic Order Financing Model

1.2.3 Electronic warehouse receipt financing model

The electronic warehouse receipt financing model is consistent with the process described in the third subsection of Chapter 2 and will not be repeated. The specific process is shown in Figure 1-3.

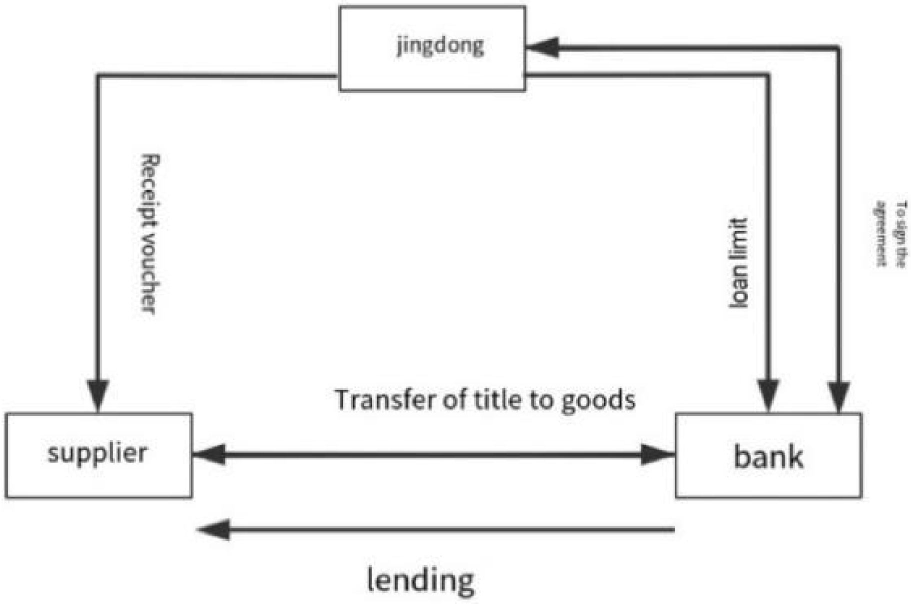

Figure 1 - 3 Flow chart of JD electronic warehouse receipt financing model

1.2.4 Entrusted loan financing mode

The entrusted loan model refers to jd.com entrusting its own funds to banks and allowing banks to use the funds to provide financing services to upstream and downstream enterprises in the supply chain.[49]29 The specific process (see Figure 1-4) is as follows:

a. JD.com conducts a credit assessment on the upstream and downstream enterprises that submit financing needs to determine whether their current operating conditions and future revenue forecasts are eligible for financing;

b. The borrowing enterprise submits the corresponding financing application to JD.com;

c. JD.com communicates the financing application of the borrowing enterprise to the commercial bank, and then the three parties jointly sign the financing agreement;

d. JD.com submits an application for entrusted loans from borrowing enterprises to commercial banks;

e. The bank reviews the qualifications of the financing enterprise and provides funds to it according to the quota after passing the review(Zhang Ke, 2019).

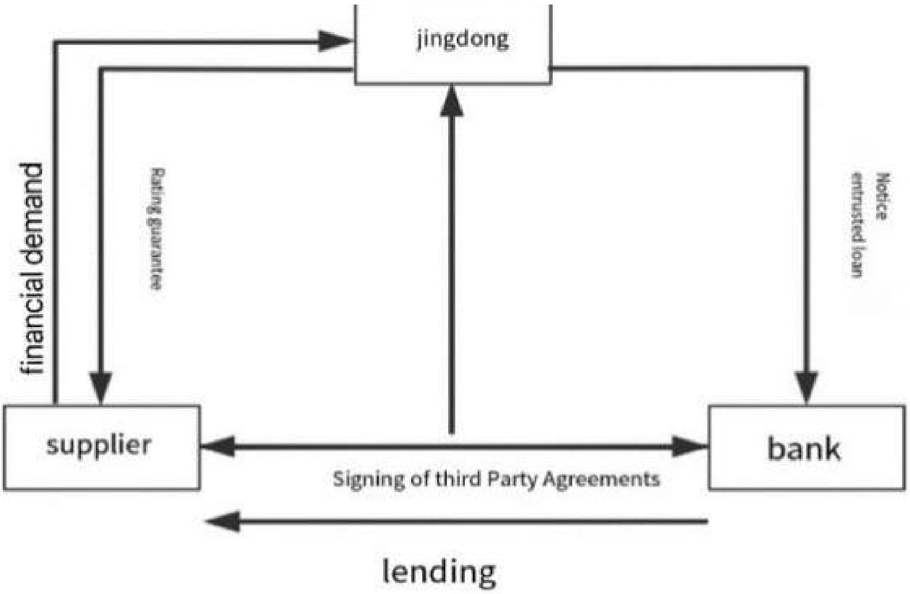

Figure 1- 4 Flow chart of JD.com's entrusted loan financing model

1.3 JD.COM'S supply chain financial innovation products

In the context of the growing development of the Internet and big data, JD.com is also gradually exploring more efficient financing models. The development of Internet supply chain finance, coupled with JD.com's increasingly powerful information advantages and capital advantages, has been able to directly provide upstream and downstream small and medium-sized enterprises with the financing services without the help of banks. This section will introduce three main innovative products, namely "Jingbaobei", "Beijing Small Loan" and movable property financing(Liu Zhitao, 2019).

1.3.1 Kyohobe

"Jingbaobei" is the first online financing product launched by JD Finance. Its biggest feature is that it is fast and efficient, and it can achieve a fast arrival in three minutes. Specifically, This product mainly provides financing services for self-employed suppliers of jd.com platform. During the operation, self-employed suppliers collect financial data such as orders and sales, and rely on the credit system to carry out credit rating on suppliers. The credit rating is divided into five levels. The first three level suppliers have financing qualifications. After receiving the enterprise financing application, the system will automatically review the enterprise credit. Those meeting the financing conditions can use their own funds to provide financing services. The whole process needs no more than three minutes. The financing period is up to 90 days, and the minimum annualization rate is less than 10%, which is very convenient and preferential.

The specific process (see Figure 1-5) is as follows:

a. JD.com signs a series of purchase orders with self-operated suppliers (borrowing enterprises), and the borrowing enterprises generate corresponding accounts receivable;

b. The borrowing enterprise uploads the relevant materials required for the review to JD Finance, conducts the operation and submits the corresponding financing application, and the two parties sign a financing agreement after the review is passed;

c. Based on the data of the borrowing enterprise in the background of Jingdong Mall, JD Finance uses an intelligent model to automatically calculate the loan amount and feedback to Jingdong Mall;

d. The borrowing enterprise that obtains the loan line uses accounts payable or purchase order vouchers for financing. The system automatically reviews and provides funds within the scope obtained after the risk control mechanism is calculated;

e. After completing the procurement task, Jingdong Mall delivers accounts receivable to the borrowing enterprise (supplier), and the enterprise independently formulates a repayment plan within the specified period of time or is automatically deducted by JD Finance for repayment.

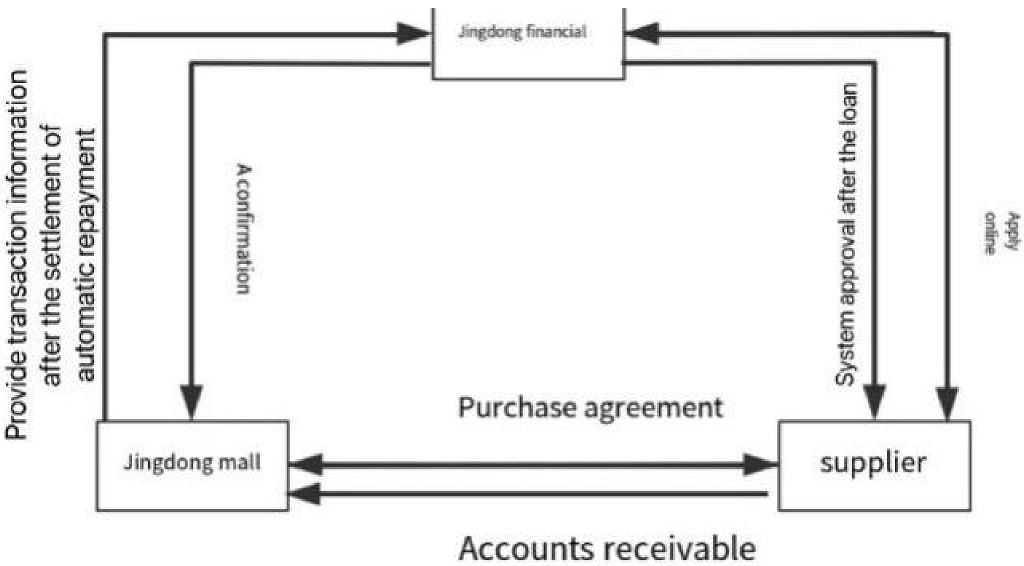

Figure 1 - 5 "Jingbaobei" financing flow chart

1.3.2 Beijing small loan

In the above introduction, it is pointed out that "Jingbaobei" is mainly for self-operated suppliers on the Jingdong platform.In fact, in addition to the self-operated suppliers on the Jingdong platform, there is also a type of platform merchant. "Beijing Small Loan" is a product developed to meet the financing needs of such merchants. Most of these businesses are small and medium-sized enterprises. The demand for funds in the early stage of development is higher, and it is more difficult to obtain financing. By collecting transaction data, inventory and other information of these merchants, JD Finance develops a corresponding credit assessment model, determines their credit status, and provides financing services to these merchants according to their differentiated needs. There are three main business models, namely order financing, early collection and credit loans. The specific process (see Figure 1-6) is as follows:

a. Platform merchants (borrowing enterprises) with capital needs submit corresponding financing applications to JD Finance;

b. JD Finance uses its own credit rating system to review the borrowing enterprise. After passing the review, it will give the corresponding credit line;

c. After the financing application is approved, the borrowing enterprise determines the loan amount, term, etc. according to obtained amount;

d. According to needs of the borrowing enterprise, JD Finance will send the funds to the JD wallet account of the borrowing enterprise;

e. Borrowing enterprises can choose to repay in advance or automatically according to their own situation (all need to use JD wallet operation).

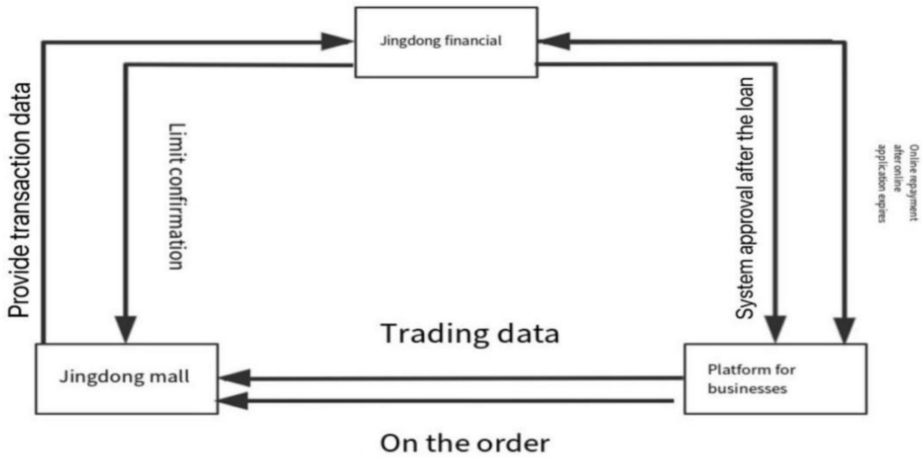

Figure 1 - 6 "Beijing Small Loan" financing flow chart

1.3.3 Movable property financing

Jingdong's "movable property financing" innovation model comes from the traditional inventory financing model. Its initial target customer group is large enterprises, and the subject matter is mainly bulk commodities. The reason why JD Finance dares to boldly innovate comes from its own strong logistics system, which requires financing companies to transfer warehouses to warehousing institutions that cooperate with JD.com. JD.com itself has JD Logistics and partnerships with 12 warehousing companies, covering clothing, home appliances, automobiles and so on. JD Finance can grasp the dynamics of the entire supply chain link, obtain corresponding data and information from it, thus effectively reducing risks. At present, there are three models of "movable property financing", namely advance financing, procurement financing and spot financing. Among them, advance payment financing and procurement financing are credit loans. Spot financing is a pledge loan. The borrowing term of "movable property financing" is 1-90 days, and the maximum amount can reach 30 million, which can complete the approval and lending within 6 working days. Its main features are a wide range of services and a large amount of funds, which is conducive to improving the turnover efficiency of enterprises.

The specific process (see Figure 1-7) is as follows:

a. The borrowing enterprise submits an application to JD Finance, uploads the relevant materials required for financing business, and binds the enterprise account of JD wallet;

b. After passing the review, the borrowing enterprise will move the inventory used as pledge to JD Logistics or cooperative warehousing in accordance with the agreement;

c. Jingdong Logistics or Cooperative Warehousing Company checks the information and inventory list provided by the borrowing enterprise according to the plan, and the Jingdong Financial Valuation Model uses the commodity price information to calculate the pledge value and determine the loan amount;

d. After the online review is completed, the fund within the allowable limit is issued to the borrowing enterprise;

e. During this period, if the goods need to be sold, JD Logistics or cooperative warehousing companies need to provide dropshipping services and update the pledge list information in real time on the JD financial platform;

f. When due, the borrowing enterprise can choose to repay in advance or on schedule.

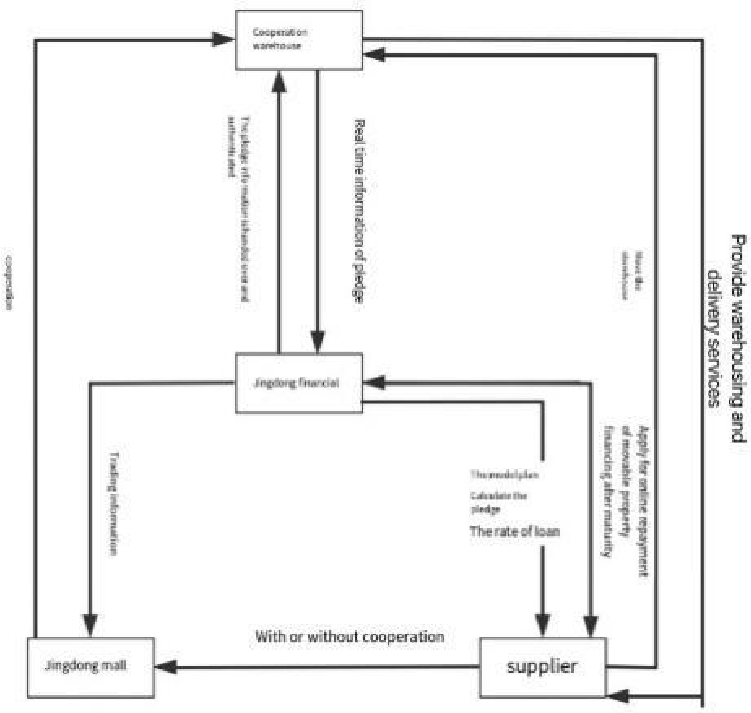

Figure 1 - 7 Movable Property Financing Flowchart

JD.COM SUPPLY CHAIN FINANCE CASE STUDY

2.1 Analysis of JD.com's financial innovation products in the supply chain

2.1.1 "Jing bao bei" product analysis

The product is the first financial product launched by Jingdong to determine its loans by relying on its funds and credit rating system. The main service object is

Jingdong's self-operated suppliers. The loan review does not involve asset mortgage or pledge. It can be lent only by relying on the credit rating of the enterprise, and the loan speed is faster. The advantages of this product also include the following:

（1）Whitelist access mechanism. As mentioned above, JD Finance divides the credit rating of enterprises into five grades, and only the first three grades of enterprises can successfully pass the qualification review and realize automatic lending, which can also reduce the risk of payment collection;

（2）Lending rates are lower. As the first financial innovation product launched by JD Finance, its minimum annual interest rate is less than 10%, which is more advantageous than other commercial loans and other supply chain financial products.

Although the "Jingbaobei" financing amount is large and the lending speed is fast, it has some obvious disadvantages, that is, the service threshold is higher, the service object is more restrictive, and it must be a Jingdong self-operated supplier to enjoy the financing service.

In addition, in terms of risk control, the advantages of the risk control mechanism of Jingbaobei are reflected in the following two aspects:

（1）The scope of the lending group is limited to the self-operated suppliers of Jingdong Mall. Therefore, the transaction records generated by the financing enterprises can ensure authenticity and avoid corporate fraud;

（2）In the cooperation between Jingdong and self-operated suppliers, Jingdong sits firmly in the central and first-class position of the supply chain. If the financing enterprise defaults, Jingdong can control its store or the materials in its warehouse for the first time. If the financing enterprise continues to default, Jingdong has enough discourse rights to stop cooperation with the financing enterprise and repay the mortgage with the goods, so that the enterprise will become the biggest loser. Sufficient voice and status can also greatly reduce the default risk of financing enterprises.

2.1.2 Product analysis of "beijing small loan"

As a supplementary product developed by JD Finance, the main service object of "Beijing Small Loan" is platform merchants to meet the financing needs of different enterprises of self-operated suppliers and platform merchants in Jingdong Mall. The product is similar to "Jingbaobei", which also uses the credit rating of JD Finance as the basis for lending. It is not necessary to pledge financial assets such as accounts receivable. And compared with "Jingbaobei", "Jingbaobei" can better meet the diversified financing needs of small and micro enterprises on the platform. The advantages of this product include the following:

（1）Zero mortgages. For most of the platform merchants on the Jingdong Mall, the scale is small, the development is still in its infancy, and the funds and materials are relatively small. "Beijing small loan" only needs business data and credit background to obtain financing, so it is welcomed by small and medium-sized enterprises;

（2）The financing process is quick and easy. As an online supply chain financial product, the entire process of "Beijing Small Loan" is completed online, and the algorithm written by the background of JD Finance automatically approves and lends money, which can obtain loans more quickly;

（3）Preferential interest rates plus multiple repayment options. The annual interest rate of "Beijing small loans" is mostly between 12% and 14%, and the maximum is not more than 24%, while most other financial institutions are higher than 20%. In contrast, the interest rate of "Beijing Small Loan" is more favorable; And financing enterprises can choose early repayment or automatic repayment when repaying, which increases the flexibility of repayment and makes the product more attractive.

In terms of risk control, the risk control mechanism of Beijing Small Loan is similar to that of Beijing Baobei, which is based on historical transaction data to establish a credit rating model. The loan amount of different merchants is strictly controlled, so that the loan amount is within its future income range. In this way, the financing enterprise can accept and have a certain ability to repay the loan, which will not be repeated here.

2.1.3 Analysis of "movable property financing" products

As mentioned above, this model is an improvement on the traditional inventory financing model, which grants credit to enterprises by using JD Finance's information technology and commodity data to assess the collateral value, and the model also relies on JD.com's own strong logistics management system to effectively reduce the cost of supervision of commodities. Compared with the previous two types of products, its service scope has been expanded to enterprises outside jd.com's supply chain. The advantages of this product include the following:

（1）Intelligent pledge automatic approval system. The strong data background of JD Finance has laid a good foundation for its huge stock Keeping Unit (SKU) data volume, different types of goods, different SKUs, and their independent characteristics, thus making it easier to identify goods. JD Finance can use this to analyze the current price, historical price and fluctuation range of the commodity, intelligently value the product, and ensure the automatic approval pledge rate;

（2）Commodity regulation costs are low. JD Finance, JD Logistics and its warehousing enterprises work together to achieve intelligent dynamic monitoring of changes in commodities and lower regulatory costs;

（3）Dynamic adjustment of the collateral. JD Finance uses the method of updating the pledge list to allow the sale of pledged products, prevent the contradiction that there is no goods available for sale after the mortgage, revitalize the inventory of enterprises, and enterprises can use the sales proceeds of goods to repay loans, so as to improve the liquidity and profitability of enterprise goods (Liang Wei, 2020).

In terms of risk control, the flow of goods in the supply chain is very rapid and complex. Besides, it is easy to cause the data fraud, so the operation difficulty of the movable property financing model is relatively large (Li Rong et al., 2018), and the process is long. Therefore, the risk control of "movable property financing" focuses on ensuring authenticity, and reduces risk by comparing the changes in recorded data.

SUMMARY

Based on the introduction of the financial financing model and risk control of the Jingdong financial supply chain, this paper analyzes the characteristics of the innovative products of the Jingdong supply chain finance in detail , and analyzes the advantages of the financial supply chain financial model of the Jingdong financial supply chain as a whole. As one of the representative enterprises of the e-commerce platform, JD.com's business and model development are typical, so this article takes the small view as the big. Starting from these commonalities, and under the trend of network ecological development, the following general development suggestions are put forward for the supply chain management of e-commerce platform:

(1) Diversify the business structure and enhance the professional ability of the platform.

(2) Different institutions cooperate with each other to improve the degree of platformization of enterprises.

The development of the supply chain system is actually a relatively macro topic. Whether it is platformization, ecologicalization or digitization, etc., can be studied in detail and in-depth separately, and the concept of integration of industry and finance contained in ecologicalization is worth continuing. Research in depth. JD.com's innovation in supply chain management is still continuing. For example, the specific risk control model in the financing model of expanding business entities to non-platform merchants is also worthy of further study. Through these more detailed and directional studies, it is believed that the development of my country's e-commerce platform supply chain will definitely achieve better results.

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EDUCATION MANAGEMENT OF ASEAN INTERNATIONAL STUDENTS IN HIGHER VOCATIONAL COLLEGES

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ABSTRACT

As a positive action of China to promote the construction of a "community of shared future for mankind", the "the Belt and Road" is an important support for vocational education to expand opening-up and promote international exchanges at a deeper and higher level. The cultivation of overseas students is an important part of China ASEAN vocational education cooperation and exchange. However, due to the imperfect management system of students in higher vocational colleges, the lack of professional and professional quality of overseas students' education management team, and the neglect of the guidance for overseas students' cultural adaptation and psychological debugging, there are still many problems in the management of overseas students' education. By analyzing the problems existing in the educational management of ASEAN overseas students in higher vocational colleges, and putting forward the corresponding solutions, we can effectively improve the educational management level of higher vocational colleges, improve the quality of talent training, and promote the internationalization, quality and efficiency of vocational education.

Keywords: Higher Vocational Colleges,International students in China,Education management

INTRODUCTION

As a positive action of China to promote the construction of a "community of shared future for mankind", the "the Belt and Road" is an important support for vocational education to expand opening-up and promote international exchanges at a deeper and higher level. ASEAN is the priority direction and important area of the "the Belt and Road" cooperation. Most countries are in the rising period of economic transformation and development, and there is a strong demand for technical talents.

Their domestic vocational educational resources can not meet the demand of economy and social development for technical talents, so they have focused on China and sent overseas students to Chinese vocational colleges to learn advanced technical skills.

The cultivation of overseas students is an important part of China ASEAN vocational education cooperation and exchange. ASEAN vocational education overseas students shoulder the mission of learning China's advanced technical skills, strengthening the cooperation and exchange between Vocational Colleges in China and ASEAN countries, and improving the internationalization level of ASEAN vocational education. By analyzing the problems existing in the educational management of ASEAN overseas students in higher vocational colleges, and putting forward the corresponding solutions, we can effectively improve the educational management level of higher vocational colleges, improve the quality of talent training, and promote the internationalization, quality and efficiency of vocational education.

With the continuous expansion of the scale of foreign students in China and the increasing pressure on the educational management of foreign students, there are great differences between the educational management concept of Chinese colleges and universities for foreign students and the culture of ASEAN countries. The methods of educational management are still relatively backward, and there are many deficiencies. This paper will start with the reform and innovation of overseas students' education management strategy, comprehensively and deeply analyze the current problems of ASEAN overseas students in education management, and put forward corresponding solutions.

PROBLEM STATEMENT

Through the results of questionnaire survey, interviews and data collection, it is found that the current problems in the educational management of overseas students from countries along the line are as follows.

2.1 The management system of overseas students in higher vocational colleges has not been improved

Among the several colleges and universities I visited, most of them implement a two-level management method of combining colleges and universities for the education of foreign students. At the school level, international exchange centers, foreign affairs offices and other foreign affairs departments are set up to be responsible for the enrollment, activity arrangement, certificate issuance and other work of international students; At the college level, it receives international students allocated by the school and arranges classes, and arranges for counselors to be responsible for the daily management of student dormitory allocation, life guidance, emergency handling and so on. Some colleges and universities are also divided into two parts at the college management level. When students first enter school, they are uniformly managed by the College of international education, and when students complete language learning and enter professional learning, they are taken over by the relevant professional colleges. Such a two-level management system seems to have a clear division of labor and perform their respective duties, but the reality is not optimistic. Specifically, the Foreign Affairs Department of the University and the secondary college jointly undertakes the daily management of foreign students, but the division of some rights and responsibilities is not clear, which is prone to duplication of work or mutual prevarication, reducing work efficiency. For some cross cutting work, there are often poor communication and different opinions, which may even lead to contradictions and conflicts, and hinder the promotion of international student education management.

Although in recent years, the vigorous promotion of the "the Belt and Road" policy and the rapid growth of the number of foreign students have made colleges and universities pay more attention to the education and management of foreign students, compared with domestic students, foreign students still belong to a small number of special groups, and the working ideas of the coordination and linkage of various departments in the school have not been transferred to the education and management of foreign students, resulting in a lot of obstacles in dealing with emergencies such as illness and discipline violations of foreign students, seriously affect the work process.

Similarly, due to the fact that domestic student management regulations cannot be simply applied to the management of foreign students, but the management system for foreign students is not yet perfect, some colleges and universities still regard foreign students as "guests" receiving services rather than objects of educational management. When foreign students are absent from work and violate discipline, they often maintain an attitude of being too tolerant or even directly ignored, which also has a negative impact on the educational management of domestic students to a certain extent.

2.2 The education management team of overseas students lacks professional and professional qualities

Compared with developed countries such as Europe and the United States, the internationalization of Vocational Education in China started late and the level is not high. The staffing problem of overseas students' education management team is particularly prominent. Especially with the rapid growth of the number of foreign students, and the traditional obsolete educational management ideas, the current international student education management team in Colleges and universities lacks professional and professional quality, which is mainly reflected in the insufficient number, low comprehensive quality, low foreign language level and so on.

From the perspective of several colleges and universities visited by the author, the vast majority of them arrange professional teachers, counselors and other part-time education and management of foreign students, and it is rare for schools with special personnel to be solely responsible for the affairs of foreign students. "Part-time" personnel often lack experience in foreign affairs management, and their poor foreign language level leads to poor communication with foreign students. In case of emergencies, the contradiction of "spare heart but insufficient strength" is concentrated, and the timeliness and effectiveness of education management are difficult to guarantee. The contradiction between supply and demand of managers' comprehensive quality and professional level is also worthy of attention. Often a counselor has to face dozens or even hundreds of foreign students from different countries, and the huge cultural differences increase the difficulty of management. The professionalization level of the management team of foreign students in most colleges and universities is not satisfactory. Not only has they not received relevant knowledge training such as management, psychology, cross-cultural communication, but also their foreign language level is uneven. They even know little about the key information such as the country of origin, preferences and taboos of foreign students. Generally speaking, the current university administrators' attention and recognition to the education of foreign students are generally not high.

2.3 Ignoring the guidance of cultural adaptation and psychological adjustment of foreign students

Culture shock (culture shock, culture shock) comes from the collision of two different cultures, which is a common phenomenon experienced by foreign students. The symptoms of physical discomfort, psychological anxiety, ideological confusion caused by it are more obvious among students who go abroad for the first time or have poor debugging ability. Taking Tongren Vocational and technical college where the author works as an example, most of the ASEAN students who come to China have never experienced going abroad. After arriving in China, the changes in the language environment, differences in living habits, and the distance between relatives and friends will inevitably bring strong panic and panic. How to adjust their state as soon as possible and integrate into and enjoy their study and life in China is the primary problem faced by overseas students. In addition to their own efforts, timely psychological counseling and cultural guidance can help foreign students adapt as soon as possible. However, according to the survey, the current educational management of foreign students in most colleges and universities is still concentrated on the level of daily affairs, rarely providing guidance on cultural adaptation and psychological debugging, and failing to play an active role in helping foreign students integrate into China.

RESEARCH METHODS

Strategies for improving the current situation of educational management of ASEAN overseas students in Higher Vocational Colleges under the background of "the Belt and Road".

At the moment of vigorously promoting the "the Belt and Road" initiative and accelerating the internationalization of vocational education, the traditional management mode of overseas students are far from meeting the practical needs. Therefore, improving the current situation of international student education management and improving the level of international student education management is a new topic facing the internationalization of higher vocational education. Through research, the author puts forward the following strategies to solve the problems, which can be used as a reference for higher vocational colleges to manage ASEAN overseas students in China.

3.1 Colleges and universities should provide necessary policy support and institutional guarantee

In the context of the "the Belt and Road" initiative, it is the mission of the internationalization of vocational education to cultivate overseas students who "know China", "friends China" and "love China" to spread Chinese stories and expand international influence. Colleges and universities should get rid of the constraints of the traditional concept of education and management of foreign students, interpret the work of foreign students on campus from a higher, deeper and broader perspective, and pay attention to strategic planning and overall planning. First of all, we should provide necessary policy support and institutional guarantee for the smooth development of overseas students' education management in the aspects of facility construction, personnel training, fund allocation, logistics support, etc. Secondly, we should build a systematic, standardized, mature and efficient management system, clarify the rights and responsibilities of all departments in the school in the education and management of foreign students in China, sort out the relationship between all departments, especially the foreign affairs department and the secondary college, and implement the enrollment registration, daily management, activity participation, foreign affairs handling, logistics support, graduation and departure of foreign students to the point and to the person, so as to prevent duplication of work or mutual prevarication, Improve work efficiency. Integrate the working concepts of "University Engineering" and "university educational administration" into the work of international students, emphasize that all departments pay attention to coordination and linkage on the basis of performing their respective duties, strengthen communication through holding regular meetings, establishing QQ and wechat working groups, timely exchange work progress, discuss working methods, and promote the sustainable development of international student education management mode.

3.2 Strive to build a professional and professional education management team for international students

First of all, pay attention to the selection and education training of overseas students' education managers. Clarify the post setting and personnel structure of the management team, eliminate the staff with low enthusiasm and insufficient ability in the existing team as soon as possible, and give priority to the teaching staff with high comprehensive quality and strong foreign language ability to undertake the front-line work. Carry out pre job training, master relevant knowledge and skills of pedagogy, management, psychology, cross-cultural communication, etc., and improve foreign language level and application ability. Organize management personnel to study abroad, learn advanced foreign student education and management methods, and investigate the local culture of the country of origin of foreign students, so as to ensure that the thoughts of education management personnel keep pace with the times and prepare conditions for "Empathy" in work. Secondly, we should improve the evaluation mechanism including student evaluation, peer review, daily evaluation and other ways, strengthen the evaluation of overseas students' education management team, and strengthen the sense of responsibility and mission of managers; Establish a reward and punishment and promotion mechanism to improve the enthusiasm and initiative of the team.

3.3 Strengthen the guidance of cultural and psychological adaptation of overseas students in China

Cultural and psychological adaptation is the premise and foundation of carrying out the educational management of foreign students and ensuring the work effect. We should give full play to the role of overseas student education managers and domestic students. Before the arrival of overseas students, understand the culture of the country of origin from multiple perspectives and channels, and be well aware of the differences with China in ideology and culture, education methods, religious beliefs, dietary preferences, etc; After arriving, international students should be given a certain space to adapt, and on the premise of fully respecting the differences between the two countries, they should help international students resolve the discomfort caused by differences, eliminate panic and helplessness, and speed up the integration of Chinese culture and Chinese life through interpretation, guidance, experience, communication and other means; "One-on-one" follow-up help people who are difficult to adapt, especially those who have difficulty in psychological adjustment, listen and persuade, and invite professionals to provide guidance and help when necessary.

3.4 Establish an all-round and three-dimensional education management mode under the guidance of the concept of "convergence"

It is the development trend of current international education to implement the educational management of "assimilation" for the group of foreign students in China. The educational management of "assimilation" does not ignore the differences between China and foreign countries, but "takes the cultural dimension as the basis", the process "has differences in the same", and realizes "moderate convergence". The educational management of "assimilation" is conducive to reducing teaching costs, improving the quality of education, and accelerating the sustainable and connotative development of the internationalization of higher education. Under this working concept, we should pay attention to the following points.

3.4.1 Establish and improve the standards and systems for the education and management of foreign students in China with reference to domestic students. Establish the awareness that "international students are the object of education management", and strictly require and standardize management in learning, life, discipline and other aspects. Improve the reward and punishment system for international students, and improve the initiative and enthusiasm of international students to restrain themselves and improve themselves by issuing scholarships, commending advanced models, and Punishing Violations of rules and disciplines; In view of the fact that some international students have poor economic conditions and under great pressure to study and live in China, we should build a funding system for international students, clarify funding standards, expand funding channels, and improve the effectiveness of our work.

3.4.2 Promote the participation and construction of the second classroom for foreign students. On the one hand, invite foreign students to join the organizations and societies of their own students, strengthen the exchanges between Chinese and foreign students in the activities, and help foreign students improve their Chinese level while understanding Chinese thought, feeling Chinese culture and understanding Chinese society; On the other hand, explore the operation mechanism suitable for the international student associations and organizations of our school, select and hire high-quality, capable and responsible personnel as instructors, do a good job in the investigation and analysis before each activity, minimize potential hidden dangers such as safety, and help international students achieve the goal of self-management and self enrichment.

3.4.3 Strengthen logistical support for international students. Establish the concept of "integration of management and service", investigate and seriously consider the actual situation and feedback of foreign students, improve the existing dormitory conditions, add a window for foreign students in the canteen, and add foreign language guidance in the library, so as to provide conditions for foreign students to live and study better in school.

CONCLUSION

Under the background of the "the Belt and Road" initiative and the internationalization of vocational education, the educational management of overseas students in China, especially those from ASEAN countries, is a new challenge faced by domestic colleges and universities. Colleges and universities should deepen their understanding of the educational management of foreign students, pay attention to the overall situation, plan as a whole, speed up the improvement of the current situation of the education management of foreign students from the aspects of policies, systems, personnel, etc., better guide foreign students to understand Chinese society, understand Chinese culture, and play their due role in the process of cultivating people who "know China", "friends China" and "love China".

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A STUDY ON THE DEVELOPMENT PATH OF SCHOOL AND ENTERPRISE COOPERATION IN HIGHER VOCATIONAL COLLEGES UNDER THE BACKGROUND OF NATIONAL VOCATIONAL EDUCATION REFORM

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ABSTRACT

The purpose of this study is to explore how to seize the reform opportunity and find a suitable path for the development of school enterprise cooperation in Higher Vocational Colleges under the background of national vocational education reform. This study uses descriptive qualitative analysis method, through literature search, analysis theory. Explore the problems existing in the current talent training mode of school enterprise cooperation in Higher Vocational Colleges: first of all, the strategic positioning of vocational colleges is not accurate, and there is no talent training mode in line with its own characteristics; Secondly, the form and content of school enterprise cooperation is relatively single, and the social service ability of vocational education is insufficient; Third, the rights and responsibilities of multiple subjects of school enterprise cooperation are not clear, and there is no unified and authoritative professional standards and institutional guarantee. Therefore,the conclusion of the study is that in the development path of school enterprise cooperation, it is necessary to clarify the strategic positioning of higher vocational colleges, highlight the brand and characteristics, and better serve the society and enterprises. Clarify the main responsibilities, and establish authoritative professional standards and institutional guarantees. To run modern vocational education in the new era well, based on the school enterprise cooperation talent training mode, all subjects should play their active roles in the process of school enterprise cooperation talent training, and jointly promote the long-term stable and orderly development of school enterprise cooperation.

Keywords: School and Enterprise Cooperation,Higher Vocational Colleges, National Vocational Education Reform

INTRODUCTION

Running education well is related to national development and the future of the nation. Deepening the reform of education, deepening the reform of talent development system and improving the quality of education have always been the mission of China in its development. On May 1st, 2022, the new 《vocational education law of the people's Republic of China》 came into force, marking the epoch-making reform and development of China's vocational education reform. China is a large manufacturing country, but the reality is that there is still a great imbalance between supply and demand, and there is still a lack of high-tech skilled talents and skilled workers with innovative capabilities. The students trained by higher vocational colleges cannot meet the social needs and adapt to the development of enterprises. How to deeply study the problems existing in the talent training mode of higher vocational colleges, grasp the opportunity of reform, seize and give play to their internal advantages, learn from the excellent school enterprise talent training mode in developed countries, seize the opportunity of vocational education reform, explore the talent training mode with Chinese characteristics in line with the development of Higher Vocational Colleges in China, promote the integration of industry and education, school enterprise cooperation, and promote the high-quality development of Vocational Education in higher vocational colleges, Make more and more high skilled talents.

2.Problems in the current talent training mode of school enterprise cooperation in Higher Vocational Colleges

2.1The strategic positioning of vocational colleges is not accurate, and the talent training mode in line with its own characteristics has not been formed

The school running idea of higher vocational education should be student-centered and market-oriented, and realize the high-quality development of Higher Vocational Colleges by adhering to the ability standard and characteristic development(Xu Guoqing,2017). However, the reality is that although the state is constantly changing and improving the relevant policies of vocational education, and constantly optimizing the top-level design, higher vocational colleges still pay little attention to it, do not actively seek change or passively accept it in the implementation process. The non active change of higher vocational colleges often leads to blindly following the trend, homogenizing development with peers and even lagging behind the development of market demand. On the one hand, from the perspective of strategic planning of higher vocational colleges, there is a lack of scientific and systematic strategic planning design and scheme, and the strategic positioning is not forward-looking. Higher vocational colleges are mostly run by local governments and industries, which are inseparable from local economic development and industrial development. However, due to the relatively single school running body, higher vocational colleges lack the awareness of competition and change. Each higher vocational college follows the trend in specialty setting and feature positioning, blindly imitating or copying the development mode of other peers, and does not combine the school situation of its own college, Lack of research on local economic and social development, industrial development planning and industrial talent demand. In addition, the ability to set up majors and serve local economic industries also lags behind market demand because of the lack of strategic positioning. Such problems will lead to the lag of the construction level of teachers. The inaccurate strategic positioning and the homogenization of talent training make higher vocational colleges lack interaction and adhesion in the school enterprise cooperation mode.

2.2The form and content of school enterprise cooperation are relatively single, and the social service ability of vocational education is insufficient.

In recent years, China has been constantly exploring the reform of vocational education. While learning the advanced educational concepts of the west, I hope to explore a characteristic vocational education development road suitable for China's national conditions. The combination of work and study, the integration of production and education, order classes, and modern apprenticeship are all based on the school enterprise cooperation talent training mode formed between vocational schools and enterprises. China has been trying to promote school enterprise cooperation. In recent years, school enterprise cooperation has been included as an important content in the policies and reform documents related to vocational education. However, the reality is: on the one hand, in the process of promoting vocational education, the school enterprise cooperation mode is a mere formality. Higher vocational colleges are more passive implementation of the government's policies on school enterprise cooperation. In the form of school enterprise cooperation, such as the combination of work and study, the integration of production and education, order classes, etc., it is only a simple task to complete, and has not taken the initiative to explore a diversified and long-term school enterprise cooperation mode in line with their own development. Higher vocational colleges can not meet the needs of enterprises for technical talents, which will lead to the low enthusiasm of enterprises to participate in the school enterprise cooperation, so that the school enterprise cooperation can not be promoted with high quality. On the other hand, the single form of school enterprise cooperation leads to the low level of students' overall technical skills, and students' entry into the job market does not have a competitive advantage. Enterprises, especially small, medium and micro enterprises, do not rely on vocational school education to a large extent. Enterprises can meet the needs of talents through their own pre job training(Yang Mengfei,2021). The two sides of schools and enterprises cannot interact and support benign, and the school enterprise cooperation also loses the most fundamental willingness to cooperate.

2.3The rights and responsibilities of the multiple subjects of school enterprise cooperation are not clear, and there is no unified and authoritative professional standard and system guarantee.

In recent years, China has repeatedly emphasized school enterprise cooperation and the integration of industry and education in the construction of vocational education system , and formulated the overall direction and objectives of school enterprise cooperation. In particular, 《the Vocational Education Law of the people's Republic of China》 which came into force on May 1, 2022, further regulates vocational education from the legal level. However, we must be soberly aware that in the process of promoting the development of vocational education, the improvement of ideas, goals and design schemes is not equal to institutional guarantee, nor is it equal to having clear rights and responsibilities(Zheng bin,2021). If we simply want to develop vocational education into what kind, we can develop into what kind, without in-depth study of the interaction process of multiple subjects and various social forces in the system construction. When the legal rights and responsibilities cannot be formed between schools, enterprises, society, government and other subjects, the theoretical explanation that only stays at the system level cannot activate the enthusiasm of multiple subjects.

3.Exploration on the development path of school enterprise cooperation mode in Higher Vocational Colleges

The combination of work and study, the integration of production and education, order classes, modern apprenticeship and other talent training concepts and models relying on school enterprise cooperation are all continuous exploration of talent training methods in vocational education reform in China. How can higher vocational colleges, based on their own situation, strengthen their own brands and characteristics, formulate differentiated strategic plans, combine the local industrial development layout, and explore a more diversified development path of school enterprise cooperation, constantly improve and clarify the main responsibilities in the process of school enterprise cooperation, activate the enthusiasm of multiple main bodies to participate in cooperation, and realize the healthy, stable and long-term development of school enterprise cooperation.

3.1Clarify the strategic positioning of higher vocational colleges, highlight the brand and characteristics, and better serve the society and enterprises.

With the continuous reform and development of Vocational Education in China, vocational education in higher vocational colleges has been further enriched and improved in content, orientation, form and status. 《The National Vocational Education Reform Implementation Plan 》 proposes that higher vocational colleges should serve the national strategy, face the region, focus on technology research and development and product upgrading of enterprises, especially small, medium-sized and micro enterprises, and cultivate high-quality technical and skilled professionals. The opinions of the Ministry of education and the Ministry of Finance on the implementation of the plan for the construction of high-level higher vocational schools and majors with Chinese characteristics put forward that it is necessary to "cultivate high-quality technical and skilled talents to meet the needs of high-end industries, and serve the Chinese industry to move towards the middle and high-end industries in the world". These proposals put forward new requirements for higher vocational colleges to run vocational education in the new era and serve the national strategy. When formulating strategic planning, higher vocational colleges should serve the national strategy and regional economy and society, develop and cultivate high-quality technical and skilled professionals. The school running concept of higher vocational colleges is a development concept that constantly adapts to the needs of enterprises and society. When preparing the strategic plan, higher vocational colleges should fully investigate the local economic and social development, industrial development planning, industrial talent demand, integrate into the regional economic and social development, and realize the consistency between the strategic plan of Higher Vocational Colleges and the regional economic, social and industrial development. In addition, specialty construction and teaching staff construction are the core of strategic planning. In the final analysis, the characteristics and core values of a school are still reflected in the level of professional construction(Zhang Feng,2017). In professional planning and construction, we should not blindly follow the trend, assimilate and develop, but closely combine the core majors of colleges and universities, combine the integration of production and education, and local economic characteristics, so as to optimize and strengthen the characteristic advantageous majors, so as to highlight the brand and characteristics of the school. Teachers are the main force to promote the reform and development of higher vocational colleges. They have a lasting endogenous power and are the first resource to support and develop vocational education. Plan to improve the professional level of teachers, continue to introduce teachers who are in short supply of majors and emerging business types, introduce or hire masters and craftsmen from industry enterprises, establish a teacher professional training system, make career planning and clarify the direction, encourage teachers to enter industry enterprises and production lines, and achieve a higher level of "double qualified" teacher team construction.

3.2Clarify the main responsibilities, and establish authoritative professional standards and institutional guarantees.

China is constantly advancing on the path of vocational education reform. Higher vocational colleges have also made many beneficial explorations in the talent training mode of school enterprise cooperation. "Order class", work study combination, post practice and modern apprenticeship are the practical achievements of Higher Vocational Colleges in the school enterprise cooperation mode. However, in order to achieve long-term, stable and high-quality development of school enterprise cooperation, in addition to the goal orientation and top-level design at the national level, what is more important is how to clarify their main responsibilities among enterprises, society, government, schools, teachers, students, parents and other subjects, stimulate the participation and interaction of various subjects, especially how to establish authoritative professional standards and institutional guarantees between schools and enterprises to serve the talent training mode of school enterprise cooperation, It needs the joint exploration of schools, enterprises and society. On the one hand, government guidance still plays an important role. According to the characteristics of local economic development and industrial layout, reward and support will be given in policies, and normative terms will be used to restrict the actions and inactions of schools and enterprises. In a sense, school enterprise cooperation is the cooperation between two organizations with different attributes, and it is the link between for-profit organizations and non-profit organizations(Pan Jianhua,2017). Therefore, from the perspective of institutional security, the government should play a guiding, regulating and supervising role between schools and enterprises. The elements of cooperation can be standardized and established from the system, including cooperation matters, cooperation rules, division of rights and responsibilities, etc., to ensure the continuation of cooperation. On the other hand, the training of school enterprise cooperation talents involves school education and enterprise practice and training. The standards of school professional teachers and the rights and responsibilities of enterprise masters cannot be ignored. Higher vocational colleges need to have strict management and assessment standards for teachers to improve their quality. At the same time, enterprises must also establish a standardized enterprise master system, clarify the qualifications, responsibilities, powers, treatment and other contents of enterprise masters, and establish a stable and long-term enterprise master team.

CONCLUSION

The national vocational education reform has made the type orientation of vocational education clear:“ vocational education and general education are two different types of education, with equal importance”. The talent training mode based on school enterprise cooperation has also been constantly enriched and improved in the reform of in-service education. To run modern vocational education in the new era well, higher vocational colleges rely on national strategies, face the region, find their own strategic positioning to better serve social enterprises, highlight brand and professional characteristics, improve professional ability construction, establish and enrich the content of school enterprise cooperation, and constantly improve the ability and quality of professional teachers. Under the guidance of the government, establish professional standards with clear rights and responsibilities and authority, and standardize the rights and responsibilities of each subject with systems, so that each subject can play their own positive role in the training process of school enterprise cooperation talents, and jointly promote the long-term, stable and orderly development of school enterprise cooperation.

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PROBE INTO THE PRACTICE OF COLLEGE COUNSELORS' WORK IN SUBSIDIZING AND EDUCATING STUDENTS

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ABSTRACT

"Do not let a student drop out of school due to family economic difficulties" is a solemn commitment made by the Chinese government and an important measure to promote educational fairness and social justice and build a socialist harmonious society. In colleges and universities, counselors are closely related to students. They are the front-line personnel of students' work and occupy an important position in education management. The financial aid work of college students is an important part of the work of counselors. Funding and educating people are the educational goal of "cultivating people with morality", effectively combining student assistance with educating people, stimulating students' intrinsic motivation, and helping students from financially disadvantaged families develop in an all-around way. The purpose of this research is to analyze and study the work of college counselors to subsidize and educate people and optimize the funding path. By selecting three student financial aid work cases of a vocational college counselor in Guangdong Province for analysis, combined with the author's three-year student financial aid work experience, this paper discusses the problems existing in the student financial aid work of college counselors. And further, optimize the path of student financial aid work, and provide countermeasures for college counselors to further do a good job in assisting and educating students in colleges and universities.

Keywords: Subsidizing; Education; College Counselors

INTRODUCTION

Background

On May 2, 2018, General Secretary Xi Jinping emphasized at the symposium between teachers and students of Peking University, if education is prosperous, the country will be prosperous, and if education is strong, the country will be strong (Xi Jinping,2018). National quality is the basic project of the great rejuvenation of the Chinese nation. Education must be given priority to improve national quality and contribute to the dream of a strong country. Over the years, in the process of solving practical difficulties for students and helping students to complete their studies, the education funding work of colleges and universities has effectively achieved educational equity and social harmony. Student financial aid is an important project to protect people's livelihood and warm people's hearts. It is related to poverty alleviation and social justice (Chen Baosheng,2018). At present, China has established a complete system of financial aid policies for college students, with multiple forms of "award, loan, aid, supplement, and reduction" to ensure that no student can drop out of school due to family financial difficulties. "That is, students don't have to worry before enrolling, don't have to worry when they enroll and don't have to worry after enrolling.

In recent years, the state's positioning of funding work has not only become more and more "accurate", but also more and more clear about its educational function. In 2017, the Party Group of the Ministry of Education of the Communist Party of China issued the "Ideological and Political Work Quality Improvement Project Implementation Outline in Colleges and Universities", which included the subsidized education system in China's top ten education systems. The outline pointed out that "helping the poor" and "supporting the wisdom", "supporting the poor" and "supporting the ambition" should be combined. Establish a "four-in-one" developmental funding system: state funding, school grants, social donations, and student self-help. Build a long-term mechanism for funding and educating people with effective integration of material help, moral infiltration, ability expansion, and spiritual incentives, and realize the organic integration of free funding and paid funding, explicit funding, and implicit funding, and form a "relief - education - talent - feedback" a virtuous circle. Focus on cultivating the good qualities of self-reliance, honesty and trustworthiness, gratitude, and courage in the assisted students (The Party Group of the Ministry of Education of the Communist Party of China, 2017).

Table 1: 2018-2020 China Student Assistance Development Report

Year	Recipient funds (unit: billion)	Number of students assisted (unit: billion)
2018	2000	1.35
2019	2126	1.06
2020	2408.2	1.46

Source: http://www.csa.cee.edu.cn/

At the same time, the state's financial investment in student aid funds has continued to increase, providing a solid guarantee for "students not to drop out of school due to family financial difficulties" (Table 1). Under the new situation, funding and educating people is not only the ultimate goal of precise funding in Chinese universities but also an important part of the ideological and political work in Chinese universities. It is still worthy of research and exploration to explore how colleges and universities can subsidize and educate people, how to effectively build a long-term mechanism, and truly realize educational funding.

Objective

The purpose of this research is to analyze and study the work of college counselors to subsidize and educate people and optimize the funding path.

LITERATURE REVIEW

Education is the foundation of everything and educating one generation well will benefit several generations. Colleges and universities should take moral education as the fundamental task, integrate them into ideological and moral education, cultural knowledge education, and social practice education, put ideological and political work throughout the entire process of education and teaching, and guide ideological values throughout the entire process and every link of education and teaching, forming the long-term mechanism of teaching and educating people (Wu Guilong,2019). Among the many work content, the only goal of the college-funding policy is to ensure that every student from a financially disadvantaged family does not interrupt their education because of economic problems. It allows more students from poor families to gain learning opportunities and then complete their studies, participate in work and benefit their families. This is the greatest project for people's livelihood. As colleges and universities attach great importance to the educational function of funding, scholars have also conducted in-depth research on the funding education system, mainly focusing on the importance and practical value of funding education, research on existing problems in funding education, and ways to improve funding.

2.1 Research Progress on the Importance of Counselor's Work in College Education

It is the college counselor who is responsible for student finance in colleges and universities. Read the relevant literature to do research on the importance of the counselor's work.

In 2017, the Ministry of Education of the People's Republic of China issued Order No. 43. The "Regulations on the Construction of Counselor Teams in Ordinary Colleges and Universities" have been revised. The document points out that in the process of cultivating college students, counselors, as the core backbone force and main performer of ideological, political, and educational work, are the core force, and their work content and professional ability will directly affect the quality and level of talent training in colleges and universities. Contemporary college students are an important factor in a country's core competitiveness and an important reserve force for national rejuvenation (Ministry of Education of the People's Republic of China,2017).

Yu He scholars proposed that with the development of the times, college counselors are not only a member of the college teacher team but also the front-line workers of ideological and political education in colleges and universities. Ideological and political education plays an important role. In the new era, the counselor team faces challenges. It should update the educational concept of the new era, confirm the role positioning, adapt to the needs of social development, explore innovative working mechanisms, and promote the rapid development of college counselors and comprehensive development (Yu He,2011).

Yang Jian believes that the work of college counselors is of high importance. Counselors have dual educational identities and undertake a higher educational mission in the education process (Yang Jian & Cong Wenqi,2017).

Xin Aitong and Zheng Libo scholars believe that higher education institutions are deeply aware of the importance of ideological and political education, and the role played by college counselors in this work cannot be ignored. Counselors must help college students establish correct values and outlooks on life and receive ideological and political education (Xin Aitong & Zheng Libo,2021).

With the help of counselors, the healthy growth of college students will be effectively guaranteed. Stability maintenance is an important foundation for colleges and universities to continuously reform themselves and achieve further development according to the changes of the times (Zhou Chao,2022).

He Zhengwen and Xu Saifen scholars believe that counselors are the core of ideological education for students and the key to helping students establish a strong learning system and living system. To carry out educational research from a diversified and in-depth perspective, to provide strong support for the steady, sustainable, and healthy development of students (He Zhengwen & Xu Saifen,2022).

“As the grass-roots staff of the ideological and political work in colleges and universities, the work content of college counselors is extremely complex and challenging. With the continuous changes of work objects and working environments, counselors are under increasing pressure in all aspects (Song Wanqiu, 2018).”

2.2 Research on Counselor-Funded Educational Work

In 2017, the report of the 19th National Congress of the Communist Party of China proposed to "improve the student financial aid system, so that the vast majority of new urban and rural laborers can receive high school education and more higher education", and put forward new requirements for student financial aid work. With the issuance and implementation of policy documents such as the "Notice on Further Implementing Higher Education Student Financial Aid Policies" and "Notice on Further Strengthening and Regulating the Identification of Students from Financially Difficult Families in Colleges and Universities" and other policy documents, the scope of student financial aid has continued to expand, and financial aid has become more accurate and effective. Subsidizing education has produced remarkable results (Dong Luwanlong,2018).

Zhao Yunfang believes that the role of college funding in educating people is mainly reflected in five aspects: ideological guidance, emotional stimulation, psychological development, personality function, and ability building. However, there are still problems in the work of subsidizing and educating people, such as the lack of specificity in subsidizing and educating people, the implementation of education links is not in place, and the development needs of subsidized people are not fully met (Zhao Yunfang,2020). Scholars Che Min believed that there are major problems in the current financial aid and education work for college counselors in their research on the financial aid and education of poor students. From the perspectives of the accurate identification of poor students, the establishment of the student loan mechanism, the establishment of the work-study mechanism, and the poor students' understanding of themselves, it is believed that there is still a lot of room for improvement for counselors in the work of subsidizing and educating people. It is furthermore pointed out that in the process of subsidizing and educating people, counselors should effectively enhance their self-management ability. From the perspectives of financial aid management ability, financial aid loan management ability, exact supervision of poor students, and improvement of humanistic care for poor students, it points out the development direction of counselors' financial aid and education work (Che Min,2022).

In the research on the role orientation established by college counselors in the work of subsidizing and educating people and the improvement of their management ability, scholar Nie Yunzhi believes that the diversity of roles of college counselors is responsible for cultivating students' moral quality, disseminating relevant national policies, and implementing financial aid and educating people. At work, we should continue to improve our self-work ability, actively play the role of educating people, and guide poor students to establish the correct direction of life development. At the same time, with the help of big data, the occurrence of false phenomena is avoided and the smooth development of subsidized education work is ensured (Nie Yunzhi,2021).

Meng Lan scholars believe that the current college students have shortcomings in the ideological level of funding; Counselors also have shortcomings in three aspects: identification, execution, and innovation in the funding process. It is pointed out that it is necessary to provide strong support for the funding work through the ability of multiple parties, and propose a corresponding implementation path for college counselors to improve the effect of their funding and educating work (Meng Lan,2021).

Duan Yuqing believes that college student bursaries play an important role in maintaining social stability (Duan Yuqing,2017). At the same time, Chen Zi scholars, in their research on the significance and practical value of the precision funding education mechanism for colleges and universities to be effective in student funding, believe that under the new situation, precision should not only aim at funding but should also increase the focus on precision funding for educating people. The research efforts should be based on students, focus on morality, and cultivate people so that students can get help materially and spiritually. It clarifies the importance of precise funding for educating people and the importance of promoting the all-round development of students, and it is also of strategic significance for the realization of the current goal of building a well-off society in an all-around way (Chen Zi,2020).

2.3 Summary

From the domestic literature research results, the researchers learned about the importance of counselors through the literature and the researcher's perspective is more diversified for the in-depth and specific analysis of the funding work of college counselors. Using the funding work of college students as the medium of ideological and political education, in theory, and practice, explore the educating function of college student's financial aid work, and use college students' financial aid work to improve the actual effect of college students' ideological and political education. In the research results, it is believed that counselors are the first line of students' work, and funding education is an important task of college counselors and an important part of the education system in colleges and universities. It shows that student financial aid has rich educational functions from multiple perspectives.

METHODOLOGY

3.1 Case Analysis Methods

The case study method was developed by Harvard University in 1880 and was later used by Harvard Business School as an educational practice for cultivating senior managers and management elites, and gradually developed into today's "case study method". The case study method illustrates the problem through one or several selected cases and uses the collected data to analyze the logical relationship between events (Sun Haifa, Liu Yunguo & Fang Lin, 2004).

3.2 Research Subjects and Scope

The report was conducted from February 2021 to April 2022. The data in this report were collected through observations, student cases for relevant information.

Through the analysis and research of three cases of student financial aid work obtained by a counselor in a higher vocational college in Guangdong Province, and then find out the problems of student financial aid work. Finally, find out the countermeasures to promote the work of funding and educating people in colleges and universities.

3.3 Case Analysis

Case one:

Student A, before the entry of the new students, has no money to pay tuition due to family financial difficulties and hesitates to enroll. After learning about this situation, the counselor immediately intervened to do ideological work for the student, and used the phone and WeChat to explain the country and the school's funding policies in detail to the students, among which the "green channel" policy allows students to enroll first and then postpone the payment of tuition and miscellaneous fees; among them, the "student loan" policy allows students to apply for student loans, and the interest will be subsidized by the state during their studies. There is also the "national three gold" incentive policy, etc. After a period of communication, the students were successfully persuaded to report to the school. All possible assistance is provided to the student. After the student is successfully enrolled in school, according to the actual situation of his family difficulties, work-study jobs are arranged to reduce the students' financial pressure, so that the student will not be unable to pay tuition fees and lose educational opportunities. During the university, he chose to take a leave of absence to join the army to realize the ideal of serving the motherland.

In this case, we cannot look at students with financial difficulties with tinted glasses, let alone expound too much on the word "poverty", to avoid harming students who are sensitive and have strong self-esteem. Through the promotion of student financial aid policies, financial aid and academic assistance are provided to students to help students get out of their predicament. Provide employment guidance and inspirational gratitude education to students, encourage students to actively face difficulties, live and study with a grateful heart, actively change the status quo through their efforts, become self-reliant, improve their comprehensive ability, and serve the country.

Case two:

Student B, second year of university, is absent many times during class, has insomnia, and does not communicate with classmates. After the counselor finds the abnormal situation of the student, he finds student B as soon as possible and has a conversation with the student. Through sincere communication, I learned from Student B that because of the sudden accident of his father, the breadwinner of the family, Student B was very worried, did not have the courage and confidence to overcome difficulties, and was unwilling to communicate with his classmates. And student B sometimes has insomnia at night, which directly leads to a lack of energy to go to class the next day. After learning about the situation, the counselor had a heart-to-heart conversation with the student as soon as possible. On the one hand, he asked her about some more specific information and informed the student of the state and school funding policies and instructed the student to fill in and submit relevant materials to apply for hardship subsidies. To a certain extent, it can alleviate the urgent financial needs of students' families. On the other hand, focus on the student's psychology, studies, and life, build a growth platform for him, and encourage students to overcome temporary difficulties with a sincere heart and inspire learning. In the later stage, visit the parents of the students to shorten the communication between the school, parents, and students. Since then, students' mental outlook and pressure have been significantly relieved, and their lives and studies have become more optimistic. At the same time, student B understands the negative emotions that stress in life brings to him, and the backlog will have adverse effects. He begins to change himself, learns to find support in life, and learns to talk to the people around him.

In this case, students who suddenly encounter financial difficulties from their families belong to a special group economically and psychologically. They face higher pressure than ordinary students and are psychologically more sensitive. They are prone to negative emotions, such as anxiety, which in turn affect learning and healthy growth of the mind and body. As student financial aid workers in colleges and universities, we must realize that the role of a counselor is not only a profession but also a reflection of feelings, not only helping students solve their difficulties in life, he is also a guide who helps students build strong self-confidence and helps them gain an optimistic spirit in the face of adversity. In the financial aid work, bear in mind that economic assistance is the means and talent cultivation is the main purpose, cultivate students' healthy mentality, strengthen humanistic care and psychological counseling for students, and guide students to establish correct values and improve their overall quality.

Case three:

Student C, the third year of university, his father was ill, his mother died, the family was in financial difficulties, and the tuition and living expenses were aided by relatives. The student once dropped out of school due to depression. After learning about the situation, the counselor will publicize the state's scholarship policy to the students, relieve the students from financial concerns, keep in touch with the students uninterruptedly, and provide help to the students in life and emotion. Through sincere communication and psychological counseling between teachers and students, student C gradually accepts the help of teachers and classmates and gradually improves the way of getting along with everyone. With the encouragement of everyone, he can arrange his life and study time reasonably. Actively participate in various practical activities of the school, assist teachers in their work, and actively serve the class. Later, counselors help students with career planning, and students are successfully promoted to undergraduate colleges after graduation.

In this case, through the combination of financial aid, psychological counseling, gratitude education, academic assistance, and employment guidance, students are guided to develop a healthy attitude, strengthen humanistic care and psychological counseling, and provide a platform for students to demonstrate and exert their abilities. At the same time, it guides students to establish the right direction of life development. It can be said that funding education is a comprehensive work that combines financial assistance, ideological education, psychological assistance, academic assistance, employment guidance, and gratitude education. It requires long-term persistence, sincere dedication, and unreserved full devotion from the counselor.

Table 2: Based on case analysis of similarities and differences

Same Points	Different Points
(1) The roles of helping students are all front-line counselors, and they are all discovered through the daily communication between counselors and students.	(1) The funding stages are different. Case one is before admission, case two is an unexpected situation during admission, and case three is just before graduation after admission.
(2) According to the characteristics of students or the difficulties encountered at different stages, different help is implemented around the theme of funding and educating people.	
(3) It is the counselor who informs the students that the corresponding assistance and funding policies are top-down, rather than the students taking the initiative to apply for qualified assistance.	
(4) In the process of funding, not only provide financial help alone, but also combine other job responsibilities of counselors, such as assistance in employment, psychology, quality and other aspects. And through funding, help students get out of the predicament and get improvement.	(2) The effect of funding is different: Case one is in the process of helping, through gratitude education, establish lofty ideals, and enlist in the army to serve the motherland. The second case is to help students cultivate a healthy attitude in the process of assistance. The third case is that in the process of assistance, psychological counseling, gratitude education, and career planning are simultaneously carried out to establish a correct life development direction.
(5) In the process of funding and education, the time span is large.	
(6) In the three cases, the students were psychologically more sensitive when facing difficulties, and negative emotions appeared.	

Based on the analysis of the similarities and differences of the three funding cases (Table 2). In general, the only goal of the college-funding policy is to ensure that every student from a financially disadvantaged family does not interrupt their education because of economic problems. It allows more students from poor families to gain learning opportunities and then complete their studies, participate in work and benefit their families. This is the greatest project for people's livelihood. Communication helps to build relationships and facilitates the achievement of goals. It is a two-way process that involves the sender and the receiver (O. et al., 2012). Therefore, the counselor assumes the role of communicating with the students. Through communication, they can understand and grasp the students' learning and living conditions, and then detect abnormalities in time, intervene in time, and provide students with scientific and effective help.

The country and the school also require that counselors should always have a high sense of responsibility, and be attentive, affectionate, and forceful to each student. Among them, sincere communication with students is the basis for counselors to carry out ideological and political education work. Counselors must always be sensitive to events and see the big picture. When encountering emergencies, often causes different degrees of psychological trauma for students. Counselors should take effective measures quickly when emergencies occur, and provide psychological counseling to students so that they can obtain spiritual support and comfort, and resume their normal study and life as soon as possible. This also precisely requires college counselors to do a good job of ideological guidance and cultivate students' healthy mentality. Strictly follow the general idea of "three comprehensive education", and adhere to the guiding ideology of "moral education first, students first, service first, and quality first". Cultivate and promote socialist core values, and guide students to become firm believers, active communicators, and model practitioners of socialist core values.

RESULTS

In recent years, the funding system of colleges and universities is becoming more and more better, the coverage of funding is more extensive, and the investment of national funds is also on the rise. Funding policies have played an important role in promoting education fairness and maintaining social stability.

However, through the analysis of three cases in different periods and the author's three-year student financial aid work experience, it is found that there are still some problems in the specific implementation process. Then we can find out the countermeasures to promote the work of university funding and education.

4.1 Problems Existing in the Funding Work of Colleges and Universities

(1) Students do not have a deep understanding of the meaning of financial aid to educate people.

Due to psychological factors, some students from financially disadvantaged families think that funding is humiliating and are reluctant to submit application materials. Some students from financially disadvantaged families do not pay attention to the application for poverty identification, and there are situations such as lack of materials and missed application time when submitting materials.And the counselor cannot fully grasp the family economic situation of each student, which is prone to omissions.

(2) Counselors do not have a deep understanding of the work of subsidizing and educating people.

Only large-scale publicity and education are carried out for funding publicity, which is a mere formality, lacks pertinence, and lacks innovation. There is no way to prescribe the right medicine according to the different situations of students and play the role of subsidizing and educating people.

(3) Difficulties in work identified by students from financially disadvantaged families.

First, in the process of identifying students from families with financial difficulties, the main basis for identifying families with financial difficulties is the information submitted by the students, such as proof materials such as low guarantee, disability certificates, and orphan certificates. And then strictly in accordance with the relevant provisions of the audit. However, it is impossible to verify the authenticity of every material, and the phenomenon of falsification is inevitable. In addition, a small number of students from families with financial difficulties have actual family financial difficulties but are unable to submit complete supporting materials, resulting in the inability to obtain financial aid through the identification of family financial difficulties.

Secondly, ignoring the long-term nature of the funding work, relying only on two poverty identifications in the fall and spring of a year, and carrying out poverty identification in a pattern based on the indicators of poverty identification, without paying too much attention to the sudden difficulties of students.

Finally, due to the high mobility of counselor positions, some counselors are directly responsible without on-the-job training, which leads to review errors in the process of identifying family financial difficulties, and the work is not carried out in place.

4.2 Countermeasures to Promote the Work of Funding and Educating People in Colleges and Universities

(1) Increase publicity efforts and innovate publicity models.

There are many funding projects from the state and schools, and the funding department needs to conduct regular training and review of the counselor funding work. Only when counselors are familiar with funding policies can it be beneficial to publicize the students in the next step. Counselors must innovate and carry out publicity and education on financial aid and education in various forms before, during, and after students enter school, focusing on strengthening students' awareness of policies and self-awareness, requiring no falsification, honest funding, and objective evaluation of their family conditions, to ensure the fairness and justice of subsidizing education work. Funding is not just to help students complete their studies, the most important purpose is to support and help students achieve their aspirations and improve their wisdom. Guiding students to the correct value orientation is the ideological basis for subsidizing and educating people, so that students can truly establish the concept of gratitude to others and return to the society, and promote their personal growth and success.

(2) Use multiple channels to expand funding coverage.

Although the state and colleges and universities increase financial aid to students from financially disadvantaged families year by year, the funds are always limited. To expand the coverage of funding, it is necessary to obtain the support of more caring enterprises and socially caring people. Colleges and universities can gather alumni channels or love school-enterprise cooperation channels to assist students by setting up scholarships and grants. Encourage students to self-improvement and study hard.

(3) Build a student information system to improve the accuracy of subsidized education.

The application of information technology in the auxiliary office, information management, and affairs management is becoming more and more popular, and colleges and universities have also put forward more and more strict requirements for the refined education management of students. The establishment of a student financial aid information system can easily and quickly edit and organize student information, save time and improve work efficiency. Reduce the work pressure on the counselors and facilitate the counselors to conduct refined management and talk according to the students' recent performance, learning, and living conditions. More able to adhere to people-oriented, rational allocation of resources, put forward scientific countermeasures according to students' personal development needs and actual conditions, and guide students to correct their attitudes, strengthen their skills, be proactive, and use their abilities to improve their lives in addition to solving economic difficulties. All-round development and return to society. Enable counselors to better carry out refined education management.

CONCLUSION

To sum up, the policy work of college funding is a good policy for the state to help students and encourage students to complete their studies, and it is an important measure to win the battle against poverty through educational poverty alleviation. Dynamic and standardized management should be carried out according to the actual situation. At the same time, the work of funding and educating people in colleges and universities is a key link in the ideological and political education of college students in the new era. In practice, further broaden the path of subsidizing and educating people, put policies in place, and achieve the goal of subsidizing and educating people.

The work of subsidizing and educating people is a long-term task. In addition, the subsidy management work involves a wide range of areas, is highly policy-oriented, has many work links, and the work is difficult. Counselors can only obtain students situations through heart-to-heart conversations with students and their usual attention. The work is difficult, and counselors are always required to be proactive. Therefore, the position of counselors in colleges and universities is very important. While insisting on material help students, we should also pay attention to spiritual support. Strengthen the education and guidance of students and avoid the state funding policy from becoming formalism. While solving the economic difficulties of students, we should focus on cultivating students' abilities, pay attention to students' psychological and psychological difficulties, improve students' quality, and provide support for students' growth.

In future research, the author will add two methods of interviews and questionnaires for research and analysis, to conduct a more comprehensive analysis of the work of subsidizing and educating people from the perspective of students.

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APPLICATION OF PDCA MANAGEMENT CYCLE METHOD IN PRACTICAL TEACHING MANAGEMENT REFORM OF APPLIED UNIVERSITY

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ABSTRACT

The Ministry of Education pointed out that newly established undergraduate colleges and universities should develop towards application-oriented undergraduate education, change the old way of training new undergraduate colleges and universities to follow the training of academic talents, and realize the transformation of newly established undergraduate colleges and universities to undergraduate-level higher vocational education. With the gradual popularization of applied universities, their teaching management has gradually attracted widespread attention from the public, and this concern has continued to increase with the gradual increase in the society's demand for talent quality. Many talents have reformed and optimized the teaching model (Wei Zhanglin ET AL., 2020), teaching management, and teaching staff. The PDCA management cycle method is one of the new methods of teaching management optimization. The article first expounds the connotation of PDCA cycle theory Secondly, it analyzes the practical problems existing in the practical teaching management of the current application-oriented undergraduate Lvliang University, and finally points out the application of PDCA cycle theory in the teaching management system of application-oriented undergraduate colleges, that is, the planning stage, the implementation stage, and the inspection stage. , the processing stage. In the research, the problems existing in the practice teaching management of Jiaokou Branch of Lvliang University were analyzed and summarized through SWOT analysis method and questionnaire survey method, and a suitable practice teaching model PDCA cycle method was constructed. The research results show that PDCA cycle can help colleges and universities to continuously improve their practice Teaching quality, the key to effective application of PDCA is to establish and improve its operating mechanism.

Keywords: PDCA management cycle method, Applied university, Practice, Teaching management

INTRODUUCTION

In the report of the 19th National Congress of the Communist Party of my country, it is clearly stated that building a strong country in education is the fundamental project of the great rejuvenation of the Chinese nation. The report emphasizes that education should be given priority, deepen education reform, speed up education modernization, and promote higher education to enter a new stage of connotative development. . However, in the traditional higher education model, schools and enterprises are basically in a state of separation. With the rapid development of science and technology, production automation and scientific information technology continue to improve, a number of applied universities have really emerged. Jinjiao(2021) No. 2 "Guiding Opinions of the Shanxi Provincial Department of Education on Promoting the Construction of Application-oriented Undergraduate Universities", issued in 2021, clearly pointed out that accelerating the construction of application-oriented undergraduate colleges and universities, and promoting the classified development, connotation development and characteristic development of colleges and universities, to accelerate the cultivation of high-quality applied, compound and innovative talents who adapt to and lead the development of modern industries. Application-oriented has its own characteristics, focusing on "application" and needs to adapt to the needs of economic and social development. All majors must closely integrate local characteristics and cultivate high-quality applied technical talents that can adapt to the development of today's economic environment(Wang Beisheng. 2017). Teaching management plays a pivotal role in the process of talent training and is the core task of applied undergraduate university education. Improving the quality of teaching management in applied undergraduate universities plays a very important role in realizing a strong country in education (Yan Wuyin. 2017). Students' satisfaction and changes in the direction of society's demand for talents have prompted colleges and universities to reform teaching and management. PDCA management cycle method is one of the methods of practical teaching management reform in colleges and universities. This article will discuss the PDCA management cycle method and its application in college teaching management. applications are discussed.

1.1 Research Objectives

1.1.1 Problems existing in practical teaching management of applied undergraduate Lvliang University

This paper analyzes and summarizes the problems existing in the practical teaching management of Jiaokou Branch of Lvliang University through SWOT analysis method and questionnaire survey method. First of all, students in practical training are relatively weak in innovation, the investment in the construction of the teaching staff is insufficient, the strength of the teaching monitoring team is relatively weak, and there are still deficiencies in practical teaching management. The quality management of the process still needs to be improved and optimized.

1.1.2 The application of PDCA cycle in the reform of practical teaching management in applied universities

According to the problems existing in the practical teaching management of the Jiaokou Branch of Lvliang University of Applied Undergraduates, it is necessary to establish a scientific and systematic management and operation system. The PDCA management cycle starts with the daily teaching management. The purpose is to provide a progressive concept and strive to form a A culture of self-examination and the establishment of a continuous improvement and development management mechanism (Xu Jing, 2016). The efficient teaching management PDCA model is a process of linking the quality goals and development goals of schools, teachers, teaching administrators, students, enterprises or society to obtain performance and efficiency (Li Changbao, 2019). The efficient practical teaching management based on the PDCA model includes four links: planning, process implementation, inspection and evaluation, and result processing.

1.2 Significant of the Study

In the application-oriented university education and teaching, practical teaching is the most effective method of linking theory with practice, which can consolidate and deepen students' understanding and application of theoretical knowledge(Ju Chenming, Xu Jiancheng. 2012). The significance of studying the application of PDCA management cycle method in practical teaching management reform in applied universities is that the PDCA cycle theory can be applied to the whole process of specific practical teaching, so that students can discover, analyze, and solve problems in practical teaching. In a closed-loop system of learning, it is possible to continuously consolidate students' theoretical foundation and practical skills, lay a solid foundation for students to be competent for their jobs in the future, and also of great significance to the improvement of teaching quality(Li Guang, Cao Qi,2019).

LITERATRE REVIEW

2.1 Related Research

By reviewing the application of PDCA management cycle method in practical teaching management of applied universities in recent years, the level of a school's teaching level depends on the operation of teaching management work in colleges and universities. At the same time, teaching management work also determines the comprehensive level of the school and students. Comprehensive quality plays a positive role in promoting the reform and development of colleges and universities. Continuously improve the effectiveness of teaching management and promote the high-level development of colleges and universities (Li Shenglu, Huang Yi, 2020). "PDCA" cycle is a general model in management. In the application and exploration of "PDCA" cycle in daily teaching management, we mainly focus on: understanding what is "PDCA" cycle? How does this cycle fit into the teaching management of the college? The PDCA cycle is actually composed of many large and small cycles, one is linked to the other, and the completion of the previous cycle will enter the next cycle;Small links will together form a large work link, and the work of different links between cycles will be gradually improved (Lu Limin et al., 2019). The big cycle is the basis of the small cycle, and the small cycle is the big cycle. To implement and concertize each cycle, coordinate and promote each other, and work towards the same direction as the overall goal (Zhao Yuanyuan, 2014). When the plan is implemented to the final stage, it needs to be summarized and dealt with, and based on the summary results, it is decided whether to carry out the plan or not. Cycle again (Zhu Chunhua, 2020). PDCA management cycle, as a management method aimed at improving and improving, has a very wide range of applications. Applying it to the teaching management of college teachers can effectively improve the current situation of college teaching management, promote the improvement of college teaching results, and assist college training. More outstanding talents should be valued and applied by the management of colleges and universities, and will definitely play a positive role in improving and improving the overall teaching quality of teachers and even schools (Xi Guiqian, 2018). PDCA theory is to constantly find problems in practice , formulate improvement measures. The PDCA theory first is the planning stage. It mainly includes determining tasks, goals, activities, formulating plans and formulating implementation measures, and then doing all the required preparations (Xu Wenwu. 2018); followed by the implementation stage. All organizational personnel should implement the plan in accordance with the formulated plan, goals and operating procedures. Each PDCA cycle has new content as the goal, which means that after each PDCA cycle, a batch of problems can be solved and the quality management level can be improved (Sheng Xiaoying, 2019); the third inspection stage. Compare the actual work results with the expected results, check whether the implementation and effect of the plan have achieved the expected goals, and find out the existing problems; the fourth is the implementation stage. According to the comparison results between the actual work and the planned requirements, take measures to correct the deviation (Gao Dan, Li Guojie, 2010). In the process of formulating the plan, the cycle cycle should be clearly defined to ensure that the plan can be carried out one by one in strict time management (Dong Na, Hu Xinying, 2020). Through literature research, we have effectively sorted out the unresolved problems in the circular management model developed by Lvliang University, and incorporated them into the next round of circular management model, intending to further solve them (Xiao Xiaocong, Zhang Wenwen, 2020), so as to timely correct the problems. Adjust the plan to improve teachers' innovation and creativity, so that they can promote the efficiency of plan implementation in a more proactive attitude (Yan Bingfei, Li Wenzuo, 2019).

2.2 Conceptual Frame

PDCA management cycle: It is a general model used in management to improve quality. In the work, it is carried out in a continuous cycle according to the four steps of planning, execution, inspection and processing, so that it can be continuously improved and solved.

Application-oriented university: refers to an undergraduate institution of higher learning with an application-oriented orientation, focusing on undergraduate education, as opposed to an academic university, and is divided into applied technology university, teaching service university, teaching application university, research application university the University.

RESEARCH METHODS

3.1 Selection of Participants

This time, the Jiaokou Branch of Lvliang University, an applied undergraduate university, has carried out research on effective practical education management.

3.2 Instrumentation

In order to facilitate better research on the exploration of practical teaching management reform in application-oriented undergraduate colleges and universities, this research adopts the observation method and the questionnaire survey method.

3.3 Data Collection

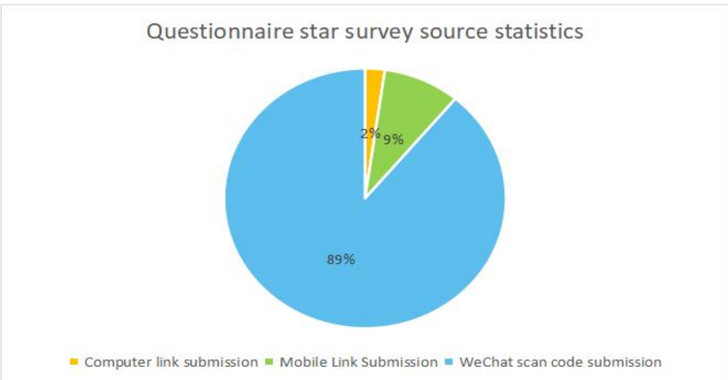
3.3.1 Data collection of on-site observation and experience

During the internship period in Jiaokou Branch of Lvliang University from December 2021 to April 2022, when attending lectures and participating in teaching management, collect the advantages, disadvantages, opportunities and challenges of teaching in Jiaokou Branch of Lvliang University.

3.3.2 Questionnaire survey data collection

The electronic version of the questionnaire was sent by 450 college students who had participated in the practical training in the Jiaokou Branch of Lvliang University, and the students scored the training and teaching management process by clicking the link of the questionnaire star or scanning the QR code of the questionnaire star (see Figure 1).

Figure 1 Statistics of the sources of the questionnaire star survey

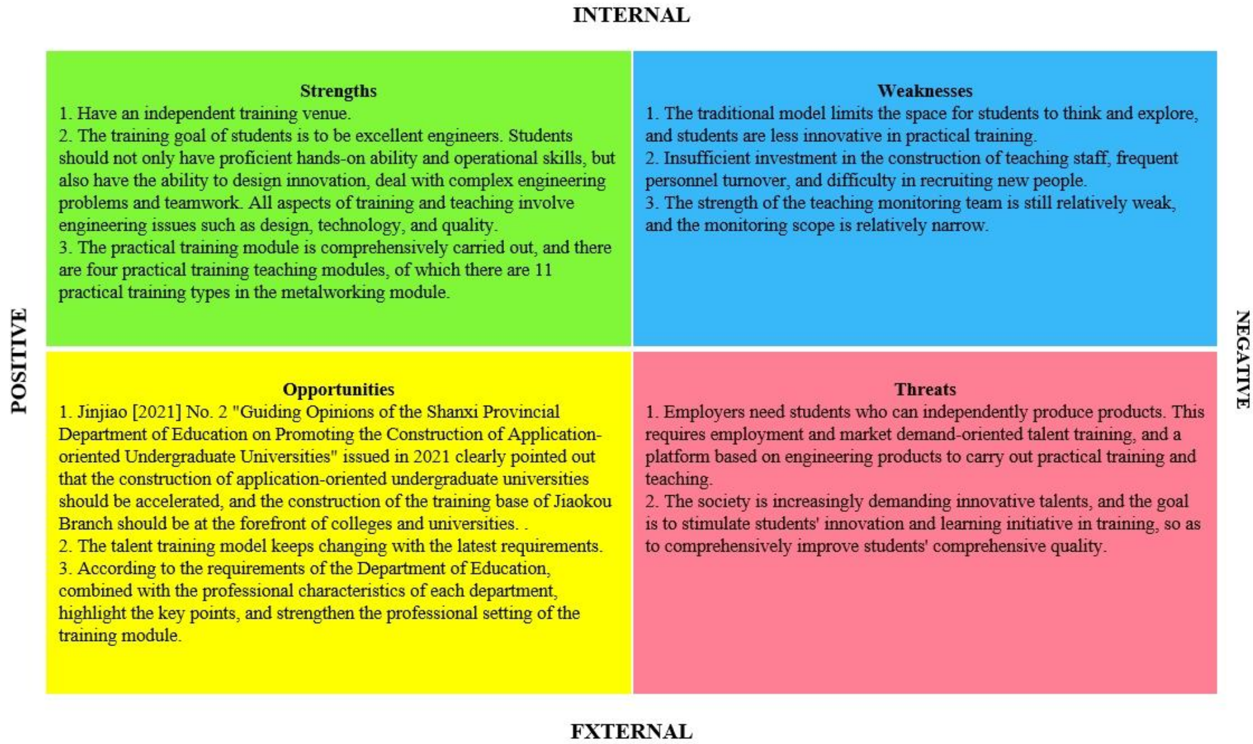


3.4 Analysis and Statistical Treatment

3.4.1 SWOT Analysis

The SWOT analysis method is used to analyze the advantages, disadvantages, opportunities and challenges in the teaching of Jiaokou Branch of Lvliang University (see Figure 2).

Figure 2 Analysis of the current situation of practical teaching management in Jiaokou Branch of Lvliang University

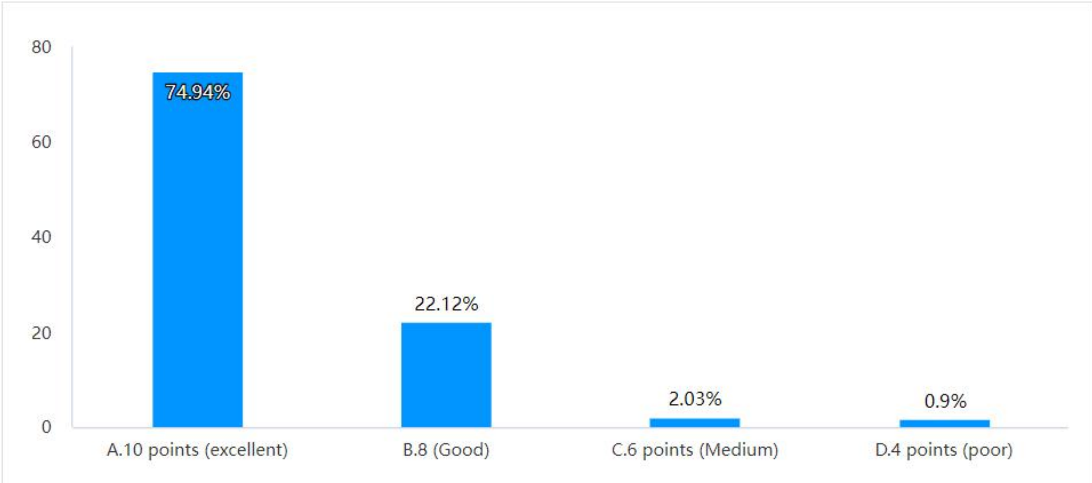


It can be seen from Figure 2 that the Jiaokou Branch of Lvliang University has an independent training site, and the training goal of students is to be an excellent engineer. Students should not only have proficient hands-on ability and operation skills, but also have the ability to design innovation and deal with complex projects. problem-solving skills and teamwork skills. All aspects of practical training and teaching involve engineering issues such as design, technology, and quality. The practical training module is comprehensive and comprehensive. There are four practical training teaching modules, of which there are 11 practical training types in the metalworking module. However, the disadvantage is that the traditional model limits the space for students to think and explore, and students are less innovative in practical training; the investment in the construction of the teaching staff is insufficient, the turnover of personnel is frequent, the recruitment of new people is difficult, and the strength of the teaching monitoring team is still relatively low. Weak, the monitoring scope is relatively narrow. In terms of opportunities, the construction of the training base of Jiaokou Branch is at the forefront of colleges and universities, and its talent training model keeps changing with the latest requirements. According to the requirements of the Department of Education, combined with the characteristics of each department, it highlights the key points and strengthens the professional setting of the training module. The results of the threat analysis show that the employment units have high requirements for students, and schools should take employment and market demand as the orientation in talent training, and establish a platform based on engineering products to carry out training and teaching. In the face of the increasing demand for innovative talents in the society, it is necessary to stimulate students' innovation and learning initiative as the goal in order to comprehensively improve the comprehensive quality of students.

3.4.2 Questionnaire survey data analysis

A total of 450 questionnaires were distributed in this survey, and 435 were recovered, with a recovery rate of 96.7% and an effective rate of 100%. (See Figure 3)

Figure 3 Statistics of the questionnaire survey on the practice effect of Jiaokou Branch of Lvliang University

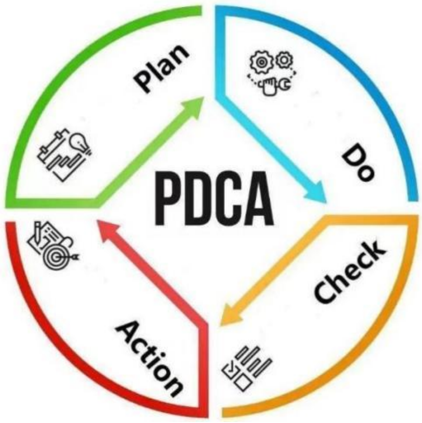


As can be seen from Figure 3, through the questionnaire survey, 74.94% of the evaluations scored 10 points, indicating that most students feel that the training is rewarding, indicating that the PDCA management cycle method has played a positive and very important role in the reform of practical teaching management in applied universities. In addition, 25.06% of the students evaluated that there are still problems in the teaching management of practical training, and the gains were not obvious. It shows that the content of each stage of practical teaching is worth in-depth study, and the application of Deming cycle needs an effective operating mechanism, and to cultivate the practical ability of college students, it is necessary to constantly explore new ideas and new methods for schools to carry out practical teaching in the era of knowledge economy, and to improve the practice Teaching quality is a dynamic process that needs continuous improvement. The PDCA cycle in quality management can help colleges and universities to continuously improve the quality of practical teaching. The key to effectively applying PDCA is to establish and improve its operating mechanism.

RESEARCH RESULTS

In applied university education, practical teaching is the most effective way to combine theory with practice, which enables students to further understand and apply theoretical knowledge. In practical teaching, due to the influence of various factors, there will be a deviation between the actual teaching effect and the teaching plan, which requires a scientific management program to evaluate, adjust and improve practical teaching to ensure that the teaching work can be Completed. The essence of this management process is the process of planning, executing, checking and implementing.

Figure 4 PDCA cycle



From Figure 4, we can see that its management process can be divided into four parts: planning, execution, inspection and implementation. PDCA cycle is used in practical teaching management in applied universities. Generally speaking, the operating system of practical teaching management is a continuous dynamic system. The four links of its process management are interconnected, restrict each other, advance layer by layer and cycle repeatedly. However, through SWOT analysis, it was found that the Jiaokou Branch of Lvliang University was unable to form a team due to the lack of teachers. Practical teaching work is a complex labor. It is difficult to describe the teaching work of teachers with quantitative and qualitative indicators. It should not be judged by the same standards. Even if a teacher can be evaluated objectively, if no other supervision is carried out, it will not have any effect on the improvement of teaching quality. If the supervision cannot be improved in time, there will always be problems in the management of practical teaching, the data of students' dissatisfaction will also increase, and the quality of teaching will be seriously reduced.

CONCLUSIONS

5.1 Research conclusions

The research shows that the level of a school's teaching depends on the operation of the teaching management work in colleges and universities. At the same time, the teaching management work also determines the comprehensive level of the school and the comprehensive quality of the students, which has a positive effect on promoting the reform and development of colleges and universities. The management of practical teaching in applied universities is a huge and complex project. To cultivate the practical ability of college students, it is necessary to constantly explore new ideas and new methods for schools to carry out practical teaching in the era of knowledge economy, and to improve the quality of practical teaching is a dynamic and necessary task. In the process of continuous improvement, for the practical teaching management of schools, PDCA is a very effective way to strengthen teaching management. Therefore, when schools conduct teaching management, they should vigorously promote the application of PDCA model in it, so as to cultivate the society. More all-round talents. Through the in-depth analysis and research of the PDCA cycle theory method, it is found that if it is applied to teaching management, through the process of constantly discovering and solving problems in the process of teaching management, by analyzing the problems encountered in the teaching management process. various problems encountered, and summarizing the experience Lessons learned to improve the level of teaching management, so as to further improve the existing teaching management system (Yang Dong, 2018) (Zhu Jiemin, 2017).

5.2 Discussion

As people put forward higher requirements for daily teaching management in colleges and universities, PDCA cycle has become the trend of daily teaching management in colleges and universities, and plays an increasingly important role. The PDCA management cycle method is a method to gradually improve and improve the management effect through management methods. It is applicable not only in the field of teaching management, but also in enterprise management, medical institution management, etc. This cycle method can effectively improve the current situation of teaching management in colleges and universities, to promote the improvement of teaching achievements in colleges and universities, and to assist colleges and universities to cultivate more outstanding talents, should be valued and applied by the management of colleges and universities. The research results show that every link of the PDCA cycle is indispensable, which directly affects the efficiency of the PDCA cycle. Therefore, it is necessary for the relevant university administrators to make efforts to investigate and give full play to the role of PDCA in combination with the actual situation of their own schools and colleges, and effectively improve the efficiency of daily teaching management in colleges and universities.

5.3 Research suggestions

Schools should conduct regular inspections and evaluations of practical teaching. The purpose of the evaluation is to check whether the expected design goals have been achieved, whether the design of the content and methods of the practical teaching is appropriate, whether the practical training teaching resources are effectively used, and whether the practical training management Whether the work is perfect, problems are found in a timely manner through inspection and evaluation, and directions for future improvement and development are proposed. In addition, the implementation of teaching management in the PDCA mode, through the participation of all staff in management and fair and reasonable quality evaluation, can also eliminate the injustice, irrationality and disharmony between teaching and management, give full play to the teaching freedom of teachers, stimulate their The enthusiasm and innovation of teaching can better play a role in deepening teaching reform and improving teaching quality.

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A STUDY OF CONSUMER INNOVATIVENESS AND SERVICE CONVENIENCE ON THE INTENTION TO USE AI ROBOT SERVICES IN HOTELS

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ABSTRACT

Through a literature review of AI robot research in hotels, this study explores the factors that can influence customers' intention to use AI robot services in hotels and the relationship between the influencing factors, proposes hypotheses on the relationship between variables, and presents a conceptual framework. This framework contributes to both theory and practice. On the theoretical side, the research is conducted from both individual consumer and AI robot service level perspectives, and the Rational choice theory is innovatively used to understand consumers' behavioral intentions to use AI robot services. For hotel managers, it can provide a reference for them to introduce or improve the AI robot service level.

Keywords: AI; AI Robot Service; Hotel; Consumer Innovativeness; Service Convenience; Trust; Usage Intention

INTRODUCTION

With the development of smart technology, consumers' needs are increasingly changing, and all industries are facing new challenges. With the advent of the Internet, big data and 5G era, artificial intelligence is also developing rapidly and is now slowly being integrated into people's lives and work. With the continuous improvement of people's living standards, tourism is also booming, greatly increasing the demand for accommodation and driving the overall progress of the hotel industry, with the emergence of multi-level hotels with various characteristics. In this era of "Internet +", the competition in the hotel industry has become fierce year by year, and traditional hotels are gradually in a disadvantageous position in the competition, so in order to find a breakthrough, various hotel groups are constantly exploring new paths. The emergence of intelligence has added a new highlight, bringing a new service experience to guests while also reducing some of the labor costs for the hotel (Wu, 2019)(Fan, Lu, & Mao, 2022).

However, many scholars have questioned in terms of consumer acceptance of AI services because AI robotics services are an innovative service option for most consumers, and people may prefer manual services over innovative AI services when making a choice of service options because of the perspective that traditional services are more customary and convenient (Czaja et al. 2006)(Wu, Liu, & Kardes 2020). Therefore, this study wants to explore the factors that can influence consumers' use of AI robot services in hotels and the relationship between the factors based on the existing literature review. For hotel operators to increase consumers' choice of AI services, it is crucial to understand the reasons why consumers choose to use AI services. Only if consumers' use of AI services increases can the purpose of reducing service costs for enterprises and bringing new service experiences to customers be achieved.

The research questions of this study are:

1. what factors can have an impact on consumers' intention to use AI robot services in hotels?

2. What is the relationship between these factors?

The research objectives of this study are：

To find the factors that influence consumers' intention to use in-hotel AI robot services and the relationships between the factors by means of a literature review to establish a conceptual framework.

LITERATURE REVIEW

2.1 Hotel Artificial Intelligence

Artificial intelligence refers to the research and development of a new intelligent machine that can respond in a similar way to human intelligence, applied to human simulation, extension and extension of human thinking, action and reasoning (Wang, 2022).AI technologies have developed considerably over the past decades and are becoming an important part of consumers' daily lives.Through AI technologies, businesses can efficiently process massive amounts of data, learn relationships among them, and enhance personalization by gaining insight into consumers. As a result of AI, businesses can improve many aspects of their operation, such as automated business processes, data analytics, customer and employee engagement, and the development of marketing strategies (Davenport et al., 2020).

Nowadays, hotel AI services are developing rapidly, covering a wide range of services and a variety of services, and AI can start serving consumers from the time they enter the hotel door. Intelligent identity recognition can verify the identity of customers by recognizing their faces, and handle information entry and check-in procedures for them; and room delivery robots can help customers deliver their luggage and other belongings to their rooms; after customers check in, there are special room service robots and restaurant service robots to meet various needs of customers after check-in; there are also special intelligent robots to complete self-service check-out when checking out (Liang, 2020; Hu & Zhou, 2019). In other words, AI robots in hotels are now able to meet the various needs of customers throughout the check-in process.

2.2 Rational choice theory

The rationality of economic man is the basis of rational choice theory (RCT). Rational choice theory is an approach that emerged in sociology to analyze social problems using some of the basic tools of economics, an approach that centers on individuals acting rationally to satisfy preferences or maximize utility (Coleman, Coleman, & Farraro, 1992). For actors, different actions yield different benefits, and the principle of the actor is to maximize the benefits and thus have different preference rankings for the outcomes of different choices. For customers staying in hotels, hotels have traditional manual service options and AI service options, and different customers have different preferences when facing these service options; the more innovative consumers are, the stronger their acceptance of new things and their intention to try them, and at this time, their preference for AI services may be higher than traditional manual service options; the convenience of AI services is strong, such as having no Consumers who believe that AI services are more convenient may believe that AI services have advantages that traditional manual services do not have, and may prefer AI services when choosing service options.

2.3 Consumer Innovativeness

Innovativeness, as a driving force of innovative behavior, is frequently mentioned and studied in the field of innovation diffusion research. Innovativeness is often mentioned and studied in the field of innovation diffusion research. In general, innovativeness can be defined as the extent to which individuals accept new ideas and make innovative decisions independently (Midgley and Dowling, 1978). The earliest systematic study of consumer innovativeness was conducted by Midgley and Dowling (1978), who classified consumer innovativeness as the tendency of consumers to buy new products more often and faster than others (Midgley & Dowling, 1978). Intrinsic innovativeness is a personality trait, a psychological predisposition to accept new products, and actual innovativeness is the extent to which some consumers adopt innovations earlier than others. Most of the existing research on consumer innovativeness is based on these two branches. This study focuses on consumers' propensity to innovate and wants to investigate the psychological tendencies of consumers when faced with an innovative service, hotel AI, and therefore focuses on consumers' intrinsic innovativeness.

Hilbrook and Schindler (1994) argue that the more consumers affirm their time and experience in previous consumption processes, the more psychologically they reject novelty and the less innovative they become. Fromkin (1971) argues that the antecedents of consumer innovation are generated by consumers' need to be different and stimulate their desire for unique products. Hawkins (2007) suggests that consumers' different tendencies to acquire, use, and dispose of items are a reflection of their need for unique products.

2.4 Service convenience

Berry et al. (2002) make it clear that convenience of goods and convenience of services are two different concepts, and researchers should take into account the differences between the two in their studies.The money, time and energy spent by customers are the three main consumption costs of customers. Service convenience refers to the consumers' perception of time and effort associated with buying or using a service (Berry et al., 2002). They pointed out that consumers' perceptions of service convenience are influenced by the characteristics of the service, firm-related factors, and individual consumer differences, and ultimately affect their assessment of service performance. Customers' evaluation of their time spent is a combination of subjective and objective assessments, and their actual waiting time (objective waiting time) is different from their perceived waiting time for service. Both the actual waiting time (objective waiting time) and the perceived waiting time for service (subjective waiting time) will affect the customer's assessment of the degree of service convenience (Durande-Moreau, 1999). Service consumers' perceptions of convenience are related to the type of service they consume. The nature and characteristics of the service are the main factors that influence the customer's perceived convenience of the service.

According to Brown's (1990) concept of service convenience, a service can be accomplished by someone else (totally convenient) or done by you yourself (totally inconvenient). In a self-service context, this idea of convenience is reversed, a higher level of SST inconvenience will push customers to use the full service method as perceived convenience increases (Collier & Sherrell, 2010).

2.5 Trust

If consumer practice is reduced to an exchange between consumers and merchants, then consumer trust is a prerequisite for successful transactional behavior, and only with trust can people perform a behavior (Brann, & Foddy, 1987). li (2021) argues that consumer behavior in the AI environment is more complex than in traditional contexts because consumers in the Because the buyer and seller are separated and there is no feedback from interpersonal interactions, trust in a self-service experience is conceptually different from trust in a traditional service transaction (Mukherjee & Nath 2007; Yoon, 2002). Previous research has indicated that trust can play a key role in customers' intentions and behaviors in using technology to facilitate transactions (Ha & Stoel, 2009). Trust is a prominent factor in the development and adoption of new technologies and products.

Consumer responses to AI companies or products are strongly influenced by trust. It is especially important for individuals to trust others when they lack control over them (Lynch et al., 2001). The trust created by human/machine interactions is different from interpersonal relationships and traditional businesses, and more research is needed to understand how individuals place trust in AI interactions (Bock et al., 2020). It is essential to better define AI's performance and process compared to other technologies as it has many unique and unfamiliar characteristics. It has been suggested that trust is a crucial antecedent to the successful development and adoption of AI because of the vulnerability associated with AI (Ostrom et al., 2018).

2.6 Social Anxiety

Social anxiety is one of the most common mental health problems that individuals can experience (Schry, Roberson-Nay, & White, 2012), and it is defined as the fear of being judged or negatively assessed by others (American Psychiatric

Association, 2013). Social anxiety differs from social anxiety disorder in that social anxiety disorder is characterized by shame, fear, or behaviors that occur when an individual participates in social activities or engages in interpersonal interactions in the presence of others, whereas social anxiety is more of an anxious emotion, a tendency.Watson & Friend (1970) considered social anxiety to be an avoidance, preference for social anxiety is the discomfort of being alone and fearing criticism from others. Social anxiety can have many negative effects on an individual's life.

In traditional transactional contexts, a variety of interpersonal interactions often occur, such as those between employees and customers, or those generated between customers, which can be a burden for customers with social anxiety. But in the AI robot service option, such traditional interpersonal interactions no longer exist, and interactions occur only between customers and non-human AI robots, greatly reducing the anxiety that customers feel due to the fear of being exposed to others.

2.7 AI robot services usage intention

The concept of behavioral intention refers to a person's intention to perform various behaviors (Fishbein & Ajzen, 1975). Following TPB and TRA, this construct has been widely incorporated into other technology acceptance models. According to the TPB, behavioral intention is the most influential predictor of behavior. Several previous studies have found a correlation between behavioural intention and actual behavior (Al-Maghrabi and Dennis, 2011; Venkatesh et al., 2012). In this study, the usage intention of the AI bot service was used to predict the customer's usage behavior for the service in the hotel.

THEORETICAL FRAMEWORK

3.1 The relationship between consumer Innovativeness, trust and usage intention

Consumer innovativeness is an innate psychological trait of individuals, which is a potential motivation for individuals to purchase new products. When a new product is introduced to the market, individuals with high consumer innovativeness show a tendency to purchase the new product rather than maintaining their previous consumption patterns. Chandrasekaran (2008) found that innovativeness significantly influences the purchase behavior of consumers in exploring the relationship between innovativeness and new product purchase behavior. This study concludes that individuals with high consumer innovativeness are more likely to believe that AI robots in hotels can satisfy their needs and bring them a better service experience when faced with such robots. Since individuals with high consumer innovativeness are willing to try new things, they are more willing to use such new service options - artificial intelligence robots - than those with low consumer innovativeness.

Based on this, the following hypotheses are made in this study.

H1: Consumer innovativeness has a positive effect on trust

H2: Consumer innovativeness has a positive effect on AI robot services usage intention

3.2 The relationship between service convenience, trust and usage intention

By reducing customer effort and time, service convenience adds value to consumers (Colwell et al., 2008). In general, customers would evaluate trust positively when they perceive convenience in self-service transactions. With customers having to exert less effort because of the convenience of a self-service application, the trust placed in an SST provider should be heightened. In order to increase trust perceptions, service providers should provide customers with more options on how and when to conduct transactions (Yang et al. 2006).

This study argues that if consumers find the AI robots in hotels very convenient to use, it will undoubtedly increase their trust in this intelligent service and thus their intention to use it.

Based on this, this study makes the following hypotheses：

H3: Service convenience has a positive effect on trust

H4: Service convenience has a positive effect on AI robot services usage intention

H5: Trust has a positive effect on AI robot services usage intention

3.3 The moderating effect of social anxiety

Caplan (2007) argued that the situation of social anxiety is mainly caused by the individual's desire to make a better impression on others but lack of confidence in self-presentation, thus leading the individual to develop social anxiety. Individuals with social anxiety, in order to reduce their social anxiety state, actively seek out social encounters that are low risk to the individual, and they limit themselves to situations that involve minimal risk to their self-presentation in order to avoid jeopardizing their self-image.Russell, Gould, & Fergus (2017) argue that when individuals enter into social situations that may have negative evaluations they may fall into a state of anxiety. This fear and concern can cause individuals to exhibit a strong sense of self, which can lead to avoidance.

Thus, when confronted with both traditional service options that require social interaction with other people and AI service options that do not require social interaction with other people but only non-human machines, individuals with high social anxiety may believe that both options can satisfy their personal needs and that interacting with AI robots does not require them to place themselves in interpersonal situations that may be negative. This avoidance leads to a stronger desire to use AI robots.

In summary, this study makes the following hypotheses:

H6: The stronger Social anxiety, the stronger the positive impact of trust on AI robot services usage intention

H7: The stronger Social anxiety, the stronger the positive impact of consumer innovativeness on AI robot services usage intention

H8: The stronger Social anxiety, the greater the impact of service convenience on AI The stronger the positive impact of robot services usage intention

3.4 Conceptual framework proposed

In the face of hotel AI robot service, since the interaction occurs between the consumer and the AI robot, the main subjects of interaction are the consumer as well as the AI robot. Then, the characteristics of consumers themselves and the characteristics of AI robot services, these two aspects will jointly influence the behavior of consumers. Further, based on the Rational choice theory, for consumers, different choices produce different benefits, and the principle of consumers is to maximize benefits, so they have different preference rankings for the results of different choices. Therefore, facing different service options provided by hotels, consumers have different perceptions of service convenience due to their different innovativeness, which leads to different levels of trust that AI robot services can meet their own needs of maximizing benefits, and then affects consumers' intention to use AI robot services. In addition, if consumers have high social anxiety themselves, then such consumers will minimize their interactions with others and have a stronger preference for AI robot service options. Based on this, this study proposes the followingconceptualframework. The independent variables are service convenience and consumer innovativeness, the mediating variable is trust, the dependent variable is usage intention, and the moderating variable is social anxiety.

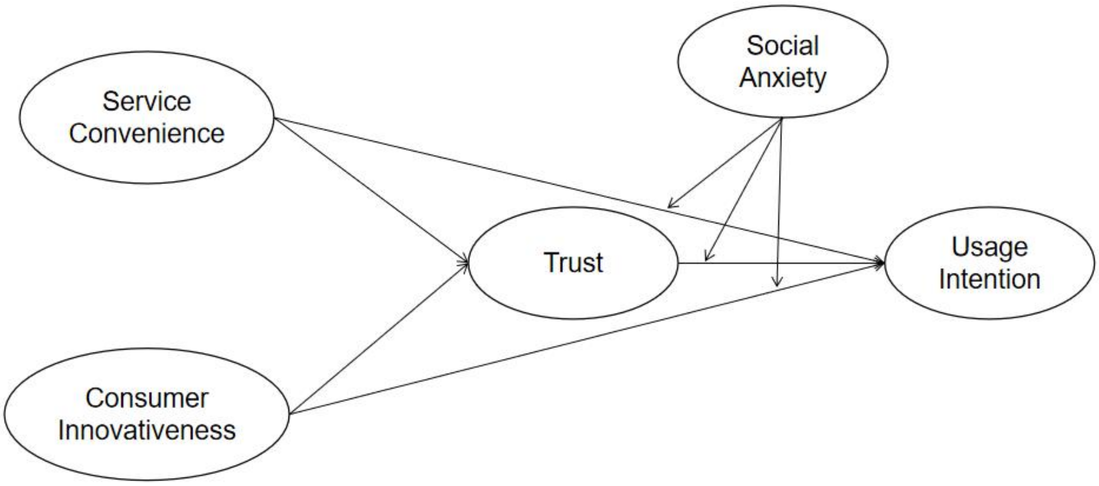

Figure 3.1 Conceptual Framework

METHODOLOGY

This study used a qualitative research approach, the methodology used in this paper was to search literature reviews from databases on topics related to artificial intelligence services, hospitality management, and the application of artificial intelligence services in hotels. References were based on Web of Science, Scopus, Science Direct and other databases, and references were taken only from journal articles, book chapters and full-text documents to sort out the relevant articles selected.

CONCLUSION

This paper has successfully developed a theoretical framework that is helpful for future research in this area. For hotel managers, they should not blindly follow the trend of introducing AI robot service, but also need to pay attention to whether the intelligent service can provide enough convenience to customers, if it is too difficult to operate or requires a long waiting time, it may affect the consumers' willingness to use; and the service staff need to decide the type of service according to the needs of consumers, for consumers with high acceptance of AI robot service, they can increase the proportion of AI robot service during the check-in process. For consumers with high acceptance of AI robot services, the proportion of AI robot services can be increased during the customer's check-in process; while for consumers with low acceptance of AI robot services, the service personnel need to reduce the proportion of AI robot services during the customer's check-in process and use traditional human to provide services.

However, this study also has some limitations. The limitations of the study are that the empirical research method was not used to test the hypothesis of the relationship between the variables proposed in this study, and the literature search was only done in a limited database, which may be incomplete. In future research, an empirical approach can be used to validate the framework proposed in this study in different industrial contexts.

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PERENNIAL PLANTS USED AS THE BUSINESS SECURITY UNDER THAI LAWS

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ABSTRACT

Thailand has abundant of natural resources.People in Thai society have variety of natural resources uses to generate income for agriculture and industry by means of labour. It has also used of traditional wisdom, such as agriculture or use of technology in foods processing industry from agricultural products. However, for investment in these businesses in terms of funding, the local people have normally entered into the loan agreement with the financial institutions. In general, loan shall comply with the Civil and Commercial Code specifying the provision of loan agreement as the principal contract. In addition, there must be an accessory agreement supporting the loan agreement. However, as security of the loan, which are guarantee agreement, mortgage agreement and pledge agreement, this article is the proposal of the legal academic opinion regarding using perennial plants as the assets of security in order to loan form financial institution pursuant to the Business Security Act B.E. 2558(2015) and Ministerial Regulation Prescribing Other Assets as Business Security B.E. 2561 (2018).

Keywords: Perennial Plants/Security/Business

INTRODUCTION

According to Thai laws, indebtedness is divided into 5 categories, which are (1) legal transaction; (2) wrongful act (Sak Sanongchat);(3) management of affairs without mandate;(4)unjust enrichment; and (5)other provisions of laws, such as tax law prescribing that people have duties to file tax returns (Tassanee Luengruengrong, 2018). Most of indebtedness by means of legal transaction are in the form of various kind of contracts, such as sale and purchase contract (Sananakorn Sothiphan), exchange contract, employment contract, current account contract, loan agreement (Tanawat Pisitchinda, 2015) or lease contract(Surasak Meebau, 2018). These contracts in legal terms are called "principle agreements" which have complete contents in their contents without any reference to any agreement. Another kind of agreement is called"Accessory Agreement" (Chit Setthabut, 2008), which has to refer to the principle agreement prior to enforce the debt, such as guarantee agreement, mortgage agreement, and pledge agreement etc.(Rathichai Rodthong,2015)

In Thailand, the Civil and Commercial Code prescribes 3 type of security to pay debt, which are (1) security of debt payment by person according to Section 680 of the Civil and Commercial Code; (2) security of debt payment by immovable properties, such as placing land for mortgage of loan etc., which is called "mortgage"; (3) security of debt payment by movable properties called "pledge" according to Section 747 of the Civil and Commercial Code 747 (Suda Wisarutphit and ParaweeKasition, 2013).It can be seen that "object of obligation" used as security of debt under mortgage or pledge agreement shall be properties. As Thai people have relation with local nature, they have sharing to each other in way of life. For example, Samutsongkhram people shall go through by sufficient economy philosophy (Khanthong Jaidee and Ludech Girdwichai, 2016).

In addition, people mostly grow a lot of perennial plants. Funding for doing business sometimes must be loan from financial institutions. Therefore, the Business Security Act B.E. 2558 (2015) and the Ministerial Regulation Prescribing Other Assets as Business Security B.E. 2561 (2018) were announced so that certain types of perennial plants can be used as business security.

Due to the announcement of such law, the fact is happened that Mr. A who is the owner of one plot of land and has 100 perennial plants that can be used as business security in his land. Mr. A has planted all of them by himself. Then, Mr. A uses only all perennial plants as business security of loan with the Financial Institution B. Later, Mr. C has adverse possession of such land so that Mr. C can obtain legal ownership of land. Therefore, the important issue of this article is what the legal result is in relation to the perennial plants used as business security of loan with Financial Institution B.

LITERATURE REVIEW

2.1 Perennial Plant sand Component Part under the Civil and Commercial Code

The Civil and Commercial Code prescribes the legal status in 2 cases. In case of perennial plants, Section 145 paragraph one of the Civil and Commercial Code Section 145 specifies that perennial plants are deemed to be component parts of the land. In case of seasonal plant, Section 145 paragraph two of the Civil and Commercial Code specifies that"seasonal plants are not deemed to be component parts of the land. The result in terms of laws in relation to the component part, Section 144 paragraph one of the Civil and Commercial Code specifies that "A component part of a thing is that which, according to its nature or local custom, is essential to its existence and cannot be separated without destroying, damaging or altering its form or nature" and its paragraph two specifies that "The owner of a thing has ownership in all its component parts." In consideration of these provisions, it is understood that the person who has ownership of land, shall have ownership of perennial plants by virtue of component part of properties (Seni Pramoj,2008).

2.2 Scrambling of ownership under the Civil and Commercial Code

Section 1382 of the Civil and Commercial Code specifies that"where a person has, for an uninterrupted period of ten years in case of an immovable, or five years in case of a movable, peacefully and openly possessed a property belonging to another, with the intention to be its owner, he acquires the ownership of it."This provision provides possession by time, which are possession of immovable properties for 10 years (Kumchai Jongjakapunand) movable of properties for 5 years (Somsak Iam Plub Yai,2018) , which the person who takes possession shall acquire the ownership of it (Arnon Mamout, 2017).

2.3 General Principle of Business Security Act B.E. 2558 (2015)

According to the Business Security Act B.E. 2558 (2015) and Ministerial Regulation Prescribing Other Assets as Business Security B.E. 2561 (2018), regulation to use perennial plants as business security shall comprise of the relevant persons, which are the "Security Provider" that is the borrower or other person who is the owner of security; and the security recipient that are financial institutions under the laws on financial institution business, such as commercial banks etc..The properties that will be used as business security under the Business Security Act B.E. 2558 (2015)are divided into 6 categories, which are right of claim, movable property, immovable property, intellectual property and other properties specified under the Ministerial Regulation which are the perennial plants.

2.4 Definition of Perennial Plants

Perennial plants under the Business Security Act B.E. 2558 (2015) and Ministerial Regulation Prescribing Other Assets as Business Security B.E. 2561 (2018) has not defined specifically. Therefore, the "security provider" and the "security recipient" can use all kinds of perennial plants to be security of loan.

There are 58 kinds of perennial plants under the said Ministerial Regulation, which areTeak, Dalbergiacochinchinensis,Tamalin, shrub, Burma Blackwood, Sathon, Ironwood Pterocarpusmacrocarpus,Pterocarpusindicus,Makhamong, Ma khatae, Khiam, Khiamkhanong ,Teng, Burmese Sal, Phayom, Takhian thong,Takhianhin,Takhianchan ta maeo, Yang, Sadao, Thiam,taku,yomhin, Yom hom,Prunuscerasoides, Non see, Alstoniascholaris ,Cerberaodollam,Phruek, Peep, Bungor,Salao, Intanin,Tabaekleuat, Indian rose chestnut, Micheliaalba,Dolichandroneserrulata, Cassia bakeriana,Cassia fistula, Cochlospermumregium, Tree of gold,Mahat,Indian gooseberry,Waa, Chamchuri, Microcostomentosa,Kankrao,Kathang, Lumpho, AgarWood, Sandalwood, Cinnamomumporrectum Kosterm, Caesalpiniasappan,Bamboo Shoot, Mango, Durian, makham.

ANALYSIS

Based on the analysis, it is found that “land” under Section 139 of the Civil and Commercial Code is deemed as “immovable property”. If any person has ownership over any immovable property, such person shall have ownership of component part of such land where the plants are growing. Therefore, if any person is the owner of property where the plants is growing, such person shall have ownership over such perennial plants as well. However, for scrambling of ownership until obtaining ownership in such immovable property, it is found that any person who has taken possession for ten years according to the conditions of Section 1382 of the Civil and Commercial Code shall have the ownership on it.

The provision of Sections 139, 145 paragraph one and 1382 of the Civil and Commercial Code prescribes the legal regulation that would affect to the case that the “security provider” was scrambled his ownership by the “third party” under such “third party takes ownership of “security” which are the “perennial plants”, which shall deprive his right on perennial plants which is the component part of such land where they are growing. This is the problem of the “security receiver” whether the “security” which are the said “perennial plants” shall be vested to the third party or not.

For this issue, the Supreme Court Judgment No. 1064/2507 can apply that the defendant mortgaged the land with the plaintiff and later such land was adverse possession. The person who had right from adverse possession that was not registered could not raise this issue against the mortgagee which has right by paying compensation in good faith and registered bona fide according to Section 1299 of the Civil and Commercial Code specifying that “where immovable property or real right appertaining thereto is acquired otherwise than by juristic act, the acquirer's right cannot be dealt with through the register unless it has been registered, nor can it, without registration, be set against a third person who has, for value and in good faith, acquired it and registered his right.”

However, if the “security provider” wishes to separate the “security” which is the perennial plant, from the “land” by agreeing with the “security recipient” at the beginning, which for example, it is agreed to use only “certain woods of perennial plants” as security. Upon enforcement of the security for payment, it is also further question whether ruling under the Supreme Court Judgment No. 1064/2507 can be applied or not.

SYNTHESIS

From the analysis of the above information, the new important finding is that the condition of perennial plant, in fact, can be separated from the land where it is growing and value of the perennial plants may be increased when they are growing and have bigger size, which would affect to the enforcement of the security of perennial plants. Therefore, the announcement of the law that gives the right to make more investment by issuing laws to allow the perennial plant as the security, opens the opportunity to local people to access funding by using natural resources and promotes growing the perennial plants that are beneficial to environment

CONCLUSION AND FUTURE WORK

Thailand opens opportunity to people as the "security providers" to access more funding by using natural resources which are "perennial plants" as the business security according to Business Security Act B.E. 2558 (2015) and Ministerial Regulation Prescribing Other Assets as Business Security B.E. 2561 (2018). However, there is no legal measure to control problems of lands where the perennial plants are growing that is adverse possession by the third party. Therefore, there should be any legal measure on how to protect the "security recipients" in this situation. There is the recommendation that the government should study and issue any legal measure to help this situations to be fair for both of the "security provider" and the "security recipient".

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ANALYSIS OF THE EMPLOYMENT SITUATION AND QUALITY IMPROVEMENT OF COLLEGE GRADUATES IN THE NEW ERA

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ABSTRACT

The negative impact of the employment difficulty of college students has penetrated into all aspects of social life, affecting the social stability and people's basic life to a certain extent. There are many reasons for the difficulty of employment of college students, and there are reasons for public opinion, for students' own employment awareness and ability, as well as for colleges and universities and employers. This paper plans to analyze the causes and solutions to the problems from the subjective and objective reasons affecting the employment of college students, and puts forward operable suggestions and countermeasures, so as to provide some decisions and references for serving the employment of college graduates.

Keywords: employment analysis quality improvement of college graduates.

INTRODUCTION

This paper analyzes the employment situation and characteristics of Chinese college graduates at the present stage, on the basis of further analyzes the college students' employment difficulties, reasons, explore the various factors that hinder the employment of college students, and then from the college students themselves, schools, government, unit of choose and employ persons put forward effective countermeasures to promote the employment of college students and Suggestions. Under the guidance of this idea, the following research framework is put forward:

The first part mainly expounds the research purpose, research significance, research methods and research results and the research methods selected in this paper.

The second part mainly analyzes the historical development history of the employment of Chinese college students, summarizes the positive efforts and remarkable achievements made by the United States and Japan in promoting the employment of college students, and the experience worth learning from in China.

The third part summarizes and analyzes the current employment status of college students, and deeply analyzes the reasons hindering the smooth employment of college students from five aspects: college students themselves, colleges and universities, the government, employers and the social environment.

The fourth part puts forward the countermeasures to solve the employment problem of Chinese college students. From the government system and policy guarantee, the management of universities in place, college graduates self-improvement of three aspects to improve the quality.

OBJECTIVES

Study the employment status of graduates of Nanyang Institute of Technology.

RESEARCH SCOPE

3.1 Scope of content

Employment problem of college graduates.

3.2 Scope of the population

Nanyang Institute of Technology Teacher Education College has 1,000 graduates.

3.3 Scope of variables

The number of students who pass the exam.

3.4 Scope of place and time

He will work at Nanyang Institute of Technology from October 2021 to April 2022.

LITERATURE REVIEW

The Since the expansion of college enrollment, more and more young people of appropriate age have entered higher education institutions. On the one hand, the expansion of colleges and universities provides opportunities for more talents to receive higher education, paved the way for more students from poor families to change their fate of knowledge, and also brought great wealth to the society. But on the other hand, the increase of the number of enrollment will certainly bring an increase of the number of graduates, and the problem of difficult employment arises. With the comprehensive marketization of college students' employment.

METHODOLOGY

Literature research method: this article has an extensive review of related works and journals, and collected The materials are summarized to understand the history and current situation of the related problems, analyze the results and deficiencies of the existing research, expand the thinking of solving the problems, ensure the correctness of the research direction and the persuasion of the research, and then understand the whole picture of this problem.

Case analysis method: a representative group of college graduates is selected to analyze the problems existing in the employment process of college graduates in China, so as to deeply analyze the difficulties of college graduates in their employment.

FINDINGS

Employment influencing factors Employment influencing factors refer to the factors considered when college students find employment, which directly affects the employment choice of college students. In the process of this survey, the factors affecting employment are summarized into seven categories, as shown in the table below. Due to the different professional background and family environment, the influencing factors vary from person to person.

The most influential factor for college students' employment

	The most influential factor for college students' employment							
	individual	**environment**	**stabilize**	**scale**	family	**government**	**rest**	**amount to**
Literature and history class	15	11	1	2	0	0	1	30
The management class	70	44	8	6	4	1	0	133
Political science and law class	2	4	1	0	0	0	0	7
Science class	9	13	0	1	2	0	0	25
Engineering class	27	30	8	4	3	6	3	81

Agricultural class	0	1	2	1	0	1	1	6
other	5	1	1	0	0	0	3	9
amount to	128	104	20	14	9	8	8	300

CONCLUSION AND DISCUSSION

To solve the problem of difficult employment of college students in China is a complicated and long-lasting project, which requires the joint efforts of the main body of employment, talent training units, employment authorities, the object of employment and all aspects of social life. Among them, as the main body of employment, college students should play a positive and subjective role, change the backward employment concept, and improve their psychological quality and comprehensive ability. As a talent training unit, colleges and universities should constantly adjust the content and form of employment guidance courses according to the market, equip full-time experienced teachers engaged in teaching work and timely cultivate the entrepreneurial consciousness of college students, so that the employment guidance courses system is comprehensive, the content is more than the form, and play a role in guiding and serving for the employment of graduates. The competent employment departments should conduct macro-control on employment, constantly improve the employment service guarantee system for college students, gradually eliminate the negative impact of the household registration system, and constantly optimize the fair environment for college students by using policy means. As the object of employment, the employer should establish a comprehensive, fair, rational concept of talent investigation, not only to be fair, but also to conform to the actual situation of the development of the unit, to avoid the loss and waste of talent.

SUGGESTION

8.1 Government Sector policy

8.1. 1 Job market environment and social restructuring

First, to increase employment, and ultimately, we must rely on economic development, rather than job growth at the expense of productivity and living standards. Comrade Jiang Zemin pointed out that we should correctly handle the relationship between economic development and expanding employment, so as to promote employment through developing the economy and promote economic development through expanding employment, so as to realize the benign interaction between economic development and employment expansion. Second, the establishment of the graduate employment market, to rely on the existing talent market, based on the tangible talent market, vigorously develop the network market, relying on the national graduate employment information network, the establishment of school graduates employment information network, to provide online information exchange and services for graduate employment.

8.1.2 Establish a social security system in line with the national conditions

The students with employment difficulties should actively carry out employment assistance training, such as resume revision and interview simulation, to help the graduates better adapt to the current employment environment. At the same time, the use of campus public accounts and other platforms to push "job guide" and "interview skills", to help graduates to prepare before employment, remind graduates to enhance the awareness of fraud prevention, take the initiative to prevent recruitment traps, and safeguard the legitimate rights and interests of graduates. Graduation class of teachers through online channels to do a good job in employment consulting, according to students intention online "one to one" guidance and group guidance, pay close attention to inputting tent card poor family economic students, establish and improve the poor college graduates employment information parameter.

8.2. Countermeasures for colleges and universities

8.2.1 School-enterprise cooperation

strengthen communication with enterprises, and jointly cultivate applied talents. Innovation and entrepreneurship education should not only be limited to the teaching of theoretical knowledge, but also must be combined with practical experience. College students should find problems in practice and correct them in time, so as to effectively improve their innovation and entrepreneurship ability. Through communication with enterprises, the school establishes deep cooperation and jointly establishes off-campus training base. While the students can gain practical experience, the enterprise can reserve human resources and promote the long-term development of the enterprise, and finally achieve the "win-win" goal of schools, enterprises and students.

8.2.2 Innovation and entrepreneurship

In recent years, to support college students in starting businesses, the central and local governments have introduced many preferential policies, involving financing, registration, taxation, entrepreneurship training, entrepreneurship guidance and many other aspects. We will promote entrepreneurship to create employment and ensure that more workers will become entrepreneurs. The Ministry of Education, the Ministry of Finance, the Ministry of Human Resources and Social Security and other ministries and commissions have issued a number of policies guiding college students' flexible employment and starting their own businesses, and these policies have helped college students to start their own businesses.

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A REVIEW OF RELATED INFLUENCING FACTORS OF INTERNET ADDICTION AMONG COLLEGE STUDENTS

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ABSTRACT

The prevalence of internet addiction has increased along with the popularity of the Internet. Internet addiction is more common among college students than it is among younger individuals. College students' academic achievement, interpersonal connections, physical health, and mental health are all impacted by internet addiction. Further research on the effects of Internet addiction is needed to comprehend network addiction in college students and to assist college students in avoiding its behaviors. The goals of this study is to provide some theoretical support for the intervention and prevention of Internet addiction among college students by focusing on the characteristics of the network itself, environmental factors, physical factors, and psychological factors. These factors were summarized from four perspectives of scholars about the influence factors related to Internet addiction.

Keywords: Internet addiction;characteristics of the network;environmental factors; physiological factors;psychological factors.

INTRODUCTION

According to the 49th statistical report on China Internet Development released by China Internet Network Information Center (CNNIC),by December 2021,the number of Chinese Internet users reached 1.032 billion,the Internet penetration rate reached 73.0 percent. The public has mostly come to rely on the Internet, particularly in collegiate life. university students.

Internet Addiction Disorder (IAD) was first proposed by I. Goldberg, a psychiatrist in New York City in 1994. Internet Addiction Disorder also known as pathological Internet use, refers to the phenomenon of Internet tolerance, withdrawal reaction, persistent desire to use the Internet, and behavioral loss caused by long-term inappropriate Internet use. Internet Addiction can cause damage to individuals' physical, psychological and social functions (Goldberg,1996),and causes significant distress and impairments in daily functioning (Kalaitzaki & Birtchnell,2014).

Internet addiction can cause depression(Yao et al.,2014), anxiety (Azher et al.,2014), higher crime rates(Tsai et al., 2009),and decrease cognitive ability (Jorgenson et al. 2016), levels of well-being and life satisfaction (Van den Eijnden et al.,2008).Among college students in China, the phenomenon of Internet addiction is relatively serious,and there is a higher incidence of Internet addiction among college students: A survey found that the incidence of Internet addiction among college students in Wuhan reached 9.9%. (Zhu &Wu,2004). Gu Haigen(Gu,2004) found that the incidence of Internet addiction disorder among college students in Shanghai was 12.9%. His research sample size was more than 4,000 people.The investigation results show that the incidence of Internet addiction among college students is 14.7% (Yao,2006).Mei Songli(Mei,2008) used the clinical diagnosis questionnaire compiled by K.S.Young to conduct a survey on 1310 college students. The results showed that 86 people were addicted to Internet, accounting for 6.56% of the total number.The sample size of his research is large, with more than 2000 people.Some other studies have found that the proportion of addiction is between 8.12% and 12.83% (Chen et al., 2007; Li et al.,2014; Zhang et al., 2014).In the survey of 1554 college students from two universities in Anhui province (Huang et al.,2018), the detection rate of college students' dependence on smart phones was 15.3%, among which the most frequent function of college students' use of smart phones was the Internet, accounting for 61.3 % of the mobile phone usage functions.Bian Huimian's study of 707 middle school students in Hubei province showed that 18 percent of them exceeded the threshold for Internet addiction(Bian,2018).In June 2020, the research conducted a questionnaire survey on 2700 college students who returned to school in a university in Anhui Province (Jiang,Wang et al.,2021)found that the detection rate of Internet addiction among college students who returned to school was 32.4%. This situation may be related to the front-line teaching during the epidemic period and the closed management after returning to school. The scale used in this study was the Internet Addiction Scale developed by Young et al.Gou Shuangyu(Gou et al.,2021)found in a survey of 1,931 college students in Guizhou province that 12.85% of them met the diagnosis of Internet addiction.Zheng Tong et al. used Young's scale to study 139 medical university students and non-medical university students, and detected that the rate of Internet addiction among medical students was 36.6%. However, the net addiction rate of non-medical students was as high as 75.0% (Zheng, et al.,2021).

To successfully eliminate Internet addiction behaviors, it is vital to identify the elements that influence Internet addiction.

THE INFLUENCING FACTORS OF INTERNET ADDICTION

There are several elements that influence Internet addiction.There are objective elements, such as Internet characteristics and the effect of ambient circumstances. Subjective elements, which mostly include individual physiological and psychological aspects, are also present.

2.1 The characteristics of the network

Network has the characteristics of openness,anonymity,virtuality,interactivity, richness, convenience and so on. The anonymity, convenience and escape reality of the Internet lead to the individual's susceptibility to Internet addiction(Young,1997).The virtuality of cyberspace makes the boundary between reality and virtuality, network society and the real world become blurred.The psychological influence of network on people depended largely on the characteristics of cyberspace, a special virtual situation. Internet users had the pleasure of communication in the process of using the Internet, including the pleasure of anonymity, the pleasure of interpersonal interaction, the pleasure of behavior, the pleasure of text interaction and the pleasure of escape.(Zhou&Zhou,1997) The pleasure brought by the Internet attracted users to continuously overuse the Internet,leading to Internet addiction.Through the Internet, people can get a kind of "liberation" from the norms and constraints of real life(Joinson,1998).Those psychological needs of teenagers that can not be met in real life could be realized in the network world. They could get social support through interpersonal communication in the network. Through virtual network communication and indirect communication, they could reduce their psychological burden, so that they would be relaxed and cathartic, self-fulfilling.(Chen &Huang,2008).

2.2 The environmental factors

Environmental variables such as family, school, and social environment all have impact on Internet addiction of college students.

2.2.1 The family environmental factors

Family, being the first, most permanent, and most significant psychological environment, has the biggest impact on college students. The parenting style of the parents of these college students with Internet addiction in their homes share the following characteristics:Parents overly intervene in their children's conduct; aggressively punish youngsters when they are at fault; Parents cannot recognize the advantages of their children, naively dismiss the advantages of children, and lose their passion; Parents seldom provide encouragement and support;The family environment is not harmonious;Lack of emotional warmth and good communication; parents' lack of comprehension of their children's learning, life, interests, hobbies, and other elements, and so on.(Zhou et al.,2008) .Students who grow up in this family environment, and with family discord or family breakdown are more likely to indulge in the Internet to seek the sense of belonging and satisfaction because they can not get psychological satisfaction in the family,which is lack of emotional warmth, understanding, communication,and full of too much rejection, denial and severe punishment (Li et al.,2004).

2.2.2 The school environmental factors

The primary battleground for preventing and curing college students' Internet addiction is the school. The design and layout of the educational environment, educational methods, student management, and educational material will influence college students' enthusiasm and involvement in their studies, as well as whether or not they will engage in Internet addiction behavior.Liu Chengyun analyzed the causes of the formation of Internet addiction in college students from the aspects of living environment, learning environment and psychological changes.(Liu,2008). He believed that the change of school learning and living environment and the inadaptability of role transformation were the catalysts for the formation of Internet addiction.Xu Juan and other scholars(Xu et al., 2008) believed that school style and class style, curriculum setting, teaching content and means, and campus interpersonal relationship all had a certain influence on the formation of Internet addiction.

According to several research, schools solely focud on the development of academic ability, focusing too much on academic components, and the assessment criteria were too narrow, overlooking the development of comprehensive traits such as personality growth. Furthermore, there was now a lack of systematic and forward-thinking Internet education for elementary and secondary schools, as well as a lack of network moral education and standards, which caused kids with weak self-control capacity to readily develop dangerous Internet addiction habits. External variables that contributed to college students' Internet addiction included Internet cafés near campus and lax Internet usage rules.If there were several Internet addicts in the same class or dormitory, it was simple to develop a group atmosphere that will have an influence on other students. (Yan,2013). Furthermore, a lack of mental health education in schools is a significant element in the development of college students' Internet addiction.

2.2.3 The social environmental factors

Tao Ran (Tao et al.,2007)believed that the social factors of Internet addiction mainly included:The dysfunctional social and cultural structure exemplified by dysfunctional community culture and community activities, a lack of sports facilities, and so on; Network pollution, insufficient monitoring of Internet, and a lack of oversight of online gaming as a result of ineffective related laws and regulations; The uniqueness of network culture and media. Inadequate Internet laws, insufficient Internet oversight, and a lack of Internet morality were significant societal issues leading to the rising incidence of Internet addiction.(Chen,2010).

2.3 Physiological factors

Existing research indicated that the development of Internet addiction was tightly tied to dopamine release, and that increasing dopamine neurotransmitter levels could alleviate anxiety and restore pleasure. Long periods of Internet use could enhance dopamine levels in the brain, resulting in a brief period of high excitement, but it eventually caused people to become more unhappy and depressed. The study found that physical health and the degree of Internet addiction were inversely connected; the more times weekly college students exercise, the lower the rate of Internet addiction. (Chen et al.,2019). College students' Internet addiction was inversely connected with their bodily and mental health scores; that was, the higher their physical and mental health scores , the lower their level of Internet addiction.(Jiang,et al.,2021).

2.4 Psychological factors

According to the poll, 60.4% of college students consider that Internet addiction was induced by external factors such as the social environment, interpersonal relationships, media characteristics, and family life.(Jiang&Qu,2005).Interest drive, introversion and frustration experience and other internal factors, of which the internal cause was more fundamental and important.A number of studies had shown that Internet addiction had a certain relationship with individual personality traits and mood.First of all,from the perspective of personal characteristics,Lei Li and Li Hongli speculate that individual personality traits may be a cause of Internet addiction. (Lei&Li,2003).Through the study of minority college students, Lin Qiongfang found that there was a certain relationship between the dissonance of self and experience and Internet addiction. (Lin,2005).Overuse of the Internet may be a defensive reaction of minority Internet addicts to seek a consistent psychological tendency when they encountered pressure in reality.Internet addicts often had some special personality characteristics, such as self-discipline,loneliness,low self-esteem and other personality characteristics.The research (Zhang&Li,2005)found that the personality of college students with Internet addiction is not as sound as that of non-addicts.Adolescents' neuroticism and extraversion also influence their Internet use preferences(Lei,Yang,Liu,2006). College students with Internet addiction tendency tended to adopt immature coping methods such as self-reproach and escape when facing problems or setbacks (Li, 2006).The research(Pang et al.,2010) found that scores of anxiety, adaptability, anxiety, loneliness, physical symptoms and impulsiveness in the Internet addiction group were significantly higher than those in the non-addiction group, and scores of self-discipline were significantly lower than those in the non-addiction group. At the same time, neuroticism and extroversion also affected the Internet use preferences of adolescents.The master dissertation found that there was a significant positive correlation between college students' sense of self-alienation and Internet addiction.(Zhang,2014). College students with a higher level of self-alienation had a higher degree of Internet addiction. Both self-esteem and social support were negatively correlated with Internet addiction, and both of them played a partially mediating role in the relationship between self-alienation and Internet addiction. High self-esteem and good social support could reduce Internet addiction and protect the physical and mental health of college students.The rate of Internet addiction of extroverted college students was lower than that of introverted and neutral college students.(Wang,Sheng&Wang,2019)

Secondly, from the perspective of the emotional characteristics of addicts,the individuals with severe social anxiety,high sensation seeking,loneliness, depression and anxiety (Lin et al.,2004) are more likely to become Internet addiction.Social anxiety and shyness were significantly related to Internet addiction, that is, the higher the degree of Internet addiction, the higher the degree of social anxiety and shyness(Wang,2003).The research of Jiang Nannan and Zhang Lanjun showed that compared with non-addicts, addicts had the characteristics of loneliness, depression and anxiety in personality, which indicated that these emotional psychological factors had an impact on Internet addiction.(Jiang,2005; Zhang,2003).Gu Haigen found that college students with Internet addiction showed loneliness, depression, anxiety and other personality traits more obviously than those without Internet addiction.(Gu,2005).Qian Mingyi,a professor from Peking University, found that those with high need for social approval and high social anxiety were prone to addiction when surfing the Internet.(Qian,2006) There was a definite relationship between individual network addiction and psychological stress(Wei,Zhou&Zhang,2018).

CONCLUSIONS

The qualities of the Internet itself, the addict's personality, and the impact of the environment around them are only a few of the factors that contribute to internet addiction. The danger of Internet addiction has escalated with the adoption of cellphones. For the sake of enhancing college students' physical and mental wellbeing and lowering the danger of Online addiction, it is vital to pay attention to the phenomena of internet addiction. Internet addiction is only the "appearance" of college students' mental and psychological issues, which exposes the depth of their overall physical, psychological, familial, and social issues.

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FACTORS INFLUENCE THE WILLINGNESS OF DRUG ADDICTS TO PARTICIPATE IN COMMUNITY DETOXIFICATION MANAGEMENT PROGRAM: AN EXPLORATORY MIXED-METHOD DESIGN

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ABSTRACT

At present, China's research on community drug rehabilitation management mainly focuses on policies and measures of community drug treatment management. Public participation in community drug rehabilitation work is not active. The community drug rehabilitation stakeholders have not yet constructed the community-based correction and control model by using patients focused on improving drug rehabilitation with drug addicts' willingness. The purpose of the study is to investigate stakeholders' perceptions of drug addicts' desire to participate in a model and the actors that influence the willingness. An exploratory sequential design will be used first to explore qualitatively to develop a context-specific and sensitive survey questionnaire that will be quantitatively tested.

Keywords: the Willingness of Drug Addicts, Community Detoxification Management Program, Influencing factors, mixed research methods

INTRODUCTION

Measures for the Administration of Community Drug Rehabilitation Personnel point out that community drug rehabilitation personnel must actively participate in social activities carried out by community organizations and consciously abide by the obligations stipulated in the administration of community drug rehabilitation and community rehabilitation. (Order No. 597th of the State Council,2020）

China needs aggravated some achievements to hypothetical Scrutinize for group keeping medication rehabilitation, Be that as it mostly keeps tabs for medicine, law, criminal investigation, psychology, sociology, and administration. At present, those examination content mostly keeps tabs once laws and regulations approach the environment and professional administration （Li Yanfei，2021)

The purpose of the study is to investigate stakeholders' perceptions of drug addicts' willingness to participate in the model and the factors that influence the willingness. An exploratory sequential design will be used to explore qualitatively to develop a context-specific and sensitive survey questionnaire that will be quantitatively tested. The first study will explore how the project's stakeholders, particularly those undergoing drug therapy, perceive the program. What, in particular, is a critical factor in the patient's willingness to participate in regaining their addiction? Qualitative data will be collected from stakeholders' drug treatment. The qualitative findings will develop a questionnaire administered to a large sample from this initial exploration. In the tentatively planned quantitative phase, survey data will be collected from drug addicts at the education and correction centers of Chongqing to develop a model of Factors that Influence the Willingness of Drug Addicts to Participate in Community Detoxification Management.

Currently, China's research on community drug rehabilitation management mainly focuses on policies and measures of community drug treatment management (Zhao Ge， 2019). Therefore, the study can find a new perspective on the management model, which is valuable and innovative.

Moreover, the research findings will be considered part of evaluating project outcomes and processes and finding ways to improve the project to respond to service recipients continuously better.

Research Questions

1.1.1.How are the drug addicts' willingness in Community Detoxification Management Participation Program?

1.1.2.How do stakeholders perceive the client-centered management process of the Community Detoxification Management Program?

1.1.3.What are influencing factors of drug addicts' willingness in the Community Detoxification Management Program?

1.1.4.How do factors influence drug addicts' willingness to participate in Community Detoxification Management?

Research Objectives

1.2.1. To explore client-centered Community Detoxification Management process, influencing factors, and the Willingness of Drug Addicts in Community Detoxification Management Programs.

1.2.2. To analyze variables influencing drug addicts' willingness to manage community detoxification Programs.

1.2.3 To determine a relationship model between influencing factors and the Willingness of Drug Addicts in Community Detoxification Management Program.

1.3 Scope

1.3.1Scope of content

The study aims to study the client-centered Community Detoxification Management process, influencing factors.

1.3.2 Scope of location

The geographical location of this study is in Chongqing, including five educational correction centers. They are XISHANPING educational correction center, CHANG SHENG women's academic correction center, HULING Institute for Correctional Education, WENZHOU Institute for Correctional Education, and

JINYUNSHAN Institute for Correctional Education. All of them are independent drug treatment centers of men and women in Chongqing.

1.3.3 Scope of variable The variables in the research are:

1) Dependent variable: Drug addicts' willingness to participate in the Community Detoxification Management program.

2) Independent variables: Management Community Detoxification programs, influencing factors on the willingness of drug addicts to participate in the Community Detoxification Management program.

1.3.4 Scope of population

The population used in this study is people who live in Chongqing and participate in or will participate in community drug rehabilitation management, detoxification managers, and families of drug addicts.

According to the announcement of the Chongqing Drug Rehabilitation Department, 81,724 people in Chongqing are rehabilitating drugs. In addition, there are 2000 drug rehabilitation managers and 1000 family members.

1.4 Term definitions

Theoretical definitions

The Community Detoxification Management program: A new process for service and management for drug addicts in a community.

MOA model: A combination of basic constructs in Motivation, Opportunity, and Ability to manage drug addicts in the Community Detoxification Management program.

Drug Addicts: Persons addicted to a chemical substance in the Community Detoxification Management program.

Influencing factors can affect drug addicts' willingness to participate in the Community Detoxification Management program.

1.5The significance of the research

1.5.1 From the perspective of innovation management, this research will help the group project manage three items.

a) To test the efficiency and effectiveness of the drug addicts–centered model.

b) To further capture lessons learned from the program management for reuse and development.

c) To collect the best practices of drug addict programs in other areas.

1.5.2 From the perspective of drug addicts and their families, the program will bring new hope to lives. They can be valuable human resources to the communities and the country. Moreover, those who have recovered from drug treatment can be a model of unlearning, relearning, and learning people.

LITERATURE REVIEWS

In the nineteenth and early twentieth centuries, China faced drug addiction problems. As a result, she tried to transform herself into a "drug-free" society. In the early 2000s, China starts with a policy change. China's best efforts are implementing a more humane, compassionate, and self-proclaimed 'scientific' approach to drug treatment. The policy focused on people-oriented and local communities' competencies. As a result, China has adopted a drug treatment and rehabilitation system with four stages: 1. Voluntary treatment, .2. Community-based Treatment, .3. Compulsory isolated Treatment (CIT), and 4. Community-based rehabilitation （Lu Hong, Miethe,& Bin Liang，2016)

However, regarding policy implementation, the public security organ still occupies a dominant position in community drug treatment management, creating measures, and formulating management content （Zhao Ge，2018). In 2020, China's community drug rehabilitation will have more administrative measures （Kong Fanjin,2020). Simultaneously, the public organ is the main body, supplemented by the community. However, the lack of participation in social organizations is the gap in program management. Drug control and rehabilitation work are mainly under the unified government leadership, and relevant departments have their responsibilities. However, various departments have failed to implement the corresponding duties in community drug rehabilitation in work practice （Fu Meizhen，2021)

At present, there are some mismanagement problems in community drug treatment management, such as lack of sufficient supervision on community drug treatment, imperfect intervention mechanism in community drug treatment management, inability to meet the diversified needs of drug addicts, and low willingness of drug addicts to participate in community drug treatment management. There is a lack of community service resources for drug addicts. There is a lack of professional staff in community drug rehabilitation posts. The families of drug addicts cannot give them care and help and overcome their psychological problems, resulting in the inability to effectively supervise the drug rehabilitation behavior of drug addicts （Wang Jue, 2018).

As China's justice still needs to be improved, the lack of medical resources for community drug rehabilitation is severe, the construction of community work teams is weak, the social support system is lacking, and there is a lack of standardized management of law enforcement （Wang Haijun,2015).

The problems existing in the community drug rehabilitation system and management need to strengthen the intelligent control of the government in practical work, improve the work management system and create a working model suitable for local development （Zhao Yao，2017). The management of community drug rehabilitation personnel is not perfect; the specialization and conscientization of services are low and cannot meet the diversified needs of community drug rehabilitation personnel, which affects the improvement of drug rehabilitation effect to a great extent. Therefore, it is necessary to improve the management of community drug treatment, promote staff specialization, gradually meet the needs of drug treatment personnel, guide them to get rid of the influence of drugs as soon as possible and return to society as quickly as possible （Tang Yong,2019).

From the problems existing in China's community drug treatment management, we can see that China's community drug treatment management still needs to be improved in terms of work concept, organization system, policy system, operation mechanism, and investment guarantee. Their focus is to provide thoughtful and personalized services for drug addicts in an all-around way, help drug addicts overcome psychological obstacles, and completely get rid of drug addiction. The willingness of drug addicts to participate in community drug treatment management is one of the critical evaluation indicators of community drug treatment management that researchers cannot ignore. However, how do drug addicts willingly participate in community drug treatment management? The answer will promote the quality of community drug treatment management.

Wang Kongjing (2020) put forward that personal characteristics, family characteristics, protection benefits, costs, and external environmental factors impact residents' willingness to participate in the management of nature reserves. It is proposed to alleviate the contradiction between the development of nature reserves and community farmers, promote farmers to manage nature reserves actively, and realize the management objectives of nature reserves. They proposed establishing a sound community management organization, paying attention to residents' livelihood interests and development, coordinating the interests and relations between residents and communities, making residents participate in community management, and achieving a win-win situation for both. Finally, The researchers put forward relevant suggestions from promoting the reform of democratic Management in Colleges and universities, using new media channels to encourage students to participate in University Management. Hou Yunxia et al. (2019) mentioned the degree and influencing factors of community residents' participation in antiterrorism based on the MOA model that participation motivation, participation ability, and participation opportunity have a significant positive impact on the involvement of community residents. Among them, participation motivation plays an essential role in the MOA model, and participation opportunities and ability also indirectly affect the participation of residents through participation motivation. The reason for community residents' involvement also indirectly affects residents' involvement.

Wu Fei (2019) also used the scale to measure the detoxification motivation of drug addicts. She found that self-awareness, avoiding physical injury, and family responsibility were the main factors, while social support scores, realistic conditions, and emptiness were low.

Hou Yunxia (2019) divided the opportunities for community residents to participate in antiterrorism activities into national policies, channels provided by local governments, publicity means, and other factors. In his article, Zhang Min (2019) divided the opportunity factors of users' tacit knowledge explicit behavior into two main aspects: situational factors and environmental factors, which are divided explicitly into four parts: community relationship atmosphere, community incentive policy, community system quality and community information quality, Big elements.

RESEARCH METHODOLOGY

Based on the purpose of this study, qualitative or quantitative design alone cannot thoroughly answer the research questions. Therefore, the researchers chose a mixed method to supplement the quantitative results by using qualitative data. The study results can be incorporated into quantitative data to explore how participants experience community drug treatment management through qualitative data collection and analysis.

The researcher chose the integrated research model for this study because the researcher needs information on various aspects of management and success from the perspective of several key stakeholders. to use specific details of the study area. However, since such information is still lacking, it was not made into a database or studied systematically. Furthermore, to confirm the findings with statistical data, the researcher combines the quality data collected with the data from the theory and related research to create a tool for collecting quantitative data. They are, moreover, interpreting the findings by using two sets of data from two techniques together.

SELECT INFORMANTS

4.1.Sample size for qualitative analysis

Informants will select the purposive sampling technique from some Education Correction Institutes in Chongqing. Identify the criteria of purposive sampling As table 1.1

Drug addicts must be patients about to participate in community drug treatment management. There are no restrictions on gender, age, and education; Community drug rehabilitation managers must be full-time staff. The family members of drug addicts are limited to parents, partners, or children.

Table 1.1 Type and Number of Informants

Educational correction centers	Type and Number of Informants			
	Manager	Family members of drug addicts	Drug addicts	Total
Xishanping Institute for Correctional Education	1	2	3	6
Changsheng women Institute for Correctional Education	1	2	3	6
Fuling Institute for Correctional	1	2	3	6

Education				
Wanzhou Institute for Correctional Education	1	2	7	6
Jinyunshan Institute for Correctional Education	1	2	7	6
Total	5	10	23	38

Form table 1.1 There are 38 informants in the study.

4.2.Sample size for quantitative analysis

The population used in this study is people who live in Chongqing and participate in or will participate in community drug rehabilitation management. According to the announcement of the Chongqing Drug Rehabilitation Department, 81,724 people in Chongqing are rehabilitating drugs. There are 2000 drug rehabilitation managers and 1000 family members. According to the main focus of this study, the proportions of drug addicts, managers, and family members were 75%, 12.5%, and12.5%, respectively. In addition, this study also considered 20% of the missing data in each group. Therefore, this study will recruit 200 male drug addicts, 100 female drug addicts, 50 managers, and 50 family members of drug addicts. Therefore, this study will recruit about 300 participants.

RESEARCH RESULTS AND ANALYSIS

5.1. Qualitative Analysis

This study is divided into two phases. The first stage is qualitative analysis, using the grounded theory method to explore the influencing factors of drug addicts' willingness to participate in community drug rehabilitation management. It mainly takes the form of one-on-one semi-structured interviews, and the time for each interviewer is about 15-30 minutes. After obtaining the consent of the interviewers, we record the interview contents to ensure the accuracy and completeness of the interview materials. Our interview recordings were converted into text using the "Xunfei Hearing" software. To ensure its accuracy, we asked two researchers to proofread and revise the transcribed text and generate the original interview records. Then, the interview records of 15 (3/4) respondents were randomly selected for three-level coding and analysis of influencing factors, and the remaining interview records were used for the saturation test. The interviews were conducted around the following questions: ①Please talk about your understanding and understanding of the willingness of drug addicts to participate in community drug rehabilitation management; ②What factors do you think to affect the willingness of drug addicts to participate in drug rehabilitation management? Give an example; ③Please sort by the importance of the influencing factors. We use descriptive statistical methods to present the number and percentage of factors influencing the willingness of drug addicts to participate in community drug rehabilitation management, classify these influencing factors, and rank the frequency and importance of the items.

Table 5.1.Influencing factor interview coding table

Respondents	Category	Definition	Example(s)
Manager		Solve the problem	Community detoxification and rehabilitation offices must be established at the street level.
Drug addicts	Social support level	Harmonious relationship	I desperately want to live with my son, but I'm afraid he will dislike me, and I don't want to make him sad.
Family members of drug addicts		Support from the spirit	Under normal circumstances, if drug addicts have been recovering for decades, if their immediate relatives are gone, indirect relatives will not care about them. Most family members support their drug rehabilitation in the community
Manager		Mandatory management	Community detoxification remains mandatory for addicts
		live freely	If you do not participate in community detoxification, your travel will be affected
Drug addicts	Motivation	The dangers of drugs	Everyone knows that drug use is not good, but once you become addicted, it is tough for you to quit.
		Family responsibilities	I want to live everyday life and grow up with my children.
Family members of drug addicts		To be discriminated against	Of course, I think he can get rid of drugs; otherwise, his family will be looked down upon
Manager		The community can provide employment opportunities and vocational training	Various communities regularly offer vocational training and employment guidance for drug addicts.
Drug addicts	Perceived usefulness	work and survival	I also want to learn technology, find a job, and be able to live everyday life.
Family members of drug addicts		Family relationship	We still hope he can participate in community detoxification and return to the family as soon as possible. We do not want to dislike him.
Manager		Medical resources	The medical resources for drug rehabilitation in the community still need to be strengthened and are far from meeting the needs of drug addicts.
	Opportunity	Professionalism in management	The professional ability of community drug rehabilitation workers still needs to be improved, and the management norms need to be strengthened.
Drug addicts		Communication	Community managers do not have much time to communicate with us, and our difficulties are not resolved promptly.
Family		Safety precautions	Many safeguards in community management are still

members of drug addicts			lacking.
		Drug Rehabilitation Publicity	We don't know how to get rid of drugs, and sometimes we want to help him, but we don't know what to do.
Manager		Self-control	Drug addicts have poor self-control and are vulnerable to destructive temptations, which lead to relapse.
Drug addicts	Ability	Emotional control	I don't want to lose my temper, but I often can't control myself and quickly lose control of my emotions.
Family members of drug addicts		The dangers of drugs	Our family didn't know what drugs were, and we didn't know the dangers of drugs before, so the child was addicted to drugs, we didn't know it at all, and we didn't stop him in time.
Manager		Willingness to participate	Most drug addicts do not actively participate in community drug rehabilitation, so compulsory measures have been added.
Drug addicts	The willingness to participate	Have confidence in the community	I have participated in community detoxification, which has helped me to a certain extent. I will be very willing to join if a better platform can be provided.
Family members of drug addicts			We hope that he can successfully detoxify as soon as possible and, of course, support him in participating in community detoxification management.

Table 5.2.Theoretical Literature on Questionnaire Items

	Question	Reference
Social support level	A1:Relatives and friends gave me better support and care.	HaiyanZhu（2020）
	A2:I have a good relationship with other residents and staff in the community.	HaiyanZhu（2020）
	A3:When I encounter troubles or difficulties, someone comforts and helps me.	HaiyanZhu（2020）
Motivation	B1:I hope I can recover my health.	LinglingWeng（2016）
	B2:I want to avoid the pain of another drug addiction.	LinglingWeng（2016）
	B3:Because of my family and responsibilities, I want to get rid of drugs.	LinglingWeng（2016）
	B4:I realized that drugs would endanger my health and life.	LinglingWeng（2016）

	B5:I feel discriminated against and want to get rid of drugs and return to everyday life.	LinglingWeng（2016）
Perceived usefulness	C1:Community detoxification can help me get rid of drug addiction.	RuishanWang（2016）
	C2:Community detoxification helps to improve my interpersonal relationships.	ZhihaiFan（2002）
	C3:Community detoxification helps me return to everyday social life.	XiaoyuSheng（2014）\RengZhang（2014）
Opportunity	D1:The community has sufficient medical resources for drug treatment.	YuWang（2018）\GuirongHU（2019）
	D2:Community drug treatment staff are very professional.	GuirongHU（2019）
	D3:I can communicate with the community drug treatment staff on time	GuirongHU（2019）
	D4:The social security system for community drug rehabilitation is perfect.	GuirongHU（2019）
	D5:We often see the publicity and popular science of community drug rehabilitation.	YanfeiLi（2020）
Ability	E1:I have good self-control.	WeidongCong（2013）
	E2:I can regulate and control my emotions.	WeidongCong（2013）
	E3:I know the dangers of drugs very well.	LeiLiu（2021）
The willingness to participate	F1:I am willing to participate in community detoxification.	LeiLiu（2021）
	F2:I have participated or am participating in community detoxification.	YuweiSun（2021）
	F3:I will recommend other detoxification friends to participate in community detoxification	LeiLiu（2021）

5.2Validity test

At this stage, we used the feedback method to test the content validity of the questionnaire. Through the questionnaire, we collected 38 respondents, including six experts, ten managers, 20 drug addicts, and two drug addicts' family members. The location is Chongqing Xishanping Education and Correction Center.

Table 5.3.Questionnaire Validity Assessment (n-38)

Item	Very ineffective	Ineffectiveness	Revise	Effective	Extremely effective	Total

A1	Frequency		2	23	13	38
A2	Frequency	1	2	26	9	38
A3	Frequency		2	20	16	38
B1	Frequency		3	12	23	38
B2	Frequency		2	22	14	38
B3	Frequency		2	15	21	38
B4	Frequency		1	19	18	38
B5	Frequency			17	21	38
C1	Frequency			24	14	38
C2	Frequency			29	9	38
C3	Frequency			24	14	38
D1	Frequency			24	14	38
D2	Frequency			25	13	38
D3	Frequency			22	16	38
D4	Frequency			25	13	38
D5	Frequency			24	12	38
E1	Frequency		4	18	16	38
E2	Frequency			21	17	38
E3	Frequency		3	20	15	38
F1	Frequency		1	20	17	38
F2	Frequency		5	21	12	38
F3	Frequency		4	14	20	38

A=Social support level, B=Motivation, C=Perceived usefulness, D=Opportunity, E=Ability, F=The willingness to participate

We corrected eight items with an average score of < 3.5 points to form a predictive questionnaire with 22 items. Thirty-eight drug addicts were selected for questionnaire prediction, and the correlation between each item of the questionnaire and the total score was calculated, all of which showed significant correlation. Finally, the investigation Scale, including 22 articles, was formed.

5.3. Quantitative analysis

5.3.1.Exploratory factor analysis on drug addicts' influencing factors in community drug rehabilitation management。

We extract the common factors of the five dimensions of the concept, social support level, motivation, perceived usefulness, opportunity, and ability.KMO=0.822 shows that the scale data is suitable for building a factor model. The P value of Bartlett's test is less than 0.05, indicating that the correlation coefficient matrix constructed by the scale item data has a good correlation, and the data is suitable for factor analysis.

Principal component analysis was used to extract factors, and the maximum variation method was used for orthogonal rotation. The first-factor analysis was carried out on the 22 items measured。 Without setting the number of factors, there are five factors with eigenvalue > 1, and The cumulative explained variance rate is 79.48%. The load values of the items in each element are more significant than 0.5, and no items are found that are significantly different from the dimensions of the self-made scale and the attribution of the things. Arrange the belonging factors according to the question number, refer to the content of the question items, and name the five elements: Factor1 is called the opportunity dimension; Factor2 is named the motivation dimension; Factor3 is named the ability dimension; Factor4 is named social support dimension; Factor5 is named Perceived usefulness dimension. The distribution and loading of the 22 items in the questionnaire among the five factors are shown in Table 5.4.

Table 5.4.Influence factor and load value of drug addicts participating in community drug rehabilitation management (N=289)

Opportunity		Motivation		Ability		Social support level		Perceived usefulness	
Item	Load value	Item	Load value	Item	Load value	Item	Load value	Item	Load value
D4	0.889	B3	0.8	E1	0.899	A1	0.897	C3	0.634
D2	0.867	B2	0.791	E3	0.857	A3	0.859	C2	0.63
D1	0.845	B4	0.748	E2	0.668	A2	0.654	C1	0.518
D3	0.827	B1	0.735						
D5	0.793	B5	0.687						

Table 5.4.Cronbach's alpha coefficient table for each dimension and scale

Dimension/Scale	Number of items	Cronbach's α	Suspicious items
Social support level	3	0.80	/
Motivation	5	0.863	/
Perceived usefulness	3	0.887	/
Opportunity	5	0.929	/
Ability	3	0.806	/
The willingness to participate	3	0.821	/

The social support dimension contains three items, and its Cronbach's Alpha=0.8, indicating that the size has good reliability and reliability; the motivation dimension includes five items and its Cronbach's Alpha=0.863, indicating that the measurement is reliable and reliable. The perceived ease of use dimension consists of 3 items and its Cronbach's Alpha=0.887, meaning that the measure has good reliability and good reliability; the opportunity dimension includes five items and its Cronbach's Alpha=0.929, indicating that the size is reliable. The reliability is good, and the reliability is excellent; the ability contains three things, and its Cronbach's Alpha=0.806, indicating that the reliability of this dimension is good and the reliability is acceptable. The willingness to participate includes three items, and Cronbach's Alpha=0.821 suggests that this dimension has good and good reliability.

5.3.2.Descriptive statistical test on the influencing factors of drug addicts participating in community drug rehabilitation management

From the exploratory factor analysis, it can be concluded that the five factors influencing the participation of drug addicts in community drug rehabilitation management are: Social support level, motivation, perceived usefulness, opportunity, and ability. Descriptive statistical analysis was performed on the five influencing factors, and their mean values were ranked in descending order: motivation, opportunity, social support, ability, and perceived usefulness. All items were analyzed by mean value, and the ten things with higher average scores were then ranked high and low, as shown in Table 6. Among them, the five items D1, D2, D4, D5, and D3 belong to the opportunity factor; the three items C1, C2, and C3 belong to the perceived usefulness factor; the E1 item belongs to the ability factor; A1 belongs to the social support factor.

Table 5.5.Top 10 items with the highest mean and their factor distributions (N=289)

	Mean	Std. Deviation	Sequence	Belonging factor
D1	3.16	1.168	1	Opportunity
D2	3.2	1.148	2	Opportunity
D4	3.24	1.141	3	Opportunity
D5	3.32	1.044	4	Opportunity
D3	3.36	1.09	5	Opportunity
C1	3.56	1.099	6	Perceived usefulness
C2	3.58	1.036	7	Perceived usefulness
E1	3.61	0.888	8	Ability
A1	3.63	0.882	9	Social support level
C3	3.64	1.107	10	Perceived usefulness

5.3.3.Correlation analysis

The Pearson correlation test was performed on the five influencing factors, and it was found that there was a significant correlation between each element (as shown in Table 7). The correlation coefficient was $0.357 \leq \alpha \leq 0.986$. Among them, the correlation coefficient between Ability and Social support level is 0.986, ranking first; the correlation coefficient between Perceived usefulness and opportunity is 0.723, ranking second; the correlation coefficient between Motivation and Ability is 0.518, Ranked third; the correlation coefficient between Opportunity and Motivation was 0.357, the little correlation.

Table 5.6.Correlation between five influencing factors (N=289)

		Motivation	Perceived usefulness	Opportunity	Ability	Social support level
Motivation	Pearson Correlation	1	.477**	.357**	.518**	.521**
Perceived usefulness	Pearson Correlation	.477**	1	.723**	.462**	.470**
Opportunity	Pearson Correlation	.357**	.723**	1	.445**	.449**

Ability	Pearson Correlation	.518**	.462**	.445**	1	.986**
Social support level	Pearson Correlation	.521**	.470**	.449**	.986**	1

*** Correlation is significant at the 0.01 level (2-tailed).*

5.3.3.regression analysis

A stepwise multiple regression method was adopted to study further the relationship between the influence factors of drug addicts participating in community drug rehabilitation management. This method selects independent variables in sequence according to statistical criteria and enters the regression model.

Taking the scores of the five influencing factors t as the independent variable and the willingness to participate as the dependent variable, the stepwise regression method was used to predict the regression equation. The regression results are shown in Table 8. It can be concluded that the significant probability value $p<0.001$ indicates that the regression equation is effective. The author found that the independent variables that entered the equation, in turn, were social support, motivation, perceived usefulness, opportunity, and ability, but in the stepwise regression, knowledge, and inspiration were eliminated. The sum probability of the regression coefficients t in the other three models met the requirements—indicating that the willingness of drug addicts to participate in community drug rehabilitation management is linearly correlated with the three independent variables. At the same time, the standardized coefficients of independent variables chance, social support, and perceived usefulness, namely β, are 0.199, 0.307, and 0.282, respectively. Constant=1.052, the standardized regression equation is obtained: Y participation willingness=1.052+.199×Opportunity +0.307× Social support level +0.282× Perceived usefulness.

Table 5.7.Stepwise Multiple Regression Analysis Summary

	R	R Square	Adjusted R Square	Std. The error in the Estimate	Durbin-Watson	VIF	Sig.
Opportunity	.714 a	0.51	0.508	1.85707		2.115	
Social support level	.770 b	0.592	0.589	1.69672		1.31	.000d
Perceived usefulness	.799 c	0.638	0.634	1.6025	1.894	2.17	

ANALYSIS CONCLUSION

The willingness of drug addicts to participate in community drug rehabilitation management is mainly affected by three factors. The more detoxification opportunities obtained by the addicts, the stronger the motivation to participate in detoxification, the higher the self-efficacy, the stronger the determination to detoxify, and the higher the willingness to participate in community detoxification; During drug rehabilitation, the more helpful information is provided, the more likely it is to attract drug addicts to participate in community drug rehabilitation management. At the same time, the self-control ability of drug addicts and the motivation of drug addicts are also influencing factors that cannot be ignored.

The government has paid China's community-based drug rehabilitation management more and more attention, but the research on community-based drug rehabilitation is still in its infancy. The active participation method in community drug rehabilitation management aims to promote the scientific and systematic nature of community drug rehabilitation management, which is the innovation point of this research.

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THE IMPACT OF MINDFULNESS TRAINING ON SELF-LEADERSHIP ENHANCEMENT OF FREELANCERS

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ABSTRACT

The importance of social cognitive theory, self-determination theory, and self-regulation theory in predicting self-leadership has been demonstrated by previous studies. The factors influencing freelance self-leadership have not been studied in terms of how to enhance the self-leadership of freelancers in the context of the digital, intelligent, and platform-based economy, and the factors influencing freelance self-leadership. Therefore, this paper reviews important and recent studies on theories related to self-leadership, influencing factors of self-leadership, establishes a conceptual framework on the relationship between the level of positive thinking and self-leadership from self-regulation theory, and proposes hypotheses to be tested and a specific research proposal. The results of the analysis suggest that both the level of positive thinking and the level of authenticity directly influence self-leadership and that the level of authenticity may mediate the effect of the level of positive thinking on self-leadership. Further empirical research can be conducted to investigate the relationship under this conceptual framework through experiments and to lay the theoretical foundation for developing management interventions to enhance self-leadership.

Keywords: Self-Leadership; Influencing Factors; Mindfulness level; Authenticity; Freelancers

INTRODCTION

The development of the digital economy has brought great changes to the world. Digital technologies such as big data, artificial intelligence, cloud computing, and cloud storage have revolutionized and empowered management practices such as organizational form, decision-making models, and business operations, changing the comparative and competitive advantages of organizations (Qi, Yudong & Xiao, Xv,2020). The digital economy is fundamentally changing the existing organizational and management models (Joel & Heather, 2020).

The piecework economy brings shocks and challenges to the traditional organizational form and the existing related research findings (Kost et al.,2020). In this model, a new type of capital-labor relationship is established between employees and digital platforms, which coordinates the market supply and demand by completing a small task or "odd jobs", and freelance employees no longer belong to a fixed organization, but serve one or more "shadow employers". The economic development model based on this new type of labor-management relationship is called the "fractional economy" (Moisander & Eräranta, 2018).

The zero-work economy has a profound impact on the psychology and behavior of employees, bringing them a new work experience that is different from traditional work. The zero-work economy relies on algorithmic management techniques for digital platforms, which, on the one hand, can provide employees with a high degree of flexibility, autonomy, task variety, and complexity; on the other hand, these control mechanisms can also lead to low wages, social isolation, non-conforming working hours, irregularity, overwork, sleep deprivation, and emotional exhaustion (Graham et al., 2017). In an odd-job work environment, freelancers are prone to meaningful reference loss, group affiliation, and confusion in their self-perception of identity due to their separation from direct organizational control (Petriglieri et al., 2019). Due to the long-term lack of development space for freelancers in the odd job economy, work motivation decreases day by day (Mo, R. and Bao, Chunlei, 2022). In the complex system of human-computer coexistence, opaque and incomprehensible digital technology leads to a reduced sense of individual self-efficacy and control among freelancers, leaving one in a state of confusion (Zhang, Zhixue, 2021).

In 2021, according to the Ministry of Human Resources and Social Security of China, the number of flexible workers in China will reach 200 million, and by 2036, the number of workers in China's "odd-job economy" will reach 400 million, according to projections from relevant organizations. According to a report by Lancers, Japan's largest online talent platform, the number of freelancers in Japan was 11.22 million in 2018, accounting for 17 percent of the total working population. In an odd-job economy, self-leadership allows freelancers to maintain motivation and self-efficacy at work, develop their own literacy and capabilities to better leverage their unique value for personal career development, and in turn, enhance organizational flexibility and organizational performance. It is of great significance that theoretical and practical communities join hands to conduct research around freelancers' self-perception, values, meaning construction, self-regulation, emotion regulation, self-leadership, self-development, and health management; to propose organizational management theories and methods related to self-leadership enhancement; and to help freelance employees develop the habits of self-management and self-leadership.

Drawing on self-leadership theory, social cognitive theory, self-determination theory, psychological capital theory, and self-regulation theory, this study examines the impact of positive thinking on improving freelance workers' self-leadership and reveals the comprehensive impact of positive thinking training as a tool on the antecedents of self-leadership with a view to establishing interesting theories and training methods for improving self-leadership.

Therefore, the main purpose of this paper is to systematically sort out and analyze the theoretical framework of self-leadership enhancement for own-account professionals, summarize the research results, clarify the future research directions of self-leadership enhancement management interventions, and provide references for self-leadership enhancement research and management interventions based on the Chinese cultural context. The research findings are summarized to clarify the future research directions of self-leadership enhancement management interventions and to provide reference and guidance for self-leadership enhancement research and management practice based on Chinese culture.

LITERATURE REVIEW

Different theories exist in the literature regarding self-leadership and the factors influencing self-leadership. This study reviews the existing literature on the key factors influencing self-leadership, methods of self-leadership enhancement, and the relationship between these concepts.

2.1 The connotation of self-leadership

Leadership is the responsibility and control that an individual exercises over his or her personal behavior (Neck and Manz, 2010). Individuals exercise control over their own behavior and represent a self-directed facilitation measure (Norris, 2008).

Self-leadership is the process by which individuals work to self-influence their thoughts, feelings, and behaviors in order to achieve self-direction and self-motivation for better job delivery through self-impact (Neck & Houghton, 2006); self-leaders shape their own personal development and promote and shape personal growth by striving to exercise self-control (Stanley, 2014).

Self-leaders have three strategies used to achieve self-direction and self-motivation for individuals (Houghton & Neck, 2002; Manz & Neck, 2004; Neck, Manz, & Houghton, 2017):Positive, desirable behaviors that lead to successful outcomes are encouraged while negative, undesirable behaviors that lead to unsuccessful outcomes are inhibited; and (2) constructive mindset strategies that include the identification and replacement of dysfunctional beliefs and assumptions, mental imagery, and positive self-talk. This strategy focuses on the power of positive thinking to develop constructive habits of thinking. Positive outcomes are emphasized through the following strategies: (1) positive self-talk; (2) visualizing successful performance; (3) assessing beliefs and assumptions; and (4) natural reward strategies. type of self-reward strategy is to view the work task itself as a reward, and the other is to help individuals feel in control of themselves and have fun at work by ignoring the unpleasant aspects of the work task in favor of their inherently beneficial elements. Natural reward strategies are designed to help create feelings of competence and self-determination that provide motivation for taking action.

2.2 Theoretical Foundations of Self-Leadership

Self-leadership is a complex psychological-behavioral process, and the existing self-leadership researches mainly use the relevant theories of psychology, especially social psychology. Among them, social cognitive theory, self-determination theory, and self-regulation theory are the theoretical foundations.

2.2.1 Social cognitive theory

According to Bandura (1986 and 1991), human activity is determined by the interaction of three factors: individual behavior, individual cognition, and individual characteristics, and the external environment in which the individual lives. Bandura's social cognitive theory (1989) examines how people take control of their lives and argues that people can act as active agents of change in the processes of self-development, self-adaptation, and self-renewal. Change agents apply three main kinds of agency: direct personality agency, agentic agency, and collective agency (Bandura, 2001). Direct personality dynamics is the control that people have over their aspirations to achieve and actively respond to changes in their lives; agentic dynamics is the resources, power, influence, and expertise that people can draw on from others to achieve self-advancement; and collective dynamics is the intrinsic motivation to work with others to achieve goals (Bandura,1997). Self-development, self-adaptation, and self-renewal are the outward manifestations of self-leadership.

Social cognitive theory emphasizes that people tend to be self-directed, adopt internal performance standards of the self, monitor their behavior, i.e self-observation, and set rewards (self-response) to motivate themselves to work tirelessly to accomplish their goals. Through self-assessment procedures, people keep their behavior consistent with the evaluation criteria; through self-rewards, people give themselves positive or negative reinforcement (Chatard & Selimbegovic, 2011). The process of using self-observation, self-reward, and self-assessment to achieve self-direction is essentially close to self-leadership.

Self-efficacy is an important concept in social cognitive theory and is a key determinant of how people search for and acquire new skills. The degree of effort and stamina people have in overcoming difficulties and achieving goals is determined by self-efficacy. The level of self-evaluation is directly proportional to the level of self-efficacy (Bandura, 1997). The natural reward strategies and constructive thinking strategies in self-leadership need to be implemented by increasing the individual's self-efficacy.

2.2.2 Self-determination theory

Self-determination theory systematically describes the process of environmental factors influencing individual motivation (Zhang, Jian et al., 2010). Self-determination theory suggests that psychological needs are the core of linking the external environment with individual motivation and behavior, and when environmental factors support the satisfaction of three psychological needs, it will promote the internalization of intrinsic and extrinsic motivation. (Ryan et al., 1996).

This theory suggests that each human individual has three basic innate psychological needs—autonomy, competence, and relationships—that need to be met in order to achieve an optimal level of personal functioning and to continue to experience personal growth and well-being (Deci & Ryan, 2000a; Ryan & Deci, 2000a; Ryan & Frederick, 1997). The autonomy need is the need for people to believe that they can choose their own actions, and when this need is met, people experience personal freedom; the competence need is the desire to accomplish challenging tasks or overcome difficulties in order to obtain the results they want, and when this need is met, people experience a sense of control and accomplishment; the relationship need is the desire to connect with others, and when this need is satisfied, people feel social support from others (Ryan & Deci, 2002). Psychological needs are central to linking the external environment to individual motivation and behavior, and when external environmental factors support the satisfaction of the three psychological needs, they promote the internalization of intrinsic and extrinsic motivation (Deci et al., 2000).

The theory suggests that material rewards, time deadlines, external supervision, and external evaluations make individuals feel a lack of autonomy in their behavior and can weaken internal motivation; giving individuals opportunities for choice at work and democratic participation makes individuals feel self-determined and enhances their internal motivation. Internal motivation is enhanced when external events make individuals feel competent to do their jobs. More internal motivation occurs when individuals are in an environment where they feel secure and belong (Deci & Ryan, 1980). Self-leadership clearly facilitates the reinforcement of internal motivation.

The theory suggests that measures such as meeting the demands of relationship needs, rewards, and value affirmation are key to facilitating the internalization of external motivation. Of course, the internalization process cannot be separated from the satisfaction of competency and autonomy needs. If individuals do not feel competent in the process of achieving their goals, they will find excuses not to act; internalization is more likely to occur when individuals experience choice, will, and freedom from external demands (Deci et al., 2000, 2004).

In the process of internalization of external motivation, individuals are classified as internally motivated, externally motivated, and unmotivated according to differences in the degree of integration of the self. Internal motivation refers to the tendency to engage in an activity in order to obtain a result that is separable from the ego and is a behavioral drive that is regulated by the external environment; and the unmotivated state refers to a situation in which there is no integration, no motivation, and the ego is highly fragmented and detached. Focusing on internal motivation enhances well-being, while focusing on external motivation can lead to anxiety and depression (Vansteenkiste et al., 2004). External motivation is classified as integrative regulation, identity regulation, intra-regulation, and extrinsic regulation according to the degree of self-integration (Deci & Ryan, 2008; Gagen & Forest, 2008). According to the individual's motivation, self-leadership can also be divided into three categories: internally motivated leadership, externally motivated leadership, and unmotivated leadership.

The design of self-leadership intervention strategies should focus primarily on facilitating the satisfaction of the three core psychological needs of employees: autonomy, competence, and relationships. Self-determination theory provides directions and criteria for transforming the external environmental factors that influence self-leadership (Zhang, Jian et al., 2010).

2.2.3 Self-regulation theory

Self-regulation theory emerged from social cognitive theory, which suggests that individuals self-assess their competence, and the results of self-assessment influence individuals' behavioral choices, effort, and persistence time, and that self-regulation consists of three processes: self-observation, self-assessment, and self-reaction (Bandura, 1989).

The main components of self-regulation include the regulation of emotions, behaviors, and desires. Emotion regulation is the deliberate use of techniques to generate, maintain, adjust, or express one's emotions (Tamminen & Crocker, 2013). Emotions and physical and mental health are closely related, and controlling and regulating emotional states has a huge impact on physical and mental health. The definition of meditation has not yet formed a unified standard in the psychological community. Its essence lies in purposeful concentration with a certain experience within the individual. Positive meditation can directly increase people's positive emotions and feelings and improve mental health while also alleviating negative emotions to promote mental health (Schwartz, 2011). Behavioral regulation is emotionally driven and volitionally controlled, and consciousness and behavior act synergistically in self-regulation (Kuvaas et al., 2013). In self-regulation of consciousness and behavior, self-concept is an important influence on organizational citizenship behavior (Wiener, 1961), and self-efficacy can also be used as a moderating variable in the self-regulation learning process (Sitzmann, 2012). Self-concept influences individual decisions and efforts to achieve goals; emotional states and habits play an important role in the development of citizenship behavior (Duan, Jinyun et al., 2017).

According to self-regulation theory, self-regulation is an ability that can be acquired through training (Lord et al., 2010). There is a link between an individual's external attitude and the perceived validity of future events, and self-regulation can be used to influence an individual's perception of the validity of future events by influencing the level of habitual interpretation of the individual's approach to things (tasks), with the time interval as the main variable, to promote the construction of mental health (Wang et al., 2012).

Self-regulation theory lays the operational foundation for the design of intervention strategies for self-leadership enhancement.

2.3 Factors influencing self-leadership

2.3.1 Self-Leadership Development Model

Bandura (1978) identified self-esteem and self-concept as direct factors of self-impact. Gist's (1987) study showed that self-esteem is an excellent predictor of an individual's level of motivation and ability to perform tasks. Self-esteem provides a sense of self-worth (Modupe & Ositoye, 2010). Self-esteem is an ongoing comparison between people's views based on their chosen reference group's views and their own self-views, which evolve in the process of comparison (Ashforth & Mael, 1989).

The self-concept represents the individual's mental image of self. An individual's idea of his or her self-concept is the foundation of a leadership development program; a positive self-view of the self-concept leads to a confident person becoming a leader (Cameron et al., 2003; Chan & Drasgow, 2001).

Self-confidence represents an individual's beliefs about his or her personal abilities (Neck & Houghton, 2006). Self-confidence is a process that involves an individual's assessment of self-efficacy (Bandura, 1982; Neck & Houghton, 2006). Self-confidence helps overcome self-doubt and provides insight into an individual's level of self-esteem (i.e., feelings about self). Self-confidence is measured by an individual's choices, aspirations, or goals (Steel and Konig, 2006).

Attitudes reflect individuals' assessments of themselves, others, and situations. Leaders do not have negative or indifferent attitudes (Shamir et al., 1998), and positive attitudes motivate individuals to take action and influence individuals' perceptions of the range of opportunities available (Bandura,1982).

Motivation is the result of an individual's wanting something; one needs to be competent in interactions with society and achieve socially acceptable accomplishments in order to earn respect; and in order to satisfy the need for self-actualization, one needs to strive to realize one's potential and become more and more the person one desires to be; self-motivation makes one focused (Maslow, 1943). Self-motivation leads to the realization that achieving goals requires more effort and a personal comfort zone (Cross & Markus, 1994).

Values are belief systems that help people decide what is right and wrong, good and bad, and what is important and what is not (Chan & Drasgow, 2001). An individual's value system provides guidance for deciding how to act. Behavior is an agentic measure representing the individual's values (Power et al., 1989).

The self-concept is the bridge between self-esteem and self-confidence (Modupe & Ositoye, 2010). According to self-regulation theory, self-assessment plays a decision-making role at the onset of self-control (Yeow & Martin, 2013), and self-assessment influences people's self-motivation and behavior (Carmeli et al., 2006). Self-assessment, self-esteem, and self-concept influence an individual's personal value system, and an individual's values determine an individual's behavioral choices.

In order to improve self-leadership, either the individual or the organization must focus on creating the necessary conditions to design an ongoing self-development process that improves the self-concept sufficiently to develop self-confidence and sufficient to generate positive attitudes, which in turn leads to a motivated person becoming achievement-oriented.

Figure 1 illustrated Stanley's model (2014) of self-leadership development.

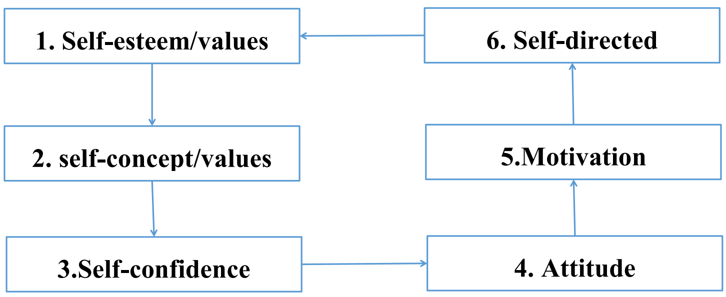

Figure 1. Basic Leadership Development Model

2.3.2 Mindfulness Level

According to self-regulation theory, a person's complete self-regulation includes three aspects: emotions, behaviors, and desires. The influential elements in the self-leadership development model involve two main aspects: behavior and desire. Behavioral regulation is driven by emotions and controlled by will (Kuvaas et al., 2013). For a person with self-leadership, physical and mental health are necessary conditions. To maintain physical and mental health, it is necessary to control and regulate one's emotional state. Positive meditation is an effective means of emotional regulation. The definition of positive thinking is shown in Table 1.

Source	Definitions of Mindfulness
Hanh,T.N.(1987)	To keep one's consciousness alive to the present reality.
Baer, R.A.(2003)	The non-judgmental observation of the ongoing stream of internal and external stimuli as they arise.
Brown et al.(2007)	A receptive attention to and awareness of present events and experiences.
Kabat-Zinn.(2003)	The awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment by moment.
Bishop et al.(2004)	As a process of regulating attention in order to bring a quality of non-elaborative awareness to current experience and a quality of relating to one's experience within an orientation of curiosity, experiential openness, and acceptance.

Table 1.Definitions of mindfulness

Mindfulness is strongly linked to a variety of important psychological indicators, including anxiety, life satisfaction, psychological resilience, and creativity (Kabat-Zinn et al., 1992). Phan et al. (2020) suggested that mindfulness can optimize people's functional states. Scholars have recently attempted to consider the positive benefits of positive thinking in organizations and have demonstrated that positive thinking enhances everything, including resilience, social relationship performance, and well-being. Research on positive thinking in neurobiology has demonstrated that changes in brain structure and activity associated with positive thinking affect increased awareness, careful emotional and physiological regulation, and positive psychological experiences (Good et al., 2016; Wu, C.-M & Chen, 2019). An individual's level of positive thinking can have an impact on self-leadership by affecting emotions (Panditharathne Nishantha Kumara & Chen, 2021).

2.3.3 Level of authenticity

Authenticity is the degree to which an individual's behavior is consistent with their inner authentic self (Harter & Stone, 2012). Authenticity consists of self-alienation, authentic living, and accepting external influence. Self-alienation is the subjective experience of not knowing who one is; authentic living refers to the degree to which individuals are mostly true to themselves and live according to their values and beliefs; and accepting external influence refers to the degree to which individuals accept the influence of others and meet their expectations (Van den Bosch & Taris, 2014).

Authenticity, as a positive quality and also as a positive psychological resource, is considered in self-determination theory as an inherent attribute of self-determined, motivation-driven behavior that does not need to be assessed separately (Ryan & Deci, 2006). Authenticity contributes well to the satisfaction of the three basic psychological needs of autonomy, competence, and relationships, which in turn contribute to and form the psychological capital of the individual.

There is a positive relationship between authenticity and individual life satisfaction, self-esteem, autonomy, well-being, personal growth, self-acceptance, and gratitude (Reinecke & Trepte, 2014). Ménard & Brunet (2011) indicated that employee authenticity is positively related to job well-being and that authenticity may lead to a greater appreciation of the meaning of work and thus promote job well-being. Studies have shown that authenticity is positively related to several positive job indicators such as job autonomy, job satisfaction, job engagement, job performance, and retention (Van den Bosch & Taris, 2014).

2.3.4 The relationship between Mindfulness and authenticity

In the self-alienation dimension of authenticity described by Van den Bosch and Taris, we can see that authenticity is related to the person's ability to be authentically aware of his or her thoughts. Kernis and Goldman (2003) argue that awareness, i.e., the individual's awareness of and trust in his or her motivations, emotions, desires, and perceptions related to self, is an important component of authenticity.

Through a study of positive thinking training conducted with corporate employees, Kernis and Goldman (2003) showed that authenticity was significantly and positively correlated with the level of positive thinking, and Tsur et al. (2016) found that the level of positive thinking mediated the relationship between emotional clarity and interpersonal authenticity, and Leroy et al. (2013) found that functional authenticity mediated the relationship between positive thinking and work engagement through a study of positive thinking training.

CONCEPTUAL FRAMEWORK

3.1 Research hypotheses and variables

Based on a literature review of theories and influencing factors underlying self-leadership, Sampl & Furtner (2017) conducted a study on the impact of positive mindfulness-based self-leadership training (MBSLT) and the results of the study indicated that the combination of positive mindfulness and self-leadership can have a positive impact on emotions and can be combined with self-leadership to develop a healthy form of self-regulation. In addition, the results of Furtner et al.'s (2018) study on the relationship between self-leadership and positive thinking showed a positive correlation between self-leadership and the observed aspects of positive thinking. No relevant studies on the mechanisms of positive thinking influence on self-leadership have also been found. In this study, the effect of positive thinking on self-leadership was investigated by using "authenticity" as a mediating variable of self-leadership, drawing on the findings of positive psychology. Accordingly, the following hypotheses are proposed:

Hypothesis 1: Individuals' level of positive thinking is positively related to self-leadership.

Hypothesis 2: Individuals' level of authenticity is positively related to self-leadership.

Hypothesis 3: Individuals' authenticity level can moderate the effect of positive thinking on self-leadership.

The conceptual framework of this study is shown in Figure 2.

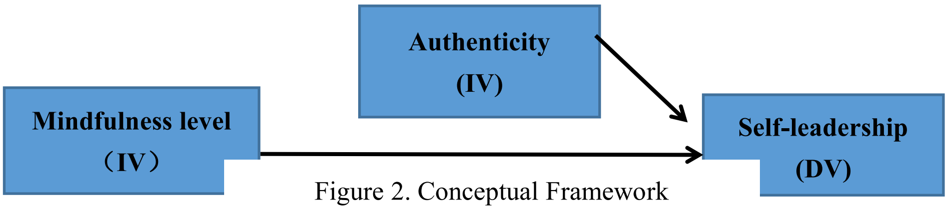

Figure 2. Conceptual Framework

3.2 Research design and research method

In this study, 60 live marketers（who market directly to the public in live web marketing） were randomly sampled from Shijiazhuang, Hebei Province, China, through a questionnaire star, and divided into 2 groups of 30 each; one group was the experimental group, which was trained with positive thinking; and one group was the control group, which was not trained with any intervention.

The study was conducted by means of a field intervention experiment, divided into experimental and control groups. A pretest was administered to both groups, and a post-test was administered to both groups within 1 week after the end of the positive thinking training. A third measurement for both groups was completed within week 12. All measurements were completed online through an app. The instruments were administered through the Chinese version of the Individual Authenticity Measure at Work (IAM at Work), the Five Facet Mindfulness Questionnaire (FFMQ), Houghton and Neck's Self-Esteem Inventory, and the Leadership Modification Five-Point Inventory (LMI). Houghton and Neck's Five-Point Leadership Modification Scale (Houghton & Neck 2002).

In this study, interview and experimental methods were used to collect data through questionnaires, and the data collected was analyzed for possible relationships between variables using independent sample t-tests and regression analysis.

3.3 Positive thinking training program

Qiong Wu et al. (2013) pointed out that the effect of eight weeks of positive thinking training is better than four weeks of implementation. In this study, we used an 8-week positive thinking stress reduction therapy training program, and according to the actual situation of the couriers, the original 2.5 hours of offline concentration practice time per week was compressed into 10 minutes of online concentration practice each morning and 10 minutes of online stopping practice each day. The participants were asked to practice on their own for 10 to 25 minutes every day according to the instructor's recording, and then report the practice feedback by voice message online, and report and share the practice online the following week. The training was led by a professional positive thinking instructor from APP.

CONCLUSION

The purpose of this study is to develop a conceptual framework on the pathways of self-leadership enhancement for self-employed people in the odd-job economy model, combining social cognitive theory, self-determination theory, self-regulation theory, and self-leadership theory. Since this is a new and comprehensive framework, the relevant literature on the factors influencing self-leadership is analyzed, and the most recent and important research in these fields is included.

The contribution of this study lies in its theoretical and empirical implications. First, this study provides greater insight into the antecedents of the exploration of self-leadership variables. This new understanding should help improve predictions of the effects of self-leadership. Second, this study provides a framework for empirical research on levels of positive thinking, authenticity, and self-leadership.

The main limitation of this study is that the self-leadership scale was developed based on employees working in traditional corporate organizational scenarios with clear employment relationships. Further research is needed to ensure the reliability of the research findings. Freelancers have changed dramatically both in terms of their organizational affiliation, work environment, and interrelationships. These changes have impacted the psychological needs of own-account workers, and how to develop a self-leadership scale for own-account workers in a digital, intelligent, and platform context. Moreover, the volume of literature is insufficient. Future research in this area includes a more comprehensive systematic review of this topic to investigate the relationship between levels of positive thinking and elements of self-leadership influence. Despite its limitations, this study certainly adds to our understanding of the development of self-leadership management interventions.

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RESEARCH ON TEACHING OPTIMIZATION OF BROADCASTING AND HOSTING MAJOR UNDER THE BACKGROUND OF CONVERGED MEDIA

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ABSTRACT

After 50 years development, China's media education for hosts faces kinds of contradictions. Under comprehensive investigation, this thesis analyses the media education situation in China from six aspects: history, subject status, admission scale, education aim, syllabus, and method. Allowing for the new situation, the thesis also notes some salient problems for media education at the moment. Faced up these problems, by analyzing the information spreading features, combining the most updated reports, referring to the personal reports from some Chinese prestigious hosts, the author proposes a new plan of the media education reformation.

Keywords: Broadcasting and Hosting; Media Convergence; Talents Cultivation Development

INTRODUCTION

Today's media era is the era of media integration, and a large number of new media such as mobile media and online media have flooded into people's lives. The emergence of new media has brought challenges to traditional media, and it has also accelerated the pace of reform and transformation of traditional media. The integration and penetration of traditional media and emerging media is the process of today's media development, and media integration has profoundly affected all aspects of human life in the new era. With the advent of the era of media convergence, the traditional radio and television industry is facing new challenges. Media convergence has put forward new requirements for the development of radio and television, which has also opened up new horizons for professional talent training. As an important element of traditional radio and television programs, announcers and hosts have gradually developed into an important role in audio-visual new media programs. No matter in terms of role positioning, professional ability, practical level or cultural cultivation, there are new era requirements for the training of broadcasting and hosting professionals.

Research Objectives

In the continuous development of the media age, the professional education of broadcasting and hosting has gradually exposed multiple contradictions, which are mainly reflected in the disconnection with the needs of the industry and the unbalanced requirements of the times.The objectives of this research are as follows

Today's broadcasting and hosting teaching are all based on research under the radio and television system, and this research is to complement the research on today's media environment.

It’s to promote the research on the theoretical system of broadcasting and hosting, and promote the development of emerging majors in radio and television.

It is imperative to promote the reform of talent training for broadcasting and hosting arts professionals in the era of convergent media.

LITERATURE REVIEW

Through CNKI search, the keywords were set to "media fusion, broadcasting and hosting training", and a total of 14 papers were published before the deadline. A total of 183 papers were published on the keyword "Broadcasting and Hosting Cultivation". There were 362 articles on the keyword "media talent training", and the keyword "new media" has a total of 92,451 papers. Guiping (2009) analyzed the current problems in the teaching of broadcasting and hosting majors. He pointed out that many colleges and universities have unreasonable curriculum structures for broadcasting and hosting majors, with too many professional courses and few cultural quality courses. Ruifang (2008) analyzed the current situation and problems of broadcasting and hosting art majors in science and engineering universities. He pointed out that the talent training model has no characteristics, and it does not form a competitive advantage. Zu-ping (2007).proposed an integrated broadcasting and hosting professional education model. Ma Di (2011) proposed a talent cultivation model of “school-level cooperation”.

In the 1950s, the development of show hosts was prosperous, and after that, various types of show hosts gradually appeared in France, Canada, Japan and other countries (Roger & Joseph, 2010). There is no self-contained system for the study of host abroad. Most of the works are a series of practical research works such as the experience sharing of famous foreign hosts and the process of becoming famous (Larry et al (2009). In recent years, domestic scholars have also made reference to the research experience of broadcasters and hosts abroad, carrying out extended research in the field of oral communication with subject orientation (Durant & Marina, 2009). In foreign countries, as an important branch of communication science, the major of oral communication is different from mass communication (Stanley, 2008). Oral communication is based on speech studies, which originated from public speaking in ancient Greece, and it was later combined with other oral expression disciplines, forming a very inclusive field. From the perspective of oral communication, taking care of the major of broadcasting and hosting is conducive to improving the communication ability of broadcasting students, and which is also conducive to fully adapting to the social needs of the development of the media age.

METHODOLOGY

In view of the above research objectives, this paper mainly adopted the following research methods.

1. Literature Analysis

Consulting and studying academic journal papers, theoretical works, dissertations and related reports related to this thesis. This research fully understood and mastered the latest academic trends related to this thesis through literature reading, and which summarized the academic arguments with reference value.

2. Interview Method

This research used the in-depth interview method to conduct in-depth exchanges with representative personnel such as broadcasting and hosting art students, new media human resource managers, and university broadcasting and hosting art discipline leaders. This research also used empirical research data to explore the research question presented.

3. Quantitative Research Method

Through the design and statistics of questionnaires, the questionnaire investigated the employment orientation of students majoring in broadcasting and hosting arts. This study summarized the current students' cultural, skill, and literacy needs from the dimensions of media attitudes and curriculum teachers. In addition, this paper searched and summarized the recruitment information of mainstream media structures in 2019-2021. According to the statistics, the needs of media talents in the era of new media and media integration were summarized in this study, so that the school could train students majoring in broadcasting and hosting arts in a targeted manner.

FINDINGS

(1)Overview of Broadcasting and Hosting Institutions

Since 2000, due to the rapid rise of the media industry, the art of broadcasting and hosting has become popular, it has rapidly expanded to more than 200 colleges and universities today.

(2)Analysis of Training Objectives of Broadcasting and Hosting

Through the analysis of the training objectives of the six broadcasting and hosting art colleges, it can be seen that there are differences and similarities at the same time. From this, it can found that in the era of media reform, the training programs of broadcasting and hosting art majors in colleges and universities have not changed according to the development of media. Being in a lagging state is not conducive to the development of broadcasting and hosting art majors and the employment of graduates.

(3)Current Situation of Curriculum Setting in Broadcasting and Hosting

In reality, the curriculum of broadcasting and hosting art majors is not ideal. The basic theory of broadcasting and hosting art majors for three-year university students has been basically completed, and the professional practice has been nearly half. The effect evaluation is not optimistic, as shown in Figure 3-1 and Figure 3-2.

Figure 3-1

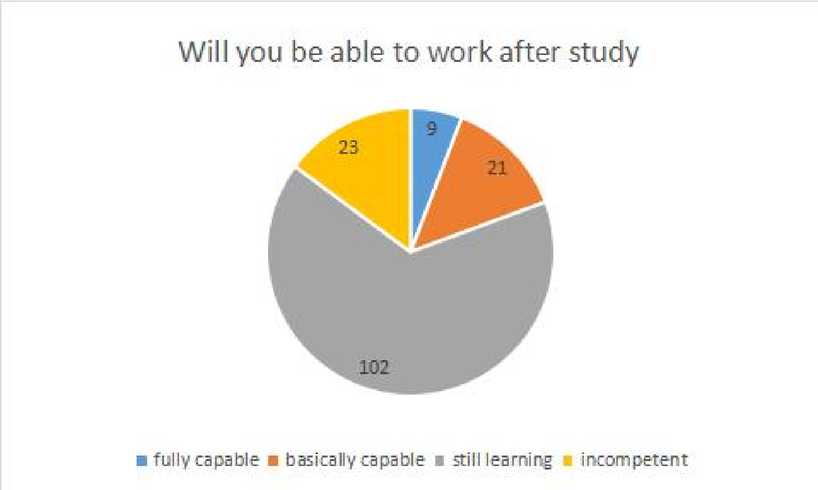
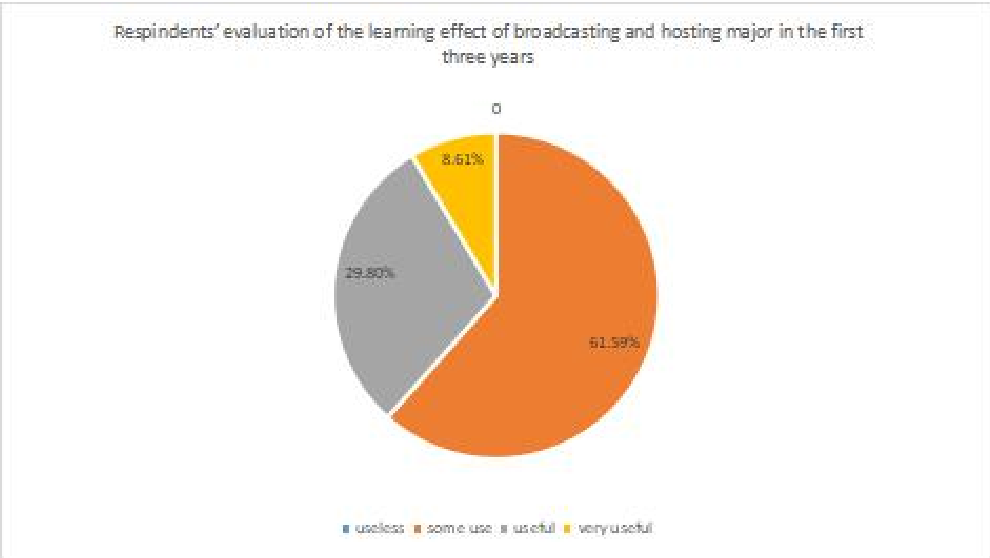


Figure 3-2



From Figure 3-1, it can be found that among the 151 respondents, 102 believe that they need to continue their studies before they can be qualified for future jobs, accounting for 67.5% of the total number, and 23 people think that they cannot meet the needs of employment, accounting for 15.2% of the total number. This shew that the vast majority of students majoring in broadcasting and hosting art think that the knowledge acquired in three years of university is lacking in employment requirements. Figure 3-2 also seems to illustrate such a problem. Students majoring in broadcasting and hosting art believe that three years of study will only have a partial effect on future employment, accounting for 61.5% of the total number. The results show that there are some problems in the current curriculum setting, which does not fully play the role of the curriculum to help students. Because broadcasting and hosting art majors have few courses in the fourth year of college, they mainly prepare with practice and graduation thesis works. Therefore, the theory and practice of the first three years of university are very important. After students have completed about 3 years of theoretical and practical courses, the employment assistance for students is not ideal, which requires innovation and optimization of curriculum settings.

(4)Teaching Problems of Broadcasting and Hosting

Among the professional learning demands of students majoring in broadcasting and hosting arts, but practical operation courses and on-site practical guidance courses are not favored by students, as shown in Figure 3-3 and Figure 3-4.

Figure 3-3

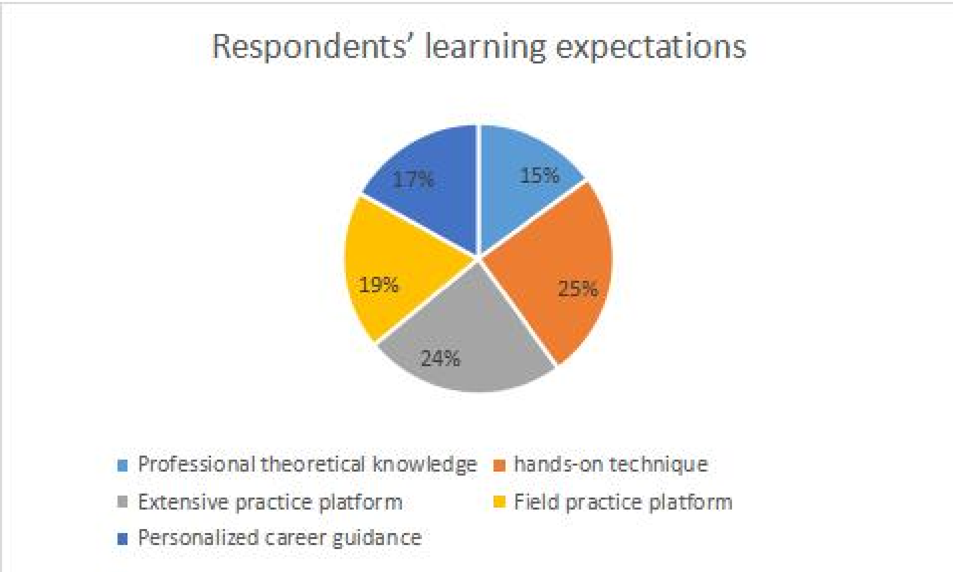


Figure 3-4

As can be seen from Figure 3-3, 25% of students hope to get on-site guidance from teachers, and 24% of students hope to get a wider practice platform, 19% of students would like a course with more hands-on practice. This also shows that the teaching of broadcasting and hosting art majors is affirmed and recognized by students. It can be seen from Figure 3-4 that students attach great importance to professional practice courses and hope to receive more professional practice courses in schools, which also highlights the importance and necessity of professional small courses.

CONCLUSION

This is a diversified, networked, digital and fragmented information society, science and technology are the primary productive forces. In fact, in today's increasingly blurred media barriers, the basis for the division of the training system in the form of media such as radio and television can no longer guide the current practice. Meanwhile, due to the respective utilitarian pursuits of candidates and institutions, broadcasting and hosting education has gradually separated from the normal educational ecology, and professional development has been seriously unbalanced. To break through the traditional teaching mode, it must have certain path dependence and difficulty in thinking, so there is a phenomenon of reform ideas but still following the old traditions. In order to train an announcer and host suitable for the development of the times, China must start with the discipline of broadcasting and hosting art.

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ONLINE TEACHING QUALITY MANAGEMENT IN COLLEGES AND UNIVERSITIES UNDER THE BACKGROUND OF REGULAR EPIDEMIC PREVENTION AND CONTROL

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ABSTRACT

This study aimed to describe the current status of online teaching quality management in colleges and universities during regular epidemic prevention and control. This study was qualitative research with a phenomenological approach. Data were collected from 968 students and 12 faculty members from four colleges in Jinhua, Zhejiang Province, China, through questionnaires and interviews for quantitative and qualitative analyses. The results showed that there are two main dilemmas facing by online teaching in colleges and universities. First, there is lack of online teaching quality process management in colleges and universities. Second, there are deficiencies in the adopted online teaching quality evaluation system for colleges and universities. According to the existing problems and causes, this paper puts forward the promotion strategies of online teaching quality management in colleges and universities.

Keywords: online teaching, quality management, regular epidemic prevention and control

INTRODUCTION

In 2020, the sudden outbreak of Covid-19 disrupted the rhythm of our life. At the same time, the teaching order of more than 2,700 colleges and universities in China was upset, resulting in more than 30 million college students not being able to return to school as scheduled. The Chinese Ministry of Education has launched an initiative entitled "Disrupted Classes, Undisrupted Learning" to provide flexible online learning to hundreds of millions of students at their homes (Huang et al., 2020). To minimize the negative impact of the epidemic on teaching, colleges and universities have proposed teaching programs and strategies to combat the epidemic, and carried out online live teaching, online homework, online defense, and other distance learning activities actively.

This large-scale activity of online teaching is an unprecedented challenge for universities in terms of teaching methods and quality. Due to the outbreak of Covid-19, the most significant effect on education was the loss of classroom learning (Liguori & Winkler, 2020; Lynch, 2020; Zhang et al., 2020). There are many differences appeared between online teaching and traditional teaching, such as the teaching environment is changed from centralized teaching in a classroom to independent teaching at home; the interpersonal object is changed from multiple coexistences with teachers and students to single coexistence with family members; the management mode is changed from "heteronomy" to "self-discipline", from "face-to-face" management to "voice-to-voice" and "call-to-action" management, from "familiar management mode" to "exploratory management mode", from the field supply of learning resources to online resources. At the same time, online teaching in colleges and universities puts forward high requirements on teachers' and students' network signals, computers, cell phones and other terminal devices, and requires teachers and students to master online teaching operation methods and skills. Facing all these challenges, it is urgent to explore a new management mode of online teaching.

Higher education is a high-cost, sequential and regular talent training activity, and the opportunity is often only once. Once the quality of teaching deviates, it will change the original training plan and be detached from the needs of the public. Covid-19 has revealed emerging vulnerabilities in education systems around the world. It is clear that society needs flexible and resilient education systems as we face unpredictable futures (Ali, 2020). Nowadays, online teaching is becoming the "new normal" in higher education teaching in the era of the epidemic, and quality assurance and recognition of online teaching are essential (Zhang & Huang, 2022; Lai & He, 2022; Wan, et al., 2022). For online teaching in colleges and universities, online is the way, teaching is the essence. To ensure the quality of teaching, the only way is to follow the law of teaching management, make effective use of information-based teaching resources and technical means, and establish a more systematic, scientific and efficient comprehensive quality management system with the management goal of improving the teaching effect and the quality of talent training.

This study aims to answer two questions, namely (1) What are the current problems and causes of online teaching quality management in colleges and universities, and (2) What are the strategies to improve the quality management of online teaching during the regular epidemic prevention and control? We hope that the results of this study will become one of the considerations for higher education institutions and the government in making policies to improve the quality and equity of education today as well as in the post-pandemic period.

METHODS

Research Design

To analyze the causes of current problems in online teaching management concepts, management behaviors, and management policies, we investigate the current situation of online teaching management in colleges and universities by questionnaires and interviews, so as to propose strategies to improve the quality management of online teaching in colleges and universities.

Sample and Data Collection

Considering the convenience and representativeness of the survey, four colleges in Jinhua that have fully conducted online teaching were selected. 953 students were selected randomly from four colleges for questionnaire survey. At the same time, 15 students, 8 teachers and 4 teaching manager were selected randomly as interviewees.

Instrument Development

2.3.1 Questionnaire preparation

Based on the theory of teaching quality management, the management policies of four colleges and some related studies, the questionnaire consists of three parts: basic information on online teaching participation, the current status of online teaching quality management, and satisfaction with online teaching quality. A five-point Likert scale was used on this questionnaire, anchored between "strongly dissatisfied" and "strongly satisfied".

Before conducting the formal questionnaire survey, a pre-survey was implemented to ensure the reasonableness of the topics of the survey on the status of online teaching quality management in universities. A total of 121 questionnaires were distributed, with a 100% return rate, and the reliability analysis was conducted on them, which seems to have high reliability (α=0.95) and validity (KMO=0.95).

2.3.2 Interview outline design

To totally understand the current situation of online teaching quality management, we interviewed the students, teachers and managers from the four colleges. The framework design of the interview is detailed from dimensions of teaching objectives, process management, management organization building and teaching platform construction for administrators, dimensions of opinions on online teaching, faculty's ability to teach online, teaching platform evaluation, evaluation of online teaching management, teaching teacher and student evaluation methods for teachers and students, and dimensions of self-level for students.

Data Analysis

The data were analyzed using two approaches, namely descriptive quantitative and qualitative. Data related to the basic information of students were demographically analyzed, then the results were presented in the form of a diagram. Meanwhile, qualitative data derived from the responses of students and teachers on satisfaction with online teaching were analyzed using a qualitative approach. Their responses to open questionnaires, as well as interviews, were recorded and summerized to obtain themes related to the challenges faced. The process of data analysis was data reduction, identifying themes, mapping interrelationships between themes, and concluding findings.

RESULTS

3.1 The current situation of online teaching quality management in colleges and universities

3.1.1 The current situation of online teaching platform

As shown in Fig. 1, 82.16% of the students rated more than 3-point for the platform technology satisfaction, and 80.06% of the students rated more than 3-point for the basic satisfaction of the platform function, indicating that the students are basically satisfied with the online teaching platform in general. From the analysis of students' demand for the functions of the teaching platform (Fig.2), the proportion of the demand for the function of submitting or transmitting course materials is as high as 65.06%, and the proportion of the demand for the function of teacher interaction support is 53.2%, which indicates that these two functions are needed to improve most.

Figure 1: Students' satisfaction with platform technology and function

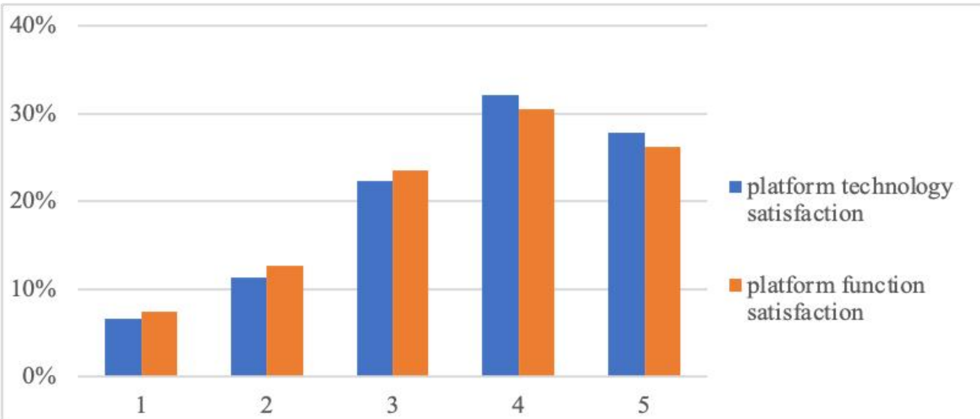
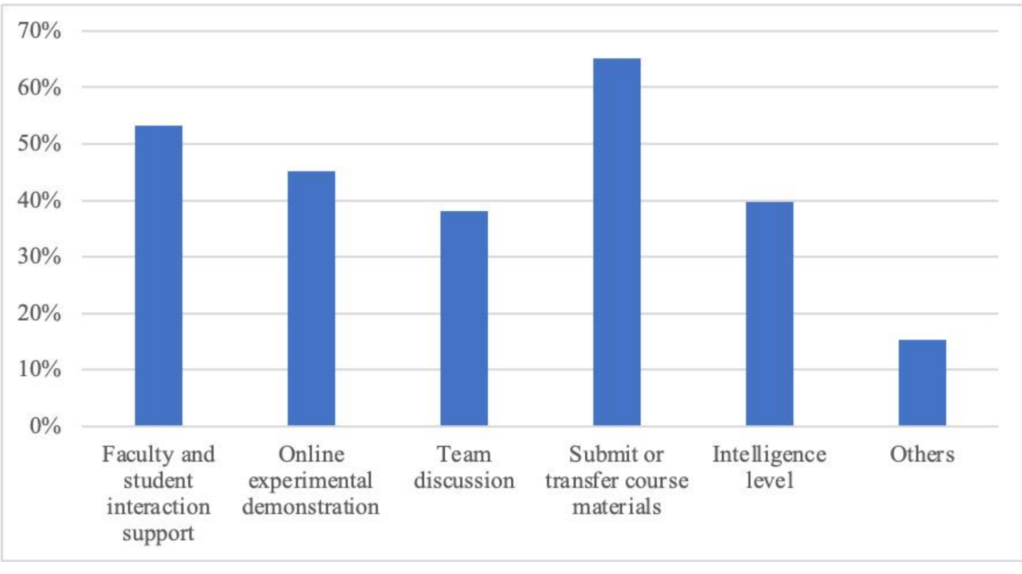


Figure 2: Students' demand for the functions of the teaching platform



3.1.2 Student management level

Student management is one of the most important part of online teaching quality management, and whether it is student-oriented or whether it is scientific is the key point. According to the results, the scores of "student-oriented" and "scientific management of student behavior" are both above 3-point, which means that the student-oriented management and scientific management of students' behaviors in online teaching are well implemented, but there is still room for improvement.

As a new mode, online teaching in colleges and universities requires higher students' self-management than traditional teaching, and students need to change their traditional behaviors and thoughts in the face of new things. Students need to have a clear understanding of their self-management ability in this teaching mode. According to the results, among the five items needed to be cultivated at the self-level, the most important thing to be improved is learning initiative, followed by learning methods. This indicates that the original learning methods need to be adjusted to adapt to online learning better, online learning needs to rely less on teachers and more on individual initiative compared to traditional teaching, and the current initiative of students in online learning cannot cope with online teaching better. It was also shown that, unlike traditional teaching, students have much more time to learn by themselves during online teaching, which lacks the binding physical space, and it is impossible to judge through the screen whether students are listening carefully or not and whether teacher-student interaction is smooth or not, so the problems they are facing mainly include self-directed learning and self-discipline, which is one of the important factors affecting the quality of online learning (Matthew et al., 2018; Liu, 2022).

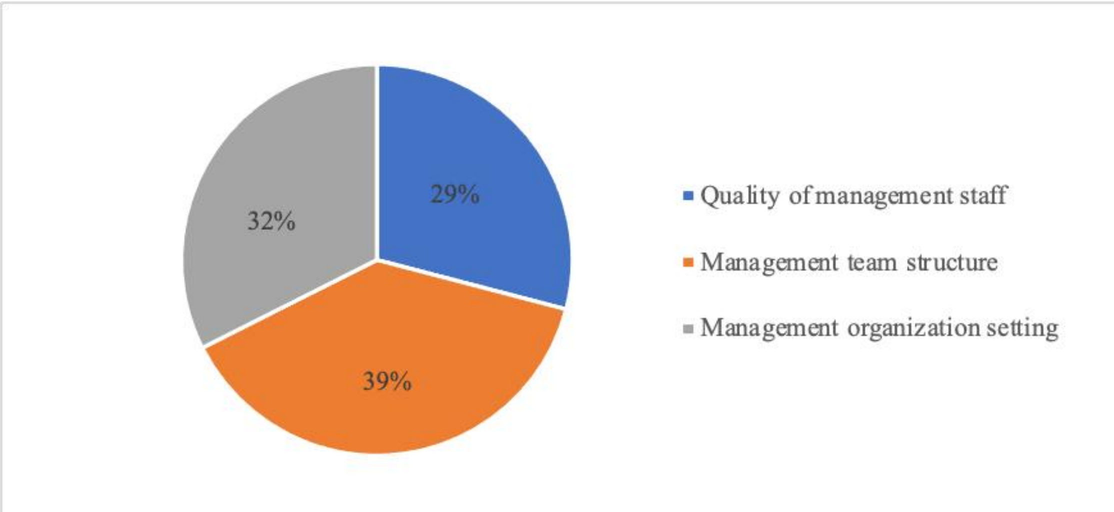
3.1.3 Faculty management level

In the face of the new teaching mode, teachers need to acquire corresponding teaching abilities to ensure the quality of teaching. For this reason, we collected items for improvement in teachers' skills through a questionnaire to understand the teaching ability of teachers and the current status of online teaching training for teachers. The results showed that the proportion of teaching methods and teaching contents that need to be improved is higher, followed by operational skills. The results of the interviews showed that half of the students think that the teachers have better operational skills, and half of the students think that the teachers use the platform functions in a simple way and have not discussed them in-depth, and have had problems in the teaching process. It is easy to see that online teaching requires high operational skills of teachers, and teachers need to master the operating skills of the platform to better complete the teaching tasks; students' attention is easily distracted in online teaching, which also faces new challenges for teachers' teaching methods and teaching contents, and needs to be more targeted. It was reported that lecturers should be able to create an interesting, innovative learning atmosphere, introduce technology and online learning resources, and motivate students so students can have high self-efficacy to continue to learn despite facing challenges in online learning (Kintan & Samsul, 2021). For this reason, online teaching places higher demands on teachers in all areas of competency.

3.1.4 Organizational management level

The questionnaire survey was conducted to understand the current situation of the university management organization through the provision of online learning resources, the satisfaction with online teaching objectives and program management, the construction of online teaching rules and regulations, the concept of online teaching management, and the cooperation between the university and enterprises. The results showed that the satisfaction scores are all concentrated above 3-point, which indicates that students are more agreeable to the organization and management. The rationalization of teaching management organization plays an important role in teaching quality management. The results of teaching management organization showed that the structural setting of management personnel team needs to be improved most, reaching 39%, followed by the setting of management organization at 32%; and finally the quality of management staff at 29%. This indicates that the structural echelon of the management organization needs to be more reasonable and the tasks that each department is responsible for should be defined more clearly.

Figure 3: Percentage of content to be improved in online teaching management organization



3.1.5 Differential analysis of the current situation of online teaching quality as perceived by students with different education levels

In order to explore the variability of the scores on the situation of online teaching quality by academic qualifications (undergraduates, vocational college students), independent samples test was used. As the results, undergraduates' satisfaction on online teaching platform technology (t=-4.76, p<0.05), teaching platform function (t=-4.83, p<0.001), student-oriented management concept (t=-6.11, p<0.001), self-management skills (t=-8.11, p<0.001), scientific student management (t=-3.72, p<0.001), teaching attitude (t=-5.74, p<0.001), learning resources (t=-6.01, p<0.001), management of teaching objectives and plans (t=-5.08, p<0.001), setting of rules and regulations (t=-4.53, p<0.001), management concept of long-term development (t=-5.50, p<0.001) and the positioning cooperation between universities and teaching platforms (t=-4.75, p<0.001) are significantly higher than vocational college students', which indicates that there are significant differences in the perception of the current situation of each factor among students with different academic qualifications. Therefore, this factor should be taken into account in the process of online teaching quality management in colleges and universities.

3.2Problems of online teaching quality management in colleges and universities

3.2.1 Lack of online teaching quality process management in colleges and universities

In the online teaching practice of the sample colleges, teaching management activities are always throughout, and this paper conducted an empirical investigation of the online teaching quality management process work in terms of the way of achieving control and supervision. In the interview, many students expressed that the college has more management methods for check-in when teaching online, but the real-time supervision is weak; the school, as well as the college, rarely includes students' wishes into the management behavior. In comparing and summarizing the management process of colleges and universities, two problems were found: firstly, the online teaching management presents the characteristics of one-way management, the feedback mechanism is not sound, and a smooth interactive relationship is not fully established. Secondly, the rules and regulations of online teaching management in colleges and universities are gradually improved, but the management actions are superficial. The management of students mainly focuses on attendance, data monitoring, and credit management. As far as the effect is concerned, such management does play a positive role in ensuring normal attendance, but it ignores the fact that as individuals students objectively have a lot of differences, and students' attention is easily distracted by different teaching methods in different spaces. The management of sign-in method will form invisible truancy, which has become the experience of most students, and the system has become empty talk. During the teaching process management, school does not give more motivational management of online teaching services instead of one-way call management, such management behavior blocked the quality of online teaching output. The previous study indicates that the quality management model of online education is still lagging behind, not only has a single model and fixed words, but also has serious deficiencies in resource allocation, institutional norm building, management supervision and other aspects, which is consistent with the findings of this study (Wang et al., 2020).

3.2.2 Deficiencies in the adopted online teaching quality evaluation system for universities

In the analysis of relevant documents and interviews with administrators in the sample schools, it is learned that the current online teaching evaluation system in colleges and universities only adopts feedback on teachers' teaching ability through the academic affairs system, without setting up a special online teaching evaluation board, and continues to follow the traditional evaluation method, which cannot reasonably evaluate online teaching. The unreasonable evaluation mechanism leads to no evaluation motivation for evaluators. Therefore, the current online teaching evaluation system fails to evaluate teacher' ability and quality of online teaching from multiple angles, fails to evaluate online teaching in an all-round way, fails to reflect students' feedback and demands truly, and also fails to mobilize students' emotions in evaluating teaching, so this evaluation method cannot achieve the purpose of improving the teaching quality of online teaching.

3.3 Strategies to improve online teaching quality management in higher education under the background of regular epidemic prevention and control

3.3.1 Establish and promote a total quality management view of online teaching

With the continued and steady development of society, online teaching must be focused on in the long term as an important form of instruction. Especially under the impact of COVID-19, it has objectively accelerated the development of online teaching, the changing shape of teaching has placed new demands on the management of teaching quality. In order to guarantee the substantial equivalence of online and offline teaching, it is urgent to build an online teaching quality management system that meets the development needs and strengthen the quality management of online teaching (Zhao, 2021; Ding et al., 2022). First of all, a full understanding of the management concept is necessary to ensure the quality of online teaching, which should be constantly adjusted with the needs of teachers, students, parents and society, so that the quality management of online teaching can develop in a better direction and achieve the quality goal that the online teaching model cultivates can adapt to the needs of society for talents. Teachers and students are the basic elements of online teaching, so managers output of teaching quality should be seen as good service for teachers and students.

3.3.2 Improve the organization system of online teaching quality management in universities

The organization and command system of higher education is the heart of the online teaching quality management system, and its function is to organize, operate and coordinate all sections of online teaching, and its reasonable organization is directly related to the efficiency of online teaching quality management. The online teaching quality management is "the combination of administration and curriculum management". Therefore, the teaching organization system should be composed of two sub-systems, the teaching administration sub-system and the teaching course management sub-system.

The administrative organization construction of online teaching should be based on the addition of a teaching platform coordination office under the original administrative organization, and its organizational operation is based on the behavioral progressive management activities of online teaching management personnel hierarchy. Moreover, the administrative organization should always carry out the guidance and guarantee of college network teaching based on the concept of service (Liu, 2001). The management organization sub-system of online teaching course is increased by the original organizational settings of the online teaching technology and technical training department, teaching assistant management department, and expanded supervision supervisory staff. The success or failure of teaching quality management is determined by the reasonable staff structure and the quality of management personnel in the online teaching organization of the university. We should strengthen the service consciousness and innovative management concept of online teaching managers for teachers and students to achieve the optimization of teaching quality management.

3.3.3 Innovative faculty and student capacity development

Based on the active nature of online learning, teacher's role in the online teaching process is totally different from traditional teaching, and they will use different teaching methods (Wang et al., 2016). The process of online teaching and its learning effectiveness largely depends on high-level active learning outside of class, and teachers can use various methods to modify students' homework and reading requirements moderately to strengthen students' active learning outside of class (Bao, 2020). Teachers need to provide students with timely and effective feedback, and use various methods to strengthen students' active learning outside of class, forming a good atmosphere for teachers and students to participate in online teaching with high quality, ultimately achieving the purpose of improving teaching effectiveness and efficiency (Sudhakar & Nalini, 2020). Therefore, in the online teaching quality management system, creating a team of excellent online teachers with strong quality, strong teaching ability and high confidence technology level is the key to improve the quality of online teaching in universities. At the same time, student's autonomy is currently one of the core tasks to cultivate talents by online teaching and also one of the necessary qualities of today's innovative talents. While online teaching should be characterized by more "personalized learning" (Hu & Xie, 2020), the previous study showed that it is still strongly influenced by the traditional classroom culture, with most students failing to develop an independent self-learning system (Zhou et al., 2022). Students' online learning, away from the traditional classroom environment, lacks real-time supervision by teachers and administrators and communication among students, so it makes students' autonomy an important factor affecting the quality of learning. In online teaching, the role of teachers as supervisors is weakened, and administrators and teachers need to guide students to develop self-regulated learning skills and teach them how to discipline themselves and how to learn efficiently in online teaching. Administrators and teachers need to let students fully self-understand, find inner learning motivation, guide students to feel the charm of information technology teaching, optimize the allocation of online teaching resources, give students more learning motivation and knowledge needs, realize more three-dimensional, vivid, and efficient online teaching, and promote the generation of personalized customized learning mode.

3.3.4 Strengthening online teaching platform construction work

The function of the online teaching platform is the prerequisite and basic guarantee of teaching quality, and it is also the cornerstone of effective teaching quality management. The provision of learning resources of the teaching platform, in addition to the functions of the platform itself, should also consider the teaching resources provided by the school, and the learning resources provided by the teachers to be applied smoothly on the platform. Enhancing the school-enterprise liaison between the school and the teaching platform is a necessary hand-end to guarantee the long-term development of online teaching. With the aim of win-win cooperation, the platform establishes a special board for each school, sets up specialized channels according to the nature of the school, the nature of the profession, and the quality of the students, as well as builds communication channels between schools and enterprises, communicates needs and problems in time, and builds good strategic cooperation.

CONCLUSION AND DISCUSSION

Under the background of regular epidemic prevention and control, this paper takes total quality management theory, teaching management theory, and the characteristics of online teaching as the basis of the study, and investigates the current situation of online teaching quality management with university students, teachers, and teaching managers as the research objects. Based on the data analysis, the current problems of online teaching are summarized: the lack of quality process management work and the defects of the adopted quality management evaluation system. Through the analysis of causes, we propose to construct strategies to improve the quality management of online teaching in colleges and universities: establish and promote the concept of comprehensive quality management of online teaching; improve the organization system of quality management of online teaching in colleges and universities; reconstruct the guarantee operation mechanism and monitoring and evaluation mechanism; strengthen the construction work of online teaching platform; and innovate the ability cultivation of teachers and students.

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INNOVATIVE MANAGEMENT OF CHINA'S NEW ENERGY VEHICLE INDUSTRY DEVELOPMENT

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ABSTRACT

In the environment of rapid development of global economic integration, low-carbon energy conservation and environmental protection have become the general trend, and new energy vehicles have also developed rapidly. China has promoted the research and development of new energy vehicles, effectively promoted the orderly development of new energy vehicles, and made them an important pillar industry in China, which can also meet the needs of China's long-term development and ensure the promotion of industrial development and transformation. Thus, the new energy vehicle industry has become an important strategic component of China's social and economic development to a great extent. In recent years, Chinese government departments at all levels have issued corresponding preferential policies to promote the orderly development of the automobile industry. Many automobile enterprises have a positive attitude towards the development of new energy vehicles, and have invested sufficient funds and resources in the research and development of new energy vehicles. At this stage, the new energy automobile industry has a certain industrialization foundation, including the production of parts, battery research and development and the construction of various infrastructure, and has established a relatively complete industrial chain. In terms of the development of new energy vehicles and the industry, the relevant policy and system documents issued by China also clearly put forward the goal of industrial development of the industry. By 2020, the output of new energy vehicles should exceed 2 million, and the total sales volume should not be less than 5 million. According to the relevant statistical data, new energy vehicles have a very large market space in China, and the market development potential is very large. Relevant automobile enterprises should invest more funds and resources in the research and development, production and sales of new energy vehicles, so as to really promote the development of the new energy vehicle industry. Protecting the ecological environment is the key to providing a good living environment for the masses, and the optimization of the energy structure can greatly promote the orderly development of China's social economy. Some policies that have been issued but have not been implemented have to some extent forced the transformation and upgrading of commercial automobile enterprises, provided new ideas for the development of these enterprises, and helped them find business

opportunities in the fierce market competition environment. At present, the field of new energy vehicles in developed countries in Europe and America is still in the early stage of development and does not occupy a leading position and market leading position. Therefore, China should accelerate the development and application of new energy vehicles, and further implement the concept of energy conservation and environmental protection, so as to promote the steady development of China's automobile industry, and also help China's automobile industry to occupy obvious technical advantages and achieve remarkable development results.

keyword: Enterprise； Innovation Development； Strategy management ； New energy vehicle industry

DEVELOPMENT ANALYSIS OF NEW ENERGY VEHICLE INDUSTRY

1.1. Development status of new energy vehicles

China's new energy vehicle industry has formed a complete industrial chain from the supply of raw materials, the R & D and production of key components such as power batteries and vehicle controllers, to the design and manufacturing of vehicle, as well as the supporting construction of charging infrastructure, and has a foundation for industrialization.

(1) China regards new energy vehicles as one of the seven strategic industries. The top leaders of the country called on the development of new energy vehicles to play a particularly prominent role in China's seven strategic industries.

(2) China's new energy vehicle development policy is relatively sound and more systematic. The central and local governments subsidize the production cost difference of new energy vehicles at the same time, reduce or exempt the purchase tax, subsidize the operation of new energy buses, and set up special license plates for new energy vehicles, giving priority to the right of way, etc.

(3) With the encouragement of many positive policies, the demand of China's new energy vehicle market has spiraled, reaching a big level every year. 500000 vehicles in 2016, 800000 vehicles in 2017, more than 1million vehicles in 2018, and 2million vehicles in 2020.

(4) At the time of the rapid development of China's new energy vehicles, the Chinese government is beginning to study new incentive policies to promote the development of China's new energy vehicles in the direction of intelligent connected vehicles. The development plan of intelligent connected vehicles issued by the Chinese government is a concrete manifestation.

1.2. Classification of new energy vehicles

One : Hybrid vehicle

Hybrid power refers to those vehicles that use traditional fuel and are equipped with an electric motor / engine to improve low-speed power output and fuel consumption. According to the different types of fuel, it can be divided into gasoline hybrid and diesel hybrid.

According to the connection mode of hybrid drive, hybrid vehicles are generally divided into three categories:

(1) Series hybrid electric vehicle (SHEV) is mainly composed of engine, generator, drive motor and other three powertrain, which form the powertrain of HEV in series.

(2) The engine and generator of parallel hybrid electric vehicle (PHEV) are powertrain, and the power of the two powertrain can be output by superposition with each other or separately.

(3) Hybrid hybrid electric vehicle (PSHEV) is an electric vehicle composed of series and parallel structures, which is mainly composed of engine, electric generator and drive motor.

In addition, according to the different degree of mixing in the hybrid system, the hybrid system can also be divided into the following four categories:

(1) Micro hybrid system. The representative models are PSA hybrid C3 and Toyota Hybrid Vitz. Strictly speaking, this kind of car with micro hybrid system is not a real hybrid car, because its motor does not provide continuous power for the car.

(2) Light hybrid system. The representative model is GM's hybrid pickup truck. The light hybrid system can not only control the start and stop of the engine with the generator, but also realize: ① absorb part of the energy under deceleration and braking conditions; ② During driving, the engine runs at a constant speed, and the energy generated by the engine can be adjusted between the driving demand of the wheel and the charging demand of the generator. The mixing degree of light hybrid system is generally below 20%.

(3) Medium hybrid system. Insight, accord and civic of Honda's hybrid power all belong to this system. High voltage motor is used in the hybrid power system. In addition, the hybrid system also adds a function: when the vehicle is in acceleration or heavy load conditions, the motor can assist in driving the wheels, so as to supplement the lack of power output of the engine itself, so as to better improve the performance of the whole vehicle. The mixing degree of this system is high, which can reach about 30%. Now the technology is mature and widely used.

(4) Complete hybrid system. Toyota's Prius and future estima are fully hybrid systems. The system adopts 272-650v high-voltage starting motor, with a higher mixing degree. Compared with the medium hybrid system, the hybrid degree of the complete hybrid system can reach or even exceed 50%. With the development of technology, complete hybrid system will gradually become the main development direction of hybrid technology.

Two :Pure electric vehicle

Pure electric vehicle is a kind of vehicle with a single battery seat energy storage power source. It uses the energy storage power source of the battery seat to provide electric energy to the motor through the battery and drive the motor to run, so as to drive the car forward. In terms of appearance, there is no difference between electric vehicles and traditional vehicles we see every day. The difference lies in the power source and its drive system. Generally speaking, the electric motor of a pure electric vehicle is equivalent to the engine of a traditional vehicle, and the battery is equivalent to the original fuel tank.

The composition of electric vehicles includes: batteries, electric drive and control systems, mechanical systems such as driving force transmission, and working devices to complete established tasks. Electric drive and control system is the core of electric vehicle and the biggest difference from internal combustion engine vehicle. The electric drive and control system is composed of drive motor, power supply and motor speed control device. The drive motor shall have the characteristics of wide adjustment range, high speed, large starting torque, small volume, small mass, high efficiency, strong dynamic braking and energy feedback. At present, electric vehicle motors mainly include DC motor (DCM), induction motor (IM), permanent magnet brushless motor (PMBLM) and switched reluctance motor (SRM). With the development of motor and drive system, the control system gradually tends to be intelligent and digital. Fuzzy control, expert control, neural network, adaptive control, variable structure control, genetic algorithm and other nonlinear intelligent control technologies will be developed and applied to the electric vehicle control system.

In addition, other devices of electric vehicles are basically the same as internal combustion engine vehicles.

Three : Fuel cell vehicle

Fuel cell vehicle refers to a vehicle that uses hydrogen, methanol, etc. as fuel, generates electric current through chemical reaction, and relies on motor drive. The energy of its battery is directly converted into electric energy through the chemical action of hydrogen and oxygen, rather than through combustion. The chemical reaction process of fuel cells will not produce harmful products, so fuel cell vehicles are pollution-free vehicles, and the energy conversion efficiency of fuel cells is 2 ~ 3 times higher than that of internal combustion engines. Therefore, fuel cell vehicles are ideal vehicles in terms of energy utilization and environmental protection. In recent years, fuel cell technology has made significant progress. There are still technical challenges in the development of fuel cell vehicles, such as the integration of fuel cell packs, improving the commercialization of electric vehicles, fuel processors and auxiliary automobile manufacturers are working towards the direction of integrating components and reducing component costs, and have made significant progress. The working principle of fuel cell vehicle is that hydrogen, as a fuel, reacts with oxygen in the atmosphere in the fuel cell carried by the vehicle to produce electric energy to drive the motor. The motor drives the mechanical transmission structure in the vehicle, and then drives the walking mechanical structures such as the front axle (or rear axle) of the vehicle, so as to drive the electric vehicle forward. Fuel cell, the core component. The reaction result of the fuel cell will produce very little carbon dioxide and nitrogen oxides, and the by-product is mainly water, so it is called a new green vehicle.

Four : Hydrogen powered vehicle

Hydrogen powered vehicle is a truly zero emission vehicle, which emits pure water. It has the advantages of no pollution, zero emission, rich reserves and so on. Therefore, hydrogen powered vehicle is the most ideal alternative to traditional vehicles. Compared with traditional power vehicles, the cost of hydrogen powered vehicles is at least 20% higher. China Chang'an Automobile Co., Ltd. completed the ignition of China's first high-efficiency zero emission hydrogen internal combustion engine in 2007, and exhibited China's first hydrogen powered concept sports car "hydrogen journey" independently developed at the 2008 Beijing auto show. Hydrogen has a high energy density, and the energy released is enough to make the car engine run. Moreover, hydrogen reacts with oxygen in the fuel cell to produce water without pollution. Therefore, many scientists predict that the fuel cell with hydrogen as energy is the core technology of automobile in the 21st century, which has revolutionary significance for the automobile industry.

1.3. Problems of new energy vehicles

First of all, as the core equipment of new energy vehicles, batteries must be subject to many restrictions. At present, lithium-ion batteries are mainly used in new energy vehicles. Its cost is not cheap, which is also the reason for the high price of new energy vehicles. In addition, coupled with the spontaneous combustion events of some new energy vehicles, many consumers are worried about the safety of batteries and new energy issues. Therefore, efficiency, safety, economy and environmental protection are still the bottleneck of current technology, which requires deeper research and development and testing to make a breakthrough.

In addition, the recycling of power batteries is a key link for the healthy and sustainable development of the new energy vehicle industry, which has important practical significance for reducing the cost of power batteries in the whole life cycle, promoting environmental protection and social security, and saving the utilization of mineral resources. As China's development of new energy vehicle industry has become a national strategy, new energy vehicles have been widely promoted and applied since 2013, and the production and sales volume has been rising year by year. By the end of 2017, more than 1.8 million new energy vehicles had been promoted, and about 86.9gwh of power batteries had been assembled. According to the research and calculation of the enterprise's warranty period, battery cycle life, vehicle operating conditions and other aspects, the power battery of new energy vehicles will enter large-scale retirement after 2018. It is expected that the recovery of power battery will reach 111400 tons in 2019 and 257000 tons in 2020. It is urgent to solve the problem of recycling and reusing waste power batteries.

Secondly, to vigorously develop new energy vehicles, in addition to excellent technology, it also needs financial support. Whether it is the construction of demonstration projects or the construction of infrastructure, it needs to invest a lot of money to continuously research and develop and test, so the development of the whole new energy needs a lot of human and financial resources; In addition, the promotion of new energy in the market is also a major problem currently facing.

Guiding consumers to understand, contact and use new energy, including the massive construction of charging facilities, are all hard indicators for the promotion of new energy

1.4. Development trend of new energy vehicles

(1) From policy driven to market driven

At present, a profound change is taking place in the field of new energy vehicles in China, which can be summarized as four changes:

The consumption structure has changed from paying equal attention to passenger cars and commercial vehicles to passenger cars: the data shows that 2009-2012 is the first demonstration period, paying equal attention to passenger cars and commercial vehicles, and the development of the industry basically depends on policies; 2013-2015 is the second demonstration period. Since 2016, the development of new energy passenger vehicles has accelerated significantly and is now in a relatively dominant position. This development track is basically consistent with the historical route of traditional cars. It can be predicted that passenger cars will account for the absolute majority in the field of new energy vehicles in the future.

The consumer has changed from the public sector to private purchase: from the perspective of the overall new energy vehicle sector, unit users accounted for 71.6% and private purchases 28.4% in 2015. In 2017, 60% were private purchases and 34% were corporate users. In terms of new energy passenger vehicles, the proportion of private purchases reached 42.6% in 2015 and jumped to 71.4% in 2017. It is obvious that it is changing to private purchase.

Private consumption areas have changed from cities with purchase restrictions to cities without purchase restrictions: from the perspective of the overall new energy vehicle industry, unit users accounted for 71.6% in 2015, and private purchases accounted for 28.4%. In 2017, 60% were private purchases and 34% were corporate users. In terms of new energy passenger vehicles, the proportion of private purchases reached 42.6% in 2015 and jumped to 71.4% in 2017. It is obvious that it is changing to private purchase.

The private consumption ecosystem is changing from passive acceptance to active purchase: new energy vehicle products are becoming increasingly abundant, and consumers are gradually changing from "no car to choose and passive acceptance" to "active selection and free choice".

These four trends show that market factors are playing an increasingly important role in promoting the development of new energy vehicles, and the new energy vehicle market is gradually changing from policy driven to market driven.

(1) Automobile "new four modernizations"

As it is more suitable to evolve into advanced intelligent mobile terminals, new energy vehicles will usher in rapid development. The "new four modernizations" of the automotive industry, namely, electrification, networking, intelligence and sharing, have become a recognized future trend in the automotive industry. Without the characteristics of the "four modernizations", it is likely to be eliminated. It is estimated that by 2027, among new car buyers, the post-00s will account for 7.2%, the post-90s will account for 41.8%, and the post-80s will account for 35.4%. These generations have grown up in the Internet environment and live without Internet. Therefore, automobiles will evolve to advanced intelligent mobile terminals, and new energy vehicles will usher in high-speed development.

(2) The production and sales of new energy vehicles increased rapidly

The production and sales of new energy vehicles will continue to grow rapidly, and the market scale will reach trillion. It is estimated that the production and sales of new energy vehicles in China will exceed 1million in 2018 and 2million in 2020. It is estimated that by 2030, China's annual sales of new energy passenger vehicles will exceed 13million; Large and medium-sized new energy buses will become the main force of bus sales. From 2018 to 2030, the market space brought by new energy passenger vehicles and large and medium-sized new energy buses will reach 13.9 trillion yuan. In order to keep pace with the development of new energy vehicles, it is estimated that in 2030, when the number of new energy passenger vehicles is close to 70million, the corresponding market space for charging services will be 510billion yuan.

(3) New energy vehicle enterprises need capital and technology for foothold

On April 17, 2018, the national development and Reform Commission announced that the restrictions on the proportion of foreign shares in new energy vehicles would be lifted in 2018. At the same time, more and more emerging car making forces are entering. The competition in the new energy vehicle industry will be more and more fierce, and the process of scouring the sand has begun. There are three conditions for an enterprise to stand on: first, it has core technology; 2、 Have marketable products; 3、 Have capital support or financing capacity

DEVELOPMENT ANALYSIS OF NEW ENERGY VEHICLE POWER BATTERY INDUSTRY

2.1. Development status of new energy vehicle power battery industry

Power battery determines the future of new energy vehicles, and the development of power battery depends on the energy density of the battery. Considering the mileage, the new energy vehicle industry urgently needs batteries with high energy density to enter the practical application stage.

For this reason, all countries in the world have formulated development plans for power batteries. At present, many enterprises in the market have begun to "fight vigorously" in the field of solid-state lithium batteries. According to the latest news, Oxis energy company in the UK recently announced that it has successfully developed lithium sulfur batteries with an energy density of 425wh/kg. At present, this kind of battery is introduced and applied to haps high altitude satellites. The company aims to achieve an energy density of 500wh/kg by the end of 2019.

The energy density of the battery pack using this technology is 300wh/kg, and Oxis aims to increase the figure to 400wh/kg by the end of 2019. The battery pack of this technology is mainly used in the field of large unmanned aerial vehicles. If it needs to be carried on pure trams in the future, there are still some problems to be solved, including cycle life, power output, charging time, etc. At present, however, Oxis has obtained a lisfab funded project, which aims to provide performance in terms of battery power, cycle life and so on. Once there is a breakthrough, perhaps the battery energy density of vehicles in the future will also be significantly improved.

In addition, Toyota Motor Corporation of Japan has recently made significant progress in battery technology, which uses solid electrolyte instead of the traditional semi liquid electrolyte lithium-ion battery. By using solid electrolyte, the improved battery is smaller and lighter than the traditional lithium-ion battery, and the battery capacity will also be greatly increased, which can make the electric vehicle have a longer mileage. Toyota said that at present, the company has made significant progress in the production engineering of this battery, and is expected to apply this new technology to electric vehicles as early as 2020.

BMW has also officially established a new partnership with solid power, Abattery technology company. The two sides will jointly develop solid-state battery technology for electric vehicles. At present, a battery made of inorganic materials has been developed. This battery technology can achieve higher energy density than lithium-ion batteries, which means that under the same size and volume, it can obtain greater energy and longer service life. Compared with the traditional liquid based battery, this technology also has advantages in safety, service life and service environment, but it still needs a lot of work to transform this new technology into a large-scale commercial application stage.

In general, the domestic breakthrough in battery technology research and development is not inferior to foreign countries. Take BAIC new energy ev200 as an example, it has 400wh/kg cells. According to the internal person in charge, with the existing battery pack volume and power consumption of 100 kilometers per ton unchanged, a single charge can not only last 620 kilometers. At the same time, it can also reduce the cost and prolong the service life of the battery, and solve the large difference between the current electric vehicle and the traditional fuel vehicle.

Enterprises in the domestic battery industry chain have also participated in it successively, such as Ningde times, BYD, BIC battery, Waterma, Zhongtian Technology, etc., all of which have their layout in the field of solid-state lithium batteries. Among these enterprises, Ningde times has carried out relevant research and development work in the direction of polymer and sulfide based solid-state batteries, and has made preliminary progress. Zhongtian Technology Group and Qingdao Institute of energy, Chinese Academy of sciences have signed a contract to jointly develop high-performance all solid-state lithium batteries.

China's policies have made clear the direction for the improvement of the energy density of the lithium battery industry. The made in China 2025 issued by the

Ministry of industry and information technology pointed out: "by 2025 and 2030, the energy density of power battery units in China should reach 400wh/kg and 500wh/kg respectively. Subsidies are directly linked to the energy density and continue to raise the threshold. It is expected that the market growth rate will reach about 50% in the next three years, and the market share will continue to concentrate on advantageous enterprises.

Driven by the policy, there is no doubt that battery range extension is the next outlet of new energy vehicles.

2.2. Development trend of new energy vehicle power battery industry

2.2.1. The production and sales volume continued to grow rapidly, and the industry concentration increased in the competition

The production and sales of new energy vehicles in China have continued to grow rapidly, and the industry concentration has increased in the competition. According to the statistics of the power battery industry development research office of China Automotive Technology Research Center Co., Ltd., the actual total output of new energy vehicles in China in 2017 was 819000, accounting for 2.8% of the total output of new vehicles that year; The terminal sales volume was 777000, accounting for 2.7% of the new car sales. Driven by the new energy vehicle industry, the power battery industry continued to maintain rapid growth, with a total supporting capacity of 37.35 billion watt hours throughout the year, an increase of 33% year-on-year.

Thanks to the penetration of the private market and the popularity of shared cars, the output of pure electric passenger vehicles increased by 84% year-on-year, accounting for more than 50% of the total output for the first time. Compared with 2016, the output of pure electric special vehicles increased by nearly 100000 vehicles, and more than 96% of all products are logistics vehicles. In terms of power battery matching, pure electric bus is still the largest power battery application field, accounting for 38%, while the power battery matching volume in the pure electric passenger vehicle field is gradually narrowing the gap with it, accounting for 33%. It can be predicted that it will soon develop into the largest power battery consumption market.

In terms of power battery supporting enterprises, in 2017, there were a total of 98 domestic new energy vehicle single power battery supporting enterprises (according to the statistics of the group, including 6 foreign enterprises and 92 domestic enterprises) and 2 fuel cell enterprises, which decreased by one third compared with 2016, The implementation of the standard conditions for automotive power battery industry in the previous stage and the increasingly mature market competition have made some enterprises with backward technology either merged and reorganized or chose to withdraw from the production and sales of automotive power batteries.

From the number of lithium-ion power battery production enterprises with different material systems, it can be seen that the most obvious change in the number of enterprises is lithium iron phosphate production enterprises, which has decreased by half from 79 in 2016. With the continuous improvement of the demand for energy density in the development route of power batteries, the living space of lithium iron phosphate production enterprises has been compressed. The number of manufacturers of other material systems has not changed significantly year-on-year.

In terms of supporting capacity, only Ningde times has exceeded 10billion watt hours, and its rapid development has become a unique phenomenon in the new energy vehicle industry. There are 39 enterprises with supporting capacity of more than 100million watt hours, with a total supporting capacity of 36.31 billion watt hours, accounting for 97%; There are 59 enterprises with less than 100million watt hours, a year-on-year decrease of nearly 50%. This further shows that the concentration of industry development has been effectively improved after the waves washed away the sand. The supporting capacity of the top 20 enterprises accounted for 87% of the total supporting capacity, which was basically the same as that in 2016, but the total growth was considerable.

2.2.2. The sales price of power battery system has fallen strongly, and upstream materials have become a key factor

As the component with the highest cost proportion in new energy vehicles, the power battery system directly determines the market price of the whole vehicle. At present, it is believed that only when the cost of the power battery system is reduced to a level equivalent to the cost of the engine of traditional fuel vehicles, can pure electric vehicles have real market competitiveness in the terminal price after the withdrawal of financial subsidies. In the development and evolution of the cost of power battery products in China, the construction and improvement of the industrial chain and the continuous improvement of the localization rate have played a key role in boosting the cost reduction of power batteries.

In terms of cathode materials, the output of cathode materials in China increased rapidly in 2017. The research and development of high nickel ternary material technology of leading enterprises is approaching the advanced level of foreign countries, and large-scale mass production has been achieved. The high nickel material products of dangsheng technology, beiteri and Ningbo rongbai are highly competitive in the market. In terms of negative electrode materials, domestic enterprises continue to maintain the leading edge in the traditional graphite market, and are accelerating the research and development and production speed in the field of silicon carbon negative electrode materials for high specific energy batteries. Mainstream negative electrode manufacturers have increased their investment in silicon carbon negative electrodes, and new entrants have also begun to layout silicon carbon negative electrodes, and the industrialization process is accelerating. In terms of diaphragms, the localization rate of diaphragms is constantly improving. With the continuous improvement of domestic diaphragm manufacturers in the wet production process and coating technology, the performance of wet diaphragms is closer and closer to the level of foreign enterprises. Domestic wet diaphragms have occupied part of the imported market share, and there is a trend of gradual expansion. The popularization and application of domestic diaphragms has achieved remarkable results in breaking the monopoly pattern of foreign enterprises and reducing the cost of power batteries. In the field of electrolyte, with the development and maturity of China's electrolyte industry, the global electrolyte production capacity is being transferred to China. Domestic electrolyte has been sold to domestic and foreign markets. At the same time, domestic electrolyte additives are also forming a supply pattern that dominates the global market. The progress and maturity of the industrial chain is of great significance to meet the development needs of the new energy vehicle market and reduce the cost of power batteries.

On the whole, the sales price of China's new energy vehicle power battery system has shown a downward trend year by year. By the end of 2017, the industry average price of power battery system has fallen to 1.4 ~ 1.5 yuan / watt hour, a 25% decrease from 2.0 yuan / watt hour at the end of 2016, The goal of reducing the power battery module cost of new energy vehicles to less than 1.5 yuan / watt hour by 2020, as required by the energy conservation and new energy vehicle industry development plan (2012-2020), has been achieved in advance, and the product prices of some enterprises can be lower. As for the goal of reducing the system cost to less than 1 yuan / watt hour in 2020 as required by the action plan for promoting the development of automotive power battery industry, the gap is not large. In the post subsidy era when subsidies are about to withdraw, new energy vehicles need to compete with traditional fuel vehicles in terms of market terminal price, so the power battery system should reach the cost level of internal combustion engine system, and the price should be 0.6~0.7 yuan / watt hour at this time. According to the plan of the "energy saving and new energy vehicle technology roadmap", it will be 2030 to reach this level, but the cost of foreign power battery system will also decline rapidly, and it may reach 100 euros / kwh in the ideal state in 2020. Therefore, the development path of China's power battery industry is not easy, and the competition situation is still severe. It needs the joint efforts of the industry to achieve the set goals in advance.

2.2.3. The multi technology system is advancing in parallel, and the ternary battery occupies the dominant position in passenger cars

The multi technology system of power batteries is advancing in parallel, and ternary batteries occupy the dominant position in the passenger car market. In 2017, the leading position of lithium iron phosphate battery was strongly impacted by the ternary battery. The annual supporting capacity of lithium iron phosphate battery was 18.75 billion watt hours, accounting for 50%, a decrease of 22 percentage points compared with 2016. The annual supporting capacity of ternary batteries was 16.22 billion watt hours, accounting for 43%, an increase of 20 percentage points compared with 2016. The supporting capacity of lithium manganate battery is 1.56 billion watt hours, accounting for 4%; The supporting capacity of lithium titanate battery is 570 million watt hours, accounting for 2%; The supporting capacity of multi-component composite batteries is 230million watt hours, accounting for 1%; The matching amount of Ni MH battery and super capacitor is relatively small.

In the field of pure electric passenger cars, lithium iron phosphate battery is still the absolute main supporting battery, accounting for more than 90% as a whole, while the other shares are mainly occupied by lithium titanate battery and lithium manganate battery; The plug-in hybrid bus is the common market of lithium manganate and lithium iron phosphate. In the field of passenger cars with the highest production of models, whether plug-in hybrid passenger cars or pure electric passenger cars, ternary material batteries occupy an absolute dominant position. Due to the market demand for vehicle driving range, ternary material batteries with high energy density advantages and development potential will gradually replace lithium iron phosphate batteries. In addition, in the field of pure electric special vehicles, ternary batteries are also the main supporting batteries, especially the demand for high driving range of pure electric logistics vehicles drives the supporting application of ternary batteries in special vehicles.

2.2.4. The technical route of forward-looking battery is clear, and all solid-state battery has become the focus of attention

China's forward-looking battery technology has a clear route, and all solid-state batteries have become the focus of the industry. In March 2017, the national development and Reform Commission, the Ministry of finance, the Ministry of industry and information technology and the Ministry of science and technology jointly issued the action plan for promoting the development of automotive power battery industry, which proposed that by 2020, the specific energy of new lithium-ion power battery cells would exceed 300 Watt hours / kg; The specific energy of the system will strive to reach 260 watt hours / kg. By 2025, the new system power battery technology will make a breakthrough, and the specific energy of a single unit will reach 500 watt hours / kg. In May 2017, the medium and long term development plan for the automotive industry jointly issued by the Ministry of industry and information technology, the national development and Reform Commission and the Ministry of science and technology once again proposed that by 2020, the specific energy of power battery cells will reach more than 300 watt hours / kg, strive to achieve 350 Watt hours / kg, strive to achieve 260 watt hours / kg system specific energy, and by 2025, the specific energy of power battery systems will reach 350 Watt hours / kg.

Facing the requirements of top-level design, the industrialization research and development project of high-energy density power battery for 2020, which is implemented by the Ministry of science and technology's new energy vehicle key special project, is being carried out in an orderly manner. The project led by Ningde times, Hefei GuoXuan high tech and Tianjin Lishen adopts the soft packed battery with high nickel ternary positive pole and silicon carbon negative pole, and the energy density has reached the technical requirements, The next step will be to tackle the key problems of industrialization in terms of improving cycle life and safety. The development target direction after 2020 is the research and development of new high specific capacity cathode materials, with a view to breaking through the monomer 400wh/kg by 2025. In the key new energy vehicle project, Peking University and the Institute of physics of the Chinese Academy of sciences have also led and undertaken the research and development project of new materials for high specific energy power batteries, which has also made phased progress. The scientific research work carried out around lithium rich manganese based cathode materials is gradually seeing the hope of industrialization, Among them, the specific capacity of lithium rich manganese based cathode materials developed by Peking University has reached 400mah/g.

In 2017, as the next generation battery technology route for 500wh/kg, solid-state batteries with high energy density and high safety characteristics are attracting worldwide attention. Relevant research institutions and enterprises in Japan, South Korea, Europe and the United States and other countries and regions began to make efforts to layout and accelerate the research and development of solid-state batteries. In China, the research team represented by the Institute of physics of the Chinese Academy of Sciences is actively carrying out the industrialization of solid-state batteries. At present, the energy density index of phased cell samples developed is close to 350wh/kg. In terms of enterprises, Ganfeng lithium cooperates with Ningbo Institute of materials, Chinese Academy of Sciences to promote the industrialization of solid-state batteries. In addition, enterprises such as Ningde times, Tianjin Lishen, AVIC lithium battery and Weilan new energy are also developing solid-state batteries. With the joint efforts of the industry, the realization of solid-state battery industrialization may come in advance.

2.2.5. The recycling route is becoming clearer, and the business system still needs to be improved

The 2018 Blue Book of power batteries believes that the recycling route of power batteries in China is becoming clearer, but the business system still needs to be improved. The recycling and reuse of power batteries is a key link for the healthy and sustainable development of the new energy vehicle industry. It has important practical significance for reducing the cost of power batteries in the whole life cycle, promoting environmental protection and social security, and saving the utilization of mineral resources. As China's development of new energy vehicle industry has become a national strategy, new energy vehicles have been widely promoted and applied since 2013, and the production and sales volume has been rising year by year. By the end of 2017, more than 1.8 million new energy vehicles had been promoted, and about 86.9gwh of power batteries had been assembled. According to the research and calculation of the enterprise's warranty period, battery cycle life, vehicle operating conditions and other aspects, the power battery of new energy vehicles will enter large-scale retirement after 2018. It is expected that the recovery of power battery will reach 111400 tons in 2019 and 257000 tons in 2020. It is urgent to solve the problem of recycling and reusing waste power batteries.

Facing the increasingly severe challenge of power battery recycling, the competent government departments have continuously introduced technical standards in enriching and improving the power battery recycling system architecture Management norms, demonstration projects and other multi-dimensional measures: in 2017, recommended standards such as specifications for the recycling and disassembly of vehicle power batteries, product specifications and dimensions of power batteries for electric vehicles, coding rules of vehicle power batteries, and residual energy detection of vehicle power batteries were successively released;

Submitted to the WTO and publicized the "Interim Measures for the management of the recycling of new energy vehicle power batteries", which was finally officially released in February 2018. The Interim Measures for the administration of the recycling of power batteries for new energy vehicles points out that the principle of extending producer responsibility should be implemented, that is, new energy vehicle manufacturers should bear the main responsibility for the recycling of power batteries, and encourage power battery manufacturers, comprehensive utilization enterprises and other relevant enterprises to cooperate with vehicle enterprises to fully implement the recycling responsibility of power batteries in terms of standardized design, open communication protocols and code traceability, through various forms, Cooperate to build and share the recycling channels of waste power batteries, and follow the principle of cascade utilization before recycling to carry out multi-level and multi-purpose rational utilization. According to the relevant requirements of the Interim Measures for the administration of the recycling of power batteries for new energy vehicles, further carry out the pilot implementation plan for the recycling of power batteries, and carry out engineering demonstrations in the construction of recycling system, the exploration of business model, the promotion of technological innovation and the improvement of incentive mechanism. Driven by multiple driving forces such as policies, interests and responsibilities, battery manufacturers and material manufacturers such as Ningde times, BYD, GuoXuan high tech, camel Co., Ltd., AVIC lithium, and Huayou cobalt have begun to make efforts in the layout of power battery recycling.

EXTERNAL ENVIRONMENT ANALYSIS OF NEW ENERGY VEHICLES

3.1. Analysis of industrial environment

The automobile industry is an important pillar industry of the national economy and plays an important role in the national economic and social development. In order to speed up the cultivation and development of energy-saving vehicles and new energy vehicles, and promote the development of China's automotive industry. In 2012, the State Council issued the "energy saving and new energy vehicle industry development plan (2012-2020)", which clearly points out the technical route and main objectives of China's new energy vehicle development from 2012 to 2020. In 2015, in order to achieve the strategic goal of becoming a powerful manufacturing country, the State Council issued "made in China 2025", in which the development of energy-saving and new energy vehicles was included, and the development of the automotive industry was once again included in the government plan. From then on to 2017, the Ministry of industry and information technology, the national development and Reform Commission, the Ministry of science and technology and other three ministries jointly issued the "medium and long term development plan for the automotive industry". The "plan" planned the development of China's automotive industry in detail, and put forward the development requirements of electrification, intelligence, energy conservation, lightweight and other development goals, such as ten-year efforts to become a powerful automotive country. The plan also sets out in detail the development tasks of the automotive industry in China, requiring the annual production and sales of new energy vehicles to reach 2million by 2020, the specific energy of power battery cells to reach more than 300 watt hours / kg, strive to achieve 350 Watt hours / kg, the specific energy of the system to reach 260 watt hours / kg, and the cost to be reduced to less than 1 yuan / watt hour. By 2025, new energy vehicles will account for more than 20% of vehicle production and sales, and the specific energy of power battery system will reach 350 Watt hours / kg.

In 2018, in order to implement the "energy saving and new energy vehicle industry development plan (2012-2020)" and the "medium and long term development plan of the automotive industry", the National Standards Commission established and improved the standards and regulations of the automotive industry, and the State Council, the Ministry of industry and information technology, the Ministry of transport and other relevant departments have issued supporting policies for the automotive industry.

1. From 2018 to 2020, the purchase tax of new energy vehicles will continue to be exempted

In order to implement the spirit of the 19th CPC National Congress and further support the innovative development of new energy vehicles, China will continue to implement the preferential policy of exemption from vehicle purchase tax for new energy vehicles during the 13th Five Year Plan period. On December 27th, 2017, the Ministry of finance, the State Administration of Taxation, the Ministry of industry and information technology, and the Ministry of science and technology jointly issued the announcement on the exemption of the purchase tax of new energy vehicles (hereinafter referred to as the announcement), which explained the relevant matters of the exemption of the purchase tax of new energy vehicles.

The announcement made it clear that from January 1st, 2018 to December 31st, 2020, new energy vehicles purchased will be exempted from vehicle purchase tax. The new energy vehicles exempted from vehicle purchase tax shall be managed by issuing the catalogue of new energy vehicle models exempted from vehicle purchase tax (hereinafter referred to as the catalogue). The new energy vehicles listed in the catalogue before December 31, 2017 will continue to be exempted from vehicle purchase tax. In addition, according to the requirements of the announcement, from January 1, 2018, new energy vehicles listed in the catalogue must meet four conditions at the same time: first, the models must be pure electric vehicles, plug-in (including add-on) hybrid vehicles and fuel cell vehicles licensed for sale in China; Second, meet the technical requirements of new energy vehicle products; Third, pass the special inspection of new energy vehicles and meet the special inspection standards of new energy vehicle products; Fourth, new energy vehicle manufacturers or dealers of imported new energy vehicles meet relevant requirements in terms of product quality assurance, product consistency, after-sales service, safety monitoring, power battery recycling, etc. The Ministry of finance, the State Administration of Taxation, the Ministry of industry and information technology and the Ministry of science and technology will also adjust the conditions of new energy vehicles listed in the catalogue in due time according to the development of the new energy vehicle standard system, technological progress and model changes.

At the same time, the announcement made it clear that enterprises whose products do not meet the requirements of the application materials, product performance indicators do not meet the requirements, and provide other false information to defraud the qualification of models listed in the catalogue will be disqualified from applying for exemption from vehicle purchase tax, and will be punished in accordance with relevant laws and regulations. If there are potential safety hazards or safety accidents in the use of sold products, depending on the nature and severity of the accident, measures such as stopping production, ordering immediate correction, suspension or cancellation of the qualification for application for exemption from vehicle purchase tax shall be taken according to law. If the staff engaged in the examination and verification of the application report of the catalogue and the tax exemption examination have committed abuses of power, dereliction of duty, favoritism and other violations of law and discipline when performing their duties, they shall be investigated for corresponding responsibilities in accordance with the civil service law, the administrative supervision law and other relevant national regulations; Those suspected of committing a crime shall be transferred to the judicial organ for handling.

The implementation of the preferential purchase tax policy has played an important role in boosting the market development of new energy vehicles in China. At present, the decline of China's new energy vehicle subsidy policy has had a certain impact on the growth rate of new energy vehicle production and sales. In order to achieve the goal of supporting the excellent and the strong, the four departments have also appropriately increased the technical threshold requirements for new energy vehicles that enjoy the preferential purchase tax policies, and will also dynamically adjust the relevant requirements, which will also play a positive role in ensuring the continuous improvement of the technology, safety and reliability of new energy vehicles in China.

2. The Ministry of Commerce revised some provisions of the measures for the administration of used car circulation

In recent years, China's used car circulation market has developed very rapidly. In terms of sales volume, in 2016, the transaction volume of second-hand cars across the country exceeded the 10 million mark for the first time, reaching 10.3907 million vehicles, with a cumulative year-on-year increase of 10.33%; In 2017, a total of 12.409 million used cars were traded in 1068 used car trading markets in 31 provinces, cities and autonomous regions, with a year-on-year increase of 19.33%, and the transaction amount reached 809.272 billion yuan, with a year-on-year increase of 34%. The growth momentum is very rapid. Judging from the market situation, the current car ownership in China has reached 217 million, and the second-hand car market has great potential. In addition, benefiting from the release of dividends from the relevant policies of the country to activate the used car market, especially the cancellation of the policy of restricting the relocation of used cars, has brought huge market opportunities to China's used car market. The measures for the administration of used car circulation (hereinafter referred to as the measures) was promulgated in 2005. After more than 10 years of economic growth, scientific and technological development, and changes in the main body of the industry, some contents need to be revised according to the actual situation to meet the needs of the current development of the used car market. On September 25th, 2017, the Ministry of Commerce issued the decision of the Ministry of Commerce on Abolishing and amending some regulations (order of the Ministry of Commerce No. 3, 2017), which partially revised the measures for the administration of second-hand car circulation and deleted Articles 9, 10 and 11.

It is not difficult to see that the purpose of this revision is to continue to deepen the reform of streamlining administration and delegating power, combining decentralization and management, optimizing services, and sorting out the regulations involved in the cancellation of administrative approval projects, according to the requirements of the State Council. The Ministry of commerce is still in the process of revising the core content. In fact, as early as July 2015, the Ministry of Commerce organized a seminar on the revision of the measures, at which a consensus was reached that the current measures have been implemented for more than 10 years. At present, the industry market scale, business model, supporting policies, etc. have changed significantly, and the current measures can no longer fully adapt to it, so the revision is imperative. It is reported that the revision of the measures discussed at that time will mainly update and supplement the tax reform, relocation restriction policy, temporary property right registration, e-commerce transactions and vehicle information disclosure. On October 25th, 2017, the Department of market construction of the Ministry of commerce again convened industry associations, used car dealers, dealer groups, trading market principals, etc. to participate in the Symposium on the management of the used car industry. In combination with the current situation of the development of the used car industry, it discussed the tax system, temporary property rights, identification of business entities, accident scheduling vehicles and other industry issues, and put forward suggestions for revision.

Although the revision of the measures failed to completely solve the major problem of the development of the used car industry and had a narrow impact, these changes still benefited some enterprises. At the time of the promulgation of the measures, the development level of China's second-hand car industry was uneven. In order to meet the market demand, many testing and evaluation institutions emerged everywhere. The evaluation and appraisal ability of these institutions was difficult to identify, so it was necessary for government departments to regulate, raise the industry threshold, and ensure that enterprises have the ability to serve customers. With the maturity and stability of the market, many evaluation institutions have been transformed into formal management, and the market has become the key to determine whether an enterprise can continue to survive. The elimination of this restriction and approval is conducive to the prosperity and development of the used car industry, and enterprises such as used car detection and evaluation will achieve the survival of the fittest in full market competition, thus improving the development level of the industry. At the regular press conference on January 25th, 2018, the Ministry of commerce also said that in 2018, it will continue to promote the complete abolition of the relocation restriction policy for second-hand cars, accelerate the revision of the measures, promote the construction of second-hand car information and credit system, standardize the trading order of second-hand cars, promote the further release of the potential of the second-hand car market, drive the development of auto parts, maintenance, insurance and other related service industries, and promote the continuous optimization of the structure of China's auto market, Develop with high quality under the guidance of the five development concepts.

The national development and Reform Commission issued the implementation plan for the industrialization of key technologies of intelligent vehicles (hereinafter referred to as the "action plan") and issued on November 20, 2017.

The action plan points out that intelligence is the trend of a new round of change in the global automotive industry. The development level of new energy vehicles in China ranks in the forefront of the world, the development level of network communication and road facilities is high, and the automobile consumption market is broad, which has laid a good foundation for the development of intelligent vehicles. Developing intelligent vehicles is conducive to cultivating intelligent economy, building intelligent society and building intelligent power. In terms of the industrialization of key technologies of new materials, the action plan also puts forward several industrialization priorities related to the automotive industry: first, we should accelerate the industrialization of advanced metal and non-metallic key materials, and focus on the development of ultra-high strength steel plates for automobiles and parts, steel for key parts of high-speed rail, high-performance silicon steel, high-temperature alloy materials for engines, etc; Second, accelerate the industrialization of key technologies of advanced organic materials, and focus on the development of flexible packaging films for lithium-ion batteries and special chemicals for new generation lithium-ion batteries; Third, improve the production and application level of advanced composite materials, and focus on the development of high-performance battery materials and products such as high nickel ternary cathode materials, lithium iron phosphate cathode materials, high safety and high specific energy batteries.

According to the relevant requirements of the action plan, in order to improve the technical level and core competitiveness of China's automotive industry, promote the innovation and development of intelligent vehicles, and accelerate the industrial transformation and upgrading, the national development and Reform Commission also formulated the implementation plan for the industrialization of key technologies of intelligent vehicles (hereinafter referred to as the implementation plan), which was issued on December 26th, 2017. Compared with the relevant statements of intelligent vehicles in the action plan, the implementation plan is more comprehensive and specific, defines the development goals and main tasks, puts forward key projects, and formulates corresponding safeguard measures.With the continuous enhancement of the independent development ability of China's automobile industry, the development of intelligent vehicles in China has started. At present, vehicle enterprises have mass-produced models with driving assistance functions, Internet enterprises continue to work on autonomous driving operating systems, and communication enterprises have increased research and development efforts in vehicle communication systems and chips, and have made gratifying progress. The promulgation of the implementation plan has further clarified the future development goals and focus of these enterprises, and has important guiding significance for improving the key technology level of intelligent vehicles in China. At the same time, we should also see that the development of intelligent vehicles involves many related fields, which are not limited to the traditional automotive technology fields such as machinery, electronics and materials. It is closely linked with communication, vehicle road networking, vehicle cloud networking and various intelligent terminals. It is a cross industry complex industrial system, which requires comprehensive, systematic and long-term strategic deployment at the national level, cross field, cross industry Cross departmental coordination. At the same time, relevant laws and regulations should also be improved as soon as possible, otherwise the industrial development will also be restricted.

3.2. Analysis of national policies and regulations

In 2018, in order to accelerate the development of the new energy vehicle industry and optimize the construction of the new energy vehicle standard system, the Ministry of industry and information technology, the National Standards Commission and other relevant departments of the automotive industry have successively established and improved the standards and regulations of the automotive industry. The State Council, the Finance Bureau and other departments have issued preferential policies such as subsidies and exemptions for new energy vehicles to support the development of the automotive industry.

1. Establish and improve standards and regulations

(1) Optimization and improvement of standard system

In January, 2018, the National Standardization Commission proposed to establish four national standards for the new energy vehicle industry, "limits and measurement methods of radio disturbance characteristics of electric vehicles and hybrid electric vehicles for protecting receivers outside the vehicle", "General requirements for high-power charging systems of electric buses", "special requirements for commercial vehicle applications of electric vehicle wireless charging systems", and "interoperability and testing of electric vehicle wireless charging systems".

In April, in order to further strengthen the safety technology management of operating trucks and effectively curb transportation safety accidents caused by insufficient vehicle safety performance, the Ministry of transport formulated and issued the transportation industry standard "safety technical conditions for operating trucks Part 1: trucks" (jt/t 1178.1-2018), which was officially implemented on May 1, 2018.

In June, the National Standardization Commission issued gb/t 36277-2018 technical conditions for on-board static DC watt hour meters for electric vehicles, gb/t 36282-2018 electromagnetic compatibility requirements and test methods for drive motor systems for electric vehicles, and gb/t 36278-2018 technical specification for electric vehicle charging and exchange facilities connected to distribution network Gb/t 36288-2018 safety requirements for fuel cell stacks of fuel cell electric vehicles and gb/t 36363-2018 polyolefin separators for lithium ion batteries will be implemented on January 1st, 2019. The Ministry of ecological environment has promulgated the emission limits and measurement methods of pollutants from heavy-duty diesel vehicles (China's sixth stage), which will be implemented from July 1, 2019.

In July, the Ministry of transport revised and improved the classification and rating of operating passenger cars (jt/t325-2018) and implemented it from August 1, 2018; The National Standardization Commission issued the "motor vehicle safety technical inspection items and methods", which stipulates the inspection items, inspection methods, inspection requirements and disposal of inspection results of motor vehicle safety technical inspection.

In August, the Ministry of industry and information technology issued the "automatic driving function test procedures for intelligent Internet connected vehicles (Trial)" to provide reference for local governments at the provincial and municipal levels to organize and carry out the road test of intelligent Internet connected vehicles. Subsequently, Shanghai, Tianjin, Jinan, Changsha, Jiangsu and other provinces and cities successively adopted the road test management measures for intelligent Internet connected vehicles.

2. Preferential support policies

In January, 2018, the State Council exempted new energy vehicles purchased from January 1, 2018 to December 31, 2020 from vehicle purchase tax.

In February, the Ministry of finance, the Ministry of industry and information technology, the Ministry of science and technology and the national development and Reform Commission jointly issued the notice on adjusting and improving the financial subsidy policy for the promotion and application of new energy vehicles, and the subsidy amount decreased by about 30%. In March, the State Council adjusted the value-added tax rate of manufacturing and other industries, requiring that the value-added tax rate of manufacturing and other industries be reduced from 17% to 16% from May 1, 2018.

In April, the national development and Reform Commission opened the automotive industry in a classified transition period, and in 2018, the restrictions on the proportion of foreign shares in special purpose vehicles and new energy vehicles were abolished; In 2020, the restrictions on the proportion of foreign shares in commercial vehicles will be abolished; In 2022, the restrictions on the proportion of foreign shares in passenger cars will be lifted, and the restrictions on joint ventures not exceeding two will be lifted. Through the five-year transition period, all restrictions on the automotive industry will be lifted.

In May, the Tariff Commission of the State Council issued the announcement on reducing the import tariff of complete vehicles and parts, which requires that the import tariff of complete vehicles and parts be reduced from July 1, 2018. Reduce the tax rates of 135 tax lines with a vehicle tax rate of 25% and 4 tax lines with a tax rate of 20% to 15%, and reduce the tax rates of 79 tax lines with auto parts tax rates of 8%, 10%, 15%, 20% and 25% to 6%.

In June, the Ministry of finance, the State Administration of Taxation and the Ministry of industry and information technology issued the announcement on the reduction of vehicle purchase tax on trailers, requiring that vehicle purchase tax be halved on the purchase of trailers from July 1, 2018 to June 30, 2021; The State Council issued the three-year action plan for winning the blue sky defense war, which requires accelerating the development of new energy buses. By the end of 2020, all buses in municipalities directly under the central government, provincial capitals and built-up areas of cities specifically designated in the plan will be replaced with new energy vehicles. At the same time, we will vigorously eliminate old vehicles. From July 1, 2019, key regions, the Pearl River Delta and Chengdu Chongqing will implement the national six emission standards in advance. Promote the use of gas-fired vehicles that meet the national emission standards.

In August, the Sino US trade war escalated, and the tariff on imported American cars was raised to 60%.

In October, the Ministry of Public Security issued the notice on further standardizing and optimizing the traffic management of urban distribution vehicles. The notice requires the implementation of differentiated traffic management policies for new energy trucks, providing access convenience, expanding the scope of access, and less or no restrictions on pure electric light trucks.

3.3. Local policy analysis

In response to relevant national policies and regulations, relevant departments of local governments have formulated automobile development policies suitable for the province in combination with the actual development situation of the province.

1. New energy promotion

In 2018, in response to the three-year action plan for winning the blue sky defense war issued by the State Council, 13 provinces and cities across the country issued blue sky defense plans and new energy promotion plans in combination with the actual situation of the province. The plan mentioned that we should vigorously promote new energy vehicles, and all new and updated public transport, sanitation, postal, rental, commuting, light logistics and distribution vehicles in urban built-up areas should use new or clean energy vehicles.

3.4. Big data analysis of new energy vehicles

3.4.1. New energy vehicle license issuing enterprise

Currently, 16 enterprises in China have obtained the new energy license issued by the national development and Reform Commission, which are:

First qualification: BAIC bjev second qualification: Changjiang motor

Third qualification: future automobile fourth qualification: Chery new energy

Fifth qualification: Jiangsu Min'an automobile sixth qualification: Wanxiang Group

Seventh qualification: Jiangling new energy eighth qualification: Jinkang new energy

Ninth qualification: national energy new energy tenth qualification: Yundu new energy

11th qualification: Zhidou 12th qualification: Henan Suda

13th qualification: Zhejiang Hezhong 14th qualification: Land Ark

15th qualification: JAC Volkswagen 16th qualification: Changhe Suzuki

ANALYSIS OF THE DEVELOPMENT OF AUTOMOBILE MANUFACTURING INDUSTRY

4.1. Development status of automobile manufacturing industry

Compared with western developed countries, China's automobile manufacturing industry developed late. In 2001, China entered the WTO, and the automobile manufacturing industry ushered in a golden period of development. From 2000 to 2007, the compound growth rate of China's automobile sales reached 22.8%. Even in 2008, when the global financial crisis occurred, the growth rate of China's auto sales reached 6.7%. In 2009 and 2010, China implemented preferential policies such as halving the purchase tax, and the car sales grew again at a high speed, with a year-on-year growth rate of 45.5% and 32.4%. In 2009, the annual sales volume was 13.64 million, and China's automobile sales volume ranked first in the world for the first time. Affected by the withdrawal of preferential purchase tax policies in 2011, the annual sales growth rate was only 2.45% year-on-year.

From 2012 to 2015, the compound annual growth rate of China's automobile sales reached 8.3%. 2016 was another policy year, with annual sales of more than 28million vehicles, a year-on-year increase of 14.46%. In 2017, the annual sales volume was 29.0154 million, with a year-on-year increase of 3.19%, and the sales volume ranked first in the world for nine consecutive years. The above data are from the relevant statistical data of China Association of automobile industry from 2010 to 2017. As can be seen from the figure below, China's automobile output generally shows an increasing trend year by year.

China's automobile industry has experienced more than half a century of development, and has played a decisive role in the development of China's national economy. Judging from the current scale of the automobile industry, the number of automobile manufacturing enterprises continues to increase. As of September 2017, the number of enterprises in China's automobile industry has reached 14620, accounting for 3.8% of the number of Industrial Enterprises above Designated Size in the country.

4.2. Distribution area of automobile manufacturing industry

In 2017, China's automobile production capacity was estimated to be 63.58 million units. By region, the top ten provinces and cities in terms of automobile production capacity are Jiangsu Province, Chongqing, Hubei Province, Shandong Province, Hebei Province, Guangdong Province, Jilin Province, Shanghai City, Hunan Province and Zhejiang Province.

The distribution characteristics of automobile production capacity in the above ten major automobile production capacity provinces and cities can be divided into two types: one is the area distribution dominated by central urban agglomeration, which is relatively concentrated. This type of provinces and cities mainly include Hebei Province, Guangdong Province, Hunan Province and Jilin Province. Hebei has formed automobile production areas mainly in Baoding, Zhangjiakou and Cangzhou; The automobile production areas in Guangdong Province are mainly concentrated in the Changsha Zhuzhou Xiangtan Urban agglomeration with Changsha, Zhuzhou and Xiangtan as the core; The automobile production capacity layout of Jilin Province is mostly distributed in Changchun, the old automobile production base, and the surrounding Jilin City. The second is the uniform distribution of multiple facets. The provinces and cities with obvious performance of this type are mainly Jiangsu Province, Shandong Province and Zhejiang Province. The automobile production capacity of Jiangsu Province ranks first, and automobile enterprises are blooming everywhere. Almost all prefecture level cities have distributed the automobile industry. On the whole, the automobile production capacity of Shandong Province is mainly concentrated in Qingdao, Weihai and Yantai in the eastern Shandong region, Weifang in the central Shandong region, and Dezhou in the western Shandong region, showing a "t" shaped distribution; In the north of Zhejiang Province, there is a planar distribution of automobile production capacity centered on Hangzhou, and in the east of Zhejiang Province, there is a planar distribution composed of Ningbo and Taizhou.

4.3. Development of automobile manufacturing

1. Influence of automobile manufacturing industrial policy and automobile related policies

China's market economy was born out of the planned economic system, and the government plays a leading role. The automobile industry policies and automobile related policies formulated by the government will inevitably have a significant impact on the development of China's automobile industry. Further tilt to large automobile groups in terms of policy guidance, capital, new product approval, etc.

According to the data provided by the China Association of automobile manufacturers, from January to may 2018, the top ten enterprises in terms of auto sales were SAIC, Dongfeng, FAW, Chang'an, BAIC, GAC, Geely, great wall, brilliance and Chery. The above ten enterprises sold a total of 10.4795 million vehicles, accounting for 88.87% of the total auto sales. However, some small automobile manufacturing enterprises, such as Zhejiang Geely and Jiangsu Yueda, have weak competitiveness despite their high quality and low price, and despite their environmental protection and safety standards, so it is difficult for abundant private capital to enter the long-term ischemic automobile industry.

2. China's automobile manufacturing enterprises are small in scale and high in cost

There are nearly 100 auto factories approved by the government in China, which can be called the world's largest, but the repeated construction is serious, the scale is generally small, and the market competition is seriously insufficient. The automobile industry is an industry with prominent economies of scale. Although

Chinese automobile enterprises have expanded rapidly in recent years, they are still small compared with the world's important automobile companies.

From the sales volume data delivered, Volkswagen group sold a total of 10.74 million vehicles in 2017, while SAIC Group, which ranks first in sales in China, sold 6.91 million vehicles, a difference of 1.5 times. In terms of labor costs, although China is 80% cheaper than Japan and other countries, for various reasons, the cost of a car manufactured by a joint venture in China is two to three times higher than the international average. Among them, the daily operating cost is eight times the international average, the manufacturing cost is twice the international average, and the parts procurement cost is 50% higher than the international average.

3. Backward technology and weak innovation ability

After the comprehensive technology introduction, digestion and absorption since the reform and opening up, China's automotive industry has made great progress, with considerable technology development capacity and the foundation for further development, but it is still in the innovation process dominated by technology introduction.

Major automobile manufacturing enterprises are passively dependent on the amount of multinational companies in product technology innovation, and have no initiative in product development and selection; Thirdly, there is a big gap with the international advanced level in the technological development of auto parts, and many key parts are only imitations of foreign products. Finally, compared with the automobile industry of developed countries, the products of China's automobile industry also have a large gap in electronization and informatization.

4. Lack of R & D funds and talents

At present, the domestic funds for technology development and investment are still very low. Generally speaking, car development has two levels: first, generation development; The second is body development, that is, to transform the chassis, electrical system, powertrain and transmission system of the existing models, and give new shapes and designs to the interior and exterior decoration of the body.

Relatively speaking, the former has a long development cycle and a huge cost (about 8-9 billion yuan), which can not be borne by any domestic automobile company. In terms of body development with relatively short development cycle and low cost (about 1-2 billion yuan), some large automobile manufacturers in China have begun to intervene. At the same time, China's automobile manufacturing industry still lacks high-level technology development talents who are at the forefront of the world's automobile manufacturing industry, and a limited number of talents are scattered in different enterprises.

The automobile industry is originally a capital intensive industry, and research and development costs account for a large proportion of product costs. Therefore, if automobile manufacturers want to occupy an advantage in price, reducing product costs through mass production has become the best choice.

5. The monopoly of multinational automobile companies in China is gradually strengthened

In China's automobile market, the car products that currently dominate are produced by joint ventures, and are basically foreign brands. Most of the world's most famous automobile manufacturers have jointly established vehicle manufacturers in China. In the field of commercial vehicles, the trend of using foreign brands is also expanding. Multinational companies actually have the right to speak and dominate product development in joint ventures with technology and brand.

The monopoly performance in the automobile and parts market mainly includes three aspects:

First, the investment mode has changed from joint venture to sole proprietorship. Multinational companies have obvious capital, brand and technological advantages, and sole proprietorship can further monopolize them. In the auto parts industry, the trend of multinational companies from joint venture to sole proprietorship is very obvious;

The second is to acquire or control domestic enterprises and eat domestic brands. Some multinational companies with core technology advantages are forming new industry monopolies, crowding out or annexing domestic enterprises through mergers and acquisitions or holding.

Third, the cooperation mode of multinational companies in China has changed from product and general technology cooperation to brand and standard cooperation. The competition mode has changed from general commodity competition to brand patent competition, setting industry standards first and controlling advanced technology to maintain its monopoly position.

4.4. Development trend of automobile manufacturing industry

Flexibility - make the process equipment and process route suitable for the production of various automotive products, and for the rapid replacement of processes and products;

Agility - shorten the preparation time of production to the market, and enable manufacturing and processing to turn flexibly; Intellectualization, an important part of flexible automation, is a new development and extension of flexible automation. Human beings should not only get rid of heavy physical work, but also be liberated from tedious mental work such as calculation and analysis, so as to have more energy to engage in high-level creative work. Intellectualization promotes flexibility, which makes the production system have more perfect judgment and adaptability.

Informatization - the automobile manufacturing industry no longer has material and energy to produce value with the help of the power of information, but information produces value with the help of the power of material and energy. Therefore, information industry and intelligence industry will become the leading industries of society. The automobile manufacturing industry will also be a new automobile manufacturing industry dominated by information and adopting advanced production mode, advanced manufacturing system, advanced manufacturing technology and advanced organization and management mode. Its importance is manifested in its globalization, networking, virtualization, intelligence and green manufacturing with environmental protection coordination. The construction of an enterprise's information infrastructure should be based on the current business and future development of the enterprise, according to the requirements of information collection, processing, storage and circulation, purchase and build an environment composed of information equipment, communication network, database and supporting software. Information equipment and communication network are also expanding with the change of enterprise demand. With the development of economic globalization, China's economy has gradually integrated into economic globalization. Therefore, concurrent engineering, lean production, timely production and other aspects have become very popular research topics in the automotive manufacturing industry in the future. Flexibility, agility, intelligence and informatization are the general trend of the development of the automotive manufacturing industry. At the same time, they are also one of the effective guarantees for the automotive manufacturing industry to carry out modernization and participate in market competition at home and abroad.

SUMMARY STUDY

The development of new energy automobile industry has played a decisive role in the upgrading of China's automobile industry, reducing environmental pollution and saving energy. In recent years, the Chinese government has begun to vigorously support and promote the new energy vehicle industry, formulated a series of industrial policies, consumption policies, tax policies, etc., which have attracted extensive attention of scholars, triggered a huge wave of investment, and greatly promoted the development of the new energy vehicle industry. At present, the research on new energy vehicles in China is relatively few, and the research field is relatively limited. This paper compares and summarizes the relevant research on new energy vehicles at home and abroad, and studies the current new energy vehicle industry and consumer market in China

At present, China's automobile sales volume has ranked among the top in the world, and the demand for automobiles is huge, but the sales of new energy vehicles in China is not optimistic, which has become the biggest problem facing China's development of new energy vehicles, and also the biggest concern of automobile manufacturers about the new energy .vehicle market. Aiming at the consumption of new energy vehicles, some domestic scholars have conducted relevant research on China's new energy vehicle market through data and empirical analysis. Ma et al. (2009) constructed a prediction model of China's new energy vehicle passenger vehicle market share based on 1ogit regression analysis of new energy vehicle market share and consumer utility in Europe, America and Japan. The results show that the development of new energy vehicle market is closely related to government regulation However, government policies are only one of the important influencing factors of market development. The effectiveness of policies and subsequent self transformation arrangements will become the focus of the development of new energy vehicle market. Wu Qitang (2010) pointed out that the key to developing the market is to reduce car prices and increase subsidies to stimulate consumers' willingness to buy. Xu Guohu and Xu Fang (2010) pointed out that consumers still have a certain willingness to buy new energy vehicles by investigating the purchasing behavior of consumers through questionnaires. The factors affecting purchase are divided into five main aspects: after-sales service, purchase cost, vehicle quality, energy consumption and surrounding influence Tang Baojun et al. (2012) believed that government incentive policies, consumer income and crude oil prices affect consumers' decisions to buy new energy vehicles. Lowering car prices will greatly increase consumers' willingness to buy.

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A CONCEPTUAL MODEL THROUGH INTEGRATED KNOWLEDGE MANAGEMENT, CUSTOMER EXPERIENCE BASED ON ANALYSIS OF NINGXIA WINES CHATEAU

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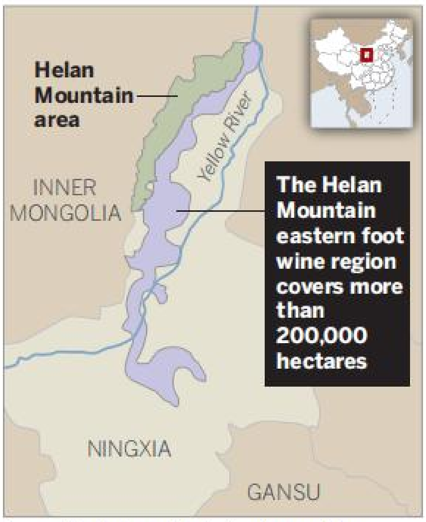
ABSTRACT

The wine industry at the eastern foot of Helan Mountain in Ningxia has unique natural conditions recognized by the world and develops rapidly with government policy support. It is representative of the wine-producing regions in China. However, the Covid-19, consumption customs, and target group positioning changes in the new market environment pose challenges to the development of the wine industry. This paper introduces the development status of the Ningxia wine industry. Through analysis, interview, and literature review, we find out the problems that need to be aware of in the future development of the Ningxia wine-producing area.put forward how to integrate customer experience and knowledge management knowledge to produce a new theoretical model, improve the customer experience in the process of wine sales, and finally enhance customer awareness of the wine brand.

Keywords: Ningxia Wine Industry; Integrated; Knowledge management;Customer Experience

INTRODUCTION



Source: Ningxia Grape Industry Development Bureau

The eastern foot of Helan Mountain in Ningxia is one of the world's most suitable regions for wine grape cultivation (located between 37°and 45°North latitude). It has an advantageous geographical location, long sunshine duration, a significant temperature difference between day and night, drought and little rain, good air permeability for planting soil and mineral-rich sand, and convenient irrigation by the Yellow River.(2021) By 2020, the Ningxia wine planting area has reached 32800 hectares, accounting for about a third of the Chinese wine grape cultivation area.(LI,2017) With the rapid development of the Internet economy, the arrival of the new retail era, and the acceleration of digital transformation, Ningxia wine-related enterprises also speed up their shift,(LONG, 2021) However, the wine-producing area still lacks well-known wine brands and chateaus to drive the development of the wine industry (ZHANG 2022). There are also problems such as high operating costs, lack of product competitiveness, and slow progress of talent recruitment and training in various aspects， so how to do this work, let the region's wine brands become prominent, and cultivate knowledge wine workers becomes particularly important. (NIU, 2017) In order to solve these problems, this paper, based on the current situation of a chateau at the eastern foot of Helan Mountain, selects the wine experts of local chateau and wineries as the main interview objects, analyzes the problems in the development of chateau, and puts forward the corresponding solutions.

LITERATURE REVIEW

1. Knowledge management

Knowledge management is a kind of activity or process. It can develop and exploit knowledge to achieve or enhance various outcomes such as organizational objectives, value, and long-term performance (HEISIG, 2009). A knowledge management framework enhances knowledge gathering, sharing, and application ; Knowledge is a crucial resource in your company. Suppose firms can manage and utilize their knowledge resources effectively. In that case, a wide range of benefits can be reaped, such as improved corporate efficiency, effectiveness, innovation, and customer service. (CHRISTINA, 2015).

Under the circumstances of rapid business development, product diversification and rapid market change, large enterprises pay more and more attention to the investment of research and development and scientific and technological innovation.In the case of increasing R & D investment, the generation and management of knowledge faces a series of problems, including: the growth of the traditional master and apprentice training, unable to meet the training needs, business knowledge is not systematic, knowledge operation depends on experience, employees cannot quickly obtain the required knowledge, how to learn and further improve the company job ability model has not been established, managers have no suit model for the training of employees.(He, 2021) In order to solve the above problems, use the relevant tools and methods of knowledge management to build a learning organization and improve the management problems of the company.(SUN, 2022)

2.New retail

Retail includes all activities that sell goods and services directly to consumers for both personal and non-commercial purposes. New retail is defined as through big data mining and analyze the real demand of consumers, through the depth fusion of online and offline channels to carry out all kinds of entertainment, social, experiential marketing activities, make enterprises and consumers have the best experience of retail way (WANG, 2019), new retail and traditional retail to consumers directly selling goods and services, its essence is still the cost, efficiency and experience. However, in the current social and technological environment, the application of Internet technology, Internet of Things technology, artificial intelligence and big data technology, online and offline stores combined with multi-channel sales mode, a comprehensive retail of consumer-centered, all process channel optimization to optimize resource allocation. (CHENG, 2020) Therefore, new retail is more defined from the mode or method and technical innovation and development of retail realization.(DU, 2019)

3.Customer experience

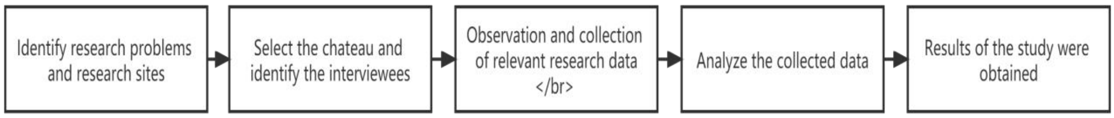


Figure II research process

Customer Experience is the feelings and experiences consumers experience when shopping or trying to *buy* something. Its crucial function is to enhance the consumer experience in every aspect of the shopping process. There is making customer purchases enjoyable and enhancing brand good feelings. In Schmitt's paper, he came up with about five categories of customers(sense, Feeling, thinking, acting, and relating) to form the base for the customer experience. (1999&2003)

In the future of competition, The role of consumers is constantly changing, their needs are also changing, and their experience is more personalized compared to the past. They need to co-creation unique experience value so that managers and consumers can experience and understand their business more and more, and not merely as an abstraction of numbers and charts. (C.K. Prahalad, 2004)

METHODOLOGY

1.The research object

This study takes Ningxia as an example and selects the chateaus at the eastern foot of Helan Mountain in Ningxia as the research object. Ningxia Wine Producing Area is China's largest concentrated planting chateau wine producing region, has been built, and is building the winery has 211 (built-in 101, is building 110). The rapid development of chateaus has promoted the development of the Ningxia wine industry. The author spent more than half a year to visit and investigate 8 well-known chateaus, It includes six winery sales managers and two chateau owners.

2 .The research method and process

The subject of this study is exploratory research, where customer experience is a difficult variable to quantify.Therefore, I used the network information analysis method, observation method, in-depth interview method, and literature review.The main study process is shown in Figure II

Through the research and analysis of the above research process, we can quickly improve the understanding of wine-related knowledge, so as to have a deeper and more comprehensive understanding of the problems of Ningxia wine production areas.

RESULT AND ANALYSIS

1.Initial finding

100% of the wineries believe that the quality of their wines is excellent. However, the brand awareness of their products is not yet sufficient. In addition to producing wine, 50% of the wineries have become tourist attractions.100% of winery managers have recognized the value of customer experience. In addition to the quality of the wine, service is also critical to retaining customers in the future.100% of the wineries also believe there is a shortage of talents related to wine management and marketing at the eastern foot of Helan Mountain. To achieve a total wine experience, the practitioners need to have rich wine knowledge and appropriate methods of customer experience management.In particular attention, the chateau manager mentioned in my interview, because of the problem of salary and treatment, if experienced employees leave, then how to use affective methods to transfer these experience and accumulate knowledge is still relatively difficult.

2.Integrated analysis

Through interview, literature review, observe method to analysis of the wine industry at the eastern of Helan Mountain in Ningxia shows the following:

The geographical location, soil conditions, and climate conditions of wine grape cultivation are pretty suitable. Wine industry policy has apparent advantages. The wine industry is one of the local pillar industries. (ZHANG, 2014) The wines from the appellation have won many awards at home and abroad.There is still a lack of famous domestic brands in the production area. The characteristics of wine personalized development are not prominent. Some wineries are still traditional in advertising and marketing.Due to the impact of COVID-19, consumers pay more attention to the pursuit of health and quality of life. (SHI, 2019) Consumers' cognition of wine consumption and consumption level has been improved. After tariff adjustment, some imported wine adopts a low-price marketing strategy. Changes in wine consumption groups. In addition to demanding good wine quality, consumers also pay attention to wine's production process and service experience.(YANG, 2022)

With the increasing popularity of wine-producing areas, the acceleration of digital transformation, and the government's attention, wineries' marketing channels are changing rapidly. In addition to increasing the social media display, Online live streaming to sell wines, online sales, part of the wine also has a free to visit, to attract tourists to the wine chateau or take a holiday in the wine region, let the wine consumers to the identity of the visitors into the winery, personally experience the wine production process and chateau wine unique culture, through the guide consumers to feel, Not only will it promote their interest and understanding of wine, but it is also an excellent time to instill in visitors the concept of the chateau and develop their loyalty to the chateau brand. (CAO, 2018). Hence, consumers' views are critical, so how to accurately and timely obtain consumers' most authentic ideas and opinions? After obtaining consumers' ideas, we need to explore how to carry out wine product innovation, analyze the consumption characteristics of target consumer groups and make decisions for the subsequent development of the chateau. How design an appropriate customer experience framework or model to carry out customer experience is very important.

3.Conceptual framework

Based on the analysis results and literature review, The result shows the customer experience theory and knowledge management theory can be integrated to utilize the advantages of the two approaches and use them in the Chateau scene. Chateau should try to use the conceptual model to improve enterprise competitiveness.

Used the POMP experience model(KLAUS, 2013) to integrate customer interaction into the company sales process. Create a positive brand image, provide differentiated and personalized products or services, achieve benign interaction, and strengthen customer brand recognition. Through the use of digital technology, in-depth digging, accurate grasp, and management of customer needs, customers can feel the professionalism and sincerity of the enterprise, thus improving the satisfaction and loyalty of the enterprise, enhancing the brand image of the enterprise, and enhancing the competitiveness of the enterprise brand. (WU, 2017)

Through Knowledge audit, knowledge capture, build knowledge Model systematization of the knowledge generated in the experience process, Combined with Workplace Learning method for employees to learn and make progress and finally realize the efficient use of knowledge. The Conceptual Model is shown Figure III:

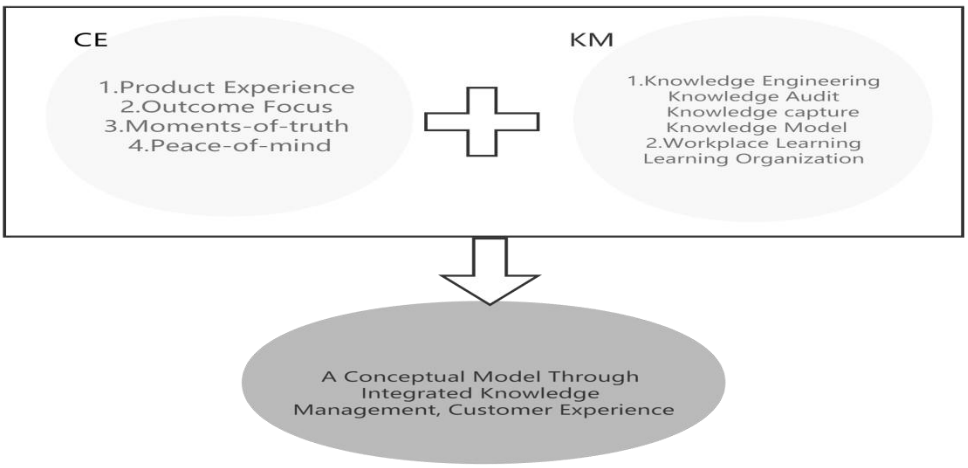


Figure III: Conceptual Model

DISCUSSION AND CONCLUSION

This paper first reviews the new retail, customer experience, knowledge management theory, and through visiting, research, and information analysis, found the marketing problems in the new retail era, put forward how to integrate customer experience and knowledge management knowledge to produce a new theoretical model, to improve the customer experience in the process of wine sales, finally enhance customer awareness of wine brand, improve product sales.

Next step of the research, I will try to integrate knowledge management and customer experience and add empirical evidence to verify the validity of the proposed conceptual model.

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EFFECTIVENESS AND OPINION OF USING THE INSTRUCTIONAL PROCESS BASED ON INQUIRY APPROACH AND SITUATED LEARNING APPROACH TO PROMOTE SKILLS IN CONDUCTING RESEARCH OF STUDENT TEACHER

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ABSTRACT

The purposes of this research were 1) to study the effectiveness of instructional process based on inquiry approach and situated learning approach to promote skills in conducting research of student teachers; 2) to study the opinions of the participants toward the use of an instructional process based on inquiry approach and situated learning approach to promote skills in conducting research of student teachers. The research design is based on quasi-experimental research. The study is composed of two phases which are the development of the instructional model and the experiment of using the model. The samples were 55 student teachers from 2 classrooms, divided into 2 groups: 30 student teachers as the experimental group and 25 student teachers as the control group. The sample groups were chosen by the use of simple random sampling. The research was conducted for 15 weeks. The research instruments included research assessment, interview, and learning log. Data were analyzed by the percentage of average scores, *S.D*, *t*-test, and content analysis. The results of this research are as follows: 1) After using the developed instructional model, the experimental group could promote skills in conducting research higher than the control group at a significant level of .05. 2) The opinions of the participants toward the use of instructional process on inquiry approach and situated learning approach to promote skills in conducting research of student teachers' shows a satisfying level. The result also shows that the participants were satisfied that the model has enabled them to conduct their own research and exposed them to a real-world situation.

Keywords: Inquiry Approach, situated learning approach, skills in conducting research, student teachers

INTRODUCTION

Research is the process of seeking knowledge. The truth of phenomena using scientific methods is a science recognized as a systematic, rational, and reliable cognitive arrangement. Scholars in various fields are trying to implement scientific methods in their studies. Educational research is therefore of paramount importance to the teaching profession. As an instructor, research can be done to solve problems and improve their teaching. The findings from research on teachers reflect that they lack research abilities. The research abilities they lack are inaccurate cognition research, lack of knowledge and skills in searching for documents and creating tools, lack of knowledge in population or sample selection, sampling, statistics selection, and data analysis. In addition, they also lack the ability in summary writing, writing accurate research reports, or even finding out about research issues. Moreover, the whole process does not distribute significantly to the improvement of teaching practice (Jun Sirisoda 2008; Phichit Shinmatra 2008; Skawrat Chumchaya 2013; Scheerens, Glas&Thomas 2003)

The above-mentioned problems are the result of the learning process as undergraduate teachers. In other words, students lack the skills to do research, such as presenting research objectives, determining how research is conducted. As a consultant in student research, problems in writing research papers include unclearness in identifying background. The importance of the problem and the title inconsistencies between research purposes and research assumptions or writing patterns are incorrect. There are also inaccuracies of population and sample determination, data collection and analysis, translation and reading of findings, writing of the expected benefits, unclear in shaping the concept of research, insufficiency in reviewing documents and research, inefficiency of research tools, impropriety in presenting information or findings, unclarity in discussing the results and writing of research recommendations, as well as inaccuracies based on the principles of writing reference documents, bibliography and report writing style (Kiatwat Watchayakan 2010; Pornthip Geyuranon 2012) It is essential to find effective ways to promote research capabilities for student teachers.

The skills of doing research can be learned. Learners must have the knowledge and understanding of scientific methods since the research process requires scientific methods to seek new knowledge. As a result, the concept of exam succession can be used to improve the skills of the learner's research because it is a concept that relies on scientific methods, namely, to question the problems faced, assumptions, data collection, and analysis. According to Hogan and Berkowitz (2000), teachers can choose to equip students through the contextual learning process of the instructor. When schools and learning resources available are ~~as~~ appropriate, then teachers should encourage learners to explore phenomena and build the right scientific understanding by turning to the instruction, and topics that focus on the learners.

In addition, teaching students to experience the use of problems in real contexts by searching for and using knowledge in specific situations, as well as reflecting learning, encourage students to show their knowledge, as well as seeing concrete problems and solving them. This concept believes that learners can build knowledge by practicing activities in the most real or virtual situations and contexts, reflecting learning in activities, creating knowledge, making learning meaningful for learners, and being able to remember what they have learned for a long time (Brownet al., 1989; Lave 1991; McLellan 1993). In addition, situational learning can guide the development of teaching and learning, because there are variety of processes that can focus on activities that improve decision-making capabilities, from practice planning to evaluation. This can also train students to be responsible by practicing thinking skills, coping skills, and learning from problems so that they can solve problems effectively.

The concept of exam succession is used as a scientific method which is an important part of the research process. Situational learning also promotes the development of skills in research efficiency, as situational learning enables students to face problems in a realistic context, being able to show clear knowledge or solutions and solve problems that match problems in a particular situation. When combined in the teaching process, it effectively improves research skills. It is from these mentioned reasons that propel my interest in researching the effectiveness of instructional process based on inquiry approach and situated learning approach to promote skills in conducting research of student teachers. My interest is also based on the fact that this model recognizes the importance of developing research skills for teachers based on the concept of exam succession and situational learning. Moreover, this will help promote research skills for teachers to have knowledge and understanding of the scientific methods that are essential in conducting research in the teaching profession to further promote students to maximized learning.

Research Objectives

(1) To study the effectiveness of instructional process based on inquiry approach and situated learning approach to promote skills in conducting research of student teachers.

(2) To study the opinion of the participants toward the use of an instructional process based on inquiry approach and situated learning approach to promote skills in conducting research of student teachers.

LITERATURE REVIEW

Inquiry approach

Situated cognition theory, based on an anthropological view of natural learning in natural settings, was the theoretical framework chosen to support this research. In theory, situated learning has the potential advantage of (a) placing learners in realistic settings where socially acquired ways of knowing are often valued, (b) increasing the likelihood of application within similar contexts, and (c) strategically applying the learner's prior knowledge on a given subject (Lave & Wenger, 1991).

Situated learning approach

The fundamental approach to inquiry learning is based on constructivist learning theory. Constructivist learning strategies capitalize on learning through inquiry and problem solving via critical and creative thinking. According to Asselin et al (2003) student inquirers are encouraged to explore new ideas and understandings through personal discoveries and explorations as well as interactions with objects and with other people. Learning is enhanced through the inquirers‟ opportunity to engage in real life activities, situations and with real audience.

From the theory teachers generate the facts that students:

- can actively build their knowledge and understanding through their inquiries and information - seeking nature.
- develop their cognition as well as meta cognition as they absorb the information.
- experience changes in their affective and cognitive domains as they progress.
- need time to reflect on their new - found knowledge and process the information.

Skills in conducting research

Research skills is Knowledge of the basic principles of research and the quality of research that uses the formal presentation of the report. Measure evaluation by testing and quality assessment of successful research reports over a specified period of time.Sucheera Mahimuang., (2011.) the difficulty and complexity of applying the scientific method in educational settings, the steps of the scientific method used by educational researchers are the same as those used by researchers in other more easily controlled settings: 1. Selection and definition of a problem. L. R. Gay, Geoffrey E. Mills, Peter W. Airasian (2011)

- Selection and definition of a problem.
- Execution of research procedures.
- Analysis of data.
- Drawing and stating conclusions.

Since educational research is systematic there are basic steps to plan conduct a study. These include:

- Identifying a Research Problem
- Reviewing the Literature
- Specifying a Research Purpose
- Designing a Study
- Analyzing and Interpreting the Data
- Reporting Research

RESEARCH DESIGN

Participants

The sample in this experiment was the third-year student teachers in the Faculty of Education enrolled in the educational research courses in 2016. They were 55 students from 2 classrooms including an experimental group of 30 people and 25 people in the control group. The researchers took the academic achievement scores of both groups of samples to test the difference in average scores and test them with T-scores and found that both groups had different levels of knowledge. And then the lottery method of sampling was used to select 25 student teachers as a control group and 30 student teachers as an experimental group.

Research framework

The research design is based on quasi-experimental research. The study is composed of two phases which are the development of the instructional model and the experiment of using the model.Procedure of instructional process based on inquiry approach and situated learning approach to promote skills in conducting research which consisted of 4 steps as figure.

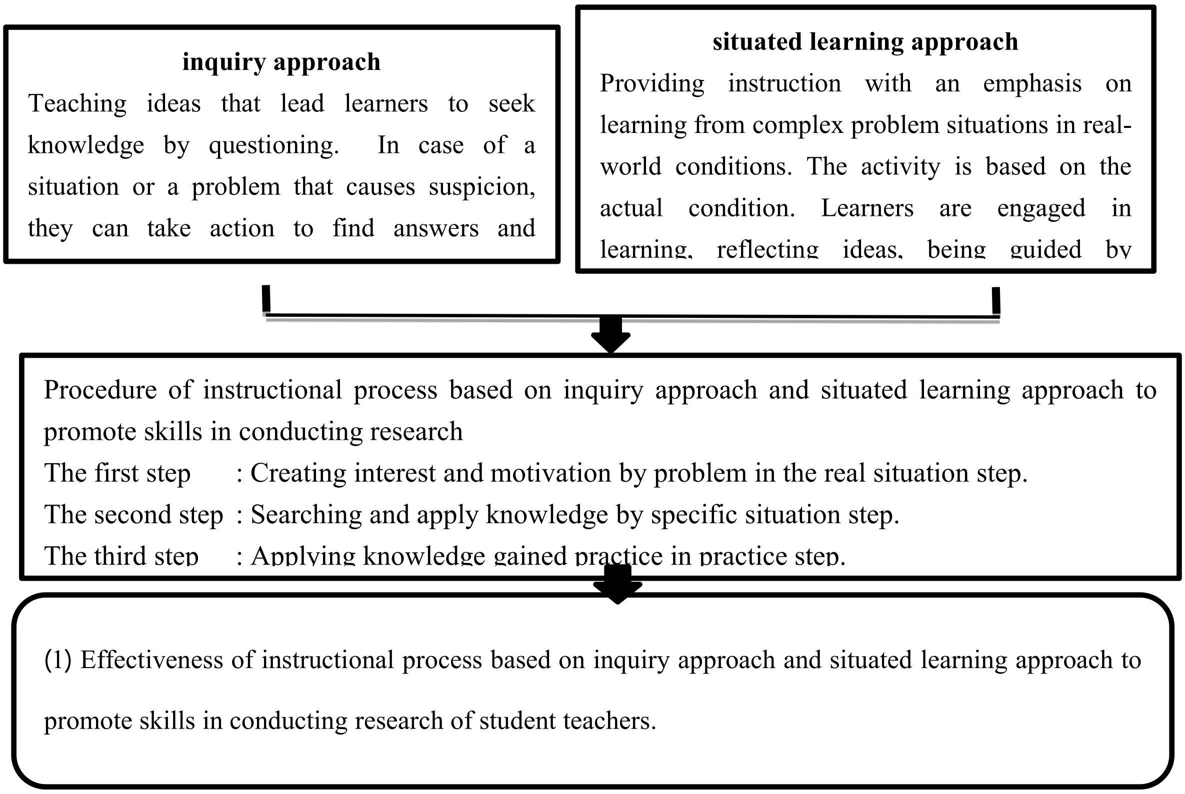

Figure 1: *Research Framework*

Data sources

Researchers created and tested the quality of the tools used in the research by letting 5

people who are experts in educational research teaching and educational measurement and evaluation expertise check the content accuracy of the tools, then analyze IOC and improve the tool more effectively. The tools used to collect data are as follows:

(1) The research quality assessment form is characterized by 26 rating scales used to evaluate the research of the sample after the end of the learning process in the 15th week.

(2) The research interview form is characterized by 3 rating scales, 16 questions used for oral examination of the ability to conduct research after the end of the learning process in the 15th week.

(3) The learning log is characterized by 5 open-ended questions used to collect experimental group-specific data which includes graduating in each content, documenting what the learner learned, and the problems they encountered each time.

This research is based on the development, effectiveness, and opinion of using the instructional process based on inquiry approach and situated learning approach to promote skills in conducting research of student teachers**.** The evaluation of the effectiveness of the teaching process is quasi-experimental research with two group post-test design. There were two samples: an experimental group that learned by using an evolving teaching process, and a group controlled by regular teaching during a 15-week experimental period. Data were collected from the two groups during and after the trial.

DATA ANALYSIS

The researchers conducted data analysis as follows**:**

(1) Data obtained from research quality assessment and interview from both groups of samples after the experiment, take the average and standard deviation then use *t*-test to compare statistically significant differences at .05

(2) Qualitative data from the learner's learning logs use summary and analysis of the text recorded by the learner at the end of each learning activity regarding opinions on the teaching process, categorize all the information, and then presented it in essay format.

FINDINGS

(1)Effectiveness of Using the Instructional Process Based on Inquiry Approach and Situated Learning Approach to Promote Skills in Conducting Research of Student Teachers.

Experimental groups taught by the teaching process using exam and situational learning concepts had a higher average score than the control group that was taught normally (Table 1).

Table 1. *Comparison of averages and standard deviations of post-experiment research capability scores between experiment groups and control groups.*

Sample	N	$\overline{X}$	*S.D*	*t*	*p*-value
Experiment Group	30	75.3	6.3	11.2	.00*
Control Group	25	61.1	3.4		

$^*p < .05$

From table 1, comparison of averages and standard deviations of post-experiment research capability scores between experiment group and control group after experiment between experimental group and control group found that experimental teachers who were taught by the teaching process based on exam-based and situational learning were higher than those of control teachers who were taught normally.(experiment group $\overline{X}$ = 75.3, control group $\overline{X}$ = 61.1) And when comparing the research capabilities of both groups with statistical values, there is evidence of equal value. Therefore, it is concluded that after applying the teaching process according to the concept of exam succession and situational learning, the experimental group has different research capabilities than the control group that is taught normally (p = .00) with statistically significant at .05.

Table 2*. Average comparison results and standard deviation of post-trial research capability scores between* ***the*** *control group and trial groups composition analysis (100 points).*

Skills in conducting research	Sample			.D		p-value
1)The skills to define and define problems according to what they want to do in the research.	Experimental Group	0	6.3	0	.9*	.00
	Control Group	5	9.5	.3		
2) The skills in theory, documents and related research	Experimental Group	0	8.8	.7	.2*	.00
	Control Group	5	6.2	5.5		
3) The skills to the concept frame and research assumptions	Experimental Group	0	0.5	3.7	.6*	.00
	Control Group	5	9.6	3.5		
4) Research design skills	ExperimentalGroup	0	1.9	.8	.2*	.01
	Control Group	5	6.3	.9		
5) The Skills to determine population and samples.	Experimental Group	0	9.4	.1	.1*	.02
	Control Group	5	3.8	.2		
6) The skill of creating and finding the quality of research tools	Experimental Group	0	1.8	7.0	.5*	.00
	Control Group	5	4.4	9.2		
7) Data collection skills	Experimental Group	0	7.5	0.6	.6*	.00
	Control Group	5	1.8	0.7		
8) Data analysis skills	Experimental Group	0	1.5	1.6	.3*	.03
	Control Group	5	1.9	0.9		
9) The skills in translating results and summarizing research	Experimental Group	0	5.4	2.7	.6*	.00
	Control Group	5	7.4	0.3		

$^{*}p < .05$

In conclusion, the results from table 2 compared *the average and standard deviation* of the research capability score for inquiry approach and situational learning after experiments between the experimental group and the control group and found that the experimental group that was taught by the teaching process based on the concept of exam succession and situational learning had higher scores than the control groups that were taught normally as follows:

(1) The skills to define and define problems according to what they want to do in the research found that the average of the research skill scores after the experimental group was higher than the control group. (experimental group $\overline{X}$ =86.3, control group $\overline{X}$ =69.5) and also, the analysis of the t-test revealed that the experimental group was statistically significantly higher than the control group at .05.

(2) The skills in theory, documents, and related research also found, that the average of the research skill scores after the experimental group was higher than the control group. (experimental group $\overline{X}$ =88.8, control group $\overline{X}$ =66.2) and also the analysis of the t-test found that the experimental group was statistically significantly higher than the control group at .05.

(3) The skills to the concept frame and research assumptions found that the average of the research skill scores after the experimental group was higher than the control group. (*experimental group* $\overline{X}$ =80.5, control group $\overline{X}$ =59.4) and also the analysis of the t-test found that The experimental group was statistically significantly higher than the control group at .05.

(4) Research design skills revealed the average of the research skill scores after the experimental group is higher than the control group. (*experimental group* $\overline{X}$ =81.9, control group $\overline{X}$ =76.3) and also the analysis of the t-test found that the experimental group was statistically significantly higher than the control group at .05.

(5) The Skills to determine population and samples found, that the average of the research skill scores after the experimental group was higher than the control group. (*experimental group* $\overline{X}$ =89.4, control group $\overline{X}$ =83.8) and also the analysis of the t-test found the experimental group to be statistically significantly higher than the control group at .05.

(6) The skill of creating and finding the quality of research tools found that the average of the research skill scores after the experimental group was higher than the control group. (*experimental group* $\overline{X}$ =54.4, control group $\overline{X}$ =71.8) and also the analysis of the t-test found that the experimental group was statistically significantly higher than the control group at .05.

(7) Data collection skills found that the average of the research skill scores after the experimental group was higher than the control group. (*experimental group* $\overline{X}$ =77.5, control group $\overline{X}$ =61.8) and also the analysis of the t-test revealed that the experimental group was statistically significantly higher than the control group at .05.

(8) Data analysis skills found that the average of the research skill scores after the experimental group was higher than the control group. (*experimental group* $\overline{X}$ =91.5, control group $\overline{X}$ =71.9) and the analysis of the t-test also found that the experimental group was statistically significantly higher than the control group at .05.

(9) The skills in translating results and summarizing research found that the average of the research skill scores after the experimental group was higher than the control group. (*experimental group* $\overline{X}$ =85.4, control group $\overline{X}$ =67.4) and the

analysis of the t-test also revealed that the experimental group was statistically significantly higher than the control group at .05.

(2) Opinion of the participants toward the use of an instructional process based on inquiry approach and situated learning approach to promote skills in conducting research of student teachers

The opinion of the participants toward the use of an instructional process based on inquiry approach and situated learning approach to promote skills in conducting research of student teachers were very positive. The content analysis found that almost all the student teachers–love studying based on this instructional process because they can do research by themselves when following all the steps. They see the real situation when they do the research and it makes them feel assured that their research skills have greatly improved.

Discussion and implications

(1) Effectiveness of Using the Instructional Process Based on Inquiry Approach and Situated Learning Approach to Promote Skills in Conducting Research of Student Teachers.

Effectiveness of using the instructional process of student teachers. The experiment groups taught by the teaching process based on the concept of exam succession and situational learning average scores were significantly higher than the control groups that were normally taught at .05, indicating that the teaching process was able to promote the skills of doing the research of student teachers as follows:

Step 1: Creating interest and motivation by a problem in the real situation step. It is a step where instructors stimulate learners' learning by bringing real contextual problems to students in the class by giving examples of research related to issues that they are currently paying attention to. The proposed research is quoted only as part of the content that is studied at a time. The instructor then asked questions from the research samples presented to encourage the learner to wonder and raise questions, and to be interested in learning and finding answers for themselves. As stated by Saranporn Yingsuk (2014), questions can be asked clearly and to the point. During the use of the developed teaching-learning process at first, the learners were very quiet. Due to this, instructors use questioning to motivate learners and stimulate attention until they start asking questions both to the instructors and asking their classmates so as to get the right answers. In organizing the event, the researchers gave the learner the opportunity to think and wonder then ask questions independently.

Step 2: Searching and applying knowledge by specific situation step. It is a step where instructors guide learners about creating processes in search of new knowledge and understanding. Learners are engaged in learning, offering ideas, discussion, and creating processes for finding knowledge and understanding manually. This starts with a training exercise where the instructor creates a situation or problem so that the learner can use the knowledge to solve the problem in the context in which the learner is learning. While learners are seeking knowledge, instructors use questioning to encourage interested learners to find the right answer. In addition, the instructors advised students to create a process of finding new knowledge and understanding based on scientific processes, in line with Pornthep Chandraukrit (2013). This allows students to investigate their knowledge of exams themselves and gives them the opportunity to acquire scientific process skills to practice rational thought processes. Learners are motivated to practice thought processes and analyze them with a question or problem to investigate the answer. During the use of the teaching process developed at this stage, it was first found that the learner searched and answered properly by observing the questions, and then the instructors used the teaching process by having the learners make a worksheet from the exercise. It was found that students were able to find the right information and get more accurate answers.

Step 3: Applying knowledge gained in the practice step. It is a stage where instructors can practically practice from real-world situations, with activities organized based on problems arising from real conditions that the learner is interested in finding answers. To achieve this, students must organize their own pursuit of knowledge from real-world situations, create meaningful knowledge from experience, based on scientific processes to seek answers in line with Berk and Gultekin research (2011), which says that if students are to learn things that are of no interest, they will reduce their motivation and feel bored. Therefore, allowing learners to choose to learn things that they are interested in helps to encourage more effective learning. During the use of the developed teaching-learning process, it was found that most learners had the opportunity to seek knowledge by collecting information from a real context. This allows each learner to work in real-world situations which were challenging, exciting, and fun.

Step 4: Exchanging gained knowledge step. It is a stage where students can share or discuss and reflect on ideas from what they have learned. First, the sharing or discussion and reflection of ideas learned is done among the learners and later between the learners and the instructor. Based on data studies and research capability training, which is a first-hand experience, the instructor is a stimulant, a guide, and a palliative person when the learner is still developing their potential to reach the capacity they should be, as well as providing the learner with improvement according to the correct feedback. This is in line with Jaruwan Silparat (2548) who stated that practicing and exchanging learning with each other could be well learned if the material used is familiar to the learners. When applied effectively, and the material is of interest to the learners, it can lead to a variety of experiences being exchanged for the benefit of the learners. During the use of the developed teaching-learning process, it was found that students were more enthusiastic about preparing and they were eagerly ready to present their work based on their actual experiences to their classmates. Q&A was offered between groups and there was a better exchange of ideas among the learners and the instructor. The learners were also able to use feedback from instructors to improve their work.

Secondly, the roles of instructors are to encourage learners to learn enthusiastically, improve the teaching process, and guide the learners. It is the duty of the instructors to help the learners by introducing a variety of learning resources to learners, engaging with learners, giving feedback to learners, listening to learners' opinions, building an understanding, and providing solutions to the problems of the learners. In this trial of the teaching process, the researchers, as the main instructors, were very close to the learner to guide and engage in learning directly with both groups and individual learning. Students could communicate outside of school hours through alternative means provided by the instructors. This was done to give opportunities to those learners who had difficulties in studying and working, and those who were not bold enough to ask questions or discuss directly with the instructors during the class hours. As a result, the experimental students had higher research capabilities than the control group. As texted by one of the learners, with one message in which the learner texted: *"I like this kind of study, teacher, I have done it myself from the first step, I have actually been in the area, I have seen the problem, it encourages me to find out the answers, it is fun"* This finding is similar to that of "Learning by Building Knowledge through Social Interaction" by Berger and Luckman (1996) and Resnick et al. (1991, as cited in Selley 1999) They stated that, when learners are given the opportunity to have communication among themselves and the instructors, it will increase the learning ability of the learners. Therefore, instructors must give learners the opportunity to explain things, which allows them to develop their thinking skills.

Thirdly, the developed teaching process strengthens research-related skills. As a result of the ongoing practice of learners throughout the evolving teaching process, there is evidence of learners' enhanced skills related to research capabilities such as observation, data analysis, and data synthesis. This process has helped in encouraging learners to conduct and complete research systematically by following the right step. This makes the research more complete; this finding is in line with the statement of Teddlie & Renolds, (2000) that over the last two decades, studies conducted in different countries revealed that the classroom effect in explaining variation on students' achievement is in both cognitive and affective outcomes. Effectiveness studies also reveal that quality of teaching is the most important factor at the classroom level. (Brophy & Good 1986; Fraser, Walberg,Welch, & Hattie 1987).

(2) The opinion of the participants toward the use of an instructional process based on inquiry approach and situated learning approach to promote skills in conducting research of student teachers.

The opinion of the participants toward the use of an instructional process based on inquiry approach and situated learning approach to promote skills in conducting research of student teachers was analyzed by content analysis.

The finding revealed that almost all the student teachers love studying based on this instructional process because they successfully do research by themselves by following all the layout steps of conducting research as follows: defining and redefining problems according to what they want to do in the research, studying and reading theory, documents, and related research, doing the concept frame and research assumptions and design research, determining population and samples, creating and finding the quality of research tools, correcting and analyzing data, translating results and summarizing research. Moreover, they see the real situation when they do the research. It makes them to be sure of their research skills. In the last hour of that semester, they said that they were very happy and had fun doing research by themselves and also that this instructional process makes them be more confident to do research than before. Moreover, they said that it was not boring and sleepy because they were actively learning. This statement from the learners conforms to that of Ajriya Watcharawiwat (2001) who stated that the teaching process that will help improve the ability to do research should focus on allowing students to carry out practical practices in real-world situations. She further added that it is beneficial for the learners to have experience in self-research and practice self-knowledge, rather than just lecture or teaching. As mentioned above, it is clear that by having learners have the opportunity to conduct their own research and conduct practical practices in real-world or realistic situations, they will be able to experience real problems and give real solutions to the problems by linking what they have learned to help improve their research capabilities.

To organize teaching activities, instructors must give students the opportunity to seek their own knowledge based on what they suspect and want to find out. The focus should be on students seeking knowledge through real-world situations to achieve an effective learning process. Instructors should be aware of the role of teachers in organizing teaching activities as facilitators. Therefore, instructors should study and understand their roles before applying the teaching process and organize instructional activities according to this process to achieve effective teaching outcomes.

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EXPLORING THE FACTORS AFFECTING CONSUMER BEHAVIOR TOWARDS THE PURCHASE OF NUTRACEUTICALS IN PAKISTAN

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ABSTRACT

Objectives: The aim of this study was to examine the association between factors affecting purchase of Nutraceuticals and health conscious behavior of consumers in a Pakistani university population that consisted of millennials. Additionally, the sociodemographic profile of the respondents was also explored to understand the consumption pattern of these complementary medicines.

Method: The research model was tested using a survey instruments by means of a questionnaire and the measurement scales were developed. Data was collected through convenience sampling method. The survey was floated through survey monkey to around 300 undergraduate students studying in a local health care university and were representing different field of study namely; medicine, pharmacy, business and nursing. The whole data collection process took about two months. Out of 300 students contacted around 244 respondents returned the questionnaire indicating a response rate of 81%. Multiple regression analyses were used to describe the relationship between factors affecting the purchase decision of nutraceutical and health conscious behavior of consumers. Decision to accept or reject the hypothesis was based on the ‘p’ values calculated. ‘

Results: The prediction model is statistically signifcant where F= 51.61,p < 0.001 with an R^2 of 21.5% which is the explnatory power of the predictors. The first decion making factor was perception of the products. The β (beta value) shows 0.341(p<0.001) and sig value is 0.000. Therefore we accept our hypothesis and state that perceptions towards nutraceuticals influences the decision making about the purchase of complimentary products by consumer’s who are health conscious. Ease of availablilty of nutraceuticals was not found to be a significant factor with the β (beta value) of 0.01(p<0.001) and sig value is 0.812. Source of information is statistically signifcant,the β (beta value)is 0.199 (p<0.001) and sig value in 0.001. Therefore we accept our hypothesis and state that source of information affects the decision for the purchase of nutraceuticals.

Conclusion: The purpose of this research has been to explore the factors affecting health conscious consumer behavior towards the purchase of Nutraceuticals in Pakistan. Literature had identified, the most important factors that affect consumer purchase behavior. With the growing popularity and rising awareness about the consumptions of these nutraceuticals among young consumers it was important to understand how significant these factors were for consumers who were particularly health conscious. Perceptions of the nutraceuticals formed by the health benefits, safety features, and other product features such as taste packaging was found to be a significant influencing factor along with source of information. Interestingly, accessibility measured through the cost, ease of purchasing and ease of use was had no significant influence on the purchase behavior.

Keywords: Nutraceuticals, perceptions, accessibility, source of information's, health conscious consumer

INTRODUCTION

In recent years, a new diet health model is evolving which places more emphasis on the positive aspects of diet. The quality of life in terms of income, spending and lifestyle has improved with economic development. But, it has also presented a major problem in the form of 'lifestyle diseases'. Dietary habits were the first to suffer the consequences of this lifestyle Junk food consumption, leading in several problems linked to nutritional deficiencies. The concept of "nutraceutical" arose first in the survey from U.K., Germany and France, where diet was rated higher by the consumers, then exercise or hereditary factors to achieve a good health. It was no surprise that too many consumers are shifting to nutraceuticals (Pandey, Verma & Saraf, 2010; Das, Bhaumik, Raychaudhuri & Chakraborty, 2012).

The term "nutraceutical" was coined from "nutrition" and "pharmaceutical" by Stephen De Felice, founder and chairman of the Foundation for Innovation in Medicine (FIM) and is defined as "a food or part of a food that provides medicinal or health advantages, including the prevention and/or treatment of illness."(Santini & Novellino, 2017), taken in the form of pills, capsules, tablets, or liquid (Cruz &Tanchoco, 2000). Nutraceuticals are classified as supplements with health benefits beyond their basic nutritional value (Teoh, Ngorsuraches, Lai, Bangpan & Chaiyakunapruk, 2019).The major difference between a dietary supplement and a nutraceutical is that nutraceuticals should not only supplement the diet but also help in the prophylaxis and/or treatment of a disorder or disease. The most rapidly growing segments of the industry were dietary supplements (19.5 percent per year) and natural/herbal products (11.6 percent per year). Global nutraceutical market is estimated as USD 117 billion. FDA regulated dietary supplements as foods to ensure that they were safe (Chauhan, Kumar, Kalam & Ansari, 2013).

From consumers point of view nutraceutical products are recognized as a source of health benefits, ranging from cardiovascular pathologies, prevent or treat hypertension, protection of the cardiovascular system, to the cholesterol control, diabetes, healthy immune system support, excessive weight, arthritis, insomnia, not to mention headaches, varicose veins, depression, reduced osteoporosis. Another significant group of products is expected at general health (e.g. probiotics) or physical and mental performance (energy and sport-bars and drinks) rather than targeting any particular (ill) health state (Prabu, Suriyaprakash, Dinesh, Suresh & Ragavendran, 2012;Daliu, Santini & Novellino, 2018; Jain & Ramawat, 2013; Siedlok, Smart & Gupta, 2010). Currently more than 470 nutraceutical products are available with standard health benefits (Manojkumar& Muliya, 2021).

The current market trends in healthcare are inclined towards preventive health care strategies, rather than treatment and disease management. Increasing occurrence of chronic diseases coupled with the high cost of healthcare interventions is creating a demand for personalized nutrition, along with a boost in demand for nutraceuticals. Additionally, there is a shift in consumer preference from synthetic pharmaceutical preparations to natural and organic nutraceutical ingredients. According to a latest report by Grand View Research Inc., the international nutraceuticals market is expected to reach USD 578.23 billion by 2025, and the United States are the first Country in the world which produces and develops nutraceuticals followed by Europe (in particular Germany), United Kingdom, Asia Pacific Countries (e.g. China, Japan, India), Central, and South America Countries (Brazil), Middle East and Africa (Aina et al. 2018; Chopra, Lordan, Horbańczuk, Atanasov, Chopra, Horbańczuk & Arkells, 2022).

The provisional results of the 2017 census exposed a population of 207.8 million in Pakistan, which comprises 63% of youth (Wazir, & Goujon, 2019; Amaliah, David & Ardiansyah, 2019; Chong et al. 2020). With a majority of young population the country has witnessed a rise in nutraceutical demand over the years. Previous studies conducted in Pakistan shows that nutraceuticals are mostly used by the educated population(Abbas, Ahmed, Yousuf, Khan, Nisa, Ali & Tanwir, 2015; Naqvi, Ahmad, Zehra, Yousuf, Kachela& Nehal , 2019) A study was conducted on the medical students to explore their opinions and attitudes towards nutraceuticals. The majority of the students opined that nutraceuticals were necessary for all ages and further agreed that nutraceuticals are good for health (Naqvi et al. 2019). Another study conducted in Pakistan, addressed the high incidence of self-medications among medical students. The reasons for self-medication, mainly, are related to stress of academic studies, so students taking psychoactive stimulants so they can achieve their tasks. In addition, students may also use nutraceuticals to avoid the depressive behavior they might experience while coping up with their studies. Use of complimentary medicines occurs due to a number of reasons, such as ease of access, ease of use, or influenced by friends in some cases (Abbas Ahmed, Yousuf, Khan, Nisa, Ali, & Tanwir, S. . 2015).

Health consciousness among millennials and the demand for nutraceuticals is escalating. Again, knowledge acquired on the nutraceuticals and values perceived by the consumers play a key role in determining the intent to purchase nutraceuticals. In addition, the association between consumers' health consciousness and knowledge is necessary to promote nutraceuticals consumption (Hoque, Alam & Nahid, 2018).

As health consciousness becomes common among young consumers through education and easy access to information, the idea of self-care is now prevalent. As economies do well, health awareness rises among consumers, prompting them to take their personal health more seriously by actively managing it. Existing research shows that young consumers believe that by taking certain food or drinks they can improve certain aspects of their health. Products with certain health claims that have undergone clinical trials to be validated can boost consumer confidence to purchase. The provisional results of the 2017 census exposed a population of 207.8 million in Pakistan, which comprises 63% of youth (Wazir, & Goujon, 2019; Amaliah, David & Ardiansyah, 2019; Chong et al. 2020)

Young consumers tend to have characteristics, such as motivation, hope and high curiosity about anything. The awareness of healthy living in the millennial generation is quite high. Consumer demand for health-based products like probiotics nutraceutical products is high, especially the younger generation. Probiotics nutraceutical products are known for improving gastrointestinal functionality and other benefits such as boosting of immunity, and improve health (Amaliah et al. 2019; Chong et al. 2020).

This study will help us to understand the level of health consciousness among young population; how aware they are about their health according to the demographic profile and determine which factors are considered significant in deciding to use nutraceuticals. The findings of the study will help pharmaceutical companies to come up with proper marketing strategies for their product offering. In addition our findings will also help healthcare professionals create awareness campaign about the importance of nutraceuticals as a mean of complementary medicine.

There is growing concern about overall fitness and health among young consumers. They are more conscious about their health and have a positive attitude towards the available nutraceuticals. Multiple studies explore the reasons for use of nutraceuticals in millennials but they all are fragmented (Bailey, Gahche, Miller, Thomas & Dwyer, 2013; Iversen,, 2019; Hoque et al. 2018).Although existing studies reflect on the overall health consciousness of millennials however there is less conclusive evidence to support the fact that how being health consciousness influence the decision making towards nutraceuticals. Moreover few empirical studies explore the role of perceived health threat in influencing the decision to consume nutraceuticals (Hailu, Boecker, Henson & Cranfield, 2009).

In addition there is a need to explore the key decision making factors as identified in the existing literature for health conscious consumers (Teoh et al. 2019). The first factor being the perceptions towards these nutraceuticals in terms of health benefits, safety and other product features. Second variable is accessibility measured through the cost, ease of using and ease of purchasing of nutraceuticals. Lastly, the role of source of information in deciding about which nutraceuticals to use.This is measured through individual knowledge, health care professional consultation and influence of friends and family. There is also a need to investigate the orientation of health consciousness consumers towards seeking information from various resources about nutraceuticals. Additionally, through empirically tested data this study is an attempt to understand the relationship between consumer health consciousness and perceived health threat with the key deciding factors to select nutraceuticals. Conclusively the overarching question of this study is which factor contributes most to the decision making regarding the selection of nutraceuticals by a health conscious consumer and what is the role of perceived health threat for a health conscious consumer in deciding to consume these complimentary products or not.

BACKGROUND & SCOPE

Some theories have emerged to illustrate why consumers continue to consume nutraceuticals despite a lack of clinical evidence. Consumers' lack of knowledge of current clinical data, insufficient regulation of nutraceutical sales, and a lack of proper consultation from healthcare professionals with updated clinical evidence are among these. However, there is no specific research revealing consumer perspectives on these problems, and understanding consumer attitudes and motivation is critical for satisfying their needs. Previous research have shown that consumers' decisions to consume nutraceuticals are impacted by three most cited important factors that have been explored: perception of nutraceuticals, accessibility of nutraceuticals, and source of information (Teoh et al. 2021; Teoh et al. 2019; Blendon et al. 2013; Tangkiatkumjai, Boardman, Praditpornsilpa & Walker, 2013; Bailey, Gahche, Miller, Thomas & Dwyer, 2013).

In this regard, this research proposes an original perspective on the relationships between consumers' orientation towards health consciousness, the perceived health threat and the factors motivating them to purchase the nutraceuticals. In other words the study aims to empirically test the significance of various factors for a consumer who may be highly health consciousness or vice versa. The novelty of this study can be justified as follows:

- Very thin literatures, to the best of our knowledge, have so far explored these relationships in context of complementary medicine.
- The existing literature on consumer's health conscious behavior and what motivates them to purchase nutraceuticals is largely influenced by perspectives from developed countries while existing works from developing countries generally do not discuss the topic in the Pakistani context.
- No studies have provided empirical evidence from Pakistan on a holistic theoretical framework presented here. The current study fills the gap in the literature on consumer health conscious behavior in context of Pakistan.

The rest of this study is structured as follows: Section 3 reports an overview of the literature and theoretical foundation in relation to the links between consumer's health consciousness, factors motivating to purchase the nutraceuticals and perceived health threat and formulates the hypotheses to be tested, section 4 outlines the research method, section 5 present the results, and section 6 details the analyses and discussion of the results, implications, limitations, and future research directions.

LITERATURE REVIEW

Health conscious consumers who care about their health are extremely concerned about how their health care is handled, administered, and priced (Prabu et al. 2012). They are dissatisfied with current medicine's cost and high-tech disease treatment approach. The health consciousness consumer is now looking for alternative products, and that is why nutraceuticals are now being used. They are increasingly using nutraceuticals as part of a massive increase to provide physiological benefits or protection against diseases.

3.1 Nutraceuticals among young consumers and reason for use

The young generation is known as the millennial generation. Some studies indicate that the millennial generation comprising individuals born in the early 1980's to 2000 can be one of the important target consumers because of the large population in the near future. Young consumers tend to have characteristics, such as motivation, hope and high curiosity about anything. The awareness of healthy living in the millennial generation is quite high. Consumer demand for health-based products like probiotics nutraceutical products is high, especially the younger generation. Probiotics nutraceutical products are known for improving gastrointestinal functionality and other benefits such as boosting of immunity, and improve health (Amaliah et al. 2019; Chong et al. 2020).

3.2 Perception of Nutraceuticals among young consumers:

Some theories have emerged to illustrate why consumers continued to consume nutraceuticals despite a lack of clinical evidence. Consumers' lack of knowledge of current clinical data, insufficient regulation of nutraceutical sales, and a lack of proper consultation from healthcare professionals with updated clinical evidence are among these. However, there is no specific research revealing customer perspectives on these problems, and understanding consumer attitudes is critical for satisfying their needs. Previous research has shown that consumers' decisions to consume nutraceuticals are impacted by a number of factors enumerated in the following text (Teoh et al. 2019; Teoh et al. 2021).

3.2.1 Health benefits of Nutraceuticals

Previous studies shows regarding the perception of health benefits of nutraceuticals, the young population are taking nutraceuticals, and the most common reasons reported were to improve overall health, such as to feel better, to improve overall energy levels, and to boost immune system (Blendon et al. 2013; Tangkiatkumjai et al. 2013; Bailey et al. 2013).

Consumers of nutraceuticals were more likely to report very good quality of health than nonusers. Previous research also suggests the nutraceuticals users have higher intakes of most vitamins and minerals from their food choices alone than nonusers (Bailey et al. 2013; Klafke, Eliott, Olver & Wittert, 2014).

In addition, the perception that nutrients intake from diet alone was adequate or not affects the perceived health benefits of taking nutraceuticals. Specifically, those who perceived that nutrients intake was inadequate from diet alone decided to take nutraceuticals, (Bailey et al. 2013; Mercer, Brinich, Geller, Harrison, Highland, James & Sharp, 2012). Similarly, consumers who were satisfied with their medicines regime would avoid the use of nutraceuticals (Mercer et al. 2012; Teoh et al. 2021).

3.2.2 Consumer perception regarding Nutraceutical is safe

Previous studies reported that consumers had trust in taking nutraceuticals with the belief that it was safe to take nutraceuticals products which motivated the decision to take nutraceuticals (Ibrahim, Hassali, Saleem & Tukmagi, 2016; Klafke et al. 2012; Mercer et al. 2012; Lowry , Alaunyte & Amirabdollahian, 2015; Teoh et al. 2021). Compared to the health benefits, some consumers valued the safety more, with the notion of “if it doesn’t help it won’t harm” (David, Pierre, Pierre, 2012; Klafke et al. 2012; Lowry et al. 2015).Consumer also spoke of considering the effectiveness and side effects of pharmaceutical drugs they are taking when making decisions about nutraceuticals. If their drugs are effective in managing their disease, with few to no side effects, they avoid using nutraceuticals (Mercer et al. 2012; Tangkiatkumjai et al. 2014; Sandmann, Brown, Mau, Saur, Amling, Barvencik, 2015; Downie, Barrett Keller,2015) and preferred normal diet with real (Downie et al. 2015; Sandmann et al. 2015).Other studies also observe consumer perception of nutraceuticals as safe and efficacious (Pike, Etchegary, Godwin, McCrate, Crellin, Mathews & Kinden, 2013; Sandmann et al. 2015).

3.2.3 Consumer perception regarding other product features of nutraceuticals

In addition to taste, the nature of the health benefit of the nutraceutical is also a likely factor influencing consumer purchase and use because different consumer segments may be motivated toward different benefits, such as improved physical health/performance compared with improved mental or emotional health. Other factors that may have an important bearing on consumers’ use of nutraceutical include the frequency of consumption required to obtain the benefit, product label, the source of the benefit claim, the nature of the product and/or its ingredients, and the mode of consumption (tablet or capsule form) (Cardello & Schutz, 2003; Sandmann et al. 2015).

3.3 Accessibility of nutraceuticals for young consumer

3.3.1 Ease of using of Nutraceuticals

Extant literature reported some young consumers believed nutraceuticals did not help, or they were not sure what to take and others that they already had a balanced diet (Holt, Holt, Erasmus, Watson, Farrell, Blackshaw & Gilbey, 2010).This belief is possibly well founded as some studies have reported that the dietary intake of young adults and students is inadequate and does not supply enough micronutrient and for that reason they use nutraceuticals to meet daily requirements (Steele&

Senekal, 2005).

3.3.2 Relationship with cost in terms of affordability

Earlier studies reported consumers avoided nutraceuticals, when the cost of nutraceutical was perceived as high (Holt, Holt, Erasmus, Watson, Farrell, Blackshaw. & Gilbey, (2010); Sandmann et al. 2015; Downie et al. 2015). While those who perceived that the cost of nutraceuticals was lower than conventional medicines were motivated to use nutraceuticals (Ibrahim et al. 2015).

3.3.3 Ease of purchasing

Consumers also considered about the ease to purchase nutraceuticals products, in terms of the availability of the products, as a main factor when deciding to take nutraceuticals (Page, Mbadiwe, McMorland & Grod, 2015; Teoh et al. 2019).

3.4 Source of information for nutraceutical consumption

3.4.1 Individual knowledge

Empirical studies reported that consumers motivated to consume nutraceuticals because of knowledge about the nutraceuticals although the reason for not consuming nutraceutical was lack of knowledge (Vella, Stratton, Sheeshka & Duncan, 2014; Bilici, Koksal, Kucukerdonmez & Şanlıer, 2012). Another study reported that consumers taking no supplement, since they believed they did not help, while others believed that they were not confident what to consume due to lack of knowledge. Some consumers reported having consumed nutraceuticals due to awareness of health benefits (Holt et al. 2010; Vella et al. 2014).

3.4.2 Significant relationship with professional consultation

Previous research shows consumer reported they would trust their doctor’s recommendation for taking nutraceuticals Consumers said that a physician had recommended that nutraceuticals during the past 2 years (Blendon et al. 2013; Holt et al. 2010; pike et al. 2013) while a few consumers said that they had been told by a physician in the past 2 years to cease use of a nutraceuticals (Blendon et al. 2013).

3.4.3 Influence other than health care professional

This may help to explain why they were more appropriate to seek the advice and knowledge of family and friends instead of their health care providers. Consumers are concerned about negative reactions from their doctors (e.g, they might not support nutraceuticals use or might try to persuade against it). Consumers perceive their doctors to be ignorant about nutraceuticals and unable to contribute positive information. However, consumers reported family and friends as a source of information about nutraceuticals; this was the most commonly reported information source (Pike et al. 2013; Tangkiatkumjai et al. 2013). This is contrasts with what was reported by the American Dietetic Association (ADA) for consumers in the USA, namely that mass media and magazines seem to be the primary sources of information on the need for nutraceutical use (Steele & Senekal, 2005).

3.5 Research objectives

RO1: To examine the relationship between factors affecting consumers' decisions on the use Nutraceuticals and their health consciousness.

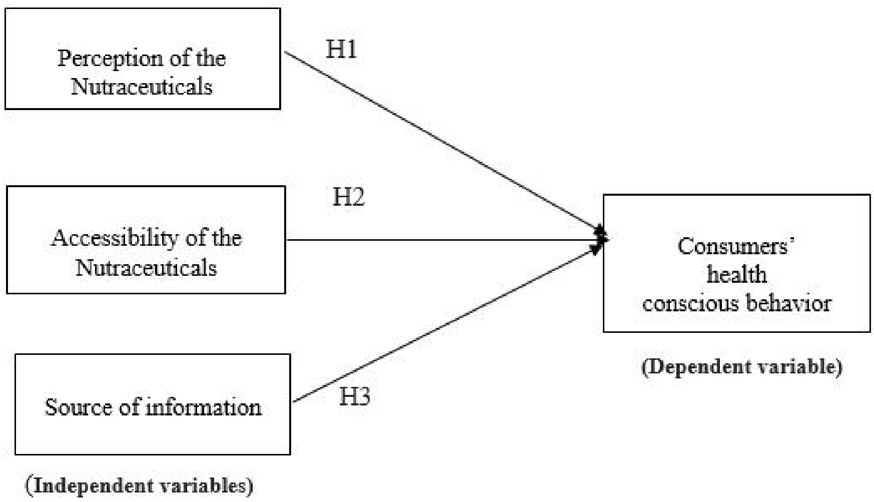
The subsequent objectives based on the key factors that makes up the buying motivation and their relationship with consumer's health consciousness are enumerated below:

RO1a: To examine how the perception of nutraceuticals influences purchase decision of a health conscious consumer.

RO1b: To explore influence of ease of accessibility of nutraceuticals on purchase decision of a health conscious consumer.

RO1c: To empirically test how source of information about nutraceuticals motivates purchase decision of a health conscious consumer.

Conceptual framework



3.7 Hypothesis construction

3.7.1 Perception of the nutraceuticals among health conscious consumer

The most frequent reasons that adults reported using nutraceuticals were to "improve overall health" and to "maintain health. Adults also reported using nutraceuticals to "to get more energy", for "mental health". Previous analysis indicates that the primary reasons for using nutraceuticals in adults were to improve or maintain overall health, or to boost immune functions (Bailey et al. 2013; Menon, Sawant, Mishra, Bhatia & Rathod, 2021; Shimul, Heitzer & Wesa, 2009). More commonly, consumers had trust in taking nutraceuticals with the belief that it was safe to take nutraceuticals products which motivated the decision to take nutraceuticals (Ibrahim et al. 2016; Klafke et al. 2012; Mercer et al. 2012; Lowry et al. 2015).In addition to taste and other product features, the nature of the health benefit of the nutraceutical is also important factor influencing consumer purchasing decision and use because different consumer segments may be motivated toward different benefits, such as improved physical health/performance compared with improved mental or emotional health (Cardello et al. 2003).

Therefore we propose that:

H1: Perceptions of nutraceuticals is a significant predictor for health conscious consumer

3.7.2 Accessibility feature of the nutraceuticals for health conscious consumer

The main reasons consumers gave for being in favor of nutraceuticals is that they want to have balanced nutrition and since it is a convenient way to eat healthfully (Steele& Senekal, 2005; Sandmann et al. 2015).The foremost reasons given for being against nutraceuticals were that they are ‘‘too expensive’’ and ‘‘fear of artificial additives’’ (Holt et al. 2010; Sandmann et al. 2015; Downie et al. 2015). In previous research consumers indicated thatnutraceuticalsbeing popular and easily accessible, are regulated differently than therapeutic goods (Downie et al. 2015; Sandmann et al. 2015). Henceforth, it is hypothesized that:

H2: Accessibility of nutraceuticals is a significant predictor for health conscious consumer.

3.7.3 Sources of information as motivating factor health conscious consumer

Previous literature suggests that consumers reported that they would trust their physicians, pharmacist for the advice of nutraceuticals while some consumers taking advice from the television or from social media and friends and family (Holt et al. 2010; Vella et al.2014). Health professionals, including physicians and dietitians, have been identified in consumer explore as perceived reliable sources of information pertaining to nutrition and health. Family members and friends have also been identified by consumers to be trusted sources of information (Vella et al. 2014). In another study, friends or family and the media and physician’s advice were most commonly reported as source of information (Tangkiatkumjai et al. 2013). Therefore, it is hypothesized that:

H3: Source of Information is a significant predictor for health conscious consumer

RESEARCH METHOD

4.1 Sample & procedure

The study is exploratory in nature and aims to investigate the relationship between the factors motivating the purchase of nutraceuticals and consumers’ health consciousness and significance of relationship between perceived health threat and consumer’s health conscious behavior. The research model was tested using a survey instruments by means of a questionnaire and the measurement scales were developed. Pretesting of the scale was done by consulting a senior faculty member who had a degree both in medicine and business studies. This ensured the content validity. Based on the recommendations few changes were incorporated. The final instrument was then administered to check the proposed hypothesis. Data was collected through convenience sampling method. The survey was floated through survey monkey to around 300 undergraduate students studying in a local health care university and were representing different field of study namely; medicine, pharmacy, business and nursing. The whole data collection process took about two months. Out of 300 students contacted around 244 respondents returned the questionnaire indicating a response rate of 81%.

4.2 Measurements

The online questionnaire was prepared after the review of current and pioneering literature on existing study. Consumers ‘health conscious behavior was measured by nine items that included overall alertness, self-consciousness, involvement and self-monitoring. The scale was adopted from the works of Gould (1988).Variables to measure consumer motivation towards purchasing nutraceuticals were espoused from the seminal work of Teoh et al (2019). In a systematic review three key factors were identified that affects consumers’ decisions on the use of nutraceuticals; a) perception of nutraceuticals; b) accessibility of nutraceuticals and c) source of information. Perceptions were measured through six items, accessibility of nutraceuticals through three items and source of information was gaged through six items. Responses for each items were based on a five point Likert scale ranging from (1) strongly disagree to (5) strongly agree. Demographic data was collected through seeking information about age, gender, socioeconomic class and area of residence of the participants.

DATA ANALYSIS

Univariate analysis consisted of the frequency of distribution of all socio demographic characteristic variables. The findings are reported in table 5.1. The relationship between the motivating factors affecting consumer purchase behavior with their health consciousness and significance of perceived health threat with consumer’s health consciousness was empirically tested through multiple regression using SPSS version 24. Reliability of data was checked through Cronbach Alpha and scores are reported in table 5.2.

Table 5.1 Demographic Profile of Respondents

Demographic characteristics	No. of respondents (n =)	(%)
Gender		
Male	111	45.5
Female	133	54.5
Age		
18-22	10	4.1
23-27	115	47.1
28-32	99	40.6
33-37	17	7.0
37 above	3	1.2
Education level		
Commerce	48	19.7
Science	156	63.9
Arts	9	3.7
Engineering	23	9.4
IT	8	3.3
Socio-economic status		
"A" class	117	48
"B" class	116	47.5
"C" class	11	4.5
Residence		
South	92	37.7
Malir	16	6.6
Central	54	22.1
East	33	13.5
West	37	15.2
Korangi	12	4.9

Table 5.2 Reliability Analysis

Constructs	No of items	α
Health Consciousness	9	0.860
Perceptions towards Nutraceuticals	6	0.742
Availability of Nutraceuticals	3	0.607
Source of Information about Nutraceutical	4	0.684

The strength of relationship between factors affecting consumers' decision on using nutraceuticals and their healthconsciouness is tested through hypothesis. The prediction model is statistically signifcant where F= 51.61,$p < 0.001$ with an R2 of 21.5% which is the explnatory power of the predictors. The first decion making factor was perception of the products. The β (beta value) shows 0.341($p<0.001$) and sig value is 0.000. Therefore we accept our hypothesis and state that perceptions towards nutraceuticals influences the decision making about the purchase of complimentary products by consumer's who are health conscious. The systematic review of studies identifying the factors influencing consumers' decisions in taking nutraceuticals showed that the perception of nutraceuticals and the source of information were the main motivating factors for consumers to take nutraceuticals (Teoh,et al 2020; Vella, Stratton, Sheeshka & Duncan, 2014). Ease of availablilty of nutraceuticals was not found to be a significant factor with the β (beta value) of 0.01($p<0.001$) and sig value is 0.812. It was found to be a major barrier in taking nutraceuticals (Teoh, et al 2020). Source of information is statistically signifcant,the β (beta value)is 0.199 ($p<0.001$) and sig value in 0.001. Therefore we accept our hypothesis and state that source of information affects the decision for the purchase of nutraceuticals. In a previous study, consumers had also identified pharmacists as primary source of information on nutraceuticals or alternative therapies (Kwan, Hirschkorn & Boon, 2006; (Barnes, Ball, Desbrow, Alsharairi & Ahmed, 2016). Physicians are the most trusted information channel (Sandmann et al. 2015).

Consumer demand for nutraceutical products is high, especially the younger generation. Nutraceutical are one of the products identified for improving gastrointestinal functionality and other benefits such as boosting of immunity, etc (Shi, Balakrishnan, Thiagarajah, Ismail & Yin, 2016). Consumers perceiving benefits of nutraceutical consumption was noticeably the key driver for the willingness to consume nutraceuticals; leading to improvement in performance, mood, health, and disease prevention (Babicz-Zielinska & Jezewska-Zychowicz, 2017).

In the context of availability for nutraceuticals either for cost or accessibility, “unclear” indicates insufficient or no information. However, the reasons given for not taking nutraceuticals in terms of availability of nutraceuticals if they were not informed about costs (Tyler, Zyzanski, Berkley & Panaite, 2009).

CONCLUSION

The purpose of this research has been to explore the factors affecting health conscious consumer behavior towards the purchase of Nutraceuticals in Pakistan. Literature had identified, the most important factors that affect consumer purchase behavior. With the growing popularity and rising awareness about the consumptions of these nutraceuticals among young consumers it was important to understand how significant these factors were for consumers who were particularly health conscious. Perceptions of the nutraceuticals formed by the health benefits, safety features, and other product features such as taste packaging was found to be a significant influencing factor along with source of information. In a collectivistic society like Pakistan consumers generally seek advice even for health care products from friends and family other than the health care professionals. Interestingly, accessibility measured through the cost, ease of purchasing and ease of use was had no significant influence on the purchase behavior The study makes a valuable theoretical contribution as till date the available work on nutraceuticals is very fragmented and very few studies have been conducted from marketing point of view. Lastly the study has useful insights for marketers of these complimentary products and health practitioner. These significant factors needs to be considered while drawing the communication strategy for marketing of these products and educate the masses about the usage and consumption of these products. There are certain limitations of this study. Data has been collected only from only one segment of the population that is the millennials as it's the biggest cohort of population in Pakistan. We may get varying results if data is collected from the older population.

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VIRTUAL SIMULATION-BASED REFORM OF APPAREL CURRICULUM

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ABSTRACT

With the rapid development of modern science and technology, computer technology has been widely used in various industrial fields of society, and the education industry is no exception. The application of virtual reality technology in clothing design has greatly improved the efficiency of designers in the redesign process and perfected the wearing effect of clothing. In the face of the future demand for innovative design talents, cultivating talents who meet the requirements of clothing design is an important issue and task for university teaching. At present, there are problems in the teaching of clothing design profession such as single traditional teaching mode, weak creativity of students' works, disconnection between teaching content and practice, imperfect teaching resources and imperfect teaching details. In this paper, virtual reality technology is introduced to reform the curriculum system of the clothing profession through a mixed research approach, using experimental project-based teaching combined with quantitative research methods. Through practice, it is proven that the integration of virtual technology into apparel teaching creates a simulation effect for teachers and students that cannot be matched in the traditional apparel design teaching process and enhances students' interest in learning. The application of virtual reality technology is a new and efficient teaching method that has emerged in recent years with the development of computers, combining technology and art, and based on the teaching of clothing design projects, which greatly improves learning efficiency and teaching effectiveness and can effectively improve students' innovation ability, and has a broad development prospect.

Keywords: Virtual reality technology; apparel design; project teaching; application

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INTRODUCTION

In recent years, the apparel industry has become highly competitive, and higher education institutions that deliver talents for apparel enterprises are also facing difficulties and bottlenecks in professional talent training and curriculum teaching. Due to the progress and changes in apparel design and production processes, some students trained under the previous professional education model often find it difficult to adapt to the new industry requirements in a short period of time. Based on this, the apparel majors actively seek ways to dovetail teaching with the market, combine new digital technologies, and explore strategies and ways to transform applied technology-based disciplines. The current professional course teaching has a single teaching mode, insufficient or backward practical training sites, high requirements for the size of the site and equipment of the apparel practical training base, and large investment, and the practical training base under the school-enterprise cooperation mode is affected by the strength of the cooperative enterprises themselves, which has the problems of unstable project cooperation and difficult transformation of results (Wang Bin, 2022). Coupled with the rapid technological update of apparel professional equipment, the relatively limited number of enterprises that can invest in equipment in schools, also directly affects the teaching results of the apparel profession.

With the rapid development of computer technology, apparel virtual design technology has become more and more practical, and the scope of application in the apparel field is becoming more and more extensive. Clothing virtual design system can not only save design and boarding time, but also can virtually display the clothing on the human body wearing effect both to save time and save costs, while being able to achieve virtual fitting, virtual dynamic display, etc （Li Geng ， Li Guosheng，2021）.

PROBLEM STATEMENT

2.1 Traditional teaching mode is single

In recent years, clothing professional teaching has been trying to reform the teaching content, teaching methods and teaching conditions, but by the school practical training conditions, financial investment, school-enterprise cooperation and many other reasons, it is difficult to really carry out some project practice teaching. In the teaching process, the teaching methods are traditionally cured, the practical projects are insufficient, and the assessment of teaching effect is single（WangBin，2022）. And because the traditional teaching of garment profession needs a long process from design to plate making to garment making, students then under this lack of innovative teaching mode, some students gradually lose their interest in learning and lack of independent innovation awareness and ability (Tang Hongyu & Hao Ruimin,2017).

2. 2 The creativity of students' works is not very creative

In the teaching process of apparel majors, students first research apparel brands and markets, then complete trend predictions based on research results, and finally practice design. At present, in China, there is a lack of originality in apparel design, and most of the professional courses are taught using European and American brands as design cases, and the design works of students are not very creative and even out of market.

2.3 Course content does not fully integrate design

For example, in the teaching of "Material Reconstruction" course, the traditional The traditional teaching mode is that the teacher introduces the methods of material reconstruction and students practice a lot of material design. In the learning process, students mastered certain methods of material redesign through learning and understanding of materials, but these material exercises are all small pieces of fabric design attempts without digital processing, and they cannot intuitively feel the integration of material redesign into clothing design works. At best, students mastered the method of material reconstruction, but they were unable to really translate the effect creatively for later use in their garment design work. Therefore, in the teaching mode, art and technology should be integrated, and the application of virtual reality technology should be used to innovate the teaching mode and improve the quality of teaching.

2.4 Imperfect teaching resources

There is already a certain mode of school-enterprise cooperation and project-based teaching in the teaching of fashion design majors, but in the process of school-enterprise cooperation, the enterprise instructors do not participate in the whole learning and practice of students, but only give guidance in the process of graduation design or a certain project. At present in China, there is no bridge between schools and enterprises to build a curriculum teaching system together, so students cannot really combine the latest development of the apparel industry with their design works (Ma Honglin, 2017). The imperfect teaching resources make the teaching process of teachers limited, which professionally leads to the hindrance of students' creative process and the inability of design works to be better accepted by the market.

2.5 Teaching details are not perfect

Fashion design students usually consume a lot of time on garment pattern making and production, students need to learn the pattern making formula and various garment sewing processes, the whole process of production is difficult and long, it is difficult to grasp the details of the garment precisely and the real final garment effect is difficult to grasp. In China, a design class is about 30 students, and the teacher does not have enough time for design coaching for each student on average, and cannot provide detailed guidance on the specific details of design, production process details, etc., resulting in most students' ready-to-wear works not being ideal.

LITERATURE REVIEW

Virtual reality (VR)technology has shown its great development potential in many industries. Combining Virtual reality (VR)technology with the game industry brings users a new game experience, as long as they put on the helmet, they can be in the game environment, without leaving home, they can be in another space, which greatly reduces the danger of outdoor games; combining Virtual reality (VR)technology with engineering design, designers can show the design products in 3D interactive form in front of customers, allowing customers to more directly understand the product Combining Virtual reality (VR)technology with medicine, medical students' learning of medical knowledge no longer stays in books or simple models, but can observe various organs or tissues up close through equipment, which not only improves teachers' teaching efficiency, but also increases students' opportunities for clinical experiments and for repeated experiments on the same case to a proficient level ...... Thus, it can be seen that Virtual reality (VR)technology has a wide range of applications and brings great benefits to all walks of life, which is reflected in the training of university talents, VR courses can be offered in science and technology, art, education and other majors, thus promoting the training of VR talents in various fields and promoting VR in The promotion and development of different industries.

Fashion design courses mainly rely on a series of skills rel virtual reality (VR) is an emerging technology that utilizes mobile and context-aware devices (e.g.smartphones, tablets) that enable participants to interact with digital information embedded within the physical environment (Dunleavy, 2014). It is a new technology that has emerged with potential for application in education (Saidin, Halim, & Yahaya, 2015) and enables users to enrich the real world with virtual content (Tesolin & Tsinakos, 2018). It also augments students' experiences in real-world environments by dynamically overlapping digital materials with a real-world environment (Elfeky, 2018; Wu, Hwang, Yang, & Chen, 2018) where virtual information corresponds to locations of real-world objects in or proximate to the current location (Sandberg, 2018).Numerous researchers have pointed out that Virtual reality (VR) has immense potential in the enhancement of learning and teaching (Bacca, Baldiris, Fabregat, & Graf, 2014; Bower, Howe, McCre-die, Robinson, & Grover, 2014; Cai, Chiang, Sun, Lin, & Lee, 2017; Foster & Cunniff, 2016). It supports the smooth interaction between real and virtual environments and, in the same time, allows a tan-gible interface metaphor to be used for object manipulation (Singhal, Bagga, Goyal, & Saxena,2012). Therefore, it is gaining popularity within society and becoming more ubiquitous in nature(Bower et al., 2014). Recently, it has matured enough and so its applications can be found in both mobile and non-mobile devices (Bacca et al., 2014). Nevertheless, few studies have been in the education field (Saidin et al., 2015). However, researchers and experts who promote the use of the Virtual reality (VR) technology claim that it provides learners with more opportunities to be more skillful and knowledgeable ated to function, aesthetics and creativity. The design of skills and functions is very important. Because fashion designers design for others rather than for themselves, they should consider other people's needs, aesthetics, lifestyle, attitude, desire and so on, so as to design something more suitable for them. And aesthetic skills are very necessary to make fashion products more attractive and popular, and to better express attitudes and ideas. In addition, creative skills usually involve fluency, flexibility, originality and other elements, so fashion design is regarded as an innovative process, designers use inspiration to produce the best creative and artistic experience. Virtual reality (VR)technology can help fashion design students improve their skills in the field of aesthetics and creativity.

RESEARCH METHODS

This study used a mixed research method with experimental research methods as the main method and quantitative research methods as the supplement. The sample was selected from 20 second-year students (5 males and 15 females) majoring in apparel at a higher education institution in Guangdong Province, China. By changing the content of apparel design teaching and design, students can understand the basic concepts and terms of virtual reality technology, master the application software of virtual reality technology for apparel majors, cultivate students' innovation consciousness and aesthetic quality, and have the ability of independent design, virtual sewing, and virtual display. The comparison was made in terms of creative thinking concept of clothing, overall shape of clothing style, use of creative elements, outer silhouette design, style design, color design, fabric design, and software application ability.

The quantitative study was conducted through a questionnaire survey of students and semi-structured interviews with apparel teachers and a corporate interview with a company dedicated to virtual reality technology for apparel professionals.

RESEARCH RESULTS

When VR technology is applied to garment teaching, the final effect will show the design diagram of traditional teaching and can see all angles of the garment in 360° in three dimensions. During the design process, the garment structure diagram (paper sample) can be generated directly, the visual effect can be modified and adjusted, and the garment can be sewn virtually; the different effects brought by the different characteristics of different fabrics can be seen intuitively, and the final result will be a virtual dynamic garment display that simulates the wearing effect of real people (Zhang, J, 2020).

Through the redesign of teaching content, the teaching effect has been significantly improved. Firstly, students' learning initiative has improved significantly, and we know through the survey that students are more interested in design; secondly, the quality of design works has improved, both in terms of creativity, style, color, fabric use and integration of paper pattern and wearing effect, which indicates that the teaching quality and students' learning effect have been improved significantly; students' satisfaction with the teaching content and teaching method has also Students' satisfaction with the teaching contents and methods has also improved, and the traditional process of making boards, sewing and modifying has been omitted, and students can see their designs more quickly and intuitively.

DISCUSSION

Virtual simulation technology teaching is a new teaching tool, which mainly obtains relevant data through the simulation of experimental objects, and then analyzes them. Analyzing from the broad teaching design, virtual simulation technology is based on a virtual integration experience of the teaching process, combining professional skills with virtual technology and virtual scenes, and finally showing them through people's vision, making students feel interesting and real, and continuously improving students' learning initiative and professional skills .

6.1 Based on ability cultivation and integration of practical training course content.

At present, through continuous teaching reform and practice, the training system aiming at cultivating comprehensive design talents with certain design ability, pattern-making ability and understanding of technology has been gradually formed in the apparel design and technology majors of sample colleges. According to this cultivation goal, the curriculum is based on "professional basic courses - professional core courses - comprehensive practical training courses - expansion and innovation courses " progressive curriculum system, combined with the four parts of the curriculum of design, structure, process and display of the garment profession, as well as comprehensive practical training courses to integrate the content of practical training courses.

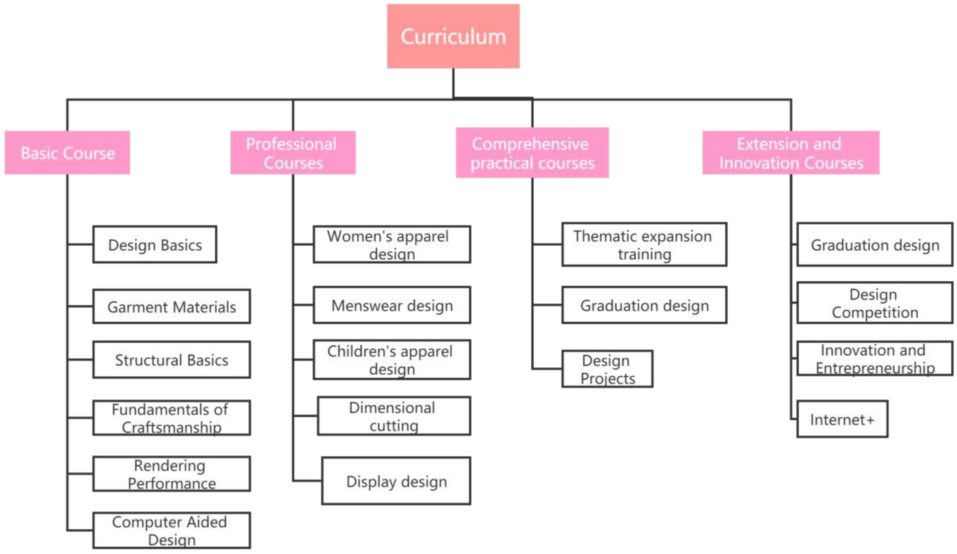
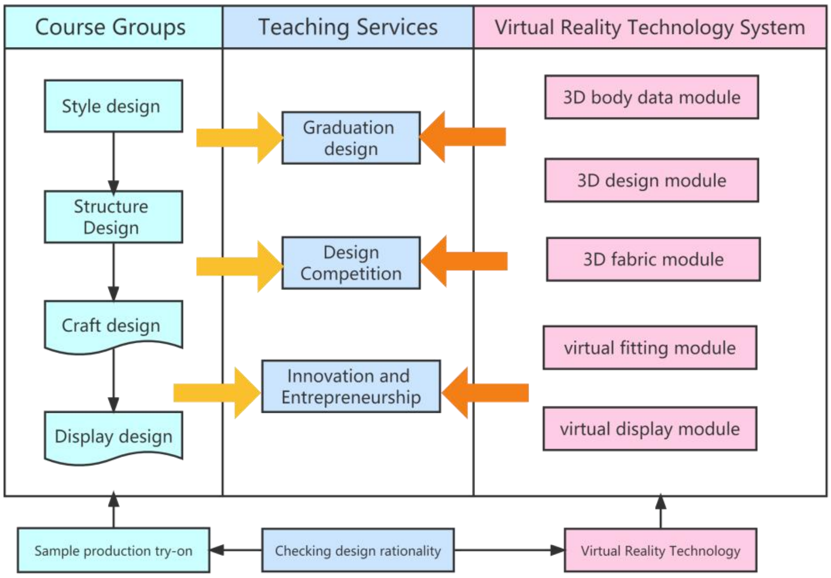


Figure 1: Curriculum

6.2 Improve the practical training content and integrate virtual reality technology.

With the continuous development of virtual reality technology, various virtual simulation technology platforms have been perfected in function and are widely used in various fields of the apparel industry. The virtual simulation training room is built on campus, which contains an integrated design simulation system with 3D body data module, 3D design module, 3D fabric module, virtual fitting module and virtual display module, which can realize the functions of garment profession from design, pattern making, production, sample dress fitting and dynamic display, completely covering the four major contents of garment teaching - -style design, structure design, process production and ready-to-wear display (Zhang, J, 2020). According to the course teaching objectives of apparel majors, the practical teaching hours are reasonably arranged, requiring a reasonable ratio of theory and practice, and the content reflects feasibility and necessity, and can be connected with the previous and following courses and improve the course content. In the process of comprehensive practical training, the project teaching method is used to integrate the contents of each practical training module.

Figure 2: Course System Design



6.3 The cost of teaching expenses investment is reduced.

In the practical training practice, the application of virtual reality technology can simulate the creation of realistic working environment, intuitive operation process, historical costume pavilion, display showroom, as well as 3D simulation fabric selection, 3D sample garment trial production, etc.. Compared with the previous teaching faculty, equipment and venue requirements of the apparel design profession, such an approach can effectively reduce the financial investment in teaching and improve the efficiency and skill level of students' practical training.

6.4 Teaching form innovation.

The use of virtual reality technology in the teaching of apparel is a new form of teaching that adapts to the development of information technology and the goal of training applied talents. Virtual reality technology is immersive, interactive and experiential, which can make teaching methods more vivid and intuitive, teaching contents more innovative and assessment methods more mobile and flexible (Wang Y, 2020). By using virtual reality technology, teachers can help students understand the abstract theoretical knowledge of clothing, establish the thinking basis of three-dimensional space composition of clothing, and let students experience the spatial relationship between human body and clothing modeling more intuitively; introduce the latest industry information technology to meet the needs of professional digital transformation, which is more conducive to cultivating students' learning interests and abilities (Benjy Marks &Jacqueline Thomas, 2022).

6.5 Teaching content innovation.

In the teaching of virtual reality design, the actual work design and production cases are carried through the whole teaching content, according to the employment group of enterprise positions, driven by the real project tasks of enterprises, oriented by the actual system of students' creation and design, with the market transformation of teaching achievements as the goal, completing the teaching tasks while completing the project tasks, cultivating students' professional habits in the teaching process, realizing the effective connection between higher vocational education and enterprise job talent demand (Hernandez-de-Menendez & M., Diaz, C. E., etl,2020). In the process of learning, we aim at aligning with the professional job specifications and work standards of enterprises, improving students' comprehensive professional quality and enhancing their employment competitiveness.

6.5 Teaching practice innovation.

Through virtual reality technology design teaching innovation and practice, promote the development of garment industry intelligence, informationization and higher vocational education, provide leadership and talent guarantee for the innovation-driven development of the garment industry, and provide a demonstration role for the curriculum reform of garment vocational education.

6.6 Teaching system innovation.

The reformed apparel practical training course is adjusted to the market and enterprise talent demand, and the content of the apparel practical training course is readjusted to increase the course arrangement of digital intelligent manufacturing practical training and emphasize the cognitive ability training of intelligent manufacturing equipment (Benjy Marks, Jacqueline Thomas, 2022). As students are familiar with enterprise informationization, intelligence and other high technology, they can quickly integrate into enterprises after graduation, which not only promotes the development of garment professional construction, but also enhances the overall development of enterprise garment technology and the quality improvement of industrial personnel.

CONCLUSION

Virtual reality technology has brought about a radical change in the teaching of apparel design, enabling teachers and students to complete their teaching tasks and plans in a lively and harmonious environment. Professional teachers are no longer bound to use a single form of hand-drawn expression to teach, and a series of complete processes such as design, pattern making, sample completion and sample adjustment are simulated realistically and quickly with the help of computers, greatly improving learning efficiency and teaching effectiveness. The virtual reality technology in apparel design teaching. Virtual reality technology is widely used in the teaching of clothing design, so that the traditional teaching of clothing design from the limitations of the means of expression, to achieve the transition of three-dimensional models to real products. Teachers cannot through the real production of real objects will be designed to show students the clothing program, but directly use virtual reality technology to design the results of the realistic presentation, in the future will have a broad development prospects.

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INNOVATIVE MANAGEMENT OF CHINESE STYLE WEDDING INDUSTRY IN YUNNAN

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ABSTRACT

With the wedding service industry in Yunnan Province in its infancy in its infancy, it is necessary to give full play to the basic guarantee role of standardization construction, whether from the perspective of the market demand of the wedding service market in the province, or from the perspective of the good and rapid development of various industries and enterprises. With the Chinese wedding is one of the essence of China's traditional culture, with thousands of years of history and unique style of traditional "hi" cultural characteristics. China's marriage culture has a long history, although it has experienced a lot of purification and baptism in the long river of history, but the traditional Chinese marriage customs still affect future generations. In recent years, with the promotion of "cultural self-confidence" to revive traditional Chinese culture, Chinese weddings have become more and more popular with the public. Therefore, we need to deeply understand the development of Chinese weddings, and understand the views and acceptance of Chinese weddings in today's society. The organic combination of Chinese and Western cultures is innovated to reflect the cultural characteristics of weddings in the new era.

Based on the data of the authoritative data platform and combined with the data of the Yunnan Wedding Industry Association, this paper adopts the hybrid research method to study the construction of standardized services in the wedding service industry in Yunnan Province and puts forward innovative ideas.

Keywords: wedding services; Standardization; Innovation management;New Chinese wedding;innovative development

INTRODUCTION

1. The current situation of China's wedding industry

1.1 Development status of wedding celebrations

With China's wedding industry currently in a period of prosperity and maturity, the advantages of head enterprises have begun to appear, and they have gradually begun to integrate the upstream and downstream industrial chains of wedding services, with the intention of providing consumers with one-stop solutions. In 2020, due to factors such as the intention of the epidemic and the decline in the number of marriages in China, the size of China's wedding market fell by 31.6% compared with 2019 to 1,414.8 billion yuan. However, it is expected that in the future, with the gradual control of the epidemic and taking into account various factors, China's wedding industry will still maintain a compound annual growth rate of about 5%, and it is expected to exceed 2 trillion yuan by 2026. According to the "2021 Marriage Industry Insight White Paper" released by Tencent, the average wedding cost per couple affected by the epidemic in 2020 reached 174,000 yuan, a decrease from 2019, but it is still 8.8 times the total monthly income of both men and women, which is 2.7

times that of 2015, which shows that the consumption potential of the wedding market is still considerable. (China Wedding Industry Market Research and Investment Forecast Analysis Report)

1.2 Wedding development trend

The decline in the number of people registered for marriage in China has brought certain adverse effects to China's wedding industry year by year, but the increase in China's per capita disposable income and the increase in consumer expenditure have made China The amount of wedding consumption of newlyweds is increasing rapidly, and the market potential of the future wedding industry is still expected. In the face of the huge potential market, the development of the domestic wedding industry is also changing, and the consumer demand for marriage of newlyweds has gradually changed from the past modeled and single demand to personalized and diversified needs. China's wedding industry has transformed from quantitative growth to intensive cultivation stage, and the industry prospects are still promising. It is predicted that from 2020 to 2025, the average annual compound growth rate of China's wedding industry will be about 10.94%, and by 2025, the industry market size will exceed 4 trillion yuan, reaching 4147.4 billion yuan, so it is predicted that China's wedding industry will remain More than 10% positive growth. (Unknown, Prospective Industry Research Institute China Wedding Industry Market Research and Investment Forecast Analysis Report, 2021)

1.3 The main consumption links of the wedding industry chain

1.3.1 Wedding planning business has a wide range and strong market demand

The wedding planning business covers all matters related to the wedding, including wedding planning, on-site decoration, lighting and sound, wedding car, makeup, photography and video, etc., which is the most extensive link in the wedding industry. Modern people's life is tense, marriage leave is limited, and the preparation time for marriage is short, making wedding planning gradually become a necessity. According to statistics, in 2019, 34.5% of newlyweds were only 1-3 months old, and the proportion of young people who had been preparing for marriage for more than 1 year ranked second. With the fast-paced life of contemporary young people and the continuous streamlining of life, "too busy at work" has become one of the top 1 of the six reasons for delaying marriage preparation, it is expected that the preparation time of the future wedding crowd will continue to shorten, more and more wedding content will be transferred to wedding planning services, and it is foreseeable that the demand for wedding planning will continue to grow in the future. In 2019, the overall market size of China's wedding celebrations was 2,112.03 billion yuan, an increase of 15.85% year-on-year. Among them, wedding planning accounted for 28.7% of the total market size, so it is estimated that the market size of China's wedding planning in 2019 is nearly 606.2 billion yuan.

1.3.2 The wedding banquet industry has high profits and a large market scale

China's wedding banquet market is characterized by seasonality, more concentrated time, more complex service objects, and special choice of dishes, and the overall industry profit is higher and the market scale is larger. There are more than 2.2 million wedding service companies in China, and the industry profit margin reaches 50%-60%. In 2019, the overall market size of China's wedding celebrations was 2,112.03 billion yuan, an increase of 15.85% year-on-year. Among them, wedding banquet services accounted for 49.3% of the total market size, so it is estimated that the size of China's wedding banquet service market in 2019 is nearly 1,041.2 billion yuan.

1.3.3 The penetration rate and consumption amount of the wedding photography industry are rising

With the continuous progress and change of people's consumption concepts, consumption capacity and social trends, the penetration rate and consumption level of wedding photography are rising, according to the big data of the China Wedding Expo Wedding Consumption Data Survey and Statistics Center, the demand for private customized wedding photography in Beijing continues to rise, and the mass consumption consumption range of Shanghai wedding photography is 6000-9000 yuan, and the high-end custom consumption range is 9000-15000 yuan. The growth of industry penetration and consumption has undoubtedly driven the expansion of the industry scale. There are more than 90,000 wedding photography companies in China. In 2019, the overall market size of Chinese weddings was 2,112.03 billion yuan, an increase of 15.85% year-on-year. Among them, wedding photography accounted for 11.6% of the total market size, and it is estimated that the chinese wedding photography market size in 2019 is nearly 245 billion yuan.

1.3.4 Wedding dress market brands are lined up, fierce competition

The data shows that when the Chinese wedding preparation crowd chooses the wedding expenditure category, 53.4% of the wedding preparation population will choose the wedding dress. The high penetration rate has also created a situation in which there are many brands and fierce competition in the Chinese wedding dress market. According to statistics, there are more than 70,000 Wedding Dress (Customized Service) companies in China. In 2019, the overall market size of Chinese weddings was 2,112.03 billion yuan, an increase of 15.85% year-on-year. Among them, wedding dresses accounted for 10.4% of the total market size, and it is estimated that the market size of Chinese wedding dresses in 2019 is nearly 219.7 billion yuan. (Unknown, Data Institute Analysis of the market status and development trend of China's wedding industry in 2021, 2022)

OVERVIEW OF CHINESE WEDDINGS

2.1 Definition of Chinese Wedding

Chinese wedding refers to a traditional Chinese wedding. In ancient times, it was held at dusk, so it was called the evening ceremony - the wedding. There are six ceremonies for Chinese weddings, namely: Na Cai, Qing Ming, Na Ji, Na Zheng, Please Period, and Kiss and Greet. The big red flower palanquin, the mighty greeting honor guard, wearing the phoenix crown Xia Shuai, the Yuanyuan costume, the worship of heaven and earth, the lifting of the head, the Chinese wedding dress, the gold ware hairpin flower, the ring Ju Pei, this is the Chinese wedding. ”

2.2 Development of Chinese Weddings

2.2.1 Xia Shang Zhou period: during the Xia Shang period, there were the etiquette of "welcoming in the court" and "welcoming in the hall". There were six wedding ceremonies in the Zhou Dynasty, the first five of which were pre-wedding preparations. The process of the wedding ceremony is subdivided into: trend, stop, squeeze, but fan, feng za wo, co-prison and eat, couple eating, drinking soup, smacking sauce, fermented, drinking together, and libi. The custom of weeping marriage also began from this period. The new person's clothing is a black top, a light red bottom, and its overall black, red as a supplement, and the shoes are red multi-soled shoes.

2.2.2 Qin and Han Period: The cultural politics of the Qin and Han Dynasties reached a relatively high level. The progress of society also promoted the improvement of weddings, marriage customs and marriage systems at that time, and the Qin and Han dynasties gradually formed a system of weddings, such as marriage proposals, new houses, sending relatives to relatives, letters of appointment, and dowry. During the Qin and Han dynasties, black was respected, so he wore a black wedding dress when he got married.

2.2.3 Tang Dynasty period: We often see the process of welcoming the bride with eight sedans blowing and blowing, which began to be popular in the Tang Dynasty. In the early tang dynasty, it was at dusk, and in the middle and late period, it was changed to daytime. When married, the groom rides a horse and the bride rides in a car. "When the bridegroom greets his relatives, he needs to bring three liters of millet to fill the mortar; Xi Yizhang covered the well; Reed three pound plug stove; Arrow three to buy a house. "The wedding dress of the Tang Dynasty was no longer honored with black, and the wedding dress of this period blended the solemnity and sacredness of the Zhou wedding with the lively celebrations of the future generations, and the style was the tungsten dress , the color is red male and green female.

2.2.4 Song Dynasty period: During the Song Dynasty, weddings strictly followed the "six rites", and the titles and practices of the six rites varied according to the identity and status of the parties. The wedding dress of the Song Dynasty was basically the same as that of the Tang Dynasty, but there were also grooms wearing soap-colored round neck shirts, two corners folded upwards and then crossed and fixed heads, and the bride was a crown, a xia shuai, a large-sleeved shirt, and the color was cyan.

2.2.5 Yuan Dynasty period: During the Yuan Dynasty, the Mongols had two marriage systems: marriage snatching and marriage. There is an important ceremony in Mongolian weddings, after the bride marries into the groom's house, the first thing to do is to hold a fire worship ceremony, and the bride and groom pass through the two piles of fire and receive the baptism of fire. Their costumes are mainly "quality sun clothes", which are shorter robes, relatively tight and narrow, with many folds around the waist, this design is to facilitate riding and shooting.

2.2.6 Ming Dynasty: The wedding ceremonies during the Ming Dynasty only retain the rituals of Na Cai, Na Zheng and Invitation Period according to the Zhu Zi Family Ceremony. "The day before the kiss, the bride's family can send someone to the man's house to furnish a new house. The main ritual procedures for greeting the bride are: the bride dressing, the celebrant to the ancestors, the groom kneeling to worship the ancestral tablets of the woman's family, the ceremony of laying the goose, the bride's parents training the daughter, the bride and groom accompanying the groom to the man's home, the bride and groom paying homage to the church, the "same prison ceremony" and the "joint ceremony". The wedding dress of the Ming Dynasty was the Fengguan Xia Phi and the Yuanyuan Dress.

2.2.7 Qing Dynasty period: During the Qing Dynasty, on the wedding day, while holding a banquet for guests and friends, the man's family took the welcoming team to the woman's home to pick up the bride. The groom waits at home without having to pick up the kiss himself. The woman's family dressed up the bride and waited for the welcoming team to come and kiss her. According to Manchu marriage traditions, a bride had to cross a brazier before she could marry into her husband's house. The wedding dress of the Qing Dynasty still follows the Phoenix Crown Xia Shuai of the Ming Dynasty, although it is mainly red, but the style of the wedding dress is based on the qipao as a template.

2.2.8 modern period: the development of modern times to the present, Western wedding ceremonies have gradually become popular in China, Chinese weddings with the development of modern Chinese wedding etiquette, Unlike traditional Chinese wedding ceremonies, some Western elements have been added. In addition to the cheongsam Zhongshan dress, the wedding dress of this period also had wedding dresses and suit dresses, and the headdress was no longer a phoenix crown, but a white veil.

2.3 The embodiment of Chinese weddings

2.3.1 weekly wedding: The ceremony of the weekly wedding mainly includes pre-wedding ceremony, wedding ceremony and post-wedding ceremony. The weekly wedding ceremony is not happy or celebratory, and the whole ceremony is solemn and elegant, simple and clean, which has a very classical Chinese atmosphere. The dress of the weekly wedding is generally black, the clothes are wide, the upper body is very temperamental, and there is the beauty of the ancient charm.

2.3.2 Han Tang wedding: Han Tang wedding is the most popular traditional Chinese wedding, similar to the weekly wedding, Han Tang wedding ceremony is very strong, the style is solemn, gorgeous, the etiquette system is many and special. For example, the Fan Ceremony, the Wo Ceremony, the Three Prayers, etc., show the profound traditional Chinese cultural heritage everywhere. The dresses of the Han and Tang weddings are mostly red, but also black, with gorgeous embroidery, wide cuffs, and the bride's dress has a large tail, which is more dignified and atmospheric.

2.3.3 Ming and Qing weddings: Ming and Qing Chinese weddings pay more attention to creating a festive and joyful atmosphere, which has changed greatly compared with Han weddings. Wedding palanquins, phoenix crowns, cross-saddles, etc., all began to appear in the Ming and Qing dynasties, which is more in line with most people's cognition of traditional weddings.

2.3.4 New Chinese wedding

The New Chinese Wedding is an improved version of the traditional Chinese wedding, which does not have a particularly obvious concept of dynasty. The new Chinese wedding not only simplifies the ceremony of the traditional Chinese wedding, but also integrates more fashionable and novel elements, without too much framework, generally in the wedding into the Chinese elements, can be called the new Chinese wedding. The color color of the new Chinese wedding is not necessarily red, it can be champagne, blue, etc. The dress can be worn without a phoenix crown, or with a wedding dress with a traditional pattern. (Zhong, 2018)

INVESTIGATION AND ANALYSIS OF THE CURRENT SITUATION OF CHINESE WEDDINGS

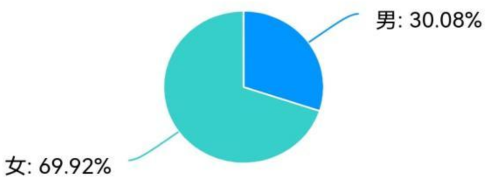
3.1 Research methods and processes

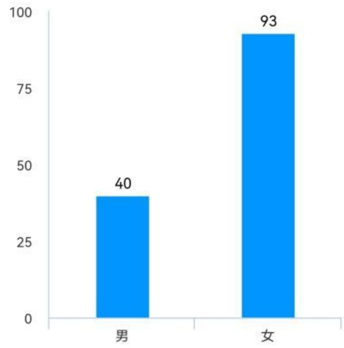
The survey was conducted using a questionnaire method, using an online survey of questionnaire stars, with a total of 150 questionnaires distributed and 133 valid questionnaires recovered. At the same time, offline interviews were also conducted, and 2 post-90s and 3 post-00s were invited to participate in the survey. Among them, 3 post-00s and 1 post-90s generation because of the rise of Hanfu culture, so they prefer Chinese weddings and have a certain understanding of Chinese weddings. Another post-90s person said that he had watched the relevant video and felt that the Chinese wedding dress and process were too cumbersome, and he preferred the process to be simple and relatively small. Finally, by collecting relevant information on the Network and comparing it with the survey data, the accuracy of the data is ensured and summarized.

3.2 Survey data

3.2.1 your gender?

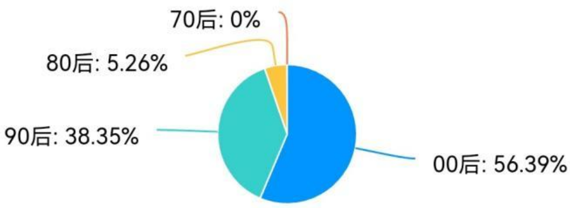
Options	subtotal	proportion
man	40	30.08%
woman	93	69.92%

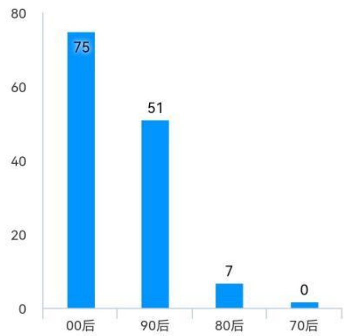




3.2.2. What is your age?

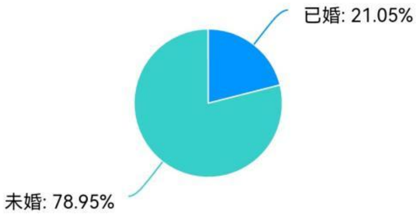
Options	subtotal	proportion
After 00	75	56.39%
Post-90s	51	38.35%
Post-80s	7	5.26%
After 70	0	0%

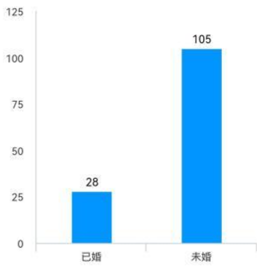




3.2.3 What is your marital status?

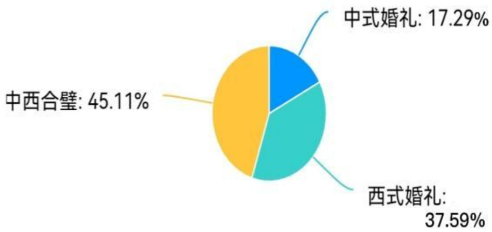
Options	subtotal	proportion
married	28	21.05%
unmarried	105	78.95%

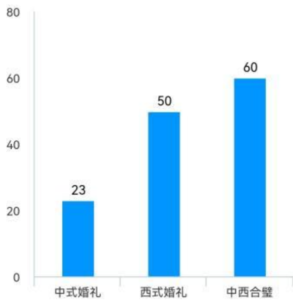




3.2.4 *Which wedding format do you or the couples around you choose?*

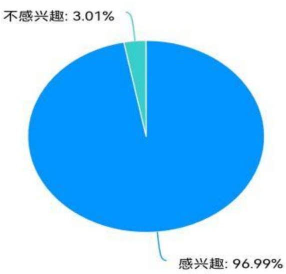
Options	subtotal	proportion
Western-style wedding	50	37.59%
Chinese wedding	23	17.29%
A combination of East and West	60	45.11%

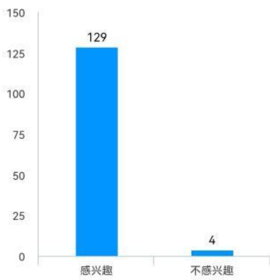




3.2.5 Are you interested in traditional Chinese weddings?

Options	subtotal	proportion
interested	129	96.99%
Not interested	4	3.01%

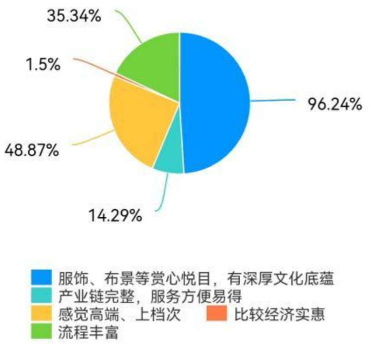




3.2.6 Why did you choose a Chinese wedding?

Options	subtotal	proportion

The costumes and sets are pleasing to the eye and have a deep cultural heritage	128	96.24%
The industrial chain is complete, and the service is convenient and easy to obtain	19	14.29%
It feels high-end and high-end	65	48.87%
More affordable	2	1.5%
Rich in processes	47	35.34%



3.2.7 How much do you know about traditional Chinese wedding customs?

Options	subtotal	proportion
Very knowledgeable	3	2.26%
Compare	52	39.1%
Learn a few	72	54.14%
Ever heard of it	6	4.51%

3.2.8 What is the way do you understand traditional Chinese weddings?

Options	subtotal	proportion
Film and television dramas	120	90.23%
book	38	28.57%
Elders or teachers in the family	75	56.39%
Family peers or friends	35	26.32%
other	14	10.53%

3.2.9 Have you ever watched or attended a traditional Chinese wedding?

Options	subtotal	proportion
Yes	94	70.68%
No	39	29.32%

3.2.10. If you have the opportunity, would you like to hold a traditional Chinese wedding for yourself?

Options	subtotal	proportion
willing	128	96.24%
Reluctantly	5	3.76%

3.2.11. If your children want to hold a traditional Chinese wedding in the future, will you support it?

Options	subtotal	proportion
backing	133	100%
Not supported	0	0%

3.2.12 What is your ideal Chinese wedding format?

Options	subtotal	proportion
Only typical processes (e.g. worship, hopping)	28	21.05%
Control as many processes as possible over a fixed period of time	2	1.5%
Contains interesting processes with features	26	19.55%
Complete and meticulous complete process	47	35.34%
In the whole process provided, it is designed according to customer needs	30	22.56%
other	0	0%

3.2.13 If economic conditions permit, what do you think should be retained for Chinese weddings?

Options	subtotal	proportion
Traditional wedding dress (such as phoenix crown xia shuai)	127	95.49%
Traditional processes (e.g. worship, wine, tea ceremony)	121	90.98%
Traditional food	39	29.32%
Traditional recruitment processes (such as eight major pieces).	38	28.57%
other	16	12.03%

3.2.14 What do you think are the shortcomings of contemporary Chinese weddings?

Options	subtotal	proportion
Expensive	95	71.43%
Old style	20	15.04%
It is inconvenient to wear tediously	45	33.83%
It needs to be tailored and time-consuming	93	69.92%
Etiquette is plentiful	32	24.06%
other	17	12.78%

3.2.15 Do you think traditional wedding customs need to be inherited?

Options	subtotal	proportion
Yes, it is part of traditional Chinese culture	131	98.5%
No, it is far behind modern society and has no meaning of existence	1	0.75%
Doesn't matter	1	0.75%

3.2.16 How do you view the development of traditional Chinese weddings in today's society?

Options	subtotal	proportion
The development status is good, and the degree of acceptance and recognition is high	27	20.3%
The development prospects are greater, and it is gradually being accepted by people again	92	69.17%
The development status is average, and the acceptance is average	14	10.53%
The development situation is not good and the acceptance is low	0	0%

3.2.17 In today's society, do you think traditional Chinese weddings are worth carrying forward?

Options	subtotal	proportion
Well worth it	130	97.74%
Of little consequence	3	2.26%
Not worth it	0	0%

3.3 Analysis of survey data

3.3.1. Age

①The chinese marriage population is mainly after 90 and 00. They are more likely to follow their own preferences for weddings, tending to be personalized and distinctive. With the revival of traditional culture, the national tide has gradually prevailed, and Chinese weddings that pursue cultural roots and attach importance to traditional folklore have gradually been favored by young people, and thus ushered in better development opportunities.

②According to the "2021 China Wedding Industry Market and Consumer Behavior Survey Report", 41.5% of Chinese wedding consumers prefer Traditional Chinese weddings in 2021.

3.3.2 The degree of understanding of Chinese weddings

The survey results show that 54.14% of people know something about Chinese weddings, and 39.1% of people know more about Chinese weddings, most of which they learn through film and television dramas, family elders or teachers. It can be seen that most people know about Chinese weddings and have a certain understanding. From the two main ways to understand, it can be seen that the division and film and television dramas have played an important role in the dissemination of Chinese wedding culture, and it can be seen from the side that the elders prefer Chinese weddings.

3.3.3 Views on Chinese Weddings

In recent years, with the prevalence of national style, traditional culture has gradually been revived, and Chinese people have paid more and more attention to the development and inheritance of traditional culture. Chinese weddings are an important part of traditional culture, so more than half of the people in the survey believe that the development prospects of Chinese weddings in today's society are relatively good, and they are gradually accepted by people again and have a high degree of recognition. (Zhang, 2018)

3.3.4 Chinese wedding form

The survey results show that most people said that in the form of Chinese weddings, traditional wedding dresses and traditional processes should be retained, believing that the process of Chinese weddings is rich and the costumes, sets, etc. are pleasing to the eye Deep cultural heritage. It can be seen from the side that people want to retain the traditional ceremony of Chinese wedding as much as possible, better feel the cultural connotation of Chinese wedding, and make the wedding experience the best.

3.3.5 The importance of Chinese weddings

With the development of traditional culture, people are also paying more and more attention to Chinese weddings. About 90% of people are willing to hold a

Chinese wedding for themselves and their children when financial conditions permit. In the survey data, 98.5% of people believe that it is necessary to inherit the traditional Chinese wedding, and 97.74% of the people think that the traditional Chinese wedding is worth carrying forward.

3.3.6 The inadequacies of contemporary Chinese weddings

Most of the Chinese weddings are Chinese wedding dresses, phoenix crown Xia Shuai, and the ring Ju Pei, and the set, costumes, etc. all show the solemnity and elegance of the Chinese wedding. But most people in the survey said Chinese weddings were expensive and time-consuming to dress.

FUTURE ANALYSIS OF THE NEW CHINESE WEDDING INDUSTRY

4.1 The development prospect of new Chinese weddings

In recent years, with the development and improvement of the country's economic level; Revival of traditional Chinese culture; With the continuous presentation of a large number of historical film and television dramas, the public has a new understanding of traditional Chinese culture and Chinese wedding ceremonies. Chinese weddings are also increasingly appearing in people's field of vision. It can be boldly predicted that Chinese weddings will become popular in recent years.

Since the entry of Western wedding culture into China, people have blindly pursued Western-style weddings, and in recent years, whether it is because of the epidemic and the rise of people's patriotic feelings, many people have begun to re-pursue Traditional Chinese culture. With the rise of the national tide, people also understand and love some traditional Chinese cultures more and more, and began to take the initiative to choose Chinese weddings. The Chinese wedding form has emerged with the love of more and more young people, and has gradually entered the public's vision. More people have changed from wedding dresses, dazzling spotlights, luxury hotels, and wedding forms for many guests to phoenix crowns, large red flower palanquins, huge greeting teams, and worship of heaven and earth.

4.2 The development trend of the wedding industry

According to the data of the scale of China's wedding banquet market in 2021-2026 predicted by the Prospective Industry Research Institute, it can be roughly seen that although the number of marriages in China has declined, the consumption of the wedding market is rising year by year. With the increase in the size of the marriageable population and the change of wedding consumption concepts, customers' pursuit of quality has also begun to improve. Therefore, in the future development of weddings, China's wedding market will continue to heat up, and different models have different development prospects.

THE SIGNIFICANCE OF THE STANDARDIZATION OF WEDDING SERVICES

5.1 The standardization construction is conducive to the development of the wedding service industry

Standardization construction is an important symbol of whether the wedding service industry in Yunnan Province can develop steadily and sustainably, and is an important guarantee for the transformation of the wedding service industry in Yunnan Province from "quantity" to "quality". Promoting the standardization of wedding services is conducive to coordinating and mobilizing the strength of relevant government departments, social organizations, enterprises and wedding service practitioners, improving the social influence and industry reputation of the wedding service industry, and is conducive to the wedding celebrations The service industry and enterprises have been built into quality and efficiency-oriented industries and enterprises.

5.2 Standardization construction is conducive to the standardization and scientificization of market supervision construction.

With the continuous development of the wedding service industry in Yunnan Province and the continuous improvement of market demand, the standardization of wedding services will surely become one of the important means of market supervision, and promote the transformation of the wedding service industry from "lack of management" to "standardized management" and "systematic management", so as to effectively improve wedding celebrations Safety index of service industry operations.

5.3 The standardization construction is conducive to improving the quality and core competitiveness of relevant enterprises.

The standardization of wedding services is an important guarantee for the value of "money" by service providers in the process of consumption, which is conducive to transmitting the quality development concept of wedding services to enterprises, society and consumers, and guiding society and consumers to pay more attention to service quality, so that enterprises and practitioners can standardize their service behavior and service procedures in accordance with the established service quality objectives. The level of development of wedding services in various parts of Yunnan Province is different, the quality level is quite different, and the standardization construction is conducive to improving the overall level of wedding services in various parts of the province and to improving the comprehensive competitiveness of wedding service enterprises.

5.4 The standardization construction is conducive to leading and standardizing the development of new formats of wedding services

With the transformation and improvement of wedding service consumption, the resource range of wedding services has been expanding, new forms of wedding services (products) have emerged, business methods have been continuously innovated, and organizational forms have been continuously updated. In order to better cope with the fierce competition in the wedding service industry at home and abroad and better meet the new needs of wedding consumers, the wedding service industry in Yunnan Province is also constantly producing new formats, new products, new methods and new markets, which also needs to be led and standardized by standardization construction.

5.5 Standardization construction is conducive to strengthening regional cooperation and international standards

At present, China's wedding service industry has entered the stage of regional cooperation in resource exchange and differentiated development, and has shown a new development trend. Yunnan wedding services are no exception, and a series of regional cooperation and cross-regional cooperation projects such as southeast Asian regional cooperation, domestic provincial and regional cooperation, and great southwest cooperation will continue to emerge. The standardization of wedding services can provide technical support for regional cooperation, which is conducive to coordinating the standardization of facilities and service standards, and accelerating the pace of cooperation. Standardization construction is the demand for the internationalization of wedding services, if the wedding service industry in Yunnan

Province wants to enter the world wedding service market, it is necessary to accelerate the realization of standardization construction to promote the integration of the wedding service industry with international standards.

It can be said that there is no quality of service without standards; There is no market without standards; Without standards, there is no benefit; There is no regulation without standards. In short, the implementation of standardization construction is conducive to the effective use of standards in the wedding service industry in Yunnan Province, and to gain the initiative in the international and domestic competition in the wedding service market; It is conducive to optimizing and adjusting the industrial structure of wedding services in Yunnan Province, improving the quality and safety level of wedding service products, and enhancing the core competitiveness of the wedding service industry in Yunnan Province; It is conducive to the rational and effective use of the wedding service resources of Yunnan Province, improve the added value of resources, and promote the stable, healthy and sustainable development of the wedding service industry in Yunnan Province.

DIFFICULTIES IN THE STANDARDIZATION OF WEDDING SERVICES IN YUNNAN PROVINCE

With the continuous development of the wedding service industry in Yunnan Province, it has formed a wedding service business body with a certain scale, different grades and different types, the service system is becoming more and more perfect, and the consumer market continues to develop. With the increasing diversification of wedding consumption demand and the increasingly high requirements for wedding service quality, the wedding service industry in Yunnan Province is facing great opportunities and challenges.

Due to the weak foundation and late start of the standardization of wedding services in Yunnan Province, there are still some problems that cannot be ignored. It is mainly manifested in the fact that the relevant industries and enterprises in the wedding service industry in Yunnan Province generally do not fully understand the importance of standardization construction, the standardization construction policy system and organizational guarantee are not effective, the coverage field of standardization construction theory is not wide, the coordination of standardization construction is not strong, the operation mechanism of standardization construction is backward, and the standardization construction professionals are very lacking. Some of these problems belong to the level of understanding, and some belong to the level of construction, which require us to pay attention to them in the next step of construction and further take effective measures to improve and enhance them.

INNOVATIVE IDEAS FOR THE STANDARDIZATION OF WEDDING SERVICES IN YUNNAN PROVINCE

7.1 Establish an operational management mechanism for the standardization of wedding services in Yunnan Province, formulate plans and related systems, and promote the institutionalization and standardization of standardization.

7.2 Focusing on the current situation of wedding service-related enterprises and the requirements of the wedding service market, build a standard system for the wedding service industry in Yunnan Province.

7.3 Carry out the formulation of important local standards that are closely related to the development of the wedding service industry and market supervision in Yunnan Province, gradually expand the coverage of wedding service standards in Yunnan Province, identify the characteristics and advantages of the wedding service industry in Yunnan Province, and actively strive to make breakthroughs in the formulation of local standards.

7.4 Vigorously publicize, promote and implement national standards related to the wedding service industry through multiple channels and angles, and focus on the construction of standards to promote the standardization of wedding services in Yunnan Province.

7.5 Implement the pilot demonstration project of the standardization of wedding services, continuously accumulate experience, and effectively promote the standardization of the wedding service industry in the province.

7.6 Establish an information platform for the standardization of wedding services in Yunnan Province, enhance the timeliness and accuracy of standard information, the scientific and dynamic nature of standard management, and the standardization and effectiveness of standard promotion.

7.7 Take effective measures to ensure that the standardization of wedding services in Yunnan Province is implemented

INNOVATIVE PATH OF STANDARDIZATION OF WEDDING SERVICES IN YUNNAN PROVINCE

To start and promote the standardization of wedding services in Yunnan Province, effective measures should be taken to ensure that the standardization construction is implemented.

8.1 Strengthen organizational leadership

The standardization of wedding services is a construction related to the overall and strategic construction of the wedding service industry, so it is necessary to adhere to the principle of support of business management departments and operation of industry associations, effectively strengthen the leadership of standardization construction, and put standardization construction on the important agenda.

8.2 Strengthen organizational construction

Establish a leading group for the standardization of wedding services in Yunnan Province and a technical committee for standardization construction, and carry out unified leadership, unified organization, unified coordination and unified implementation of standardization construction. Establish and improve the construction mechanisms such as policy support, personnel construction, input guarantee, incentive assessment and other construction mechanisms to promote standardization construction, and strengthen close coordination with relevant departments such as the Bureau of Quality and Technical Supervision. The Standardization Construction Technical Committee should conscientiously perform its functions, play a leading and coordinating role, and strengthen the organization, coordination and guidance of the standardization construction of the wedding service industry under the guidance of the Provincial Bureau of Quality and Technical Supervision and the leadership of the Provincial Department of Commerce. Industry associations should fully and effectively give play to the role of association organizations in standardization construction, continuously study and explore the reform of the system and mechanism of standardization construction, and gradually improve the conditions for standardization construction.

8.3 Widely publicized and launched

At present, the atmosphere of standardization of wedding services in Yunnan Province has not yet been formed, and the standardization construction has not yet penetrated the hearts of the people. Therefore, through conferences, forums, lectures, newspapers and periodicals, television, the Internet and other forms of media publicity, unit publicity and other forms, multi-level, multi-angle, multi-faceted dissemination of wedding service standardization construction concept, popularization of standardization construction knowledge, display the standardization construction process, expand the social influence of standardization construction, enhance the wedding service operators, managers and consumers of the standardization construction awareness, Improve people's awareness of standardization construction, mobilize more social forces to support the standardization of wedding services, make the standardization of wedding services a conscious behavior of industries, enterprises and practitioners, and strive to create a good atmosphere of "caring for standards, attaching importance to standards, participating in standards, enjoying standards, and supervising standards" in the whole society.

8.4 Carry out pilot demonstrations

Faced with the cross-industry and cross-regional high relevance of the wedding service industry and the diversity of wedding service objects, the complexity of the standardization of wedding services is determined. The standardization construction of wedding services in Yunnan Province should start from reality, carry out targeted construction by industry, region and enterprise, determine some pilot industries, regions and enterprises of standardization construction in stages and batches, pilot first, take the lead in breakthroughs, accumulate experience, and then gradually promote and learn from it, so as to comprehensively promote the standardization of the wedding service industry in Yunnan Province. Through the pilot project of wedding service standardization construction, especially the pilot construction of standardization at the county and municipal levels, it can improve the understanding of the whole society on the standardization construction and the quality of wedding service services, effectively promote the promotion and popularization of wedding service standards, and promote wedding celebrations The cultivation of service brands promotes the improvement of wedding service quality and management level.

It is necessary to attach great importance to the benchmarking and demonstration role of pilot areas and pilot enterprises in the standardization of wedding services in the province, conscientiously summarize their experience in standardization construction, and further deepen the standardization pilot construction in Yunnan Province. Through the experience summary and demonstration role of the pilot units, we will comprehensively promote and promote the improvement of the standardization construction level in Yunnan Province. It can also cooperate with the Provincial Bureau of Quality and Technical Supervision to comprehensively launch the pilot construction of provincial wedding service standardization, cultivate a number of standardization construction demonstration units, and then carry out standardization construction demonstration and promotion activities in the whole industry.

8.5 Strengthen the application of standards

The implementation of wedding service standards is the core and key of standardization construction, and the implementation effect of wedding service standards is directly related to the success or failure of standardization construction. Since the standardization of wedding services in the province is still in the initial stage, the implementation of wedding service standards and the supervision, evaluation and management of implementation are the weak links in the entire standardization construction. Through the establishment of provincial and municipal level relevant wedding service standard evaluation and accreditation institutions, the establishment of a new model of standard evaluation and identification management led by business management departments, specific organizations of industry associations, and joint participation of wedding service enterprises, we should consolidate the construction foundation for the implementation and application of standards. At the same time, the construction of standards and market supervision and supervision are organically combined, the inspection of wedding services is strengthened, the daily supervision and management of wedding service enterprises and practitioners who are qualified by the standard level is strengthened, and a market access and withdrawal mechanism for wedding services is formed. By promoting the application of standards, we will further strengthen the awareness of standardization construction of industry associations, enterprises and practitioners, create a good atmosphere of compliance with standards in the wedding service industry, and lay the foundation for the full implementation of standards.

8.6 Accelerate talent training

In the standardization of wedding services, talents are an important support for the realization of the standardization construction strategy, and solving the current shortage of talents in the standardization of wedding services in Yunnan Province is an important task of the standardization construction. Special research should be carried out on special topics and establish a talent education and training mechanism for the standardization of wedding services, and accelerate the speed of talent training in the standardization construction; Coordinate relevant colleges and universities to set up courses on the standardization of wedding services; Encourage wedding service enterprises to participate in the cultivation of standardization construction talents; Entrust standardization research institutions to carry out special training on a regular basis; Strengthen the construction of grass-roots standardization management personnel and application-oriented talent teams; Efforts should be made to cultivate and introduce high-level and high-skilled standardization construction professionals. Through a series of talent training construction, the number and quality of standardization construction professionals have been significantly improved.

CONCLUSION

Economic globalization and service internationalization and standardization have put forward higher requirements for the standardization of the wedding service industry in Yunnan Province, and we should vigorously implement the leading strategy of the standardization construction of wedding services, focus on improving the standardization construction system, innovate the standardization construction operation mechanism, expand the coverage of standards, standardize the market order, comprehensively improve the quality and service level, enhance the comprehensive quality of the industry and international competitiveness, and realize it The good and rapid development of the wedding service industry in Yunnan Province has made greater contributions.

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HOW TO FOLLOW THE "JOURNEY TO THE WEST" TEAM TO BE THE TEAM MANAGEMENT OF THE INSURANCE COMPANY

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ABSTRACT

“Journey to the West” is one of the four great Chinese classics, well known in China. It is the novel with the most popular readers and the most adaptations of various art forms. In addition to its own fascinating plot, Journey to the West also contains many life philosophy and wisdom that can be chewed. Children like the strange and wonderful plot; adults like its justice, kindness, sincerity, optimism, courage, confidence and persistence: entertainment people love it can bring themselves endless happiness and artistic enjoyment; students love it for a long time, taste the deep academic charm; and the wise man can experience more life philosophy and life wisdom. Today we are discussing the five protagonists: Tang Priest, Wukong, Bajie, Sand monk, and the white dragon horse composed of such a Buddhist scriptures team behind the success of our management enlightenment!

Keywords: Divided into team management, Clear objectives, Training, Meeting management

INTRODUCTION

1.The thought of expressing the Journey to the West

What are the thoughts expressed in the Journey to the West?

The story of achieving the true scriptures?

The legend of the suffering?

In fact, the expression is to do a good job of team management, form a unified goal of the team, and always for the spirit of efforts!

LEARN TEAM CHARACTER CLASSIFICATION

Introduction to the learning team:

Tang's monk- -super team leadership ability- -German

Diligent and studious, extremely high understanding-high IQ;

Proficient in Buddhist classics- -strong professional;

Tough conduct, extremely strong principle-high virtue;

Have a magic weapon and a golden staff stick- -have the authority;

To be emotional people, to be virtuous people- -can communicate.

Sun Wukong- -super personal ability- -able

Good personal skills;

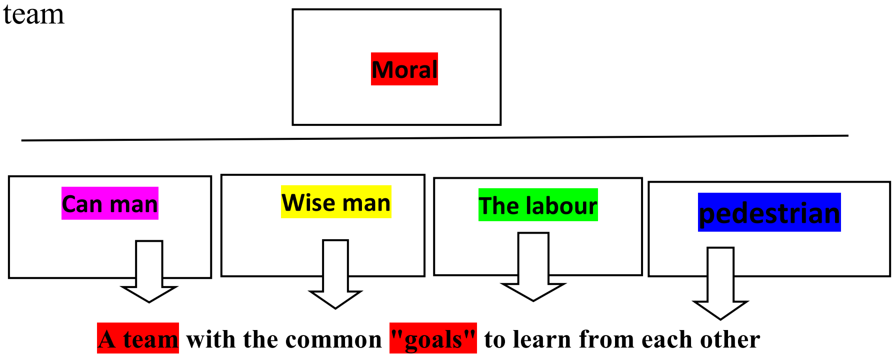
Bright personality, easy to offend people;
Have authority, team influence center;
The performance of the team, can help the supervisor to visit, guidance;
Use well, omnipotent;
It is difficult to do anything when used improperly.

Pig eight quit- -temperament man- -wise man
Good attitude, optimistic, eloquent, happy fruit in the team;
No plan, loyal to the supervisor, can help the supervisor to do ideological work;
General business ability, not independent, strong inertia;
Poor principle, easy to accept the outside temptation and go astray;
Occasionally pass small words, see the wind and rudder, play a negative role;
Critical moments can help, but it's hard to turn the failure around.

Sand monk- -hard work- -labor
Honest and honest, strong team coordination force;
Lack of creativity, ordinary smile;
Work steadfast, practical style;
Ordinary performance, ordinary work, will never bring trouble to the team and will not bring harm.

White dragon horse- -porter- -walker business ability is general
Expertise to help executives in business and business issues in some ways;
Little age, little experience;
Loyal and steadfast;
Do obedient, strong execution.

A good team



CLASSIFICATION AND CLASSIFICATION OF TEAM MANAGEMENT

Those who are virtuous get above them

1、Review whether they have a virtuous style: smart, professional, virtuous, respected, sincere, in the daily work to constantly remind yourself to improve;

2、When you want to develop a potential supervisor in your team, you can select virtuous people with the above qualities.

Those who can be in the front
How to manage and make good use of the capable people?
Appreciation: give him the stage (share, visit), appropriate rewards and praise

(Praise, benchmarking text message, red envelope) - -Pay attention to enough.

Authority: in the business ability does not lose too much, some aspect beyond him-to be leadership that has convinced him.

System: a reasonable constraint- -the magic spell.

Attack the heart: care and exchange, observe the thought dynamic timely communication and adjustment- -empathy, to emotional people.

The wise man is on the side

How to manage and make good use of the wise people?

Pt: give him the chance to perform and not shy praise, satisfy his vanity-help him build team prestige.

Make good use of: drive the team to be positive, enter the team, understand the team dynamics, and send negative shock when encouraging and charging fees, through his voice to express it, it is easier to establish empathy, and move smoothly forward- -to cultivate the management assistant.

Specification: establish rules, constantly remind, partner exhibition industry, avoid inertia-pull up the business to help retention.

Attention: always pay attention to the dynamic, to prevent the temptation, the use of the team problems- -prevent small problems.

The labor is in its power

How to manage and make good use of the workers?

Attention: Try to find his highlights and infinite amplification, to help him build himself confidence- -gradually high-profile.

Tutoring: to give more guidance and help in working methods and business skills. Improve skills and increase income- -to help with retention.

Model: set up a benchmark, take advantage of his steadfast practical quality to drive the new people, help new people develop the habit of visiting steadily- -with new people.

The walker uses its length

How to manage and make good use of the walkers?(people of a new type).

Use it: Explore what he's good at and make full use of it to help his supervisor do it.Be good at work, give him a sense of the value of his existence- -the needs of the team.

Training: take advantage of various training, meetings and opportunities, let him participate in it, exercise can force, firm retention- -with full experience to help growth.

Encourage: cooperate with all the activities of the team, often care, timely give encouragement- -feel the team care.

NEW MATERIAL SELECTION AND RETENTION

About the new material selection

An excellent team needs not only capable, wise, but also labor, walker. It is because each partner's different personality performance complement each other and complement each other, so as to show greater team charm. As the saying goes, " there is no perfect individual, only a perfect team!"Only by making good use of the advantages of each partner can the talented team go back to a better direction.

Similarly, in the new, each type of new people is what we need, of course, every management cadre with like the ability, personally think that the able and the workers are the main force of our new, the wise need but the proportion should not be too high, in fact, after the training can be completely transformed into the workers or even the able, can also choose. The first half year of the new person is more social relations and customer resources, and decided to prepare for a long time must be the quality, effort and confidence, careful screening, dedicated training can be firmly retained!

About retention

Focus on the following points:

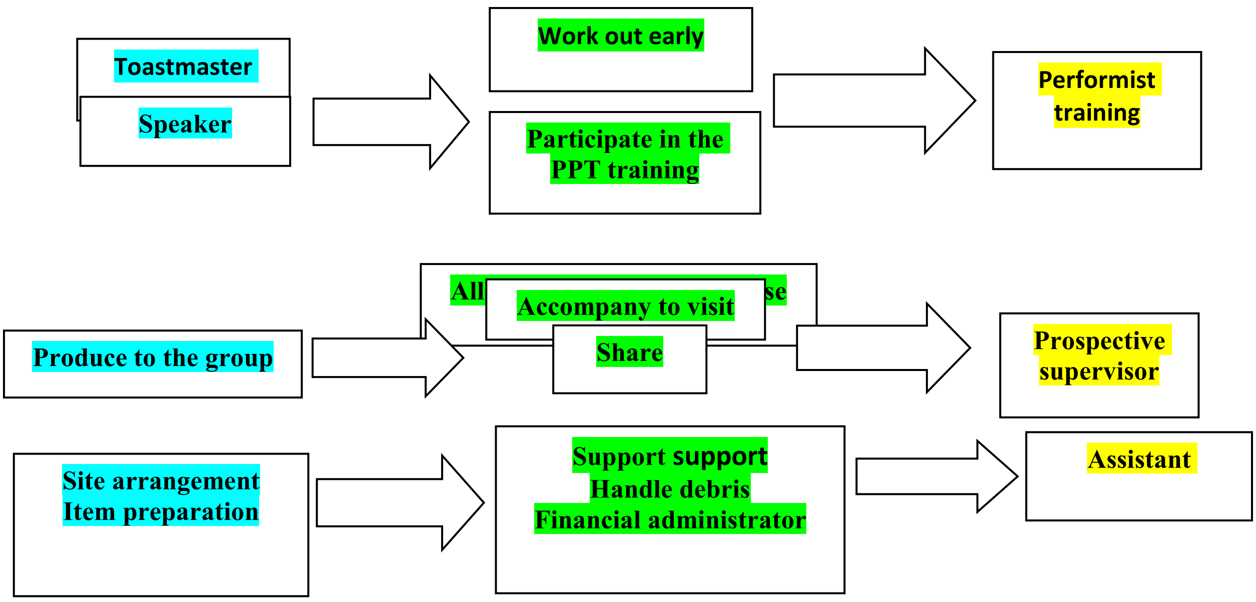
1. In-depth communication before the work: do not rush for a while, do not pay the deposit, with more than a week of early meeting, sign a non-self-insured piece.

2. Continuous attention after work: the first three only accompany the visit, the basic knowledge guidance should not be perfunctory, pay attention to the personal visit deduction, pay attention to the positive assessment, pay attention to the interests of the new person, any small mistake may bring the thought fluctuation of the new person, affect the confidence of the industry.

3. Stable income every month: the reason why the newlyweds are willing to work in the company and in the channels for a long time must be that their personal value is reasonably reflected. The first monthly income is the bottom line and goal of their future income, guiding them to achieve excellent performance and develop the habit of excellent and high income.

RESERVE ECHELON TRAINING

Now each group can hold our own customer appreciation meeting



CONCLUSIONS

Follow the secret of the success of the Westward Journey team

Clear goal: get the true scriptures (retention)

Consistent interests: repair (income)

Clear rules: mentoring ethics (system)
Reasonable structure: intelligent labor and practice (collaboration)

Superior support: Guanyin Tathagata (communication)

When our team is implemented in the above several aspects, we will eventually gradually grow and achieve win-win results!

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USING ENTERPRISE RESOURCE PLANNING (ERP) SYSTEMS TO ENHANCE ORGANIZATIONAL PERFORMANCE

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ABSTRACT

Organizational performance is one of the most important factors within an organization. Every organization seeks maximum level of organizational performance to be competitive in the market in the world. Further, managers in their study perceived improved performance on the BSC would lead to improved efficiency and profitability. Organizations seeking to implement a balanced scorecard are striving to become a strategy focused organization. Strategy focused organizations exploit the balanced scorecard and technology to become more agile. These organizations attain incremental returns on their customers, processes, employees, and technologies. Organizational performance cannot achieve without skilled individuals. However, an enterprise resources planning (ERP) system can improve business productivity and efficiency by automating processes and providing a centralized source of data for all teams at your company. But an ERP implementation can be complex and sometimes challenging, largely because it affects people and business processes across the entire organization. The implementation of an ERP system is a key activity for any organization that has decided to deploy a new enterprise system, regardless if it replaces a current on-premises solution, adds capabilities to an existing cloud environment, or is a greenfield deployment that supplants disparate spreadsheets and homegrown software.

INTRODUCTION

Global business environment is shifting day by day and organizations must adapt for their survival in the environment (Varma, 2017). The concept of performance has got attentions in recent decades in the competitive world. Leaders, executives, managers and supervisors (LEMSs) of businesses have searched for new efficient practices and ways for their firms to remain competitive by trying to reach the expected efficient profit and satisfying the customers and stakeholders (Cummings & Worley, 2008). Organizations in the world develop continuously the projects and innovations and globally distributed teams work together to achieve big picture (Hotaran, 2020). From global perspective, to be competitive in global and interdependent economic flow, individuals from must be knowledgeable, skilled and well - understood on rules and regulations to be able to work properly. According to (Hotaran, 2020), performance is the fact to translate individual ability as a value that is important for stakeholders, customers and organization's capability. Movements of workers become massive under globalization and there may have differences at workplace. Therefore, many countries attempt to manage it to be productive and profitable. Locker (2003) said that treating people right is not an option, but a necessity in 21st century. Motivating employee in the work place is a sensitive factor that impacts the organizational performance. Extrinsic and intrinsic motivations bring job satisfaction and enhance their productivity (Elizabeth, 2016).

Another factor is skills and ability of an employee that is a principal source of competitiveness. Employee development is a joint initiative of employee and employers to upgrade employee skills. These kinds of employees enable to work effectively for higher performance (S, 2019). When technologies come to apply, employees need to be able to use it well. Training is needed to provide for them. Operations are facilitated by the use of technology- based systems. Enterprise Resource Planning system is widely implemented in SMEs. While implementation the system, organization faces technical and organizational barriers. Global statistics said more than 50% of implementation failure are because of lack of feasibility in implementing. Readiness assessment is required not to fail and to use system effectively (Majid Aarabi, 2014). Employees must be educated and well - trained and informed to gain ERP benefits (Dorabat, 2010). Since Enterprise Resource Planning system allows the organization automate, integrate and facilitate the business processes in a real- time environment, management could connect to stakeholders to enhance organizational performance (Evan Njhia, 2014).

Asian companies has been strived their performance to be competitive in the region. Asian economy has been transforming as a digital economy and they contain some of the richest and largest economies in the world. In the region, the ASEAN Economic Community (AEC) was launched in 2003 as a response to the Asian financial crisis. AEC aims to serve as a more secure foundation for rebuilding the economies. The ultimate purpose of AEC is to provide free flow of goods, free flow of services and skilled labor, free flow of investment, and free flow of capital among the member countries. The integrated ASEAN economic region aims to be built on the four pillars—(a) a single market and production base, (b) a highly competitive economic region, (c) a region of equitable economic development, and (d) a region fully integrated into the global economy (Secretariat, 2015). That being said, businesses and firms in the region are being forced to make dramatic improvements not only to compete and prosper but also to merely survive and thrive. Every organization in both private and public sector needs to ready them in order to be able to respond to tremendous threats and challenges. They have started building social support and service system by the inspiration from other developed countries (Bingqin Li, 2018). As most of businesses in the region are under such pressure, they have started looking into new ways to lead, motivate and change their organizations for the better. Research describes that employees do not easily accept change, especially if it is a dramatic one such as changes affecting their core job responsibilities (Cummings & Worley, 2015). Motivation is the willingness to effort to achieve the goals of the organization, employees must be motivated through incentives and rewards (Elizabeth Boye Kuranchie- Mensah, 2016).

LITERATURE REVIEW

Enterprise Resource Planning (ERP) System Implementation

Enterprise resources planning (ERP) solutions are designed to support an organization in just about every aspect of business operations by centralizing data and through automation. There are different kinds of Enterprise Resource Planning implementation vendors such as SSA Global, Microsoft, PeopleSoft, Oracle and SAP implementation methodology. These Enterprise Resource Planning implementation vendors facilitate the information flow not only within the organization but also in the external environment with the stakeholders (R.Balaji, 2012). SSA Global technologies work for Enterprise Resource Planning applications in manufacturing, services and public organizations and advocate in customer relationship management, supply chain management and business performance software (Schwartz, 2003). Bann Microsoft Dynamics are used in SMEs and also in Enterprise solutions. This can support the business with its relating products for employees, work processes and systems. It can increase productivity and efficiency of the organizations both inside and outside (W.Shanahan, 2016).

There are five phases presented in the ASAP methodology as a roadmap for SAP-ERP implementation. They are project preparation, business blueprint, realization, final preparation, and go live and support (Collado, 2001). ASAP methodology assists SAP-ERP implementation phases and can make less the cost of the implementation projects. It makes the quality of work higher but the risk of failure less and helps in management, consulting and IT personnel. In general, most of Enterprise Resource Planning users seem inexpert in the implementation project and therefore, they have to deal with the consulting company. According to SAP recommendation, if seventy percent of consultants have done the training and comprehend well about ASAP, the consulting company becomes the partner for ASAP (Miroslav Lutovac, 2012). ASAP is now regarded as a standard SAP methodology and the experts including more than140, 000 consultants are well-trained for ASAP implementation methodology (ASAP, 2012).

Nine Critical Factors of Enterprise Resource Planning System Implementation. There are nine critical factors involved in making the Enterprise Resource Planning project an effective implementation in an organization (Velcu O., 2007)

1. Clear understanding of strategic goals: One needs to understand on the desire of changing to Enterprise Resource Planning. It means the organization, itself, requires to understand what achievement do they want and how to get it.

2. Commitment by top management: Top management mainly makes the decisions. Enterprise Resource Planning project work requires helps of top management and its commitment.

3. Excellent project management: Every perceptive project management strategy needs to be followed for its achievement. This requires a vivid comprehension and definition of purposes. The management needs to track the project progression.

4. Organizational change management: Organization always faces the employees and user who are always resistant to it. Therefore, change management is vital.

5. Implementation team: Consulting partner needs to fill with competency.

6. Data accuracy: When an organization starts to use Enterprise Resource Planning system, it requires moving its data to new Enterprise Resource Planning system from the old system. While moving data, it must be correct and accurate to avoid the possible problems.

7. Extensive education and training: Training should be provided for reducing user resistance. Educating and training employees is important for the successful implementation of Enterprise Resource Planning system (Elisabeth J Umble, 2003).

8. Performance measures: The organization has to evaluate the Enterprise Resource Planning system performance to measure if the Enterprise Resource Planning system meets the goals of the organization.

9. Multi-site issues: This factor is fundamental to Enterprise Resource Planning system. Top management must take care of it for the successful implementation.

They are fundamental to the Enterprise Resource Planning system, and are usually difficult to implement, so it has to be taken care of by a top implementation team (Elisabeth J Umble, 2003). Almgre & Bach (2014) proposed a success scheme to overcome these issues. The table 1 below is the proposed scheme that will be utilized for overcoming the managerial and operational effects (Bach, 2014).

List	Details
First Phase: Consultant Team	This phase requires forming a consultant team in which experts from the organization for system implementation, operations and information system. Outside experts should also be included in the consultant team.
Second Phase: Team Plan	It involves designing a main plan that specifies the phases of the project. The phases are as follows: specifying data of information system; setting up goals, choosing ERP product; choosing integration partner; training; and system testing; and reviewing proposals and implementation.
Third Phase: Announcement	The scheme is declared to everyone in the organization and it is critical in making sure that everyone is involved.
Fourth Phase: Involvement	Here, the employees are informed how they will be involved in this project. The engagement of the employees reduces resistance and increases trust in the project.
Fifth Phase: Business Process Mapping	The integration partner and the consultant team hold the meetings and discussions concerning with using ERP system. They have to be close and familiar with the departments and also have to know the flow operations.
Sixth Phase: Implementation Plan	The integration partner plans the implementation, discusses the plan with the consultant team and gets their approval.
Seventh Phase: Tracking	The consultant team tracks and evaluates the progress of the implementation every week.
Eighth Phase: Evaluation	The consultant team evaluates the project after it has been completed and evaluates whether the goals have been met.

Table 1. ERP Success Scheme. (Bach, 2014)

An enterprise resources planning (ERP) system can improve business productivity and efficiency by automating processes and providing a centralized source of data for all teams at your company. But an ERP implementation can be complex and sometimes challenging, largely because it affects people and business processes across the entire organization. The implementation of an ERP system is a key activity for any organization that has decided to deploy a new enterprise system, regardless if it replaces a current on-premises solution, adds capabilities to an existing cloud environment, or is a greenfield deployment that supplants disparate spreadsheets and homegrown software. No matter what type of new ERP system is selected, the success of the chosen enterprise solution—in terms of user adoption, process alignment, data quality, and enterprise fit—depends on having a successful implementation.

An ERP implementation involves people as well as technology. Accordingly, it may face people-related challenges, such as resistance to change, as well as technical obstacles. Common ERP implementation challenges include:

1) Project management. ERP implementations entail multiple phases: discovery and planning, design, development, data migration, testing, deployment, support and post-launch updates. Each phase brings critical tasks, and all elements need to stay on track, which requires meticulous project management. Additionally, successful ERP implementations require participation from all the groups that will be involved in developing and using the system. That can be incredibly challenging, because each department is juggling its ERP project responsibilities with multiple other priorities.

2) Project planning: Organizations often underestimate the time and budget necessary for a successful implementation. One of the most common causes of budget overruns is scope creep—when a business adds capabilities or features to the system that weren't part of the original plan—and another is underestimating staffing needs, according to Statista. Developing a clear and realistic plan from the start can help to avoid those issues. A realistic project plan that acknowledges possible speed bumps and minor cost overruns and addresses them in advance will simplify that decision-making process and keep the project on track.

3) Data integration: One of the key advantages of ERP is that it provides a single, accurate source of data for the whole organization. A key step in ERP implementation is data migration, which typically involves moving data from multiple older systems into the ERP database. But first, you have to find all of your data. This may be much more challenging than you expect. The information may be spread far and wide across the organization, buried in accounting systems, department-specific applications, spread sheets and perhaps on paper.

4) Data quality: Once the organization has located all data sources, it can start thinking about migrating it to the ERP system. But that may involve a serious data hygiene exercise. Because multiple departments interact with the same customers, products and orders, organizations often have duplicate versions of the same information in their systems. The information may be stored in different formats; there may be inconsistencies, like in addresses or name spellings; some information may be inaccurate; and it may include obsolete information such as customers or suppliers that have since gone out of business. Ensuring data quality can become a sizable project on its own, involving validating the data, cleaning out duplicates and adding missing values before migrating data to the ERP system. The new data should also be thoroughly tested before going live with the ERP system. Make sure your team understands the importance of cleaning up data, and assign clear responsibilities in doing so. For example, the accounting team will handle all financial data and the customer service group will clean up customer data.

5) Change management. An ERP implementation involves more than just switching to a new software system. It typically means overhauling business processes to take advantage of the efficiency and productivity improvements possible with the new solution. This requires a shift in mindset and a change in everyday work processes for many employees, which presents typical change management challenges.

6) Cost overruns: ERP projects are infamous for sailing past budgets after the implementation kicks off. Many organizations underestimate the amount of work required to move to a new business system, and that results in spending more money than expected. These cost overruns often show up in a few different areas.

7) Continuous improvement**:** An ERP implementation is not a one-off effort that ends when the new system goes live. The solution must continue to evolve to support new business demands and technology. The project team needs to continue to manage the project after deployment, fixing issues and supporting new requirements as they come up.

The success rate ERP implementations is improving thanks to a focus on user experience, specifically simpler interfaces, more configuration flexibility, mobile functionality and increased automation

ORGANIZATIONAL PERFORMANCE

Organizational performance involves analyzing a company's performance against its objectives and goals. In other words, organizational performance comprises real results or outputs compared with intended outputs. Organizational performance involves analyzing a company's performance against its objectives and goals. In other words, organizational performance comprises real results or outputs compared with intended outputs. The analysis focuses on three main outcomes, first, shareholder value performance; second, financial performance; and third, market performance (Richter et al., 2017). (Figure 1)

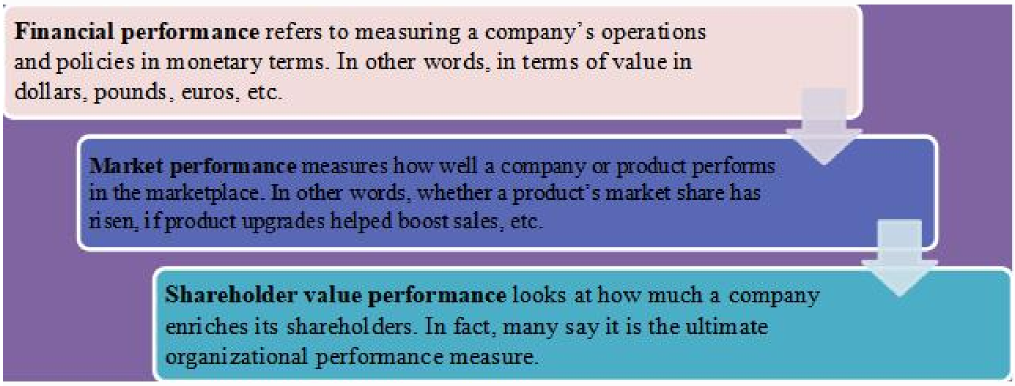


Figure 1 Organizational effectiveness performance

Employees usually are not willing to change, especially in the case of technology use. The implementation of ERP system, a technology- based system is not merely an outcome of technological change; it is also changes in work, operations and people (Adiel Harun, 2019). Since ERP system is a large project, organization needs to assess readiness to use it properly (Soheila Shiri, 2015). According to (Valentin Florentin Dumitru, 2013), organizational performance is the ultimate impact of ERP system.

BALANCED SCORECARD

The balance score card is a management system that enables organizations to clarify their vision and strategy and translate them into action. It provides feedback around both the internal business processes and external outcomes in order to continuously improve strategic performance and results. The balance score card which saw its initial development during the years of 1987-1992 (Art Schneide, 2002), links performance measures by looking at a business's strategic vision from four different perspectives: financial, customer, innovation and learning, and internal business process. The balance score card represents a mechanism for communicating that strategy and defining levels of success based on W.Edwards Deming's Total quality management (TQM) principles (Deming ,1986; Kaplan and Norton , 2001).Thus the balance score card consists of a set of performance measures that give a comprehensive view of the company based on the following for perspectives.

Robert S. Kaplan and David P. Norton of Harvard Business School developed the balanced scorecard framework in 1992 (Kaplan & Norton, 1996). The balanced score card model was originally aimed to measure effective performance in both of business unit and organizational levels. It is a strategic tool that utilizes both financial measures and strategic key performance indicators. Ever since, it started using to evaluate performance not only at above levels, it is also at functional levels. It is developed to use in evaluating performances of ERP system in three phases-implementation, operation and maintenance (Rosemann and Wiese, 1999). The balance scorecard approach analyzes the organization from four perspectives—Financial, Customer, Internal Business & Learning and Growth (Martinsons et al., 1999). Kaplan and Norton (1996) developed the following four quadrants. A balanced scorecard is a strategic management performance metric that helps companies identify and improve their internal operations to help their external outcomes. It measures past performance data and provides organizations with feedback on how to make better decisions in the future. The balanced scorecard includes financial measures that tell the results of actions already taken. It complements the financial measures with operational measures on customer satisfaction, internal processes, and the organization's innovation and improvement activities—operational measures that are the drivers of future financial performance. It's important for organizations to adopt an approach to strategic performance management to optimize business performance across the board. However, the balanced scorecard is a management system aimed at translating an organization's strategic goals into a set of organizational performance objectives that, in turn, are measured, monitored and changed if necessary to ensure that an organization's strategic goals are met. (Figure 2)

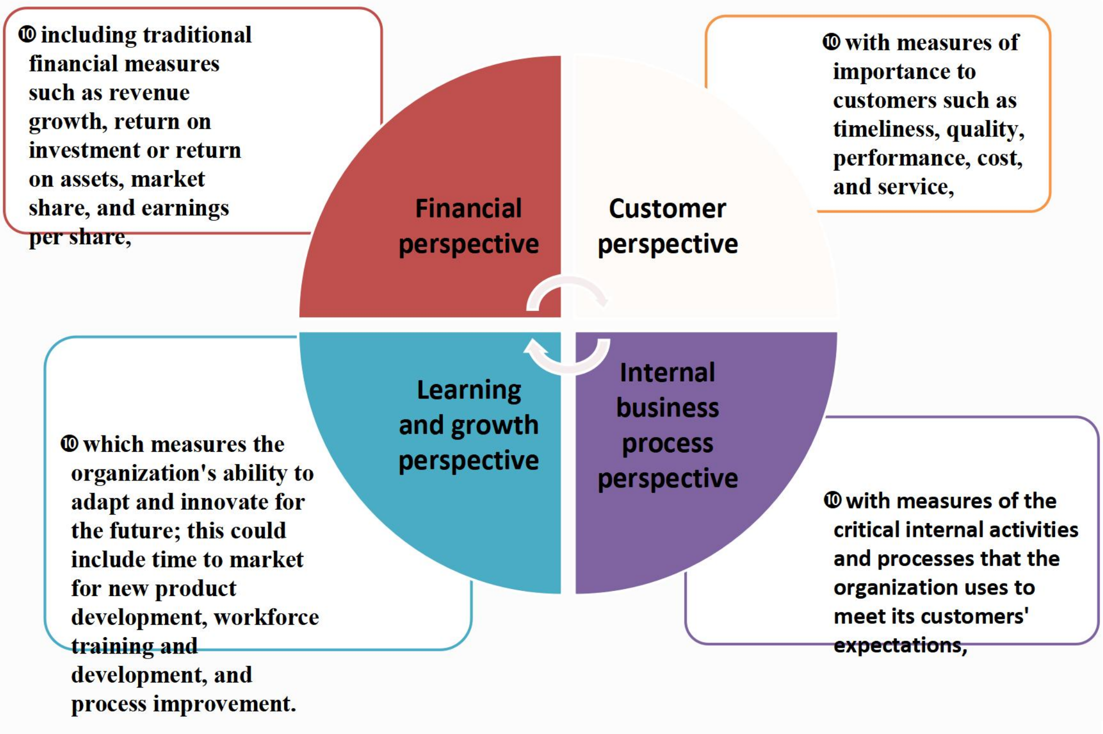


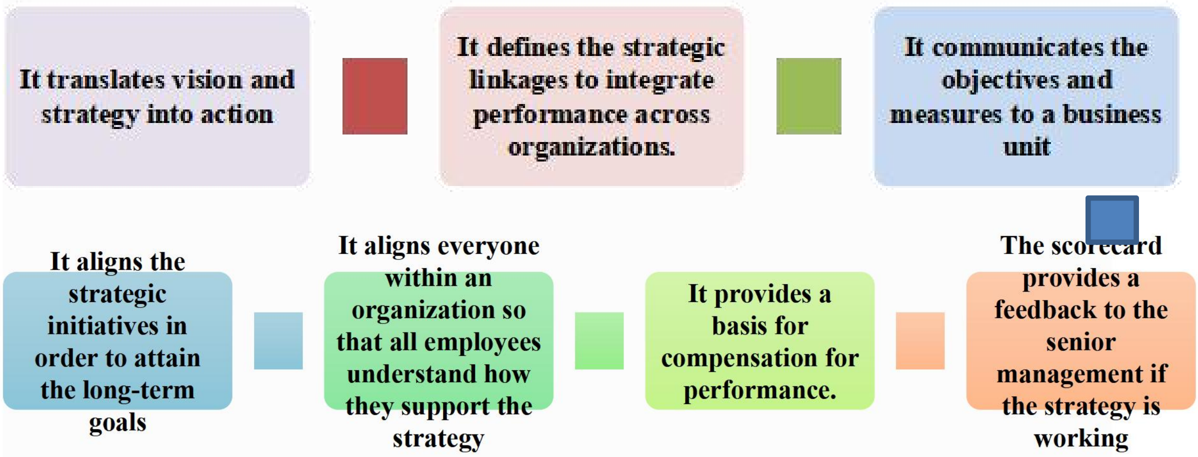
Figure 1. The ERP Implementation Balanced Scorecard. (Kaplan & Norton, 1996)

As described in Figure, (1) the financial perspective is used to measure corporate operating cost and revenue growth; (2) the customer perspective, the transaction time and customer satisfaction; (3) the internal perspective; the operational bottleneck and employee productivity; and (4) innovation & learning perspective, employee productivity and reliability of software vendor.

The aim of the Balanced Scorecard is to direct, help manage and change in support of the longer-term strategy in order to manage performance. The scorecard reflects what the company and the strategies are all about. It acts as a catalyst for bringing in the 'change' element within the organization. The framework tries to bring a balance and linkage between the – (a) Financial and the Non-Financial indicators, (b) Tangible and the Intangible measures, (c) Internal and the External aspects and (d) Leading and the Lagging indicators.

ADVANTAGES OF USING THE BALANCED SCORECARD

This tool is being used by several organizations throughout the world because of its certain advantages which are cited below:



Case Study in Apple Computer Adjusting Long-Term Performance

Apple Computer developed a balanced scorecard to focus senior management on a strategy that would expand discussions beyond gross margin, return on equity, and market share. A small steering committee, intimately familiar with the deliberations and strategic thinking of Apple's Executive Management Team, chose to concentrate on measurement categories within each of the four perspectives and to select multiple measurements within each category. For the financial perspective, Apple emphasized shareholder value; for the customer perspective, market share and customer satisfaction; for the internal process perspective, core competencies; and, finally, for the innovation and improvement perspective, employee attitudes. Apple's management stressed these categories in the following order:

Customer Satisfaction: Historically, Apple had been a technology and product focused company that competed by designing better computers. Customer satisfaction metrics are just being introduced to orient employees toward becoming a customer-driven company. J.D. Power & Associates, a customer-survey company now works for the computer industry. However, because it recognized that its customer base was not homogeneous, Apple felt that it had to go beyond J.D. Power & Associates and develop its own independent surveys in order to track its key market segments around the world.

Core Competencies: Company executives wanted employees to be highly focused on a few key competencies: for example, user friendly interfaces, powerful software architectures, and effective distribution systems. However, senior executives recognized that measuring performance along these competency dimensions could be difficult. As a result, the company is currently experimenting with obtaining quantitative measures of these hard-to measure competencies.

Employee Commitment and Alignment: Apple conducts a comprehensive employee survey in each of its organizations every two years; surveys of randomly selected employees are performed more frequently. The surveys questions are concerned with how well employees understand the company's strategy as well as whether or not they are asked to deliver results that are consistent with that strategy. The results of the survey are displayed in terms of both the actual level of employee responses and the overall trend of responses.

Market Share: Achieving a critical threshold of market share was important to senior management not only for the obvious sales growth benefits but also to attract and retain software developers to Apple platforms.

Shareholder Value: Shareholder value is included as a performance indicator, even though this measure is a result-not a driver-of performance. The measure is included to offset the previous emphasis and focused company, Apple has introduced measures that shift the emphasis toward customers on gross margin and sales growth, measures that ignored the investments required today to generate growth for tomorrow. In contrast, the shareholder value metric quantifies the impact of proposed investments for business creation and development.

USING OF ERP SYSTEM AND ORGANIZATIONAL PERFORMANCE

Organizations seeking to implement a balanced scorecard are striving to become a strategy focused organization. Strategy focused organizations exploit the balanced scorecard and technology to become more agile. These organizations attain incremental returns on their customers, processes, employees, and technologies. Organizational performance cannot achieve without skilled individuals. Their knowledge or skill greatly impacts the organizational performance (Lestari, 2018). (Valentin Florentin Dumitru, 2013) believed that organizational performance is the ultimate impact of ERP system. Each measure for each perspective in a balanced scorecard is selected based on the corporate vision and strategy.

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COMPETENCY MODEL OF INNOVATIVE TALENTS IN ENTERPRISES

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ABSTRACT

With the advent of the knowledge economy era, innovation has become a hot topic of the times. Under the fierce market competition environment, enterprises must rely on high-quality talents to achieve value creation. Talents are the main factor to realize innovation, and innovative talents have become the key factor to affect the development of enterprises. In order to retain, recruit, screen and select the innovative talents, enterprises have begun to pay attention to the evaluation of innovative talents. At present, China is in the critical period of promoting the innovation development strategy, and innovative talents are the core elements of the implementation of the strategy. In order to better promote the overall development of the enterprise and the industrial layout and talent strategy in the process of enterprise innovation and development, the innovative talents of the enterprise can bring the maximum economic benefits to the enterprise and improve the market competitiveness while realizing their personal value. Therefore, this paper focuses on theoretical research, combines the relevant concepts and theoretical research of innovative talents and competency model, through the methods of literature analysis, collation and literature induction, sorts the importance of the competency factors included in the enterprise innovative talents competency model, and puts forward the idea of building the enterprise innovative talents competency model, In particular, it provides theoretical and practical guidance for recruiting and selecting innovative talents. To build a competency model for innovative talents of enterprises, including five dimensions of innovation foundation, innovation ability, innovation consciousness, innovation personality and market orientation.

This paper builds a competency model of enterprise innovative talents. Through the research, it can scientifically and reasonably guide relevant enterprises and units, effectively carry out the selection, recruitment and training of enterprise innovative talents, provide an effective basis for the development of enterprise innovative talents and the selection of talents, make enterprises rapidly improve and occupy their core competitive advantages, and play a positive role in improving and promoting the research of enterprise innovative talents. The content of this study has great significance in theoretical research and practice.

Keywords: Enterprise innovative talents, Competency model, Innovative quality

INTRODUCTION

1.1 Research background

At present, in order to cope with the unprecedented changes in the world in a century, the strategy of strengthening the country with talents has become a basic strategy for China's economic and social development, and the country is vigorously building an innovative country. According to the important instructions of the "three-step" strategic objectives put forward in the national innovation driven development strategy outline (2016) issued by the CPC Central Committee and the State Council, it is specially pointed out that China will enter the ranks of innovative countries by 2020, basically build a national innovation system with Chinese characteristics, rank among the forefront of innovative countries by 2030, and become a world scientific and technological innovation power by 2050. Innovation is the strategic support for improving social productivity and comprehensive national strength. It is at the core of national development. The key lies in the quantity and quality of innovative talents. In this process, our government, units and enterprises have an extremely urgent demand for high-level innovative talents. As we all know, innovative talents are the core of enterprise innovation. Only by continuously carrying out R & D innovation, production innovation, management innovation, marketing innovation and other innovative activities can enterprises improve their overall innovation level. Only by strengthening the construction of the competency model of innovative talents in enterprises and giving full play to the enthusiasm and innovative role of innovative talents, can the overall innovation ability and comprehensive competitiveness of enterprises be ultimately improved. Only through in-depth research on innovative talents of enterprises can we better train and use innovative talents and truly provide talent support for building an innovative country.

The Fifth Plenary Session of the 18th CPC Central Committee (2021) proposed: "to adhere to innovation and development, we must place innovation at the core of the overall national development situation, constantly promote theoretical innovation, institutional innovation, scientific and technological innovation, cultural innovation and other aspects of innovation, let innovation run through everything of the party and the country, and let innovation become a common practice in the whole society." The outline of the national medium and long term talent development plan (2010-2020) also clearly points out that the strategic goal of China's talent development is to "train and bring up a large-scale, optimized structure, reasonable layout and high-quality talent team by 2020, establish the comparative advantage of the national talent competition, and enter the ranks of the world's talent powers", and makes clear and emphasizes the concept that "talent is the first resource for China's economic and social development". In the current competitive economic and political environment, if an enterprise wants to have a market advantage and become an innovative enterprise, it must firmly grasp the acquisition of innovative talents. Talents are the core resources for developing new products and services and improving the competitiveness of enterprises. Therefore, how to select innovative talents is a key issue that enterprises must consider. What is the standard of innovative talents? At present, the definition of the standards for innovative talents in most enterprises is rather vague, which leads to problems such as nonstandard recruitment process and unscientific talent selection methods, which makes the people recruited by enterprises not necessarily competent for the job and create high performance. Therefore, the competency model of enterprise innovative talents in this study is an important means for enterprises to evaluate innovative talents. In recent years, domestic scholars have conducted researches on the competency model of innovative talents from different angles, different methods and different contents, but generally speaking, they are relatively few. Through combing the domestic related research, this paper finds out the reasonable and available aspects, and on this basis, puts forward some future research prospects, with a view to providing some help to the theoretical research and practical application of enterprise innovative talent competency model.

1.2 Research blank

Domestic scholars have defined the concept of innovative talents and explained terms such as "innovative talents", "innovative scientific and technological talents" and "enterprise innovative talents", mainly focusing on the quality closely related to innovation activities. Most scholars will start from the relevant theories of talent quality characteristics, such as competency theory and human capital theory, scientifically divide the ability characteristics according to the different scope of application of the research, use data analysis means to screen indicators, and finally build an innovative talent ability evaluation model. The evaluation elements include innovative knowledge, innovative skills, innovative consciousness, innovative thinking, innovative personality and other dimensions. Some scholars also consider the comprehensiveness of talent evaluation and include ideological and moral quality, political level and physical quality.

Foreign scholars' research on "creativity" is relatively early, focusing on the research on a single concept such as creativity, creative thinking, creative personality, and so on. They have not formed a complete concept of "innovative talents". The research on innovative talents is relatively less, and more from the psychological quality to explore the internal motivation of talents to carry out innovative activities. Starting from the relationship between organization and innovative talents, some scholars have studied the psychological characteristics of innovative talents, the impact on the team, and the psychological motivation of innovation, and developed a series of talent evaluation models. Foreign countries have strong practicality and pertinence for the cultivation of innovative talents, and integrate the evaluation and cultivation of innovative talents with the needs of social innovation value.

On the whole, scholars at home and abroad have conducted in-depth research on the meaning and quality characteristics of innovative talents. There are few studies on measuring and evaluating innovative talents with competency model, but there is a lack of quantitative analysis or targeted methods for the construction of innovative talents' competency model, such as subjective or objective empowerment. Therefore, it is necessary to improve the construction of competency model in order to improve the scientific and practical evaluation of innovative talents in enterprises.

1.3 Research significance

Taking enterprise employees as the research object, this paper establishes a relatively complete theoretical system through the definition of the connotation and characteristics of enterprise innovative talents, the analysis and research of the competency characteristics and other contents of innovative talents, which will promote the improvement of relevant research on innovative talents.

The competency model studied in this paper defines the basic qualities that innovative talents should have. When enterprises cultivate innovative employees, they can refer to these indicators and dimensions to formulate training objectives and contents. Enterprises can also understand the innovation ability level of employees through talent measurement, so that they can formulate training programs that are more suitable for employees and enterprises. Therefore, talent measurement has certain guidance for enterprises to cultivate innovative employees.

1.4 Problem statement

1. Lack of understanding of innovation, especially the lack of a unified definition of enterprise innovative talents.

2. There is a lack of research on enterprise employees, and there are various influencing factors on the competency model of enterprise innovative talents, so there is no more perfect research.

3. The lack of research model on the competency and innovation quality of innovative talents in enterprises, and the inability to select a variety of influencing factors for a comprehensive evaluation, makes it difficult to build a perfect model.

1.5 Research questions

l. What is the definition of innovative talents in enterprises? What are the competency characteristics of innovative talents in enterprises?

2. What are the innovative qualities that affect innovative talents in enterprises?

3. How to build a competency model of innovative talents in enterprises?

1.6 Research purpose

1. Through literature review, this paper gives the definition of enterprise innovative talents, selects the characteristics of enterprise innovative talents, and constructs a competency model of enterprise innovative talents in line with the characteristics of current economic and social development.

2. Rank the importance of competency factors contained in the competency model of innovative talents in enterprises. Build a competency model for innovative talents.

3. Through the analysis of the innovative ability of enterprise employees, using the method of literature collection and collation, combined with the situation of enterprises, this paper constructs a competency model of innovative talents, establishes an effective internal and external recruitment, screening and selection mechanism of innovative talents, and improves the innovative ability of enterprises.

LITERATURE REVIEW

2.1 Enterprise innovative talents

(1) Innovative talents.

There is no clear definition in the academic literature on innovative talents. According to the research of Ren Yang & Chen an (2017), the innovation objectives and talent standards set forth the definition of innovative talents: innovative talents refer to people who have the ability to find problems and give play to their own advantages on the basis of having the basic qualities of ordinary talents, and can comprehensively utilize and constantly surpass in practice, so as to solve problems and achieve innovative results. According to Li Qi (2021), innovative talents are those who have innovative consciousness and ability, are selfless and fearless, full of personality and meticulous thinking, engage in creative practical activities, ultimately create value and contribution for society, and promote social development and progress.

According to the latest definition of the term "talent" in the national medium and long term talent development planning outline (2010-2020) issued by the Chinese government, people who have certain professional knowledge or skills, carry out creative work and make contributions to society are workers with high ability and quality in human resources.

(2) Enterprise innovative talents.

Scholars at home and abroad have different emphasis on the research of innovative talents in enterprises. Many domestic scholars study innovative talents in enterprises from the perspective of sociology or economics. Lin Ruoming (2021) studies that: from the perspective of capability characteristics and in combination with the characteristics of enterprise innovation process, enterprise innovative talents are defined as those who have strong innovation motivation, innovative thinking, innovative skills, carry out innovation process, achieve innovation results and seek innovation benefits for the enterprise. Based on the iceberg model, Wang Xin and Chen Ni (2020) divided the value of innovative technical talents into explicit value and implicit value. Explicit value includes innovation knowledge, innovation skills and innovation achievements; Hidden value includes innovation character, innovation motivation and innovation potential. The entropy weight method is used to calculate the weight and construct the entropy weight. TOPSIS evaluation model establishes the value evaluation system of innovative technical talents. Different from domestic scholars, foreign scholars mostly analyze the quality structure from the perspective of psychology. Pay attention to the personality characteristics and psychological motivation of innovative talents, emphasize the demand orientation of social development, and integrate it into the research of innovative talents, such as "creative mind", "creative thinking" and "creativity". Enterprise innovative talents have their specific work departments, posts and work contents, and engage in innovation activities in their work fields to make contributions to enterprise innovation. According to the summary of the above concepts, this paper divides the innovative talents into the following characteristics:

1. The innovative talents of enterprises depend on the development of enterprises and generally come from the practice of enterprises. In the innovation practice of enterprises, the innovative talents of enterprises create innovative achievements, which must be based on existing practical experience and conform to scientific laws.

2. Innovative talents of enterprises should have creative thinking, and at the same time, they should have the spirit of hard work, team cooperation and courage to study. Innovative talents in enterprises generally have clear career goals and values. The realization of values is the main pursuit of innovative talents. On the basis of pursuing the realization of their own values, they achieve career success.

3. Generally speaking, the positions of innovative talents in enterprises are relatively fixed. For some management enterprises, most of the leadership and management of enterprises have become the "residence" of innovative talents; For some technical enterprises, the senior technical personnel and senior operating workers in the enterprises are generally the gathering places of innovative talents. Innovative talents have no differences in age, gender, race and social status. As long as they have innovative thinking and innovative ability, they can create new achievements.

4. Enterprise innovative talents need a certain enterprise environment. In an excellent environment, innovative talents of enterprises can focus more on innovation, define their own goals and tasks, and have full trust in the organization, policies and system operation of enterprises; Innovative talents can follow the order to do their own work and make contributions to the development of enterprises and countries.

The definition of enterprise innovative talents in this paper is based on the research of Lin Ruoming, Wang Xin and Chen Ni in China. It defines enterprise innovative talents as: enterprise talents have innovative quality (i.e. innovation foundation, innovation ability, innovation consciousness, innovation personality and market orientation), can obtain innovative results through innovation research and innovation practice activities in their posts, and can provide the enterprise development and social economy People who make contributions to scientific and technological progress. After defining the connotation of enterprise innovative talents, the most important thing is to study their innovative qualities.

2.2 competency model

American scholar McClelland (1973) first proposed the concept of "competence". He proposed the concept of "competence" in order to solve the problem that the United States Department of state selected diplomats based on intellectual factors. He believed that in a specific job and organizational environment, competence is the most significant quality and characteristic to distinguish the excellent and the mediocre. After long-term observation, it is found that in the actual work of employees, the influence of intellectual factors is not particularly obvious, and the excellence of employees mainly depends on their competence, including knowledge, skills, social roles or values, self cognition, characteristics and motivation. He also advocated replacing the intelligence and ability tendency test with the competency characteristic test, and proposed six principles for the competency test. Spencer et al. (1994) proposed that competence refers to any individual characteristic that can be reliably measured or counted and can significantly distinguish excellent and general performance, such as motivation, trait, self-concept, attitude or values, knowledge or skills. This definition is widely used in the world. Since then, Chinese and Western scholars have published a series of articles on competency model and its application.

The definition of competency model is to identify employees to better complete a work task, analyze the characteristics of employees' abilities, and determine that they can complete the work task with high efficiency and high level. Spencer, an American psychologist, first proposed a more complete definition of the competency model. He summarized the models of more than 100 researchers and 286 studies in 24 countries. Finally, he summarized 760 behavioral indicators and extracted 21 competency characteristics and 360 behavioral indicators as the competency model. Spencer (1993) believes that according to the application scope, the competency model can be divided into three types: one is the general competency model, the other is the core competency model, and the third is the proprietary competency model. Among them, the general competency model is applicable to all employees of the enterprise and mainly reflects the values, culture and business needs of the enterprise; The core competence model is based on the department or the demand for similar knowledge and skills; Proprietary capability model is based on specific job requirements and has unique knowledge and skills. The competency model mainly evaluates employees' abilities according to the advantages of specific positions. It can not only help employees improve their work and further education, and plan their career, but also predict the long-term performance of employees, so as to tap their potential abilities and achieve the goal of promoting organizational development. Generally speaking, the competency model is mainly divided into the following two dimensions:

(1) Capability elements. It is necessary to clarify all potential abilities and qualities necessary for the efficient completion of each work. Only with these

corresponding competencies and qualities can some employees perform better and more efficiently in their work.

(2) Capability level. It refers to that the ability required by the same type of work is different in the completion of the work objectives when the performance is different. Different enterprises will choose different competency models according to their industry characteristics, scale, resource constraints and other factors.

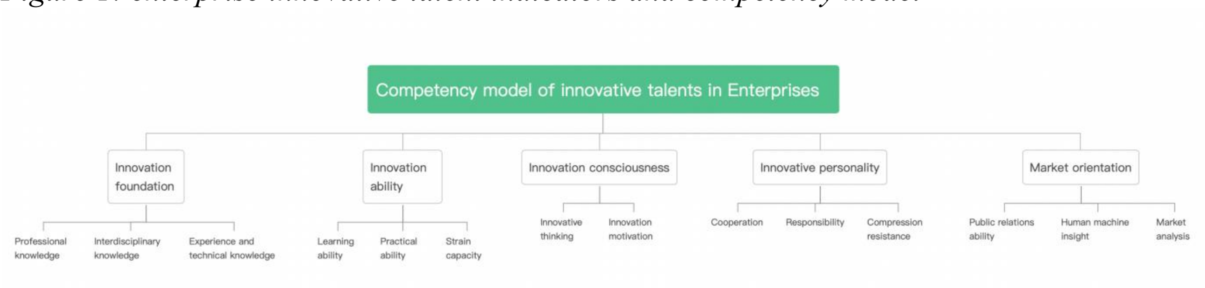
The evaluation of the performance of innovative talents in enterprises depends on the competency model, which is mainly reflected in the sum of the innovative competencies that should be possessed by a certain role within the enterprise. According to the research, the competency model was mainly used in the selection of employees and the evaluation of employees' quality and work performance in the early stage. Later, it was gradually cited by government agencies, universities and other fields. The reason why the competency model is so widely used is that the competency model can not only measure and evaluate the surface characteristics of employees, but also evaluate the hidden characteristics of employees, which has unique advantages. Therefore, this paper will cite the competency model theory as the theoretical basis and effective tool for the evaluation of innovative talents in enterprises.

2.3 Eevaluation index and model of enterprise innovative talent competency model

Based on the competency model theory, domestic scholars have constructed many types of innovative talents evaluation indicators in different industries. According to the research of Liu Jia (2022), the selection of indicators for evaluating enterprise talent competency model can be divided into two points. First, it should match the development direction of the enterprise. Talent evaluation should closely focus on the future development strategy of the enterprise, and take strategic planning, industrial planning and technical planning as the direction to select innovative talents that can better match the development of the enterprise. Secondly, match the enterprise values. In addition to the dominant factors such as professional knowledge, skills and tools, talent value creation is also closely related to the underlying qualities such as personality, traits and motivation. That is, the "part below the iceberg" in the iceberg model proposed by the famous American psychologist McClellan. This part is the internal quality of talent, which is difficult to change, but plays a decisive role in the behavior of talent, The higher the matching degree of talents with enterprise values, the greater the contribution degree. Lin Ruoming (2021) constructed a set of three-level evaluation index models based on the iceberg model. From the perspective of explicit ability and implicit ability, he constructed a two-level index system composed of six aspects: innovation knowledge, innovation skills, innovation spirit, innovation quality, innovation potential and innovation motivation. Each index also includes three-level indicators, which are divided into 22 three-level indicators. The research of Xing Lingling, Wang Xin & Zhao Yawen (2020) shows that innovative talents are people who have certain basic knowledge and professional knowledge, effectively apply all innovative elements through the combination of perception, imagination and action, form certain innovative achievements, and generate certain utilization value or wealth value. In essence, innovative talents should have five first-class indicators: innovative knowledge, innovative ability, innovative thinking, innovative spirit and innovative personality. The research of Yang yuekun and Lu Nan (2019) shows that there are three first-class indicators: Professional Ethics (tacit knowledge value), competence quality (explicit knowledge value) and performance contribution (circulating knowledge value), eight second-class indicators and 17 third-class indicators. Li Rui et al. (2017) six first level indicators, 16 second level indicators and 47 third level indicators of innovation knowledge, innovation skills, influence, innovation ability, innovation power and management ability.

Based on the research results of the above-mentioned documents, this paper classifies innovation motivation and innovation thinking into innovation consciousness, and takes the five aspects of innovation foundation, innovation ability, innovation consciousness, innovation personality and market orientation as the first level indicators to evaluate innovative talents of enterprises. On this basis, through the research and analysis of relevant literatures on enterprise innovative talents, various indicators on the evaluation of enterprise innovative talents are summarized, classified, screened and merged, and the evaluation indicators of enterprise innovative talents are summarized, including 5 first-class indicators and 14 second-class indicators, as shown in Figure 1.

Figure 1: enterprise innovative talent indicators and competency model



RESEARCH METHODOLOGY

3.1Research Design

This paper mainly combines the competency theory and the relevant research results of innovative talents, and puts forward the competency model of innovative talents in enterprises. According to the analytic hierarchy process, the competency model of innovative talents in enterprises is established, and then the application of the competency model of innovative talents in enterprises is explained.

After carefully combing the relevant literature of enterprise innovative talents, this paper scientifically defines the concepts of innovative talents, enterprise innovative talents, competency and competency model, and reviews the relevant theories, which provides a strong theoretical support for the construction of competency model in this paper. Through literature review, based on the previous research of enterprise innovative talents, extract the competency of enterprise innovative talents, build a competency model, screen the innovation indicators of innovative talents through literature research, and initially build a competency model of enterprise innovative talents. The evaluation of innovative talents is conducive to a better understanding of the internal quality and structural characteristics of the quality of innovative talents in enterprises. It is of great significance to apply the theory to practice, and it is also more conducive to the further improvement of the theory in practice.

3.2Research Setting

In order to focus on the frontier fields of innovation under the background of innovation, this research focuses on the following six industries closely related to economic transformation and industrial innovation and development: medical and health, education and technology, consumption field, real estate technology, financial technology Enterprise level services. Under the guidance of innovation, define the job categories of data collection groups: medical and health field (bioinformatics, genetic testing, operation manager, investment manager, deep learning researcher, drug research and development, clinical registration), education and technology field (discipline operation, community operation, traffic planning operation, experience center operation), consumption field (user operation, new media operation, operation manager, investment manager / VP / MD, strategic investment), Real estate technology field (new media operation, smart service, Java / IOS / Android Development Engineer, test engineer), financial technology field (cloud computing engineer, application architect, system architect, network architect, product innovation analyst, rule management), enterprise service field (new media operation, operation manager, investment manager / VP / MD, strategic investment). This study takes the employees of enterprises in the six major industries as the main research object to carry out the evaluation of innovative talents.

3.3Instrument

Based on a large number of reading the research results of competency and innovative talents, and combining the previous research on competency model, this paper finds that there are three main methods to build the competency model of enterprise innovative talents:

(1) Behavioral event interview (BEI). It is an open behavior retrospective exploration technology, which allows the interviewees to review in detail the key success events and failure events in the past work, so as to judge the parties' thoughts and processing process of the whole event, so as to sort out specific competency elements and contents.

(2) Strategy oriented approach. This method mainly focuses on the core values and main goals of the organization, establishes performance standards through the hierarchical decomposition of organizational goals, and establishes an extensive competency list combined with job analysis. This method can mine deep-seated competency characteristics that meet organizational values and specific goals. The competency model based on this method can help organizations recruit employees who are suitable for the organizational culture.

(3) Benchmarking research method. This method refers to taking the enterprises in the same industry and at the same development level as the benchmark, analyzing their competency model, and combining the actual situation of the enterprise, establishing a competency model suitable for the enterprise.

CONCLUSIONS

4.1Conclusion and contribution

Innovative talents are the cornerstone of innovation and development of enterprises. There is an interactive relationship with enterprises. The development of enterprises can not be separated from innovation. The root of innovation is talents. Only by selecting, retaining and making good use of innovative talents can enterprises improve their market competitiveness. With the development of knowledge economy era, enterprises need a large number of innovative talents to carry out efficient innovation, and the demand for innovative talents is more and more urgent. However, there are still many practical problems in the development of innovative talents in China. This paper puts forward the competency evaluation index of enterprise innovative talents, which provides a basis for evaluating the innovative ability of enterprise innovative talents. First of all, this paper confirms the relevant principles of building the competency model of innovative talents in enterprises, and establishes five first-class evaluation indicators on the basis of previous studies. At the same time, 14 secondary indicators are established, and the five primary indicators are explained respectively. Finally, the competency model of innovative talents is established through research. By building a competency model to identify and evaluate innovative talents of enterprises, we can meet the needs of development and meet the actual needs of enterprises. The innovative quality of innovative talents in enterprises should add new characteristics on the basis of the characteristics of traditional enterprises. When building evaluation indicators, we should learn from and innovate. We should adopt a variety of research methods to evaluate the innovative quality of innovative talents in enterprises, so that the management of talents in enterprises can be more efficient and convenient. We can evaluate innovative talents according to the evaluation indicators, and the evaluation results can be directly used in various management links to improve the management effect.

Enterprises pay more and more attention to the combination of innovative talents and competency models. The practical application of innovative talents and competency models in enterprise human resource management is becoming more and more extensive, and they are playing an increasingly important role. The talent assessment prepared according to the characteristics and competencies of enterprise employees in different positions and industries provides a scientific and reasonable management basis for enterprises. The assessment of enterprise innovative talents helps enterprises to effectively screen and reasonably employ the innovative talents they need. It avoids the mismatch between personnel and posts, and also plays a guiding role in the training of new and old employees, so as to achieve a targeted goal. In the era of rapid development of knowledge economy, innovative talents are the important competitiveness of enterprise development. It is necessary to enrich, optimize and cultivate a team of innovative talents in order to occupy a place in the competitive market. The evaluation of innovative talents provides an excellent template and scientific basis for the selection of innovative talents. It plays a pivotal role in the recruitment process. It also plays a guiding role in the effective incentive and training process of employees after the selection of personnel. It cultivates employees into innovative talents that meet the needs of enterprises, and enables enterprises to keep up with the pace of the times and achieve the greatest value.

4.2Discussion

Implementing the "three-step" strategic goal proposed in the national innovation driven development strategy outline is an effective way for China to change its economic development mode and enhance its international competitiveness. Innovative talents are the core elements of China's innovation development strategy. Their introduction, cultivation and evaluation need the government, universities and enterprises to rely on an innovation oriented and scientific evaluation index system. Through literature analysis and other methods, this study builds a competency model of innovative talents in enterprises, including 5 first-class indicators of innovation foundation, innovation ability, innovation thinking, innovation consciousness and innovation personality, and 14 second-class indicators. Due to the limited scope of samples, how to match each dimension with the innovation quality of innovative talents in different enterprises has not been thoroughly demonstrated in this study, which is also the focus of the next step.

4.3Future direction

Domestic scholars will study more and more competency models of enterprise innovative talents in the future, which meets the requirements of the times and the needs of national innovation strategy. In the future, the research direction of enterprise innovative talent competency model can be divided into the following two aspects: on the one hand, it is necessary to form a certain training and formation of innovative talent competency model with common characteristics. On the other hand, there are relatively few indicators in this study. As the talents of innovative enterprises in China involve many fields, the nature of work is different, and the requirements of enterprises for the dimension of talent innovation ability are also different. In the future, we will subdivide the industry, enrich the sample number of papers, and improve the accuracy and pertinence of the evaluation model. The key is to be able to put forward and practice a dynamic, systematic and scientific competency model that can closely integrate with the actual situation of social development. In terms of research methods, a variety of research methods can be used to combine the changes of the innovative ability evaluation indicators of excellent enterprise innovative talents into the construction of competency model. Of course, in the process of studying competency model, we should not only study for scientific achievements, but also carry out targeted and practical research.

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RESEARCH ON INNOVATIVE MANAGEMENT METHODS TO IMPROVE THE PERFORMANCE OF SMES

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ABSTRACT

In the past ten years, my country has continuously increased its support for enterprise innovation, and the market economy has gradually prospered. As the power source of enterprise development, more and more enterprises have paid attention to innovation. China also pays more attention to the development of small and medium-sized enterprises in enterprises, not only in terms of technological innovation, but also service innovation and organizational innovation are particularly important. This paper takes a small and medium-sized enterprise in my country as an example,to explore the impact of enterprise management innovation on enterprise performance. The results show that there is a positive correlation between corporate innovation and corporate performance. Therefore, in the face of the ever-changing new situation, if the enterprise has problems such as the failure of the growth model, the lack of channel marketing capabilities, and the slow response of the organization, it can adopt innovative management methods, carry out innovative reforms on the existing problems, solve problems, and improve company performance.

Keyword: Management innovation, innovative management methods,corporate performance, SMEs

INTRODUCTION

1.1Background of the study

During his inspection to the Chinese Academy of Sciences, General Secretary Hu Jintao pointed out in 2004 that the ability of scientific and technological innovation is a decisive factor in the development of a country's scientific and technological undertakings and the core of national competitiveness. The promotion of independent innovation in scientific and technological technology should be placed in a prominent position in all scientific and technological work.Since then, the country has moved on the development path of innovation. Today, small and medium-sized enterprises are a new force for national economic and social development, and an important force for expanding employment, improving people's livelihood, and promoting entrepreneurship and innovation.During the "13th Five-Year Plan" period, China's small and medium-sized enterprises will continue to enhance their quantity and scale, market vitality and profitability, while continuously improving their professional capacity and level, and accelerate the pace of transformation and upgrading.

Small and medium-sized enterprises refer to enterprises established within the territory of the People's Republic of China with small scale of personnel and operation. It is China's second-largest economy. Small and medium-sized enterprises are an important carrier for mass entrepreneurship and innovation. They play an irreplaceable role in increasing employment, promoting economic growth, scientific and technological innovation, and social harmony and stability. Employment accounts for about 80% of the urban population employed. Development is of great strategic significance.

At the meeting of The State Council leading Group to promote the development of small and medium-sized enterprises, it was pointed out that small and medium-sized enterprises are an important force in China's economic and social development, and the current development of large enterprises of small and medium-sized enterprises is still facing a complex and severe situation. For example, during the epidemic period, there were many problems, such as slow organizational response, weak channel marketing model, and ineffective growth model. This makes companies have to adjust their corporate strategy. Among them, management is an important link of whether the enterprise can implement the strategy.Effective innovative management methods can bring more opportunities to enterprises, especially innovative small and medium-sized enterprises. They not only need to pay attention to product innovation, but also need to improve the management level of enterprise innovation, so that enterprises can operate more efficiently and improve enterprise performance.

Management innovation is regarded as a way for enterprises to find creative breakthroughs and solve problems, and in order to make enterprises more competitive and improve their performance, enterprises must constantly improve their strategies. Marketing management innovation is rated as one of the most important factors in improving their competitiveness.

With the rapid development of information technology, enterprises will use a variety of technical means to improve the level of enterprise management. In the context of the Internet, management innovation can not only effectively reduce marketing costs, but also better tap market demand, guide production and operation, and finally gain market competitive advantage.

1.2Problem Statement

With the advent of the digital age, the competition of small and medium-sized enterprises is becoming more and more fierce. Enterprises should change their strategies in response to the changing market environment, and use innovative thinking and methods to solve the difficulties faced by enterprises.In order to smoothly carry out the company's business and improve the company's performance, innovative and effective new management methods are seeking changes. In small and medium-sized enterprises, not only technological innovation, but also management innovation is needed.However, not all innovation can bring results to enterprises, and the benefits of innovation are not understood by observation alone. There are many factors that affect enterprise performance, and management innovation is only one aspect that affects company performance.

1.3Research questions

In view of the above situation, this paper will discuss the relationship between innovative management methods and smes around the following two issues.

(1) What is the relationship between management innovation and enterprise performance?

(2) How to use management innovation to improve enterprise performance?

1.4 Significance of Research

The main purpose of this article is as follows:

(1) Using the relevant theories of management innovation, combined with the current problems existing in small and medium-sized enterprises, to put forward the improvement plan for small and medium-sized enterprises to overcome the difficulties and get out of the difficulties.

(2) It is hoped to find ways to strengthen management innovation through the research of this topic.

The significance of the management innovation is as follows:

(1) Find out the current problems of small and medium-sized enterprises, understand the importance of management innovation, and pay attention to the level of enterprise management innovation.

(2) Enhance the sustainable development ability of enterprises, and provide targeted reference for the development of small and medium-sized enterprises and marketing management innovation.

LITERATURE REVIEW

2.1 Management innovation

Management innovation helps to enhance the competitive advantage, for the comprehensive differences in technology and management innovation between enterprises. The definition of management innovation is adopted to produce new execution methods, responding to organizational strategy, structural changes in management, and new process management procedures and systems. " (Khosravi, P.,2019) Therefore, copying a management innovation is more difficult than other forms of innovation.（Robert, M.,2019）

In innovation management, the measures of incentives can provide the basic drivers of profitability, competitive advantage, and sustainable corporate growth, while measuring their effectiveness.（Pavol Durana,2020）

Enterprises not only attach importance to technological innovation, but also pay more and more attention to the competitive advantage of enterprise innovation in how to manage. Examples of such "management innovation" include structural advances, such as GM's departments, such as balanced scorecards (analog equipment) and scenario planning (Shell). Burkinshaw et al have made significant progress in understanding management innovations, and the model he created has provided it with a template to understand how management practices are created and implemented. This model focuses on understanding the active role of individuals in different stages of management innovation, and they are known as internal and external agents of change. Internal change subject is critical to understanding the causes and how specific management innovation occurs. All management changes are inseparable from managers. For example, Toyota Motor Company founder Akio Toyoda and production engineer Taiichi Ohno have played a key role in the development of Toyota's lean manufacturing. External change agents such as masters and management consultants can also be involved in management innovation.

The first is when change agents are motivated to consider creating management innovations because of their dissatisfaction with the status quo. The second stage, the invention, occurs when an idea or real experiment begins to create a new hypothesis of management practice. In the third stage, implementation, the practice of implementing this hypothesis to establish its value. Finally, in the fourth stage, the theoretical and labeled. Using the comprehensive theory to realize the management innovation.（George, F. J,2018）

2.2 Knowledge management innovation

Knowledge management has a significant impact on innovation and sustainability activities.(Abbas, J.,2019) The research results show that the generation, storage and application of knowledge have a significant positive impact on enterprise innovation. The study also found that knowledge application plays a mediating role between knowledge generation, diffusion, storage and enterprise innovation.(Ode, E.,2019) The research results of these authors all show the impact of knowledge management on innovation management, proving that enterprises should also pay attention to knowledge management in the process of innovation.

2.3 quality control

Quality management is a more commonly used management method in enterprises, if used properly, can continuously improve performance. The quality management principle has been applied in the industrial sector for decades; however, it can also appear in service companies. Western scholars generally believe that the quality of customer-perceived service includes two basic aspects: technical quality (also known as result quality) and functional quality (also known as process quality). Technical quality is the result of the service, which is what the customer gets after the service process ends. Because technical quality involves the tangible content of technology, customers are easy to perceive and evaluate objectively. Functional quality refers to how the enterprise provides the service and how the customers get the service, which involves the service personnel's appearance, service attitude, service method, service procedures, service behavior and so on, in contrast, it has more intangible characteristics, so it is difficult to make an objective evaluation. In the process of functional quality evaluation.

Soft practice focuses on quality management addressing the behavioral characteristics of human, social aspects, and organizational culture; instead, hard practice focuses on the technical aspects of utilizing scientific methods and statistical tools. Based on the author's summary, quality management practices can be divided into soft and hard quality management practices. (Sciarelli, M.,2020)

Organizational performance generally refers to the results of organizational operations or the realization of organizational goals. Organizational performance can be measured from different perspectives, such as organizational performance results, financial and non-financial performance, innovative performance, etc. As highlighted in these studies, there are no standard measures of organizational performance, and the measures used by the researchers are compatible with their business environment. Soft practice and hard practice have different roles on innovation. Soft quality management should be developed to create the necessary infrastructure to allow employees to proactively process new ideas, which will help to generate new idea management and technological innovations.(Sciarelli, M.,2020)

2.4 The impact of management innovation on enterprise performance

Management innovation is becoming increasingly popular in research and practice because of its positive impact on organizational renewal and performance.（Khosravi, P.,2019）

Innovation is the foundation of sustainable business growth, and innovation activities are an important source of competitiveness, economic growth, and the image of each country. On the other hand, whether the investment in innovation is uncertain. Therefore, it is necessary to accurately judge the environment and innovate.（ Pavol Durana,202 ） Management innovations will encounter suppressors.Enterprises that are just beginning to implement innovative ideas will be hindered by different factors in the process of transformation or implementation. The results show that different classes of suppressors: some of them appear more strongly in the implementation phase, and then disappear over time, but others appear later and increase in intensity. There are many inhibitory factors, such as human factors, managers' lack of familiarity with management innovation methods and decreased organizational performance, or the lack of behavioral skills and lack of motivation.(Robert, M.,2019) Therefore, the quality of innovation management cannot be judged by short-term results.

2.5 Enterprise performance evaluation

The evaluation of company performance includes assessing whether the conditions of knowledge management are conducive to the development of the innovation ability process. Therefore, the authors will measure the performance of performance indicators, economic indicators and non-economic indicators. Measures identified for non-economic performance purposes include customer satisfaction and growth, organization member satisfaction, quality and continuous improvement of products and services, alliances with other companies, company recognition, and support from R & D centers. For the identified economic performance measures, including sales growth; increased net profit; cost-effectiveness; productivity; and higher production costs.(Russian) Market orientation and innovation also have a significant impact on business performance, either directly or indirectly, through competitive advantage. Among them, management innovation seems to directly affect organizational performance, but when management innovation combined with HPO factors, it produces collaborative increase organization become an organization in an emerging market background (Sciarelli,2020) to achieve higher organizational performance not only based on simple MI introduction, but also need the introduction of other aspects, therefore, can be considered a complex phenomenon.(Sciarelli,2020) It's actually very complicated.

To better improve corporate performance, ecological innovation (technology, management and marketing needs to be conducted) (Eng, D.,2020) Ecological innovation planners need to understand the industry's major competitors.Learn from the management system of enterprise innovation, and then more actively implement the ecological innovation practice. Adopters and planners of ecological innovation can identify rational ecological innovation practices to effectively improve their environmental and economic performance at the current stage. For decision-makers, they can foster more reasonable rules and regulations by understanding the characteristics of enterprise clusters and the level of ecological innovation implementation and the percentage of leading smme.（Eng, D.,2020）

2.6 The relationship between management, innovation and enterprise performance

An open innovation culture of an organization where supportive and engaged leaders promote mutual trust, collaboration, and learning is more likely to improve the efficiency of knowledge management practices; and, ultimately, to improve the innovation capabilities of companies.(Long Lam,2021) According to the research results, only the three dimensions of innovation performance can directly affect the business performance. Moreover, this paper points out the differential impact of enterprise innovation on enterprise performance under the influence of environmental uncertainty. The impact of different innovation dimensions (product, process, organizational, and marketing innovation) as a single secondary potential factor on enterprise performance is evaluated through its main dimension- -primary potential factors (financial, non-financial, and market performance). The findings reveal important innovation dimensions, such as product, process and marketing innovation, to company performance. This is evident when considering the manufacturing companies with all responses in the study sample and only those who perceived environmental uncertainty as high. On the other hand, for companies that see low levels of environmental uncertainty, only marketing innovation does not affect their performance. Finally, the high environmental uncertainty positively regulates the link between product and market innovation and enterprise performance, while it negatively regulates the link between process and organizational innovation and enterprise performance.

Transformation leadership indirectly affects enterprise performance. Transformation leadership has greatly affected the management innovation and market performance of consumer goods enterprises. According to the survey data of consumer goods companies, the empirical study on the relationship between the transformation leadership, management innovation, knowledge sharing and market performance of consumer goods enterprises is conducted, and the intermediary role of management innovation and knowledge sharing is analyzed. The results show that knowledge-sharing has no significant impact on the market performance of consumer goods companies. Management innovation has no significant impact on the market performance of consumer goods companies. Tranformational leadership has no significant impact on knowledge sharing in consumer goods companies. Transformational leadership has an important influence on consumer goods management innovation. Tranformational leadership has no significant positive impact on market performance (Agus Purwanto,2019)

Enterprises through planning, organization, command, coordination, control, feedback to achieve organizational goals. When managers prefer transformative leadership, business management models tend to be more flexible and efficient, and innovation can be easier. Tranformational leadership positively influence behavior integration, which can enhance employee decision-making, open communication and teamwork, and promote management innovation.

In a changing environment like today, only these businesses can survive and grow, which will enable them themselves to fully leverage the capabilities, skills and learning abilities of all their employees working in different sectors of a business. Organizational learning support through the development and delivery of new and advanced products and services for sustainable growth, acquiring and submitting knowledge to enhance creativity and ensure competitiveness. Another study clearly stated that many studies on organizational learning have advanced the literature on sustainable organizational innovation. Many studies have reported a statistically significant positive effect of learning on sustainable innovation. Companies with an active learning process have successfully delivered innovative products and services as improved learning gives them the opportunity to introduce products and services to meet changing market needs.（Jaffar Abbas,2020）

This paper examines the impact of product, processes, and organizational innovation on two alternative dimensions of business performance: finance and operations. Two indicators reflect financial performance: increases in sales and lower production costs. There are two alternatives to company performance: improved production capacity and quality improvement of products / services provided by the company.（Exposito, A.,2018）

Innovation helps create value in better business performance for SME entrepreneurs. However, innovation has a broad impact on the different performance dimensions. In this sense, the findings highlight the ease of distinguishing between the types of innovation and the performance indicators, to guide innovation policies more effectively. Therefore, we believe that the concept of business performance has different dimensions, and that the effect of innovation may vary significantly depending on the type of innovation and the performance dimension considered. Most academic focus on the impact of innovation on business performance focuses on the relationship between technological innovation (such as product innovation) and business growth indicators.

Small and medium-sized enterprises operating performance. On the financial side, it is worth mentioning that product innovation has had a clear and significant positive impact on sales growth, while organizational innovation increases the likelihood of cost reduction. In terms of operating performance of SMEs, we found that all types of innovation had significant and positive effects on both performance indicators. Furthermore, our results suggest that innovation may be a booster of competitive advantage as SMEs are seeking to expand their production capacity, as size also appears to be a relevant factor for enjoying better operational performance and improving the quality of the products and services provided by the company. Thus, innovation can be described as a multifaceted phenomenon that has different types of potential performance benefits. Our results suggest that it is important to distinguish the types of innovation given the different impact on company performance; some innovations are more beneficial than others.（Exposito, A.,2018）

RESEARCH METHODOLOGY

This paper mainly adopts the method of literature research and case analysis, through literature search, sorting and summary, puts forward the problem of enterprise performance reduction, and puts forward the relatively feasible method to improve enterprise performance. It is mainly to prepare for the research topics to support the subsequent overall research work, helping to have a comprehensive understanding of the impact of innovation on the performance of smes and the content and situation in the field of enterprise management innovation.

CONCLUSION

Innovation is the core activity of entrepreneurship and the source of competitive advantage. Organizations should effectively promote innovation to survive in the long term. The same is true of marketing management innovation.In the recent years of the outbreak, enterprises are looking for breakthroughs, thinking about how to improve the management level, to achieve the goals set by enterprises. If there is no breakthrough in technology or product, organizational innovation, marketing innovation, service innovation and other innovation practices will bring greater performance to the enterprise, among which management innovation is a powerful boost for the enterprise in the process of achieving its goals. Through research, it is found that different types of innovation will have different effects on enterprise performance. Management innovation should be an innovation in multiple aspects, including but not limited to the combination of knowledge management and quality management to create ecological innovation (technology, management and marketing). Combined with multiple aspects of effective management innovation, can better improve enterprise performance.

4.1 Limitations

This paper studies the innovative methods of enterprise marketing management through literature research. Due to the limited research time and ability, although the authors have proposed some ideas of their own, there are still some deficiencies and limitations. It specifically includes the following two aspects:

(1) The management innovation method mentioned in this paper provides reference and suggestions for small and medium-sized enterprises, but the marketing management mode of each enterprise is different, which specifically needs to be adjusted according to their own situation.

(2) This research is mainly in small and medium-sized enterprises, but the scope of research is relatively wide. After the implementation of the specific innovative method, how the effect is, and how the method will change for the enterprises with less resources, we still need further investigation and testing.

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EXPLORE THE ONLINE LANGUAGE DIFFERENCES OF COLLEGE STUDENTS FROM THE PERSPECTIVE OF SOCIAL LINGUISTICS

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ABSTRACT

The rapid development of Internet technology has brought about profound changes in the mode of information transmission and communication, and also has a great impact on the language tools used. In the information age, the transformation of information transmission modes, such as keystroke, screen display, and online transmission, has given birth to network language. The survey shows that college students' identities as Internet users have become the most important part of the Internet army, and the network identity and network language are the best windows to understand the self-positioning and inner feelings of college students. Given that college students' network language has the characteristics of gender differences, and produces differences in motivation as well as has a certain complexity, the present gender differences in college students' network language and its deep reasons, widens the research field of social linguistics. Therefore, the purpose of this paper is to conduct a comprehensive and in-depth study of college students' network identity and network language.

From the perspective of sociolinguistics, this paper adopts a variety of research methods, including a questionnaire survey, comparative analysis, and example analysis. Based on the theories of linguistics, pedagogy, psychology, and gender difference, this paper proposes a hypothesis on the gender difference in college students' online language and online identity and verifies the data collected from 200 college students in Zhoushan city, Zhejiang Province, and finally draws a conclusion. This research found that there are obvious gender differences in college students' online language discourse strategies caused by different social requirements and psychological factors.

Overall, through the discussion of college students' network identity and the use of network language, the specific characteristics of gender differences, as well as the teaching enlightenment and other aspects, is helpful to the smooth progress of college students' cross-gender communication and the harmonious development of bisexual positive guidance.

Keywords: cross-gender communication, online language, psychological factors

INTRODUCTION

Background of the study

The relationship between language and gender has been the focus of linguists' research. In one of the sociolinguistic studies, gender difference has become a key point of research, which can effectively improve the authenticity and reliability of language research (Talbot, 2020). At the same time, the in-depth exploration of language differences can excavate the influence of gender on language habits and enrich the research content of sociolinguistics (Sánchez, 2022). To some extent, the phenomenon of gender difference refers to that in the same situation, background, and conditions, both sexes will adopt different ways of expression for the same content or different solutions to the same problem (Hirnstein & Hausmann, 2021).

At the international level, the research on gender language has been quite abundant, but the research on the topic of "gender differences in network language" is relatively weak (Archuleta & Weaver, 2021). As for the gender difference in network language, the research results are still mainly focused on the analysis of traditional blogs (Archuleta & Weaver, 2021). These findings enrich the research content of gender linguistics and have important reference significance and value for empirical research on gender differences in college students' online language.

The first is the stage of negating network language (Roshanzamir, Aghajan & Soleymani, 2021). The early research is limited to the general introduction of the network language phenomenon, the existence value, and the standardization of network language (Yan & Zheng, 2021). And there was a time when the negative prevailed. The second stage is the recognition of network language stage (Roshanzamir, Aghajan & Soleymani, 2021). As network language enters people's language life with an irresistible trend, people's evaluation of network language has also changed to a certain extent (Jie, 2021). Compared with the previous attitude of total denial, the attitude of this period is more rational and objective. To be specific, the public generally believes that network language is the need for the development of The Times and society, and it can better meet the needs of public communication (Georgakopoulou & Spilioti, 2020). The third stage is the stage of studying network language (Georgakopoulou & Spilioti, 2020). At the same time as compiling dictionaries, ontology research on network languages also started.

Research Gap

Along with the development of the information age, linguists both at home and abroad have been the subject of network language made a meaningful exploration, however, when back in the research process, this paper found that the existing research also has many insufficiencies, these deficiencies will be the future research should focus on problems, main show is: small category research is in the majority, and systemic research is insufficient; In the study of network language, a large number of studies focus on the description of specific situations, but ignore the exploration and explanation of its formation; There are many repetitive studies, but not enough innovative ones. There is much research on a single subject, but not enough research on the interdisciplinary subject.

Because of the shortcomings of the existing research, this paper tries to make a breakthrough in the study of gender differences and motivations of Internet language. It is found in this paper that the research results on gender differences in Internet language are presented in the form of journal papers, with a small scope of topics and shallow levels, and scattered and unsystematic models. At the same time, more systematic and comprehensive research is not enough, it is necessary to supplement and further research. Therefore, this paper will use psychology, sociology, linguistics, and other relevant theories to explore the emerging network language, focusing on investigating and exploring the manifestation of gender differences and the causes of generation. In addition, this paper extends the theoretical application to the level of cross-gender communication and teaching, to explain the basis and operation mode of the emerging network language more comprehensively and profoundly.

Problem statement

From the perspective of a theoretical issue, gender language difference exists in different languages of many cultures and is one of the eternal topics in linguistic research (Sánchez, 2022). The study of the relationship between language and gender is an important research direction of sociolinguistics, involving many disciplines such as culture, social psychology, education, and so on (Bernhard, 2021). At the same time, there are profound reasons for the differences in terms of the appellation, topic choice, discourse quantity, and language style in college students' online language, so it has the value of linguistic research. In addition, taking network language as the material, an in-depth analysis of the specific characteristics of gender differences and their underlying basis is to meet the needs of the rapid development of network communication (Leopold, 2020). The research on this topic can also expand the field of sociolinguistics and has far-reaching theoretical significance. In addition, as for practical issues, from the perspective of sociolinguistics, the study of college students' use of online language and its gender differences can promote the application of linguistics in sociology, online teaching, and other fields (Brekke, Lundetræ, & Reikerås, 2018). At the same time, network language is an indispensable part of people's language life, which is closely related to the practical use of language, and its real significance will naturally be highlighted.

Research Question

1) Explore the relationship between the external presentation of college students' self-constructed gender image and gender difference.
2) To explore the relationship between college students' internal discourse strategies for constructing gender images and the characteristics of gender differences in college students' online language.
3) Analyze and discusses the causes of college students' network language and network identity differences from the aspects of physiological factors, social factors and educational factors.

Scope of the study

This paper tries to use the theoretical knowledge of sociolinguistics, sociology, psychology, and education to analyze and discuss the gender differences in online language and online identity among some college students in Zhoushan city, Zhejiang Province. This paper mainly discusses the research status, research purpose and significance, research content, and research methods of network language at home and abroad. In addition, this paper introduces the definition, nature, and characteristics of network language, as well as the particularity and research value of college students' network language. It specifically explains the scale of the use of network language in China, the gender and age composition of Internet users, network language, gender, and network language. Moreover, this paper studies network language and gender differences in the following two aspects. The external presentation of college students' self-disclosure to construct gender image: The explanation and examples of college students' online identity and its differences are given from the aspects of personal information description, user name selection, and profile picture analysis. Second, the internal discourse strategies of college students to construct gender images: To investigate and analyze the characteristics of gender differences in college students' online language and the problems reflected by data from seven aspects, including topic selection, amount of discourse, language style, emotional color, abusive words, and appellation. Furthermore, This topic will use the interdisciplinary theories and methods of linguistics, sociology, culturology, and psychology to conduct a multidisciplinary study of sociolinguistics.

Significance of the study

First of all, network language has its particularity in language symbols and expressions. When college students use network language to communicate online, the gender identity of the object they talk to is either opposite sex or same sex. Therefore, if they can more fully understand the gender characteristics of online identity and online language, they can more smoothly establish the correct gender concept and create successful and harmonious communication (Yoestara & Putri, 2019). In addition, studying college students' network language is one of the important ways to comprehensively understand college students, as well as the best window to understand their self-positioning and inner feelings (Hashemi, Noori & Orfan, 2020). Moreover, the research of this paper can guide college students to set up correct gender concepts in the complex network environment, break the shackles of traditional gender stereotypes, and find the correct positioning in study and life (Macaro & Akincioglu, 2018). It puts forward suggestions and prospects for the future development of college students teaching and psychology.

Operational Definition

1) Through the discussion of college students' network identity and the use of network language, the specific characteristics of gender differences, attribution analysis and teaching enlightenment, this paper explores a smooth mode of college students' cross-gender communication.

2) The purpose of this paper is to identity on college students' network and the network language as a comprehensive and thorough research, not only can make people jump out of the traditional language of gender role and stereotypes, but also for the future network language researchers and education workers to provide some reference and thinking, and promote the common development of China's social linguistics and pedagogy research.

LITERATURE REVIEW

Underpinning Theory

From Zuo and Zhang (2022)'s perspective, network language is a kind of language, but it is a form of language processed by technology. They (2022) argued that it is a remolding and reconstruction of daily language based on digital technology. It also refers to natural language and symbols used in network communication. At first, Liljeström, Kujala, and Salmelinit (2018) proposed that it refers to the computer language of the Network, and also refers to the natural language used on the Network with its characteristics. Now it generally refers to the latter.

The definition of network language can be divided into two types: broad and narrow. In the broad sense, Zuo and Zhang (2022) introduced that network language refers to all language symbols on the network communication platform, including human natural language and physical technology language. The former refers to the language used to realize interpersonal communication in daily life, while the latter refers to the technical language used to ensure the normal operation and development of network media. The research object of this paper tends to be generalized network language, including new creation and conventional language application in a network context.

Explanation of variables

College students are almost in the same intergenerational group range, as a new generation group, is in the early stage of social adult, in the era of network information contact and use the Internet together. In this paper, it is relatively difficult to select Zhoushan City, Zhejiang Province to carry out the questionnaire survey, so the sample selection is representative and feasible. The paper questionnaire in this paper is targeted at college students (including graduate students), and 200 samples are taken as participants of this study.

Literature Review

Sánchez (2022) put forward that gender difference in language refers to the differences between men and women when they use the same language or dialect. This phenomenon is prevalent in human society. Bernhard (2021) raised that sociolinguistics focuses on gender differences in language and attempts to reveal the internal causes by analyzing the differences in language use characteristics between men and women.

Gómez, Fuentes, Markov, Sidorov, and Gelbukh (2019) proposed that human society is made up of men and women. Due to differences in physiological structure, social status, personality, and other reasons, males and females have different language varieties. Chan (2018) came up with the variation mainly manifested in language structure, language expression style, and language ability. Dağ and Erdoğan (2020) presented that gender differences in language can be divided into absolute gender differences and relative gender differences. Absolute gender difference is a special linguistic taboo phenomenon in primitive tribal culture groups. For example, Abha and Lakhwinder (2019) discussed that in some Indian tribes in the past, there was an absolute gender difference between men and women, although they could understand each other, they could not use each other. Dağ and Erdoğan (2020) expound relative sex difference refers to the differences between men and women in the use of a language or dialect.

Pastor and Soler (2021) explain that the difference in social status is an important factor that causes the language gender difference. In most societies, Smith, Nikolov, and Chaney (2018) account for men generally having a higher social status than women and are generally dominant in society and the family. As a result, there are a lot of cheap names for women in the language, and many words themselves are an insult to women. For example, the words "rape", "prostitute", "prostitute" and "slave" in Chinese are related to women. In addition, Latham (2020) made clear that differences in the social division of labor and cultural roles between men and women will also lead to differences in language use. In the traditional social family, Latham (2020) argued generally men are more engaged in social work and labor, while women are mainly engaged in family work and auxiliary work. Women tend to be gregarious while men are more dynamic. Therefore, men and women tend to talk about different topics when communicating with others. When talking about an event, Stelzer, O'Connor, and Croft (2019) believed that men are more likely to focus on the outcome, while women are more likely to talk about how it happened. In most societies, in the speech activities of men and women, it is generally believed that men should speak generously and loudly; Joshi, Appel, and Huang (2020) believed that women, on the other hand, are expected to be reserved and quiet (Joshi, Appel & Huang, 2020).

Framework

Fernández & Cairns (2020) proposed that psycholinguistics introduces real people into linguistic research as a frame of reference, among which, the inverted triangle theory points out that Chinese gender discrimination and gender difference coexist, which also provides a three-dimensional perspective for this paper to study the gender difference of college students' online language. Therefore, in the analysis of the causes of language gender differences, we should not only discuss the manifestations and causes of discrimination but also analyze the manifestations and causes of differences. From the perspective of psycholinguistics, this paper analyzes the gender differences in college students' network language. At the same time, it provides a more diversified and rich perspective for the research both in content and theoretical methods.

Li (2022) argued that there are dominance theory, defect theory, difference theory, and constructivism theory. Simpson & Statham (2019) introduced that Linguist Robin Lakoff is a representative of the defect theory. He summarizes the stylistic characteristics of women's language and thinks that women are always in a passive position with a low degree of self-domination. Deborah Tannen proposed that the differences in discourse styles between men and women are caused by different subcultural backgrounds, and this phenomenon should be explained by the dual cultural model (Simpson & Statham, 2019). Li (2022) proposed that constructivism scholars believe that male and female gender identities are not innate, but constructed by social culture. All in all, these theories reflect the complexity and diversity of the concept of gender difference and provide a reference value for this paper to study the construction of college students' network identity, the specific differences in network language, and its deep motivation.

Hypothesis

Hypothesis 1: Female college students seldom disclose personal information on the Internet, such as real name, occupation, location, contact information, etc.

Hypothesis 2: The amount of female college students' online communication discourse is larger than that of male college students.

Hypothesis 3: Male college students use more abusive, contemptuous, sarcastic and other abusive words than female students, while female students tend to use similar but euphemistic expressions or avoid talking about them.

RESEARCH METHODOLOGY

This paper tries to use the social linguistics, sociology, psychology, and pedagogy-related theoretical knowledge of Zhoushan city, Zhejiang province, part of the university students' network language, and the identity of the gender difference is analyzed and discussed, the full text is divided into five parts altogether: the first, this paper discusses mainly the network language research status at home and abroad, research purpose and meaning, research contents and research methods, etc. Secondly, it introduces the definition, nature, and characteristics of network language and the particularity and research value of college students' network language. At the same time, the relevant theoretical knowledge is briefly discussed. Thirdly, the paper analyzes the differences between college students' network language and gender identity characteristics. Mainly through the external presentation of college students' self-constructed gender image and internal discourse strategies Were analyzed in two ways Fourthly, this paper analyzes and discusses the causes of the differences in college students' network language and network identity from the aspects of physiological factors, social factors, and educational factors. Fifthly, a summary of the paper is made, and future research on this subject prospects.

Research Design

This paper mainly selects 200 undergraduate students from an undergraduate university in Zhoushan, Zhejiang province as the survey object, and issues a questionnaire. The contents of the questionnaire involve personal data, topic selection, amount of discourse, creative language usage, language style, language emotional color, appellation terms, and abusive words of college students in the process of using network language. We collected the original data of the questionnaire, made statistics, analysis, and summary, and provided data support for exploring the gender characteristics of the online language of college students in the Zhoushan area.

Research Setting

This paper makes a quantitative analysis of the gender characteristics of online language among college students in Zhoushan. Data analysis software and manual analysis are used to calculate the gender characteristics of network language in terms of the appellation, feedback, and discourse quantity. In addition, this paper makes a comparative study on college Internet users' gender differences in terms of various characteristics of network language, such as topic selection, discourse volume, and cursing. To highlight the characteristics of gender differences in college students' online language, some projects will be compared and analyzed with previous ones about gender differences in daily conversations. It also compares whether the traditional gender linguistics theory is fully applicable to describe and explain the gender differences in online conversation, to explore the covariant relationship between language and society. Moreover, some college students' network languages will be selected for example analysis in the research process. Then, using sociolinguistics and other relevant theories to analyze and summarize the differences in gender characteristics of network language, and explore the social reasons for the emergence of characteristics as well as deeper psychological and cultural characteristics.

Sampling

200 participants from an undergraduate university in Zhoushan, Zhejiang province

Data collection：200 undergraduate students

Data Analysis

This topic will use the interdisciplinary theories and methods of linguistics, sociology, culturology, and psychology to conduct a multidisciplinary study of sociolinguistics. The research methods used are questionnaire survey, literature research, quantitative analysis, comparative analysis, example analysis, and induction.

Ethical Consideration

Before the questionnaire was distributed, the research direction of this study was explained to all participants and their consent was obtained. To protect the privacy of participants, this study follows the principle of voluntariness and anonymity.

College students are almost in the same intergenerational group range, as a new generation group, is in the early stage of social adult, in the era of network information contact and use the Internet together. Although Zhoushan city, Zhejiang Province, where this study is conducted, is an island city, it has a fast development rate of colleges and universities and a high penetration rate of Internet users.

Therefore, it is difficult for this paper to select local questionnaires for investigation, so the selection of samples is representative and feasible. The paper questionnaire in this paper is conducted on college students (including postgraduate students) in Zhoushan city, Zhejiang Province. This paper selects full-time college students as the survey object. Of the total sample of 420 people, effective recovery of the questionnaire was 92%. For the convenience of statistics, comparison, and analysis, 200 samples of the centralized investigation were selected as the final research samples.

RESULTS AND FINDINGS

Descriptive/Inferential statistics/ Content Analysis/Thematic Analysis：

The overall distribution of college students' online personal information is shown in Figure 3.1.1. Among the surveyed college students, the most personal information revealed by online social networking tools is gender and personality signature, accounting for 97% and 93% respectively, followed by occupation (85%), birthday (75%), and educational background (63%). Personal information such as real name (23 percent), location (42 percent), and contact information (34 percent) was less likely to be included.

This questionnaire survey is mainly to study the characteristics and attitudes of college students of different genders in the use of personal information. Hypothesis 1 holds that female college students are less likely to disclose personal information on the Internet, such as real name, occupation, location, contact information, etc. According to the survey data, college students have disclosed more information in their open personal information, but the number of male students who choose to open their real names and contact information is much higher than that of female students; Secondly, the number of male college students is slightly higher than that of female college students in terms of their choice of local and occupational information. However, there is no obvious gender difference in terms of educational information and label information. Overall, the results of the survey are consistent with the hypothesis of the study, with male college students disclosing more personal information than female students.

According to the survey data on college students' online topics, the topic most commonly talked about by female college students is their feelings about their emotional life (26%), which often involves personal feelings expressed in immediate situations. Even if these women surveyed college students from different schools and professional disciplines, they are all about relationships and emotional change concerned, often in a social platform will be your own or another's daily life, emotional experience as the instant messaging language topics, such as the lonely, sensitive, joy, and the description of the assumptions and expectations in the future. On the contrary, male college students like to talk about topics other than themselves. The proportion of emotion and life perception is only about half that of female students. The topics they most often choose are games and cartoons (31%), sports (17%), and hot political issues and social news (14%). At the same time, the proportion of women in campus life, film, and television entertainment is also slightly higher than men.

CONCLUSIONS

Conclusion and Discussion

The special means of expression in the network context itself can perform the expressive function of a certain semantic style and can reveal the ideology, value orientation, and interests of the social group and class described by the communicative subject. From the perspective of sociolinguistics, this paper discusses the gender differences in college students' network language, investigates the current situation and its deep motivation, tries to make a meaningful practice of linguistic research in line with real life, and makes a comprehensive analysis and discussion.

Discussion

Through the survey, it is found that in the aspect of self-identity construction, college students mainly use personal information descriptions, profile pictures, and online nicknames to present themselves. In the aspect of network language discourse strategies, there are obvious gender differences in college students' network language. This paper chose the topic, words, language style, creative emotion, scold Li language, and network language usage and address terms this several aspects, mainly by the skill of questionnaire data and the respondent's network language text material as an example, analyzes the college students in discourse strategy of the manifestation of gender differences and deep. The research shows that the reasons influencing the gender differences in college students' online identity and online language are not only their physiological structure, but also the deeper reasons may be caused by different social requirements and psychological factors under the influence. Secondly, educational factors have an extremely important influence on the formation and development of individual gender.

Implication

Network language is different from life language. The characteristics of college students' gender language are not a simple copy of gender differences in the real world, but the characteristics of the network. The article tries to on college students' network identity and network language made comprehensive research, not only can make people jump out of the traditional language of gender roles and stereotypes, toward the harmonious development of equality, freedom, and harmony, but also for the future network language researchers and education workers to provide some reference and thinking, Thus promoting the common development of sociolinguistics and pedagogy in China.

Contribution

Through the discussion of college students' network identity and the use of network language, the specific characteristics of gender differences, attribution analysis, and teaching enlightenment, is helpful to the smooth progress of cross-gender communication and the harmonious development of bisexual students.

Limitation

College netizens have disclosed a lot of user information in the network field, including private real name, contact information, basic birthday information, occupation, education information and label information. According to the survey data, female college netizens pay more attention to the respect and protection of personal privacy. On the one hand, in order to separate real life from virtual network space, they can speak freely and express themselves freely in this free and open virtual communication environment. On the other hand, in the special realistic environment, the development of new media technology makes personal information "transparent", and the privacy of many Internet users is subject to different degrees of peeping and probing. Therefore, among the 200 college students surveyed, many female college netizens choose to hide and retain their real identity information on social networking platforms to prevent personal information such as phone numbers, mailing addresses and email addresses from being collected and spread, harassed or tracked.

Additionally, male and female college students have significant differences in communication even though they are in the same generation group due to their different physiological structure and emotional cognition. In terms of the topic selection of college students' network language, female college students tend to talk about personal topics and express their feelings on immediate situations, while male college students are less self-revealing, especially when talking with the same sex, male college students tend to talk about non-interpersonal activities. For example, the current political hot spots, sports fitness, animation, online games and some other common emotional interest content and objects. At the same time, there are obvious differences in emotional expression and behavioral activities.

Future direction

The research object of this paper is college students in Lanzhou, Gansu Province. Future research can expand the scope of research and classify research according to different educational background, occupation and income. It can also study the differences of online identity and discourse strategies between college students and other intergenerational groups. To investigate whether college students in the context of network and daily life are consistent in their performance.

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THE INFLUENCE OF ENTERPRISE MANAGEMENT SYSTEM ON THE MANAGEMENT OF SMALL AND MICRO ENTERPRISES

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ABSTRACT

At present, COVID-19 is bringing great impact to the whole world. Many enterprises in high-risk areas are no longer able to operate properly, and the online office is adopted to deal with the crisis. In such a strategic environment, many small and micro enterprises still use traditional, paper-based and eliminated management methods in enterprise management. Such management mode has many adverse factors, such as increased management cost, increased management difficulty, complex data and so on. This paper describes the advantages of online enterprise management system used by small and micro enterprises in many aspects, such as ERP management, financial management, human resource management and online office, so as to enable enterprises to operate digitally and realize enterprise integrated management.

Keywords: Enterprise management system， Innovation management， Digital management，Small and micro enterprises

INTRODUCTION

Enterprise management system refers to a kind of software that can reflect most functions of enterprise management (including decision-making, planning, organization, leadership, monitoring, analysis, etc.), provide real-time, relevant, accurate and complete data, and provide decision-making basis for managers. Divided by modules, enterprise management software can be divided into enterprise document management, financial management, workshop management Purchase, sales and inventory management, asset management, cost management, equipment management, quality management, distribution resource planning management, human resource management, supply chain management, customer relationship management, etc(SUN Dao-bing et al., 2021).

In China, almost all large and medium-sized enterprises are already using the enterprise management system to manage all aspects of the enterprise in an integrated way, such as Kingdee system, which is good at finance, collaborative office, nail of human resource management, zoom, Tencent conference, etc. Covid-19, which has made well-known large enterprises well cope with the impact of the new crown epidemic. However, the vast majority of small and micro private enterprises in China still use the traditional management mode. For example, most small and micro enterprises still use Excel to record their business. In terms of finance, accountants often make manual bookkeeping, and in terms of collaborative office, bosses often hold on-site meetings and dictate to the heads of each department. The most fatal disadvantage of these traditional management modes is that they will lead to redundant data, occupy a lot of human and material resources, and greatly increase the cost of enterprises. In the event of a huge disaster like COVID-19, employees can not normally go to work, manpower facilities management and many other aspects can not meet the needs of enterprises, so many enterprises will be closed down, which will seriously lead to the forced cancellation of enterprises.

Most small and micro enterprises also propose that enterprise management system can help enterprises complete digital transformation and accelerate enterprise development more healthily. However, due to the impact of the epidemic, literature(HUANG Zhen-hua, 2021) made a questionnaire survey on small and micro enterprises with less than 100 employees in 2020 and concluded that the return to work rate of small and micro enterprises is significantly lower than that of large enterprises, and there are generally obstacles to return to work, The root cause is that it is unable to effectively carry out online office and online management mode. Moreover, for the management system, most small and micro enterprises still put forward some objections:

1. The business of the enterprise is relatively single, small in scale and few in manpower. Considering the current profit of the enterprise more, the management system will increase the cost of the enterprise and bring pressure.

2. At present, the function of the management system in the market can not meet the operation mode of some special enterprises, but the management system will reduce the work management efficiency of the enterprise

3. Many enterprises choose to develop customized management systems in line with their operation mode, but due to the technical reasons of software development, the software has not achieved the expected effect in use.

In the current environment, how small and micro enterprises get rid of this dilemma can be studied and discussed from both macro and micro aspects. In the macro aspect, we will discuss how the enterprise management software meets the policy of contemporary enterprise digital operation and becomes the tool and carrier of enterprise digital construction and transformation. In the micro aspect, we will discuss the key functions of the enterprise management software system, and refine it to ERP system, financial management system, human resource management system and online office system to study whether the appropriate system can help small and micro enterprises get out of trouble.

LITERATURE REVIEW

Macro perspective: Digital Management

At present, the major well-known enterprises have moved towards the operation mode of digital operation and integrated management. Literature(CHEN Zhi-gang, 2008) proposed that digitization is to transform many complex and changeable information into measurable numbers and data, and then use these numbers and data to establish an appropriate digitization model. It is pointed out that in the digital era, artificial intelligence is the trend of enterprise management. In order to promote the modern development of enterprises, it is the general trend to use artificial intelligence hardware facilities or software equipment to improve management efficiency, and enterprise management software came into being. The management mode has changed from a large number of paper recorded data to the data converted into 0 and 1 numbers by computer for storage, storage and transfer at any time, and the management efficiency has been greatly increased by using scientific and technological means. Literature(YANG Zhuo-fan, 2020) proposed to study and elaborate the digital enterprise from the aspects of digital enterprise business process reengineering, digital enterprise supply chain management, digital enterprise customer relationship management and the construction of digital enterprise ERP system, which is the core function module of enterprise management system. Literature(LIU Xiao-meng, 2020) puts forward measures for effective innovation of enterprise management mode under the background of information age, one of the keys is to build enterprise information management system. According to(CHEN Hong-chuan et al., 2021),management innovation is an important antecedent for enterprises to win competitive advantage under major crises such as COVID-19, and enterprise digital management is a part of management innovation.

Literature(LIN Yang, 2021) proposes that the vast majority of small and micro enterprises are non digital native enterprises, rather than digital native enterprises. One of them is data governance in the process of digital transformation. Non digital native enterprises usually carry out information construction guided by many local business processes, forming a large number of it "chimneys", that is, "1 type of business, 1 it system, 1 database". In short, the system includes database and business management.

To sum up, in the process of enterprise digital reform, enterprise management system plays an irreplaceable role.

Micro perspective: various functions of the system

ERP management

ERP (Enterprise Resource Planning), namely enterprise resource planning, is a set of enterprise management system proposed by Gartner Group in the 1990s. It takes the systematic management idea as the core and guidance, comprehensively applies information technologies such as database structure, graphical user interface and network communication, and fully integrates the human, financial, material, production, supply and marketing of the enterprise and the resulting management flow, capital flow, information flow, logistics and other internal and external resources, so as to realize the optimal presentation and sharing of enterprise resources, Provide decision-making and operation means for enterprise employees and enterprise leaders(ZHOU Chen-ling, 2021). The literature(ZHANG Xin et al., 2021) puts forward that the core purpose of ERP is to optimize enterprise workflow, achieve enterprise benefit objectives, and improve enterprise competitiveness. Enterprise management system and platform are the specific carrier and Realization of enterprise resource planning management methods, and can promote the development of management information construction. As the platform and carrier of ERP management, management system is indispensable.

Financial management

Literature(LIU Hong-wei, 2021) puts forward that one of the two principles of financial management informatization construction of state-owned enterprises is the principle of data sharing. At present, the problems existing in state-owned enterprises are that the financial management information system is not perfect, the supervision mechanism is not perfect, and the accounting management is neglected. The way to build financial management informatization is to establish a sound financial management informatization system, smoothly connect financial management and business activities, and improve the financial management informatization system. Literature(YE Xia, 2018) puts forward suggestions to improve the financial work of enterprises. In order to establish a data sharing platform, change the financial operation mode, build a perfect financial management software with the help of existing science and technology, and comprehensively improve the service ability and work efficiency of financial management software. Literature(XU Zhi-gang, 2021) puts forward that at present, the vast majority of enterprise management software has realized functional integration in its functions, and broken through the barriers between business and finance. Financial personnel can greatly improve their work efficiency, and managers can intuitively view each data. However, compared with the world advanced level, the development of China's financial management software still lags far behind, and we should actively seek to shorten the gap.

Human resource management

Digital technology of human resource management refers to a new generation of digital technologies through mobile Internet, cloud computing, big data, artificial intelligence, Internet of things and blockchain (including cloud based human resource information system, talent acquisition scheme, internal communication platform, salary and welfare, performance management, learning and development, labor management software, human capital analysis tools, etc.). Literature(LIANG Yu-dun, 2021) proposed the digital wave of human resource management managers, and digital transformation has become a trend. Literature(YANG Wei-ling, 2021) proposes that one of the strategies for human resource management innovation under the background of big data is to build a human resource network of big data, use big data to complete the scientific allocation of post personnel, and improve the innovation incentive mechanism. It also puts forward that human resource management has been in a subversive era, and scientific and technological innovation covers the whole field of human resource management. Referring to the computing facilities, underlying technology platforms, data platforms, application middleware and tools and schemes in the vertical field of the IT industry, this paper summarizes and classifies human resource science and technology products, It is proposed that the application of human resources science and technology products includes but is not limited to the following 17 aspects. For example, intelligent hardware, software and hardware integration solutions in the field of human resources management, human resources information management system and various software as a service (SaaS) applications, etc. Document(GU Qin-xuan et al., 2021) puts forward one of the suggestions on enterprise human resource management strategies in the post epidemic era. In order to create data-driven human resource management and improve digital decision-making ability, that is, for enterprise digital transformation, the management system is indispensable.

Online office

The novel coronavirus pneumonia has been the main engine of the big data era. Online office has been in the development of the company. During the Spring Festival in 2020, the demand for new online pneumonia was stimulated by the new crown pneumonia epidemic. However, due to the different nature of the industry, enterprises have different effects and degrees of using online office software, which puts forward higher requirements for the rationality of using online office. Document(XIE Qing et al., 2021) suggests that, like the IT industry, the education industry, under the influence of COVID-19, has taken the lead in online business. However, the literature also puts forward the problems of online office, such as difficult business process construction and operation, poor screen diaphragm communication, and gives innovative suggestions, such as simplifying software operation steps, flexible network capacity, creating personalized collaborative office tools, etc. Literature(ZHU Wu-xiang et al., 2020) proposed that online office should not only be synonymous with well-known enterprises, but also advocated that all enterprises should catch up with the wave of online office

CONCLUSION

With the development of economic globalization, the needs of enterprise group management, global management and personalized management are becoming increasingly prominent. In the process of enterprise informatization, many small and micro enterprises are faced with the current situation that communication is not smooth, information cannot be obtained in time, staff efficiency is low, resources are separated, and it is difficult to unify management and coordination. Nowadays, small and micro businesses are facing a new series of difficulties, such as economic stagnation, human resources loss, low efficiency and so on caused by COVID-19(HUANG LI-hua et al., 2021). If small and micro enterprises want to survive in the current difficult environment and not be eliminated, they must be in line with the times, adapt to the environment, have the concept of digital transformation and take action for it. With the development and growth of enterprises, the enterprise system is huge, the business process is becoming more and more complex, and the business is frequently crossed and related. The importance of communication and cooperation among employees, departments and enterprises is becoming increasingly prominent. Enterprises need to break all kinds of communication and management barriers to realize the control, deployment and cooperation of all links of management and operation(ZOU Yong-bin, 2021). This can be done from the following specific points:

1.It is necessary to use ERP management software suitable for oneself in order to achieve higher and faster development in business.

2.In terms of financial management, a more appropriate financial system can help employees better carry out their work and help the boss carry out one-stop management of the enterprise's economy. The data is clear at a glance.

3.In terms of human resources, the human resources management system can make the management of employees more humanized and people-oriented, so that the happiness index of employees is higher and the cost of human resources is lower.

4.in order to better cope with emergencies like COVID-19, online office needs to keep pace with the times, otherwise many small and micro businesses will stagnate and eventually face bankruptcy liquidation(XIANG Yu, 2021).

With the rapid development of mobile Internet, the behavior characteristics of enterprise employees and enterprises have undergone earth shaking changes. The competition faced by enterprises is no longer just the competition of talents and products, but the competition of efficiency, information digitization and customer resources. In the final analysis, the competition of efficiency, information digitization and customer resources is still the competition of enterprise management. Small and micro enterprises are in the early stage of enterprise development, so they should use more efficient management methods, which is the key to whether enterprises can be invincible in the future business competition.

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ON THE PROBLEMS AND COUNTERMEASURES IN THE GRADED TEACHING MANAGEMENT OF COLLEGE ENGLISH

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ABSTRACT

With the continuous expansion of college enrollment, the level of students' basic English knowledge has also become uneven. English teaching should be improved, so English grading teaching has been widely used in Colleges and universities. According to the practice of Level-based English Teaching in our college, by analyzing the problems in Level-based English teaching, this paper is to improve and optimize grading teaching. By improving teaching methods, improving the assessment mechanism, strengthening teaching management, and fully considering students' psychological factors,it is hoped can be helpful to the reform of English Teaching in local colleges and universities.

Keywords：college English；Level-based English teaching；problem；strategy

INTRODUCTION

In 2007, the Ministry of education revised and issued the "College English Curriculum Teaching Requirements". It is clearly put forward that "China has a vast territory, and there are great differences between different regions and different colleges and universities. Therefore, College English teaching should achieve classified guidance and teach students according to their aptitude, so as to meet the personalized needs of students." Under the guidance of the "requirements", China's colleges and universities have implemented graded teaching and received some results. In 2010, our school was listed in the first batch of pilot schools of English teaching reform in Yunnan Province, and has carried out reforms in the curriculum system, teaching methods, evaluation system and so on; In the construction of teaching materials, we have made some useful explorations and attempts, and achieved some results. However, at present, there are still many problems in English Grading Teaching in Colleges and universities in China. This paper analyzes these problems and puts forward countermeasures for these problems; This is of great practical significance for deepening the reform of English education and improving the quality of education.

1.1 Introduction to level-based teaching

level-based teaching is to divide students with similar level and ability into a group according to their existing knowledge level, learning ability and learning potential, and carry out different teaching according to different categories, and adopt appropriate graded teaching methods to make students obtain good learning results in the learning process; In this way, the teaching purpose can be achieved. Level-based teaching can be divided into implicit graded teaching and explicit graded teaching. Implicit Level-based teaching requires higher quality for College English teachers. Therefore, when preparing lessons, we should fully consider the differences of students and adopt graded teaching and evaluation methods according to the characteristics of students. The purpose of explicit graded teaching is to break the current professional setting and class management in schools, and arrange classes according to the students' similar professional level. The focus of this paper is explicit level-based teaching.

BODY OF PAPER

2.1 The application of level-based teaching in College English

Our school implements classified guidance and teaches students in accordance with their aptitude. Since September 2010, English teaching has been carried out in A-level, B-level and small language classes (Thai and Vietnamese). According to the score of the English test, students with a score of more than 105 can enter class A, students with a score of 60 to 104 can choose class B, and students with a score of less than 59 can choose other languages. About 20% of the students are in class A, 78% are in class B, and 2% are in small languages. Physical education majors implement classified guidance and do not participate in classified teaching.

2.2 Several problems in the management of level-based College English Teaching

2.2.1 The classification standard is not scientific and reasonable

The College English level of our university is based on English, but the scores of English tests in various provinces are not consistent. The total score of most provinces is about 150, and the total score of Hainan and Jiangsu provinces is about 100. Therefore, it is unscientific to divide students' grades and classes according to the scores of the college entrance examination. In addition, after the division of Grade A, grade B and small language grades, the new curriculum has basically not changed. For students, the score of English test determines their grade; The teaching method of "one point to the end" is likely to make students lose their learning initiative and initiative.

2.2.2 Level-based teaching cannot really teach students in accordance with their aptitude

In the process of implementing graded teaching, the textbooks of grades A and B in our school are the same. The difference is that students in class a can speed up teaching when giving lectures; The teaching content is relatively increased; While class B is reduced in curriculum arrangement and teaching content. Even if it is the same textbook, but later, there will be a great difference between the grades of class A and class B. The students in class a generally feel relaxed, while the students in class B find this course difficult and difficult to learn. These problems are caused by the lack of scientific and systematic teaching methods and the inability to choose appropriate textbooks according to the essential differences of students; Therefore, students' learning enthusiasm is not high, and the teaching effect is not good.

2.2.3 Level-based teaching makes teaching management more difficult

Level-based teaching breaks the original professional natural classes and groups based on English, so that students from different majors and departments form different classes, which brings certain difficulties to the academic affairs office and teachers' teaching management. In addition, because there will be course selection every semester, and the students in each class will often change, it will be more difficult to manage and the responsibilities will be more vague. At the same time, it will also cause the lack of in-depth communication and interaction between teachers and students.

2.2.4 The evaluation system is not scientific enough

After the implementation of graded teaching, the evaluation criteria of test scores of class A and class B students are the same, and the test scores are the same. But this is contrary to the "graded teaching" which emphasizes that students at different levels should formulate different textbooks, different teaching forms and different evaluation systems. The students with the same exam scores, the same exam scores, and poor grades think that the difficulty is medium, and the students with poor grades will think that it is very difficult; On the contrary, poor students feel that the test paper with medium difficulty will be too easy for excellent students. Therefore, the current evaluation system of College English evaluation cannot fully reflect its scientificity.

2.2.5 Level-based teaching ignores students' mental health

After graded teaching, students who enter class a will feel that they have good basic English skills and have good learning ability when they enter class A; If you don't listen to the teacher, you can still learn English well, and this complacency will make students lazy in learning English. Class B students feel that they are "poor students" in the eyes of teachers and students. Even if they study hard, they can't learn English. This inferiority complex and negative psychology leads to their disgust and fear of English, which leads to the continuous decline of English learning effect.

2.3 Optimization of level-based teaching management of College English

2.3.1 Establishment of grading standards

In level-based teaching, colleges and universities should formulate corresponding courses according to students' English ability and examination results. In order to further solve the problems of single and accidental English grading standards in Colleges and universities, it is necessary to combine the examinee's English score with the entrance examination, so that it can more objectively reflect the examinee's real level; At the same time, we should also take the professional status of students into account. For example, candidates can be divided into classes a, B and C according to their English scores, entrance examination scores and professional conditions. Among them, the top 10% are assigned to class A, with a maximum of 50 in class A; Except for 10 students majoring in art and sports, they are classified as class C, and the number of class C cannot exceed 60; The rest of the students were assigned to class B, with no more than 60 students in each class. Students in classes A, B and C will be dynamically managed, and shifts will be changed at the specified time according to the examination results after the end of the semester.

2.3.2 Classification of teaching objectives

After determining a practical class system, we should further formulate effective English teaching goals. The teaching requirements of College English courses puts forward that "cultivate the ability of comprehensive use of English, especially the ability of listening, speaking, reading and writing, so as to use English for effective communication in future learning, work and social activities, and strengthen autonomy and comprehensive quality to a certain extent, so as to meet the needs of society and international exchanges." Therefore, when implementing graded English teaching, we should take into account the specific situation of education departments and students; In order to meet the learning needs of students at different levels, a reasonable hierarchical teaching goal is designed. This paper sets the following teaching goals for students of different grades.

Class a students' teaching objectives: on the basis of CET-4, through elective, self-study and other ways, pass CET-6 or master of English or above, and have strong English skills. Teaching objectives of grade B students: students are required to master the use of English through the study of elective courses on the basis of CET-4. Teaching objectives of class C: pass CET-4 or school English level examination, be proficient in English skills, and be able to use English skillfully.

2.3.3 Course grading

Providing different teaching contents for students at different levels is a prerequisite for achieving the purpose of graded teaching. American linguist Krashen proposed in his second language acquisition theory that when learners receive language input slightly higher than their existing language knowledge, they can ensure their understanding and mastery of the input language. Therefore, the school should take the lead to organize English teachers to discuss together and formulate teaching content suitable for the learning needs of students at different levels.

In addition to basic English listening, speaking, reading and writing training, class a students should also strengthen English culture, English literature appreciation, and English knowledge in various professional fields. For students in A class, the textbooks compiled by the school can be used to improve the English ability of class a students. In addition, an additional 200 class hours of self-study courses are added each semester; After passing CET-4, class a students can choose general English, professional English, cross-cultural communication and other elective courses according to their personal preferences. Class B textbooks are unified textbooks, and teachers should choose appropriate teaching contents according to the actual situation of students' English; Select some texts in the textbook as self-study textbooks for Grade B students, and pay attention to the comprehensive application of students' basic skills and English. The C-level course pays attention to the explanation and supplement of the basic knowledge of English, so we should choose another unified textbook.

2.3.4 Classification of teaching methods

English teaching method comes from teaching practice. It has the function of guiding the actual teaching, and it will also have a certain impact in the actual teaching. According to the practice of graded English Teaching in Colleges and universities, different levels of teaching methods should be adopted according to the actual needs of students' English; Only in this way can we better meet the personalized learning needs of students.

For class a students, teachers should make full use of micro classes, Mu classes and other forms in the classroom, carry out autonomous learning and cooperative learning, and pay attention to the ability of listening, speaking and writing; Have English translation skills. For class B students, teaching materials, cooperative learning and other teaching means can be used to improve their learning enthusiasm, and training can be carried out on the independent learning platform. Class C students have a weak foundation, and the teaching methods of autonomous learning and discussion and inquiry are not suitable. Therefore, in English teaching, teachers should make good preparations before teaching, make full use of classroom teaching methods, so that students can better master basic English knowledge. In teaching practice, teachers can guide students to study independently, consolidate what they have learned in class and internalize students; Gradually improve students' awareness and ability of autonomous learning, so that they can enter a higher level of education as soon as possible.

In short, in the process of implementing graded teaching, we should fully consider the learning ability, basic strength, cognitive characteristics and other factors of students at different levels, and make targeted adjustments according to teachers' teaching feedback, so as to achieve better teaching results.

2.3.5 Classification of teaching evaluation

Establish a comprehensive, objective, scientific and reasonable examination evaluation system, build the grades of English level examination according to the actual situation of Grade A, B and C students, correctly grasp the difficulty of each grade examination, and ensure the comparability and interpretability of examination results. Use the teaching evaluation method of combining "summative" and "formative" evaluation to improve the proportion of usual evaluation. Take extracurricular activities, foreign language competitions, online autonomous learning, etc. as the usual assessment contents. Cultivate students' reading and writing skills, while paying attention to listening and speaking skills; We should not only pay attention to the test results, but also pay attention to the learning process. In the process of evaluation, in addition to teachers' evaluation methods, students' self-evaluation and mutual evaluation should also be added to establish a diversified and dynamic evaluation mechanism.

2.3.6 Guide and strengthen emotional education

In the process of teaching, we should strengthen the psychological guidance of students, so that the negative and negative emotions generated in the process of learning can be adjusted correctly. Before grading and dividing classes, carry out necessary publicity and education for students to make them understand that grading teaching is not artificial "grading", but convenient for teaching and guidance, give full play to English grading teaching, classification guidance, teaching students according to their aptitude, give full play to the enthusiasm of teachers and students, and give full play to the characteristics of people-oriented, flexible and personalized teaching. Guide students to overcome fear, eliminate inferiority complex, laziness and other psychology, and work with teachers to find, fill in gaps, train, consolidate and improve the overall ability of English, and achieve excellent results in various examinations at all levels.

CONCLUSION

Practice and exploration have proved that graded teaching is a major measure of College English teaching reform. It has achieved remarkable results in optimizing teaching methods, improving teaching quality and improving teaching effects. In the process of teaching, we should constantly summarize and improve our own experience; Through continuous optimization, we should constantly enhance the operability and scientificity of graded teaching, so as to continuously improve college English teaching and promote the development of College English education in the new era.

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IMPACT OF ORGANIZATIONAL LEARNING AND OPEN INNOVATION ON SERVICE INNOVATION PERFORMANCE WITH MEDIATING EFFECT OF KNOWLEDGE SHARING: EMPIRICAL EVIDENCE FROM CHINA’S HOTEL INDUSTRY

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ABSTRACT

This paper examines the impact of organization learning and open innovation on service innovation performance with mediating effect of knowledge sharing: empirical evidence hotel industry of China. Specifically, based on the survey of 500 hotel staff from different regions in China, the structural equation model method will be used to explore and test the relationship between them. The analysis will show that open innovation, learning organization and knowledge sharing in the hotel industry have positive impacts respectively on service innovation performance. Knowledge sharing plays a significant mediating effect on open innovation and service innovation performance, and plays a significant mediating effect on learning organization and service innovation performance. The findings will offer insights to hotel managers on improvement of service innovation performance for achieving better outcomes from practices.

Keywords: open innovation, learning organization, knowledge sharing, service innovation performance

INTRODUCTION

In the current new economic situation, open innovation breaks through closed organizational boundary in the traditional economic era, obtains knowledge and resources outside the organization by strategically using the path from inside to outside and from outside to inside, and combines it with the original core competence and organizational strategy of the enterprises, so as to enhance the innovation ability inside the enterprise and spread the innovation results to the external market of the organization, for the purpose of further promotion of the dynamic adaptability and innovation performance of enterprises. Based on the knowledge-based theory, knowledge as the core element of open innovation, is the foundation of open innovation (Battisti et al.,2015). Based on the market demand, reasonable and scientific measures should be taken in this project, provide customers with increasingly better services, so as to improve the economic benefits and market competitiveness of hotels.

Although many scholars have made some achievements in the research on the relationship between open innovation and innovation performance, the perspectives and conclusions of the research are different (Park, 2018). This study makes further empirical research on the relationship between the two, and complements the research on the open innovation and service innovation performance.

The research on the intermediary mechanism between open innovation and enterprise performance needs to be enriched at present (Xie, 2022). As a part of enterprise performance, the way of open innovation to service innovation performance needs further research. Moreover, the research on the relationship between knowledge management and innovation performance is often too broad and lacks practical pertinence (Yang, 2019). This project will analyze that knowledge sharing would make to people share external innovation resources within enterprises more effectively, and realize the value of transformation of knowledge, so as to promote service innovation performance.

Existing studies have widely confirmed that organizational learning has an important impact on enterprise innovation performance, but these kinds of research mainly focus on technological innovation and manufacturing innovation, and there are few empirical studies on service aspect(Liu,2020). Moreover,few studies have explained how organizational learning affects the innovation performance of enterprises, that is, what the intermediate process is like (Zhang, 2017). In other words, the existing research rarely has involved its discussion on the mechanism of innovation performance.In view of the shortcomings of current research, this project will introduce knowledge sharing as an intermediary variable into the relationship between organizational learning and service innovation performance, so as to analyze the internal relationship between them. The results of the study will not only expand the research on service innovation performance, but also help to clarify the mechanism of organizational learning on service innovation performance.

Despite the rapid growth of the service industry and its significant contribution to economic development, research on service enterprise innovation is still limited (Bogers, 2018). There is little research on the innovation of the hotel industry. Many scholars pay attention to the development of service innovation in a specific industry, but mainly focus on knowledge intensive service industries, such as telecommunications and information services, financial services, public health industry, or manufacturing enterprises (Gu, 2022). Unlike other industries, the particularity of the service industry includes simultaneity, indivisibility, intangibility and heterogeneity (Battisti et al., 2015). This study will help managers improve and enhance the innovation activities of hotel enterprises, so as to effectively promote them to obtain greater competitive advantage and long-term development ability.

Hotel industry as an important part of the service industry, which environment shows increasingly dynamic, complex and unstable characteristics (Vargo, 2008). In recent years, the economic growth of Chinese hotel industry has slowed down, and most hotels are in the survival stage of low profits (Tang 2022). One of the effective ways to overcome the difficult of low profit in hotel industry is to improve the innovation performance of hotel services through innovation (Xu el al., 2017), in order to break out of the red sea of hotel product homogeneity. Therefore, it is of great significance to analyze the driving force of improving the performance of hotel service innovation in China.

Utilization and exploration of knowledge resources has become an important source of innovation for enterprises (Xu&Li, 2013). Open innovation of enterprises requires open knowledge sharing and inclusive knowledge creation mechanism (Tong, 2021). In other ways, through the effective use and integration of knowledge, it can promote the improvement of enterprise innovation ability and innovation performance. And many studies show that organizational learning is an important factor to promote enterprise innovation(Zhang， 2017). Organizational learning is the key source for enterprises to acquire knowledge and build core innovation advantages of organizations(Futteretal,2018). Therefore, this paper will explore the influence of open innovation, knowledge sharing and organizational learning on service innovation performance in Chinese hotel enterprises. The purposes of this research are: (1) to demonstrate the relationships among open innovation, knowledge sharing, organizational learning and service innovation performance, and build a conceptual framework to expand relevant theories. (2) to find out the extent of these factors that affect service innovation performance, and give practical suggestions to improve service innovation for Chinese hotel industry.

This project will pay attention to the following research questions: (1) what are the factors that affect service innovation performance; (2) what extent do these factors affect service innovation performance of Chinese hotel industry; (3) does knowledge sharing play an intermediary role between open innovation and service innovation performance, and between organizational learning and service innovation performance? And the research objectives are: (1) to identify the factors that influence service innovation performance; (2) to investigate the possible impact of the factors on service innovation performance; (3) to identify knowledge sharing play an intermediary role between open innovation and service innovation performance, and between organizational learning and service innovation performance.

I select a sample of 500 employees from 8 hotels in different regions of China and the first-hand data is obtained. Based on the above background and research, considering the complexity of the innovation mechanism and the lack of appropriate research framework to integrate the existing research of the hotel industry, it is necessary to conduct further research to better solve the practical problems. This project will conduct a comprehensive study of the connected literature, try to integrate the relationship and find out the mechanism among open innovation, organizational learning, knowledge sharing and service innovation performance. By establishing a theoretical model of their relationship, the direct impact of open innovation, organizational learning and knowledge sharing on service innovation performance, and the intermediary effect of knowledge sharing will be analyzed in this process. These are used to clarify the mechanism among open innovation, organizational learning and service innovation performance in the process of knowledge management, with the purpose of providing reference for innovation development, and would be able to effectively improve the service innovation performance in Chinese hotels. Operational definition of the paper mainly will refer to the measuring scale of Laursen and Salter (2006) and Guo (2016) to form a measurement scale of open innovation into two dimensions: breadth and depth. It will refer to the measuring scale of Lin&Zhang （2017) to form a measurement scale of organizational learning into two dimensions: using learning and exploring learning. It will refer to the measuring scale of Shi （2007） to form a measurement scale of knowledge sharing into two dimensions: sharing with colleagues in the department and with other departments. Sun (2009) divided service innovation performance into four dimensions: financial, enterprise growth, customer and internal indicators.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Concepts

Open Innovation(OI)

The concept of open innovation was first defined by Chesbrough (2003). Chen(2009) proposed that the external resources obtained by enterprises through open innovation include market information, technology and manufacturing capacity. OI is the process that enterprises can use external innovation resources such as creativity, knowledge and technology into their organizations, and also can bring internal innovative results to market (Chesbrough, 2014). Cassiman and Valentini (2016) proposed that the open innovation paradigm is about the flow of knowledge, and the inflow and outflow of this knowledge are complementary. At the same time, participating in the purchase and sale of knowledge can allow enterprises to increase innovation achievements. A recent research has document the object of openness is not limited to customers or special R & D institutions, but all subjects participating in the whole OI process(Xie&Jiang,2022).It can be seen that OI is a new process that crosses the organizational boundary,which includes the whole process of traditional innovation, as well as the process of production and marketization.

Knowledge Management

Nonaka (1994) analyzed and discussed the problem of ‘knowledge management’ in the famous article ‘knowledge creation company’, emphasizing that knowledge management is continuous and incremental innovation and growth. Davenport et al. (2007) elaborated that knowledge management consists of three processes, namely, creating, disseminating and using knowledge to achieve organizational goals. Stewart et al. (2010) pointed out that knowledge management has four processes: generation, organization, development and distribution. Becerra-Fernandez (2010) identified seven processes of knowledge management: acquisition, creation, refinement, storage, transfer, sharing and utilization. Zhao et al. (2019) claimed that knowledge management can not only rely on scientific and technological identification, transfer, storage and application, but also the communication and sharing between people. Most scholars' research on these different processes shows that knowledge is created, transferred, utilized and shared (Xu,2021).

Organizational Learning(OL)

In the era of knowledge economy, knowledge acquisition and application are of great importance. Futterer et al.(2018) claimed that organizational learning is the key source for enterprises to acquire knowledge and build core innovation advantages of organizations. Xu & Wu(2018) claimed that the construction of learning organization by enterprises is conducive to creating an organizational learning atmosphere.OL can create new knowledge and form an atmosphere of learning, communication and sharing. In the organizational learning atmosphere, knowledge sharing has a significant positive impact on employees' creativity (Ding, 2019).

Service Innovation Performance(SIP)

Barras (1990) is a representative of technologists. Bilderbeek&hertog (2000) proposed four dimensions of service innovation by integrating the concept of service innovation: new service concept, new customer interaction mode, new service delivery system and new technology. Yang (2012) proposed that service innovation is to provide new or improved solutions by updating services, expanding services or improving methods, so as to better meet customer needs and improve added value. SIP refers to the comprehensive evaluation made by an enterprise on the effect of an innovation activity, which measures the impact of the implementation of innovation activities on the overall performance of the company (Gu, 2022). Jian et al. (2015) revised and proposed the scale of SIP, including financial performance, customer performance and internal performance. Liu et al. (2019) measured financial performance and non-financial performance respectively.

2.2 Open Innovation and Service Innovation Performance

Ramirez-portilla et al.(2017) identified that under the OI mode, enterprises can make efficient use of external resources, increase the level of internal knowledge and technology into commercial achievements, and further improve innovation performance.Yang et al.(2020) claimed that enterprises have the best innovation points when using the depth of OI. Lnauen et al (2011) found that for different external entities, open innovation has different effects on innovation performance. If it is open to consumers, scientific research institutions and manufacturers, it will improve the level of innovation performance within enterprises. Therefore, it is hypothesized that:

H1: OI has a positive effect on service innovation performance.

H1a: The breadth of OI has a positive effect on service innovation performance.

H1b: the depth of OI has a positive effect on service innovation performance.

2.3 Knowledge Sharing and Service Innovation Performance

Knowledge sharing can take place in innovative activities such as R & D cooperation and co-creation alliances among team members among departments and among organizations, so that the organization's business system forms a cross time, space and level knowledge sharing network across the organization's internal and external, and then to the enterprise's internal. The network transmission of knowledge can innovate knowledge based on common goals, develop new products and business models, and improve the innovation performance of organizations (Tsai, 2001). At the same time, it is also more capable of identifying knowledge that is valuable for enterprise innovation, so as to improve the innovation performance of the organization (Tanriverdi, 2005). Through knowledge sharing, enterprises continue to increase the stock of knowledge, improve the ability to absorb knowledge, and then internalize each other's knowledge and innovation knowledge system to improve innovation performance (Zahra and George, 2012). Therefore, it is hypothesized that:

H2: Knowledge sharing has a positive effect on service innovation performance.

H2a: knowledge sharing with colleagues in the department has a positive effect on service innovation performance.

H2b: Knowledge sharing with colleagues in other department has a positive effect on service innovation performance.

2.4 Organizational learning and service innovation performance

Different OL methods have different effects on innovation. Xu and Li(2013)proposed that using learning emphasizes improving existing products or technologies through existing knowledge, which is more conducive to incremental innovation; Exploratory learning is more conducive to enterprises to achieve fundamental changes in products or technologies. Lin and Zhang (2017) claimed that using learning is conducive to enterprises to match technical knowledge with market demand, promote knowledge creation and utilization through the integration of old and new knowledge, and improve innovation; exploratory learning helps enterprises identify valuable technical knowledge by taking advantage of first mover advantage, and promotes the organic combination of external knowledge acquisition and internal R&D. Therefore, it is hypothesized that:

H3: OL has a positive effect on service innovation performance.

H3a: Using learning has a positive effect on service innovation performance.

H3b: Exploring learning has a positive effect on service innovation performance.

2.5 Knowledge sharing and mediating variable

Zhang (2019) pointed that knowledge management is crucial in the process of OI, and absorptive capacity is the main capacity in knowledge management. Jiang (2019) discussed the new path of OI to enterprise innovation ability, focusing on the intermediary mechanism of knowledge spillover effect between open innovation and enterprise innovation ability. In the process of OI, enterprises can often improve their innovation ability by acquiring and sharing knowledge, so as to further improve enterprise performance. In the process of promoting the diffusion and development of OI, knowledge not only needs to be shared, but also needs to be efficiently integrated. Therefore, it is hypothesized that:

H4: Knowledge sharing plays a mediating role between OI and service innovation performance.

H4a: Knowledge sharing plays a mediating role between the breadth of OI and service innovation performance.

H4b: Knowledge sharing plays a mediating role between the depth of OI and service innovation performance.

The relationship between technological innovation and the tacit knowledge development ability of employees was studied in tourism enterprises, opening a way for the research of knowledge sharing in tourism industry (Olsen and Connolly,2000). It is obvious that knowledge sharing is essential to promote industry information exchange and cost control in tourism industry. The existing knowledge sharing research for tourism was conducted along the following paths: one way is to discuss the relations among knowledge sharing and organizational learning activities ; another way is to explore how knowledge sharing behavior affects innovation performance (Rao et al., 2018). The hotel industry is an important part of the tourism industry. Because the hotel industry is composed of hotel enterprises, the research on the hotel industry should be based on the enterprise background. Therefore, it is hypothesized that:

H5: Knowledge sharing plays a mediating role between OL and service innovation performance.

H5a: Knowledge sharing plays a mediating role between using learning and *service innovation performance.*

H5b: Knowledge sharing plays a mediating role between exploring learning and service innovation performance.

2.6 Variables and framework

2.6.1 Independent Variables

This paper adopts the open innovation(OI) measures introduced by Keupp M M, & Gassmann(2009). The degree of innovation and openness can be divided into 2 mdimentions: the breadth of OI mainly refers to the number of external cooperative organizations and the number of elements, that is, the scope of enterprises searching for new knowledge; the depth of OI mainly refers to the degree of content interaction between enterprises and external organizations, that is, the frequency of enterprises using knowledge. Knowledge sharing includes knowledge sharing with colleagues in the department and colleagues in other departments(Shi， 2011). Organizational learning(OL) includes using learning and exploring learning. (Chen&Wang,2012).

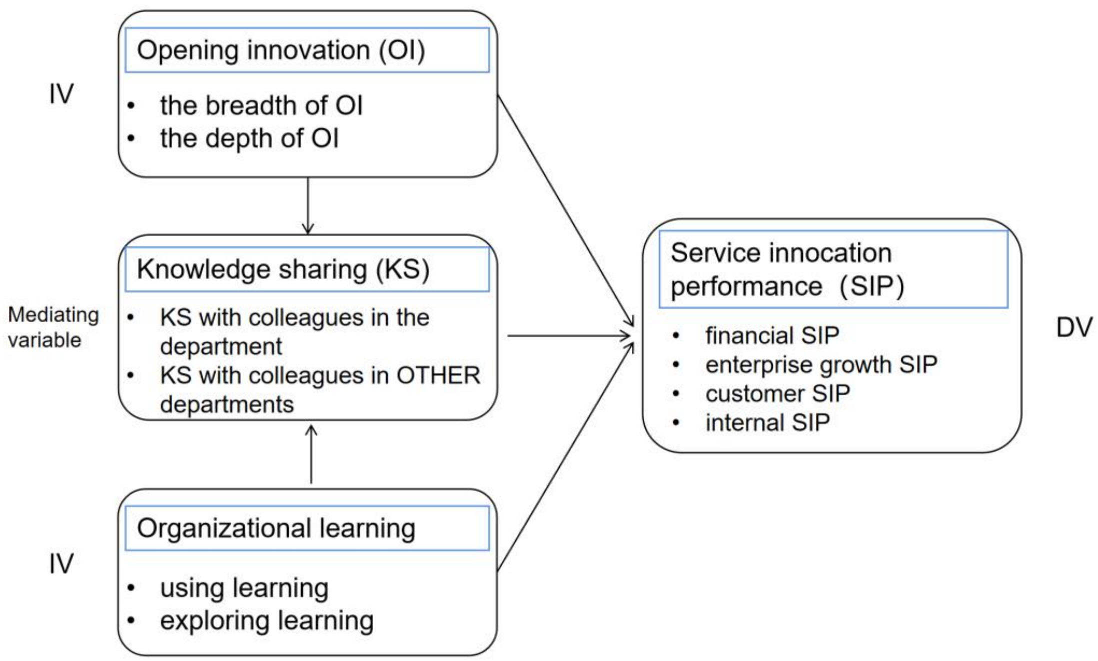
2.6.2 Dependent Variable

This study will focus on the research results of Minna et al. (2006) and divide the service innovation performance(SIP) into 4 dimensions: financial indicators, enterprise growth indicators, customer indicators and internal indicators.

2.6.3 Mediating variables

Knowledge sharing of two dimensions will be tested as mediating variable between OI and SIP, and between OL and SIP.

2.6.4 Framework



RESEARCH METHODOLOGY

3.1 Research Design

3.1.1 Document Study Method

Extensive collection and reading of previous literature will be conducted to understand scholars' research in related aspects, and find out the research of previous scholars can be enriched and improved. The content of this project will be proposed, and the literature related to this study will be searched and summarized.

3.1.2 Questionnaire Survey Method

Combined with existing measurement scales such as Likert Five Scale, nominal and ordinal scale, all objective single-choice questionnaires suitable for this project will be designed to collect first-hand data from face-to-face or Internet for data analysis.

3.1.3 Empirical Research Method

Based on relevant literature review and preliminary analysis of data, a hypothesis model will be modeling. Structural equation modeling method will be adopted, and SPSS and AMOS will be used to analyze the action path effect parameters among variables. Bootstrap program will be used to test the mediating effect of knowledge sharing.

3.2 Sampling and Instrument

The sampling of this study will adopt stratified random sampling technique. And the step is: (1) To determine the overall number, there are about 2000 employees in eight 5-star rated hotels;(2) Confirm the sample size and set it to 500 people; (3)The employees of the enterprise will be classified into general employees, grassroots managers, middle and senior managers, and the composition will be 70:25: 5. According to the proportion distribution of samples, the corresponding number will be 350, 125 and 25; (4)Similar to systematic random sampling, a random number table will be used to determine 350, 125 and 25 people from the three categories according to random numbers.

This study will use questionnaires from collecting primary data and use closed-ended question. The survey was conducted anonymously. The questionnaire is mainly filled in face-to-face and Internet questionnaire.

3.3 Data Collection and Data Analysis

500 questionnaires were distributed in employees in eight 5-star rated hotels in different parts of China. The 8 hotels will be in operation for at least five years. The employees will include the bottom, middle and high-level employees. The division of gender, professional title, age, educational background and positions should be in proportion.

Reliability and validity analysis will be adopted. The maximum likelihood estimation method will be adopted to fit the model. Bootstrap sampling statistical inference method will be adopted to verify the model estimation results. And the Bootstrap method will be adopted to test the mediation effect.

RESULTS AND FINDINGS

4.1 Analysis

SPSS tool will be used to analyze the mean, standard deviation and correlation coefficient of each variable. Reliability & validity analysis will be adopted. When each scale of the questionnaire contains multiple independent contents, the reliability of each sub-scale will be calculated separately, that is, Cronbach α the coefficient will be applied to the reliability test of each sub scale, and the results of each sub scale are used to reflect the situation of the overall scale. In this study, the total correlation of corrected items (CITC) method will be used to delete items with CITC coefficient less than 0.6. Then principal component analysis (PCA) will be used for exploratory factor analysis. KMO test and Bartlett ball test will be performed before factor analysis. Then exploratory factor analysis will be carried out on each scale that passed the reliability test. AMOS software will be used, and the maximum likelihood estimation method will be used to fit the model. Compared with the recommended value, if the fitting values of all fitness indicators are within the recommended value range, it indicates that the model has good fitting and the model is acceptable. Then the bootstrap sampling statistical inference method will be used to verify the model estimation results. This project will use the mediation effect test to analyze. The mediation effect test will be divided into two steps. One is to test the mediation effect of knowledge sharing on the path of open innovation and organizational learning on service innovation performance. Second, in order to verify the intermediary effect of knowledge sharing, bootstrap method will be used to further implement sampling statistical testing.

4.2 Findings

Through reviewing the previous literature and research, this project will explore the mechanism of service innovation performance impacting in Chinese hotel industry by taking the two measurement dimensions of open innovation and two measurement dimensions of organizational learning as independent variables, knowledge sharing as an intermediary variable and divided into two measurement dimensions. Through questionnaire survey and empirical research using the data obtained by SPSS and AMOS software, the following research conclusions will be obtained:

Firstly, the depth and breadth of open innovation have a positive impact on service innovation performance. This result shows that the knowledge innovation network formed by open innovation breaks organizational boundaries, helps to improve the systematization of multi structural knowledge, and helps organizations form the integration and coordination abilities based on innovation goals.

Secondly, the using learning and exploring learning of organizational learning have a positive impact on service innovation performance. It can be seen that organizational learning is one of the key sources of building service innovation performance. The stronger the organizational learning ability of hotel enterprises, the higher the efficiency of enterprises to acquire, absorb and apply new knowledge and new technology, and the more conducive to innovation output.

Thirdly, knowledge sharing has a positive impact on service innovation performance. The service innovation process of an enterprise is based on the existing knowledge resources. Enterprises acquire more knowledge and then effectively integrate and share the knowledge they have, so that enterprises have more opportunities to create high-level knowledge and provide conditions for innovation.

Rich knowledge reserves and effective knowledge sharing are conducive to innovation, and bring positive benefits through innovative achievements, so as to improve the performance of service innovation.

Fourthly, knowledge sharing mediates the relationship between open innovation and service innovation performance, also mediating the relationship between organizational learning and service innovation performance. The achievements of sharing knowledge significantly improves performance of hotels in financial, enterprise growth, customer and internal service innovation. Knowledge sharing is based on open innovation and organizational learning.

CONCLUSIONS

Discussion

With economic globalization becoming a general trend, it is imperative for hotel industry to improve their innovation development strategy. Innovation, knowledge management and organizational learning are crucial to the development of enterprise service innovation. However, how to improve the level of service innovation will bring many challenges to many hotels.

Hotels should integrate open innovation into strategy and corporate culture. In the process of external organizational interaction, hotel enterprises can interact with different types of enterprises, as well as cross-regional and cross-level organizational interaction, so as to increase the acquisition of innovative resources and capital, and absorb ideas, technologies and patents. In addition, social network management is also very important for enterprises' open innovation. We should constantly strive to turn the hotel enterprise social network into a carrier for organizations to gather and share knowledge and resources, so as to help achieve the performance of open innovation.

Hotel enterprises need to attach great importance to knowledge management and the construction of learning organizations. Strengthen process and abilities of knowledge management, and create a good organizational learning atmosphere in order to make knowledge management become the way of service innovation. Through knowledge sharing, improve the organizational learning ability of enterprises, increase and activate knowledge resources, which is conducive to the effectiveness of improving service innovation.

Contribution

This paper will demonstrate the relationships among open innovation, knowledge sharing, organizational learning and service innovation performance, build a conceptual framework to expand relevant theories, and give practical suggestions to improve service innovation for Chinese hotel industry.

Limitation and Future direction

Firstly, the paper will collect cross-sectional data to conduct research. However, it often takes time for open innovation, organizational learning and knowledge sharing to transform into enterprise service innovation performance. And the project may ignore the impact of time. Therefore, subsequent research can collect panel data to have a research on the time effect of several independent variables on service innovation performance.

Secondly, the paper will analyze the impact of knowledge sharing as an intermediary variable. However, as a part of knowledge management process, knowledge sharing plays a relatively limited role. Subsequent research can explore the value of the whole process of knowledge management, and further explore the impact path on the performance of service innovation.

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NETWORK CAPABILITY AND COLLABORATIVE INNOVATION FOR LATECOMERS IN THE CONTEXT OF DIGITAL ECONOMY

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ABSTRACT

In the context of digital economy, the development of enterprises is facing huge opportunities and challenges. The increase of innovation risks and the speed of technological upgrading make the original single partnership no longer adapt to the new situation, and the network capability of governance and development of external network partnership can establish high-value network cooperation. The article focuses on the key issue of "how network capabilities can improve the performance of latecomer companies in collaborative innovation", using the logic of "capabilities-relationships-performance". The article explains and verifies the relationship between network willingness capability, network building capability, network portfolio management capability, network relationship management capability, and corporate collaboration performance.

Keywords: latecomer firms; Network capabilities; relationship management; innovation performance

INTRODUCTION

According to the China Digital Economy Development Report (2022) published by the China Academy of Information and Communication Research, China's digital economy reached 45.5 trillion yuan in 2021, with a nominal growth of 16.2% year-on-year and a proportion of 39.8% of GDP, making the digital economy's position in the national economy more solid and supportive (Wei Yu & Dali Hu, 2022). The digital economy is increasingly becoming the main engine of China's economic growth, the main driving force for the transformation and upgrading of the real economy, and the main battlefield for corporate innovation (Chenyu Xia, 2022).

Driven by capital and technology, 80% of Chinese companies are in the process of digital transformation, and some industries have already found a "head model" (Lu Xia Yi et al., 2021), but only about 9% of companies have really unlocked their digital potential. In the digital economy, this is both an opportunity and a challenge for many latecomers (Du Danli et al., 2022.). Therefore, based on the advantages accumulated from the booming digital economy (Lin Xin & Xin Tong Meng, 2021), it is relevant and valuable to fully utilize the value of digital technology empowerment (Feng Lijie et al., 2021; Lin Xin & Xin Tong Meng, 2021), and to study in depth how latecomers can leverage their latecomer advantages for innovation.

With product modularity and knowledge distributed among different organizations, firms increasingly need to establish formal or informal collaborations with other firms (Feixing Li & Weiwen Yang, 2012). Networks are important not only for acquiring the knowledge needed for innovation (Jianhong He et al., 2015), but also for learning from the innovation practices of other firms (Guoshun Wang & Fan Yang, 2011), and the exchange of knowledge, promotes innovation within and between firms (Lanjian Liu, 2014; Ling Yue Zhou et al., 2022).

In the current fierce competitive environment, late-developing firms collaborate in networks by building network resources and network to achieve knowledge sharing (Junshu Du et al., 2018). Firms obtain the resources they need for their own development in the network and improve the performance of collaborative innovation (Shenghua Zheng & Junsheng Li, 2020). However, in the establishment and operation of network cooperation portfolio, latecomer firms generally focus on the number of partners, partners' technology, reputation, status, brand influence and other related indicators (Li & Wang, 2021), while ignoring how firms should coordinate each network cooperation relationship, knowledge, resources and manage the whole network cooperation portfolio (Asemokha et al., 2020). Maximize the overall effect of the network cooperation portfolio (Sayekti & Soliha, 2016), among other issues.

LITERATURE REVIEW

2.1 Latecomers and technology catch-up

Latecomers are manufacturing firms that face both technological and market competitive disadvantages while trying to compete internationally (Hobday, M., 1995). Among them, technological disadvantage stems from the distance of latecomer firms from international sources of technology and R&D (Park & Ji, 2020; Xiaoxu Yan, 2016; Li, Wei & Huang, Xia, 2022) and the lack of cutting-edge technological capabilities due to their isolation from world technology and innovation centers. Catch-up strategies for latecomers focus on helping latecomers to overcome their latecomer advantages and maximize their latecomer advantages (Xinmin Peng, Qirui Zhang, et al., 2022).

The technological catch-up of latecomer firms, mainly studied from two perspectives of technological disadvantage (Ye et al., 2019) and market disadvantage (Kwak & Yoon, 2020), first started from the exploration related to entry order effects in industrial economics and marketing, which was mainly focused on the research in the field of industrial economics at first, and then gradually developed The first studies were focused on industrial economics, and later developed into a description of the dynamics of first-mover and second-mover firms.

Regarding the technological catch-up of latecomers, the study was conducted at the institutional level (Xu & Xu, 2016; Zhang, Peng & Zhang, Weiping, 2022; Peng, Xinmin, Li, Jia-Nan, et al, 2022), network level (Li & Wang, 2021; Xiaoxu Yan, 2016; Zhang Peng & Zhang Weiping, 2022; Peng Xinmin, Li Jia Nan, et al., 2022; Zheng Guo, 2007) to conduct research; research from the perspective of enterprise technology learning is divided into strategy formulation (Xiaoxu Yan, 2016; Zheng Gang & Guo Yanting, 2017), From the perspective of technology catch-up of latecomer firms, the study is divided into strategy formulation (Xiaoxu Yan, 2016; Zheng Gang & Guo Yanting, 2017), path selection (Li & Wang, 2021; Peng Xinmin, Zhang Qirui, et al.) on the learning, absorption and application of their technologies.

2.2 Network Capability Connotation

Network capability theory was developed from Håkansson's (1987) "networked capability" and has since been usefully expanded by a number of scholars. Network capability is the ability of a firm to optimize the use of a particular relationship and to handle individual partnerships in order to achieve a leap in the firm's network position (Håkansson & Johanson, 2001). Based on its own strategy, a firm identifies potential partners (Zhou & Wenping Zhao, 2020), network cooperation values (McGrath & O'Toole, 2021) and market opportunities (Jianhong, 2016; Junshu Du et al, 2018), constructing a network cooperation portfolio, managing and utilizing the cooperative relationships at each level of the network in the network cooperation portfolio, effectively integrating, allocating and optimizing resources within the network (Ben Amara & Chen, 2020; Farida & Nuryakin, 2021; Ling Yue Zhou et al., 2022), and achieving knowledge through knowledge sharing with network cooperation firms to The ability to share to obtain good collaborative innovation performance.

2.3 Network Capability and Corporate Innovation Performance

Network capability is a firm's ability to develop and leverage interorganizational relationships and is one of the firm's higher order resources (Ben Amara & Chen, 2020). Firms use network capabilities to acquire external knowledge and improve their own financial and non-financial performance in service innovation (Farida & Nuryakin, 2021). Firms generate greater performance impact relative to other firms by establishing collaborative relationships with partners, managing a portfolio of network collaborations, and leveraging network partnerships so as to gain access to mutually matched resources for firm innovation (Mort & Weerawardena, 2006), and both relationship commitment and information sharing significantly enhance firms' service innovation performance, and relationship commitment and information sharing more can enhance firm service innovation through the mediating role of network capabilities (Jane Zhaoguan, 2018). Cross-industry relationship management capabilities are an important indicator to assess the growth performance of SMEs in international operations (Lasse Torkkeli, 2016). Through network sharing, enterprises pool, integrate and allocate network resources (Fang Gang, 2011) to obtain the resources needed for their own innovative development and improve their performance.

CONCEPTUAL MODEL AND HYPOTHESIS

3.1 Variable settings

(1) Network Willingness Capability (NWC) refers to the ability to identify, build, expand, and maintain network cooperation relationships between companies and partners based on corporate strategies with new ideas and to anticipate changes in the development of network cooperation portfolios(Håkansson & Johanson, 2001; McGrath & O'Toole, 2021; Shuizheng Song & Yunfei Shao, 2021), it is measured in four aspects: "searching for development opportunities in potential markets," "valuing

reputation for cooperation," "obtaining resources from other companies," and "we have resources that other companies need.

(2) Network Construction Capability (NCC) refers to the ability to search, identify and select valuable partners in external networks under the guidance of corporate strategy and to establish effective partnerships with them through the investment of corporate relationship skills and resources, so that the company can occupy a favorable network position and achieve good collaborative innovation performance(Zhe Zhang et al., 2015). The article measures "NCC" in six areas, including "finding more new partners," "providing guidance and collaboration across networks," and "improving collaboration processes based on experience. "Improving collaboration processes based on experience," etc.

(3) Network Portfolio Management Capability (NPC), which is the ability to manage, maintain and expand multiple relationships with other partners by strengthening and optimizing cooperative interactions at the individual or organizational level, and then adjusting and improving network partnerships at the strategic level(Håkansson & Johanson, 2001; Sayekti & Soliha, 2016). The article will measure "NPC" in five aspects, such as "integrating our partners' skills and resources", "integrating resources to satisfy specific customers residing in the organization's network", and "anticipating major market trends to discover potential needs of partners" etc.

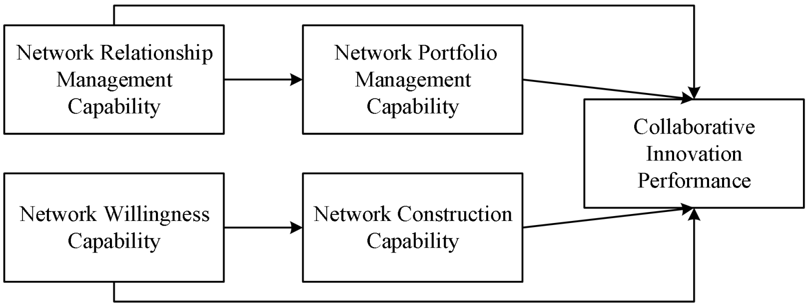
(4) Network relationship management capability (NRC), which refers to the ability of a company to manage and coordinate activities for specific network partner relationships in a diverse network of collaborative innovation relationships, and to maintain and optimize binary relationships (Cenamor et al., 2019; Håkansson & Johanson, 2001; Xiaoli Li, 2018). The article will measure NRC in four areas, such as "emphasizing that collaboration is based on trust" and "discussing the progress of collaboration with partners".

(5) Collaborative innovation performance (CIP) is the increase in enterprise value, measured as the increase in business volume, after the implementation of a new technology(Yu Ming Xie, 2016). The article will measure CIP in eight aspects, including "number of new products", "speed of new product development", and "product innovation revenue exceeding expectations". The article will measure "CIP" in eight areas, including "number of new products," "speed of new product development," and "product innovation revenue exceeding expectations" etc.

3.2 Initial conceptual model

The article analyzes the factors influencing network capabilities of late-developing firms and their relationship with innovation performance. With full reference to the model of network capabilities and firms' collaborative innovation performance (Baojian Zhang et al., 2015; Jifeng Mu, 2001; Shenggang, Ren et al., 2010; Sheng, Gang, Ren & Rui, Shu, 2014; Wangyang Ren et al. 2013;Naude, 2009), the conceptual model of this paper is constructed as shown in Figure 1.

Fig1 Conceptual Model Diagram



Source: Ren, Shenggang and Shu, Rui (2014); Mu, Jifeng et al. (2001); Naude (2009); Zhang, Baojian et al. (2015); Ren, Wang, Yang et al. (2013)

3.3 Hypothesis

Based on the setting of the primary model, the following hypotheses are formulated in relation to the needs of the study.

H1: Network building capabilities are positively related to collaborative innovation performance.

H2: Relationship management capabilities are positively related to collaborative innovation performance.

H3: Relationship management capabilities are positively related to portfolio management capabilities.

H4: Network willingness capabilities are positively related to portfolio management capabilities.

H5: Portfolio management capability is positively related to collaborative innovation performance.

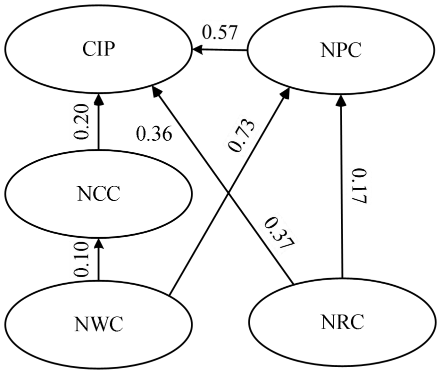
EMPIRICAL ANALYSIS

4.1 Calibration of the model

The article used AMOS structural equation modeling software and used the great likelihood estimation method to fit the model. The data results of the initial model analysis showed that the CMIN of the overall model fit was 164.314, the significance probability value $p=0.001<0.05$, the degree of freedom was 111, and CMIN/DF=1.480, indicating that the sample data did not fit the initial model. Meanwhile, RMSEA=0.052>0.05, AGFI value=0.866<0.900, and GIF value=0.903>0.900, indicating that the model fits poorly and the initial model needs to be further revised.

Bing-Lin Cheng (2003) and Hao-Zheng Qiu (2005) argue that the model is necessary to be corrected when the correction index M.I. is greater than 5. Based on the principle of gradual correction, the covariance between the errors of the variables is gradually increased. The revised model and its unstandardized estimates are shown in Figure 2.

Figure 2 Revised model for non-standardized estimation



4.2 Parameter test and model evaluation

The numbers on the latent and error variables are the respective variances, the number on the single arrow is the factor loading, and the italicized numbers on the observed variables are the multivariate correlation squared, which indicates the extent to which the observed variables are influenced by exogenous variables, and which indicates the extent to which the endogenous variables are influenced by exogenous variables. The unstandardized path coefficients of the variables passed the test at the significance level of 0.05 after the model correction was performed, and the results of the test are presented in (Table 1).

Table 1 Test results of the non-standardized regression coefficients of the modified model

	Estimate	S.E.	C.R.	P
CIP←NRC	0.371	0.067	5.545	***
CIP←NCC	0.202	0.070	2.887	0.011
CIP←NPC	0.572	0.178	3.212	0.001
NPC←NRC	0.168	0.138	2.218	0.003
NPC←NWC	0.732	0.229	3.195	0.001

Source: Calculated and organized according to the SEM.

Bollen (1989) considered model evaluation into overall fitness evaluation and model intrinsic structural fitness evaluation. Among the absolute fitness test indicators of the modified model, the CMIN of overall fitness is 108.197 with a significance probability value p=0.442>0.05; RMR (root mean square residual)=0.039<0.05; RMSEA (asymptotic root mean square residual)=0.011<0.05; GFI (fitness index)=0.934>0.90; AGFI (Among the value-added fitness indices, NFI (gauge fitness index) = 0.904 > 0.90; IFI (value-added fitness index) = 0.998 > 0.90; TLI (non-gauge fitness index) = 0.997 > 0.90; CFI (comparative fitness index) = 0.998 > 0.90. Among the parsimony fitness index test indicators, PGFI (parsimony fitness index) = 0.778 > 0.50; CN (critical sample number) = 212 > 200; the degree of freedom is 106, CMIN/DF = 1.021 < 2. All-important fitness test indicators meet the inspection criteria, indicating that the sample data fit the model and the model fit is good.

The evaluation of the intrinsic structural fitness of the model is mainly reflected in the evaluation of the measurement model and the evaluation of the structural model. Among the indicators evaluated by the measurement model, only one variable has a loading (0.436) less than 0.50, and the rest of the variables have loadings between 0.5 and 0.95, indicating that the measurement model can better reflect the latent variables it needs to measure. The evaluation of the structural model was mainly tested using the combined reliability, and the formula used was $\rho_c = \sum(\lambda)^2 \Big/ \left(\sum(\lambda)^2 + \sum\theta\right)$ (λ: standardized factor loadings, θ: error variance of the observed variables). The combination reliability of latent variables was calculated as NPC：0.774；NCC：0.789；NWC：0.623；NRC：0.695；CIP：0.583, except for the combination reliability of CIP, which was less than 0.6. The combination reliability of the latent variables passed the test, indicating that the combination reliability of the latent variables was good.

4.3 Structural model normalized path coefficients

The basic fit indicators of the model are good, in accordance with the model identification rules, and the model fits well with the actual observed data. In the test of intrinsic quality, although the parameters can still be released between variables, the overall effect of NPC, NCC, NWC, and NRC on CIP is obvious. The path coefficients of the structural model quasi-alignment were all positive, supporting the assumptions made in the initial model. Specifically, the influence weights of NPC, NRC, NWC, and NCC on CIP are 0.344, 0.327, 0.392, and 0.083, respectively, and the four influences are positively correlated with CIP, matching the assumptions H1, H2, H3 and H5 of the initial model. Among them, the direct influence weight coefficients of CIP←NPC and NPC←NRC are relatively large. the influence of NCC and NRC on CIP constitutes a positive proportional relationship, and the direct influence weights of the two on CIP are 0.240 and 0.532, respectively, and the path coefficient of the latter is nearly twice higher than that of the former.

CONCLUSION AND PERSPECTIVES

Network Willingness capability, network construction capability, portfolio management capability and relationship management capability all positively affect the performance of collaborative innovation. Network Willingness capability is a strategic capability of enterprises, which is an important factor for successful collaborative innovation and plays an important role in improving the performance of collaborative innovation. It can improve the structure of the network cooperation portfolio; relationship management capability can adjust and improve the cooperation and innovation relationship of specific network partners in the network cooperation portfolio. However, the article only considers the impact of network capabilities on the collaborative innovation performance of latecomer firms, and other factors are not considered, because in the digital era, the competitive environment is constantly changing, and environmental factors can be added subsequently to examine the impact of network capabilities on the innovation of latecomer firms in different contexts.

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THE ROLE OF COOPERATION IN CREATIVE TOURISM DEVELOPMENT IN CHINA

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ABSTRACT

Creativity and innovation of tourism economy as well as the meaning of creativity in tourism business are intensely discussed.The article aims to present the role of New Values of Creative Tourism in China. Creative tourism aims to bring about smart growth. In order to do this in China it needs to promote cross-boundary development and achieve seamless linkages and healthy interactions between industries. The expansion of the tourism industrial chain needs to focus on breaking through the limited cycle of the 'six elements of tourism'. To achieve this, tourism industries need to take advantage of the experiential demand of the entertainment age and make creative tourism an 'input factor' and 'value-added capital' for business growth.Creative tourism resources will cover all 3 levels of culture including: 1) High culture including cultural heritage such as palaces, historical sites, antiques, art galleries, museums, etc. 2) Popular culture including, folk performances such as folk music performances, performing dance, drama, festival, tradition, etc. 3) Everyday culture including crafts, arts, and community way of life, local foods, markets, houses etc.

INTRODUCTION

The tourism industry has unsteadily grown, and many global travel reports predict that world's tourism industry will be an important industry to drive the overall economic growth in the world. Trends of tourist behavior around the world predict that tourists will focus on tourism, which offers a more interesting and exotic experience rather than focusing on luxury travel and shopping. (Euro Monitor, 2017). Tourism in the age of personalized experience needs to create experiential tourism products. What people really look for is not simply a leisure and holiday package to please the body and the soul; they look for personalized tourism products with distinctive features to enrich their journey and experiences.

Today's consumers are knowledgeable and demand unique travelling experiences. Tourism has shifted from information-based to knowledge-based and experience-based activities. The concept of tourists as both producers and consumers is becoming widespread, and a destination's competitiveness is based on its distinction and differentiation. Richards (2011) mentions that the rise of creative tourism and the targeting of the creative class are among the clearest signs of this transformation. The concept of creative tourism was introduced by Richards and Raymond (2000). They define creative tourism as tourism that allows visitors to have direct experiences with the host community and participate in local activities and local culture as a part of their holidays. They define creative tourists as travellers who search for local involvement to help them develop themselves and create identity. Creative Tourism Activities focus on using intangible tourism resource such as cultural heritage and local wisdom knowledge. These experiences are created through learning history, culture, tradition, local lifestyle with the practice of local wisdom such as practice drawing, weaving, pottery, cooking, dancing, traditional music, etc.However, existing literature on creative tourism mostly lies on examining the creative tourism, creative tourists and their experiences (Ali, Kisang, &Hussain, 2015; Telan, 2018)

NEW VALUES OF CREATIVE TOURISM

The concept of creativity in Chinese culture is different from the West. Puccio and Chimento have stated that Chinese creativity is based on progressive improvement, modification and adaptation. Thus, Chinese creativity is often focused on perfecting an existing idea and gradually improving it. On the other hand, producing novel ideas and products that are valuable and unique is considered creative in Western culture. Therefore, the evaluation of Chinese creativity from a Western viewpoint may lead to misunderstandings. However, Chinese creative practices shine in their own way and positively contribute to the world (Shahinoor Rahman, 2019).

China has now become an innovative society.In 2006, Chinese leaders took a plan to transform China into an innovative society by 2020 as their medium- to long-term plan for the development of science and technology.This aim has nearly been achieved in light of the 2018 global innovation index (published by Cornell University, INSEAD, and the World Intellectual Property Organization in partnership with other organisations and institutions) that ranks China in 17th place, compared to Canada at 18th, Norway at 19th, and Australia at 20th.China's significant improvement has emerged in publications, R&D expenditures and online creativity. This is a noteworthy breakthrough of Chinese initiatives to make China an innovative society (Shahinoor Rahman, 2019).

Creative tourism aims to bring about smart growth. In order to do this in China it needs to promote cross-boundary development and achieve seamless linkages and healthy interactions between industries. The expansion of the tourism industrial chain needs to focus on breaking through the limited cycle of the ‘six elements of tourism’. To achieve this, tourism industries need to take advantage of the experiential demand of the entertainment age and make creative tourism an ‘input factor’ and ‘value-added capital’ for business growth. In this way, creative tourism becomes a key link in various industries’ effort to increase the value added (to realize the experiential value).

This also enables interaction and integration between tourism and related industries(Wuwei, Li, 2011).

Tourists are active cocreators of creative tourism experiences and participants in creative place-making. Tan et al., (2014) distinguished five distinct groups of creative tourists were identified: novelty-seekers, knowledge and skills learners, those who are aware of their travel partners' growth, those who are aware of green issues, and the relax and leisure type. A few studies aim at the production of creative tourism and the evolvement of creative tourism destinations (Blapp & Mitas, 2017)(Diassardinha et al., 2017). There is also a trend on participants of the supply side in creative tourism such as creative businesses (Mohammadi et al., 2018), and local indigenous communities (Blapp & Mitas, 2017).

From many studies found that the value system of creative industries is expressed through two channels. One benefits from the interpenetration and integration of various industries and industry sectors. The other is the benefit of scale brought about by global, creative value-focused restructuring or integration of value modules. Both models require the combination of creativity, technology, products and markets; they also require the establishment of 1) core industries, 2) supporting industries, 3) related industries, and 4) merchandising industries(Wuwei, Li, 2011). This four-level value system is the ideal model for industrializing cultural creativity and maximizing value.

Rohitrattana (2019) stated that the community enterprises refers to community operations including production, service, or another services managed by the committee with the same relationship and way of life to run this business, both juristic and non-juristic person to make income and to rely on themselves of each family, in and out of community, and the success factor of operations of community enterprises. Sangayotin (2017) studied the successful factors for operations of community enterprises, and found that the successful factors including 1) Leadership, that is, the person is that good leader must accept the opinion, be the visionary leader, and be farsighted; 2) Good management system, that is, having a goal, a structure, and a system; 3) Skills, that is, having enough productivity skills towards the sufficient demands; 4) Networking and supporting from external organization; 5) To have a market support, that is, the market can support certainly the products and the goods must be high-quality, and get help from networking. (Purwanti et al., 2019).

THE ROLE OF COOPERATION IN TOURISM

The role of cooperation in tourism has been object of discussion in this article. The impact of cooperation is not always positive. For example, Czernek (2017) posit that the lack of cooperation results from the fact that potential partners are afraid of losing competitive advantage. There are several advantages to becoming a corporation, including the limited personal liability, easy transfer of ownership, business continuity, better access to capital and (depending on the corporation structure) occasional tax benefits.Cooperation between public and private sectors, directly and indirectly involved in tourism, promoting the consolidation and valorisation of the destination, through the sharing of resources, knowledge and strategies, which allow the development of tourism and greater efficiency in the management of services and products. Such partnerships are most successful at increasing understanding of the values of protected areas and providing social and economic benefits to local communities. They also lead to improved visitor experiences. These partnerships are therefore demonstrating many of the characteristics ascribed to sustainable tourism. Moreover, the positive effects are that it increases income, helps to spread culture, and creates employment opportunities. On the other hand, there are the negative effects such as environmental damage due to overpopulation, increased crime rates, and loss of resources.

The benefits of tourism for the individual and society such as tourism enhances the peace, prosperity and happiness in the society and improves the universal friendship concept. It also improves the mutual cooperation. It encourages civic involvement and also provides cultural exchange between hosts and guests.Tourism can contribute to urban renewal and rural development and reduce regional imbalances by giving communities the opportunity to prosper in their place of origin. Tourism is also an effective means for developing countries to take part in the global economy.

Previous research found that social capital approach was used to achieve sustainability and prosperity (Moscardo et al., 2017). Strengthening positive social capital also means strengthening trust and collective action. These two aspects are able to build long-term good relationships among the member of the community (Purwanti et al., 2019). When relationships are established, then it will create various opportunities for cooperation. The bad relationships might affect some challenges, such as lack of infrastructure development, weak promotion, security issues, low leadership, and low knowledge in managing tourist destinations. Collective action in a community is a collective action in the context of vertical and horizontal relationships. The vertical relationship which is based on political trust is between the community members and their local government such as the village head. Therefore, government policy should be able to encourage the growth of collective action or people participation. based on its local wisdom, because the implementation of an appropriate policy would increase the strengths (Mustika, A. and M. K. Aditya, 2018) (Mustika, A. and M. K. Aditya, 2018). The participation of the local community helps to conserve natural capital (Purwanti et al., 2019).

Although creative tourism seems to be a solution for industry survival, it also faces criticism and challenges. Some challenges relate to creative development strategies in general, while others question the creativity shown in city policy and suggest that it needs to be reoriented more effectively Telan, 2018). Creative tourism resources will cover all 3 levels of culture including (Richards, 2009): 1) High culture including cultural heritage such as palaces, historical sites, antiques, art galleries, museums, etc. 2) Popular culture including, folk performances such as folk music performances, performing dance, drama, festival, tradition, etc. 3) Everyday culture including crafts, arts, and community way of life, local foods, markets, houses etc.

CREATIVE TOURISM PATTERN

The concept of Creative Tourism appeared in the 2000′s, and is defined as a: “Tourism which offers visitors the opportunity to develop. their creative potential through active participation in courses. and learning experiences, which are characteristic. of the holiday destination where they are taken. A place making perspective on creative development has important implications for tourism. Tourists become essential actors in the co-creation of place, re-negotiating meanings of place that attract them.

The creative tourism service model showed that most tourists preferred seeing, buying, tasting and learning at a high level. For the travel experience, most tourists preferred impressions, knowledge, the lifestyle of the community and skills at a high level. The creative tourism should proceed as follows: 1) Create awareness of creative tourism patterns, 2) Develop a variety of creative tourism patterns, 3) Create an impressive creative tourism experience, 4) Develop a tourism route that connects tourist attractions and local communities, 5) Personnel development and 6) Build a cooperation network.(Waranya Boonyanuwat, 2022)

Richards (2010) presents the models of creative tourism in Figure ***

Models of creative tourism

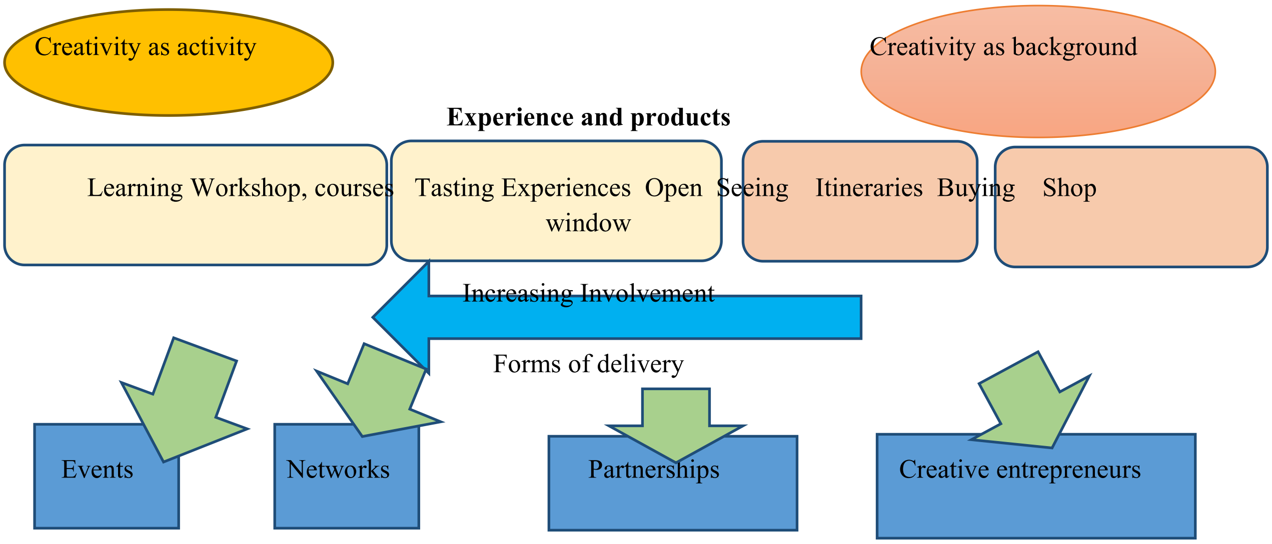

Figure ******Models of creative tourism.

Sourse: “Creative Tourism and Cultural Events,” by G. Richards, 2010

From the models of creative tourism, it can be described that there are 2 basic models: using creativity as a tourist activity and using creativity as backdrop for tourism. (Richards, 2010) 1. Using creativity as a tourist activity allows the tourists to participate in learning activities and experiencing in the tourist attraction, for example, learning and practicing local cooking and experimenting with making pottery together with people in the area. 2. Using creativity as backdrop for tourism is to apply creative ideas to build the atmosphere to make the tourist attraction more attractive by using cultural tourism resources to create experiences. The 2 activities are seeing and buying such as visiting tourists' attraction, buying souvenirs from shops in tourist attractions and seeing how to cook local food in the local museum. The form of creative tourism will focus on the activities for tourists to participate in so that they will gain knowledge and skills as well as experiencing 4 features types of activities which are "Learning" from the workshop, "Tasting" from experiences, open ateliers, "Seeing" itineraries, and "Buying" Shop windows with the purchase of souvenirs and shopping at tourist attractions, as displayed in Figure 2.4 (Richards, 2009).The basic activities in all 4 types can be utilized to organize 5 categories of activities, according to the characteristics of tourism resources, such as cultural heritage, arts, lifestyles, media and functional creation. (DASTA, 2013).

CONCLUSION

China as a Source of Tourists. The uptick in foreign visitors traveling to China is paralleled by an increased rate of Chinese tourists traveling abroad. China's expanding middle class, with increasing disposable income, has facilitated a dramatic increase in outbound tourism. Creative tourism brings much benefit in every sense, helps to preserve both tangible and intangible values, preserves heritage, protects the old traditions, promotes a country abroad and creates new work places for residents, which is especially important in the context of the today's recession.

In conclusion, for the development of creative tourism to be successful and sustainable, the followings must be improved: 1) Creative space by creating a space for creative learning atmosphere; 2) Creative spectacles must be valuable activities, identity and create a positive attitude for tourists which local people are involved in the development of products that are suitable with the demands of tourists; 3) Creative cluster must consider the cooperation in creating a variety of interesting activities that can bring good local identity and cultural identity as well, and 4) Management network with cooperation both inside and outside the local community and support from government agencies. It can be done by performing in 5 steps which are 1) Finding the identity, 2) Creating outstanding and differentiation, 3) Finding the needs of tourists, 4) Creating value for products and tourism experiences, and 5) Marketing modifications that emphasize the value of the product and the use of social media.

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INNOVATION OF ELECTRONIC ARCHIVES MANAGEMENT

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ABSTRACT

In work, archives management is an important basic work. In the era of big data, great changes have taken place in the management of archives, and the traditional way of archives management has not adapted to social development. Nowadays, electronic archives management has become the main way of archives management. This paper analyzes the significance of strengthening electronic archives management in the context of big data, and then discusses how to strengthen management from three aspects.archives management is not only an important part of enterprise management, but also a very important management link in enterprise management. Archives record the production, activities and development process of enterprises, and can provide real guidance materials for the development direction, policy and decision-making of enterprises. With the development of information technology, archives management also tends to be electronic, but in practical work, affected by many factors, the level of enterprise electronic archives management is still in its infancy, and its quality and management efficiency still need to be further improved. However, there are still deficiencies in electronic archives management at this stage. It is necessary to explore the deficiencies of electronic archives management, and analyze the new trend of innovative ideas of electronic information archives management under the background of big data, in order to further improve the level of electronic archives management.

Keywords: Big data; Electronic archives; Administration; Innovative ideas

INTRODUCTION

The arrival of the big data era has played an efficient role in people's research on data, and has penetrated into all fields of economic and academic research. Therefore, the archives management of enterprises should also comply with the development of the times, pay attention to the improvement of the level of electronic archives management, which can improve work efficiency. Paying attention to efficient electronic archives management can also promote the development of enterprises and improve the overall management level of enterprises. The electronic archives management carried out in the era of big data is an effective means of information management for enterprises, institutions and not individuals. Therefore, under this general trend, we should pay attention to improving the electronic management level of archives managers, updating management concepts, keeping pace with the times and constantly optimizing management, so as to promote the level of electronic archives management in China.

1.1 First of all, the deficiencies of electronic information archives management at this stage mainly include the following points:

1.1 The management mode is backward, the collection and management of important data are poor, and it is difficult to find the time needed.

Table 1

Traditional management mode	Modern electronic management mode
Backward management mode	Advanced management mode
Incomplete files	Complete documents
High management consumption	Easy management
Fine management is difficult	Fine management

n the traditional electronic information file management, the decentralized management mode is mostly used. This management mode has the lowest management cost for enterprises and institutions, but this decentralized management mode has an unavoidable defect, that is, the problem of incomplete data is prominent, such as when it is necessary to retrieve or browse the data of a certain event at a certain time in the work, The traditional file management mode can not transmit all the information of an electronic information, but needs to go back and forth to multiple places for data retrieval. Sometimes, due to some data loss or misoperation, the incidence of incomplete electronic information increases.First, the problem of information islands. At this stage, there is no highly unified electronic archives management database in China. Even though the electronics in various regions have established archives databases suitable for their own development and tried to strengthen the management of electronic archives information, there is a lack of a platform for the unified management of all electronic archives information, so that the information resources between different regions and different electronics cannot be shared, and the ultimate goal of archives information management cannot be achieved. Secondly, supply and demand. Most of the electronic archives management is divided into regions, which is difficult to find, and the archives management system is not perfect, so that the relevant managers treat their work with a state of carelessness and fatigue. In this situation, it is very difficult to realize cross regional and cross system management. To some extent, the value of electronic archives information cannot be brought into play. Thirdly, the awareness of electronic archives management is insufficient. The government affairs system of colleges and universities is very independent, and it is difficult to use big data technology to manage electronic archives information, and in practical work, electronic archives managers have less say. According to the relevant research findings, in the archives information management, due to the limited human resources, the electronic archives management can not achieve the efficient processing of massive data and the collection and sharing of archives information. Finally, the soft power of electronic archives management does not adapt to the hard environment. Because policy implementation and software development are more convenient than improving the quality of managers, there are great obstacles to archives information management

1.1.2 The electronic information file registration information is not comprehensive and serious, and the data may be lost.

There are important data of electronic information archives management in electronic information archives. Registration information is the first important link of the quality of electronic archives management, but the traditional electronic information archives registration information is not detailed enough, so in many archives management documents, important information is likely to be missing, unregistered or disordered. In addition, the traditional electronic information archives registration is completely completed with the help of manual input, Although the management carrier is a computer, generally speaking, the security of the electronic information file registration information itself is not high, and the probability of losing important information is high. Cause great unnecessary trouble for enterprises and institutions.

1.1.3 Traditional human resource management consumes a lot of material resources

China has a large population, and the traditional human management of electronic information archives is very common. There are many deficiencies in human management, such as low efficiency of archives management, widespread loss, low technical content, and the consumption of a lot of human and material resources, which not only increases the labor cost, but also lags behind the management. Cheap labor to make up for human resource management is very common in the traditional electronic information file management, which is inefficient, difficult to find, and wastes a lot of time and human and material resources. In the labor-intensive production mode, pure manual management is also the main way of electronic information archives management. Centralized management of a large number of electronic information archives is a waste of time and energy for archivists, resulting in a lot of criticism.

1.1.4. Fine management is difficult

Traditional methods of human resource management will inevitably lead to the phenomenon that archives are not filed in time, and the data are lack of real-time or authenticity. Archives are damaged or even lost. With the development of social economy, the information generated by them will gradually increase. In this form, the amount of information that electronic archives management needs to deal with will become larger and larger, and it will become more and more difficult to realize refined management, and a lot of workload will be increased, Cause a lot of manpower waste.

BODY OF PAPER

The innovation of electronic archives management in the context of big data has the following advantages:

1. Compared with traditional paper file management, electronic files have higher security and information processing efficiency, and can effectively ensure the information security and efficiency of the unit. The content of information archives management is not only to record the development process of enterprises and institutions, but also involves a large number of important documents and information about enterprises and institutions. Many archives contain a lot of documents and materials with high legal effect. Therefore, whether it is leakage or damage, it can

directly affect the core interests of enterprises and institutions and bring a great adverse impact on the smooth development of enterprises and institutions. By optimizing the management of electronic information archives, we can not only quickly access the required documents, but also realize the necessary protection of important documents, so as to minimize the adverse events such as leakage or damage of archives during the access process, which have an adverse impact on the unit. The improvement of the level of Archives confidentiality management plays a more positive role than traditional management.

2. The improvement of the level of electronic archives management has made the archives management of the unit standardized by computers, improved the level of intelligent management, and laid a good foundation for the specific implementation of various work tasks and promoted the scientific and standardized development of unit management. In the context of the development of big data informatization, the continuous optimization of the management of electronic information archives can also improve the overall quality and work efficiency of employees. Providing information entry and sharing can effectively reduce the workload of employees and promote the modernization of enterprise management. At the same time, the application of electronic information management in units can check documents in a timely and efficient manner, and achieve leak detection and defect filling, which is fast, safe and convenient in operation.

3. At present, most citizens' information is stored in computers through electronic information archives. This information is not only closely related to citizens' life and work development, but also related to citizens' right to privacy. Once a wide range of personal privacy information is leaked, citizens' right to privacy cannot be effectively protected, which will not only cause trouble to citizens' lives, but also cause social unrest and affect social stability. Therefore, in order to provide a strong guarantee for citizens' information security and social stability, we must optimize and innovate the management of electronic information archives, provide a strong guarantee for citizens' information, and provide a strong guarantee for social stability and development.

Innovative ideas of electronic information archives management in the context of big data

1. Pay attention to strengthening the infrastructure investment of archives managemen

In the era of big data, the investment of basic equipment is the key to improve the comprehensive quality of archives management. Units should actively learn new management concepts and knowledge, and improve the investment of hardware level, such as computers, digital scanning input and output equipment, data storage equipment, etc. as the basis for improving the overall level of archives management. In addition, we should also pay attention to the establishment of archives management, retrieval and identification management system, and continue to improve and develop in the specific operation, so as to lay a good hardware foundation for the effective implementation of various information archives management work. At the same time, we should also pay attention to the training and introduction of managers, and require file managers to master the relevant knowledge of electronic information file management and computer application technology. Under this requirement, we can carry out electronic file management, and its management quality and management efficiency can be greatly improved.The improvement of the comprehensive quality of file users also puts forward higher standard requirements for file services. It is necessary to adjust the concept and implementation path of archives utilization service according to the personalized needs of archives users, so as to improve the archives utilization service to a certain height. First, humanized service. The archives utilization service should establish the ideological concept of "people-oriented", give users equal access to information, and improve the service attitude, especially the grass-roots archives departments, which should be warm, thoughtful, patient and meticulous

2.Pay attention to the perfection and improvement of management mode

First, in the context of the era of big data, we should comprehensively implement the evaluation mechanism, urge relevant personnel to change the traditional concept of file management, accept new management means, keep pace with the times, and constantly improve various management systems in combination with the specific implementation of various work tasks, so that relevant personnel can fully mobilize their work enthusiasm. Units should take the actual situation of the unit as the basis, adopt the form of comprehensive management, and implement modern management when carrying out the collection, collation, extraction and other links of archives.

Second, implement the electronic and paper integrated management mode. The two file management methods have their own advantages and disadvantages. Massive data is stored too much in the traditional management method, and it is difficult to find the land, but the authenticity is strong, which is the advantage of traditional management. Compared with modern electronic archives management measures, electronic data management, although lacking in security protection, can achieve mass data storage, data addition and deletion, and rapid query, with high efficiency. Therefore, in the large-scale data network query system and Internet query system, confidential information and important information can not be entered into the Internet query system. Through management diversion, information security and confidentiality are improved.

Third Pay attention to the improvement of the comprehensive quality of managers

A large number of archives are produced in the process of economic and social development. Under the background of big data, in the face of more and more complex and more information data, higher requirements are put forward for the comprehensive management ability of electronic archives managers, which requires relevant managers not only to have stronger information processing, analysis and real-time update database and massive data processing ability, Improve the understanding of the maintenance and upgrading of basic equipment such as computers. Enterprises can arrange special personnel to carry out training according to actual needs and improve personnel management ability. Therefore, enterprise archives managers should timely understand the development concept of the times, introduce innovative and scientific management concepts into practical work, pay attention to the team construction level of archives management, ensure that the professional level and technical level of unit archives management keep pace with the times, and formulate technologies related to science and technology and big data, so as to lay the foundation for the further development of the utilization value of archives and promote the continuous expansion of electronic information archives management.

CONCLUSION

This paper is an output of the science project. The traditional archives management mode has been difficult to meet the management requirements of modern massive data. With the production of massive electronic information archives, the pressure of archives management in units is also increasing. Transforming management ideas and innovating archives management mode have become a top priority. The innovative management of electronic archives management must conform to the development of the times. The innovation of electronic information archives management under the background of big data can effectively promote the level of archives management, improve the quality of management, constantly innovate and improve the management concept and management system, promote the level of electronic archives management, and create higher social and economic benefits for enterprises. In the management process of electronic archives, many aspects of procedures are involved, and the requirements for infrastructure and other hardware equipment are very high. This requires units or departments to strengthen the infrastructure construction required by electronic archives management and improve the management system in accordance with the development requirements of big data technology, so as to promote the healthy development of work. In the process of improving the management technology system, first of all, ensure the accuracy of input data, establish a complete database, and maintain the database at any time, which is also the basis and premise for the effective development of the management technology system. After having a database, we need to use relevant technologies to identify the data in the database according to different work requirements, so as to realize different electronic file management functions. When improving the technical system of management, one thing that cannot be ignored is the protection of the system. When establishing the management technology system, we should ensure the safety of the system, make emergency plans and defensive measures in advance, and let the management system play a role in a safe working environment.To sum up, in the era of big data, we need to innovate the concept of archives management service, optimize and integrate archives resources, expand the practice path of archives service, and pay attention to the safety management of archives, so as to promote the efficient development of archives management

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IMPACT OF EMPLOYEES EMOTIONAL INTELLIGENCE ON JOB PERFORMANCE: A CASE OF OUTSOURCING ENTERPRISES

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ABSTRACT

Based on the theoretical research of emotional intelligence and job performance in China and in foreign countries this paper puts forward the model hypothesis of the relationship between employee emotional intelligence, superior emotional intelligence and employee job performance. Taking employees of bank outsourcing service projects as the object, we selected mature data scales in relevant research fields at home and abroad to issue questionnaires, and collected 327 pairs of effective upper and lower level paired data. Then there is spss26. 0 amos24The reliability and validity of 0 data were analyzed. The results showed that the scale used in this paper had high reliability and validity. Finally, the correlation analysis and adjustment effect verification of the survey data are carried out.

According to the research results, 1.There is a significant positive correlation between the evaluation and expression ability of employees' self-emotion and their task performance. Employees' ability to recognize and evaluate others' emotions is significantly related to their task performance and relationship performance. Employees' self emotion management ability is significantly positively correlated with employees' task performance and relationship performance. Employees' emotional use ability is significantly correlated with their task performance and relationship performance. 2. The regulation mechanism of superior emotional intelligence on employees' emotional intelligence and job performance is shown in the following two aspects. First, the superior's ability to recognize and evaluate others' emotions regulates the relationship between employees' emotional intelligence and employees' task performance. First, the superior's ability to use emotions regulates the relationship between employees' emotional intelligence and employees' task performance.

Through the above research, this paper provides theoretical support and empirical basis for enterprise human resource management. It is suggested that enterprises should pay attention to the emotional intelligence of employees and cadres from the recruitment stage, strengthen training, cooperate with external professional forces, solve the emotional problems of employees, and improve the overall level of emotional intelligence of enterprises.

Keywords: emotional intelligence; task performance; contextual performance; moderation effect

INTRODUCTION

1.1 Research background

The national government departments have given a series of major policy support, and the macro-economy has developed rapidly; Moreover, under the background of scientific and technological progress, the domestic demand for outsourcing talents continues to expand, and the outsourcing ability is valued. China's outsourcing service industry has developed rapidly, and has become the second largest outsourcing service country in the world. From the analysis of its business types, knowledge process technology outsourcing has developed rapidly, and information technology outsourcing still occupies an important leading position.

Employees of outsourcing business are prone to bad emotions in the face of complex interpersonal relationships. Different emotions and intelligence of employees will lead to changes in business performance. Changes in business performance will cause us trouble in user reputation, complaints and even business settlement. Human resource managers have been paying high attention to work performance, and enterprises pursue the maximization of interests on the one hand. On the one hand, we hope to maximize value and rationally use talents (Wong,C.S.& Law,K.S,2002). The strength of employees' emotional intelligence not only directly affects employees' personal work performance, but also affects the emotions of others in the organization, organizational climate and organizational work performance. The strength of superior emotional intelligence has a positive or negative impact on employees' emotions, which will affect employees' work performance.

Human resource managers have always attached great importance to work performance. On the one hand, enterprises are eager to realize the maximization of interests, on the other hand, they are eager to use talents through the rational selection of value maximization. However, the strength of employees' emotional intelligence not only directly determines employees' personal work performance, but also directly affects the work emotions of others in the organization. The organizational climate and the overall business performance of the organization. At the same time, the strength of superior emotional intelligence will undoubtedly have a positive or negative impact on employees' psychology and emotions, and seriously affect employees' work performance.

With the gradual acceleration of information construction, the scale of information system continues to expand, and banks, securities, asset management companies, insurance companies and other major financial institutions introduce outsourcing resources. Among the major banks, large state-owned banks, small and medium-sized joint-stock commercial banks and Fangcheng banks all over the country are in full bloom, and outsourcing has been introduced in many fields such as development, operation and testing. The scientific and technological outsourcing force of the banking industry has become a very important force in the development of Bank Science and technology, and has formed a beneficial supplement to the scientific and technological force of the bank.

At present, the banking industry uses a large number of outsourcing forms to help its own information construction. The company, as the provider of outsourcing services, should consider outsourcing services from a very important perspective, whether it is to take outsourcing services as the company's main business, or to increase users' stickiness and obtain project opportunities with the strategy of providing outsourcing services.

In the company's outsourcing projects, as employees engaged in operation, development, testing and other technology outsourcing businesses, due to various reasons, operational errors, problems in the scheme, and improper emergency treatment. At the same time, the interpersonal relationship is also complex, which requires communication with multiple departments of users. Poor communication, slow progress of the project, and even criticism and complaints from users due to business problems.

At present, most companies attach great importance to work performance, but few pay attentions to the emotional and intellectual factors of employees, so the investment in this area will be less. In addition, domestic research on the impact of emotional intelligence of employees engaged in outsourcing services on job performance is also relatively small. This paper studies the relationship between emotional intelligence and job performance of employees engaged in outsourcing services by sorting out domestic and foreign literature and combining empirical research. Moreover, it plays a regulatory role in the relationship between employees' emotional intelligence and employees' job performance.

1.2 Research purpose and significance

1.2.1 Research purpose

On the one hand, the purpose of this paper is to explore the impact of employees' emotional intelligence on job performance and the moderating effect of superior emotional intelligence on its impact, so as to provide theoretical reference for enterprise human resource management and enrich the current theoretical research on emotional intelligence. On the other hand, we started from practice and took the employees of M company, an IT outsourcing service enterprise, as the research object. According to the research theory, we guided the enterprise's employee management practice, and provided new ways and methods for the employee management of outsourcing service business, so as to ultimately improve the employees' work performance. Customer satisfaction increases, user stickiness increases and guarantees.

1.2.2 Research significance

Theoretical significance

There are few studies on the impact of emotional intelligence on job performance of enterprise employees engaged in IT outsourcing services in China, and some research literatures have not conducted a general study on this issue. At the same time, at the organizational level, there is insufficient research on how to adjust the impact of employees' emotional intelligence on job performance.

In this study, we can demonstrate the impact of employees' emotional intelligence on employee performance and countermeasures, provide reference for the practice of enterprise human resource management, and add new management methods and methods for the staff management of human resource department. Therefore, this topic selects bank outsourcing project employees as the research object, and the focus of the research is stronger, which provides a reference for scholars to explore and compare the emotional intelligence of different research objects.

1.3 Practical significance

Company M has acquired many IT outsourcing projects from banks and provided it outsourcing services to bank data centers. This paper selects the employees of M company related projects as the research object, investigates the impact of emotional intelligence of employees who provide outsourcing services on employees' job performance and the regulatory effect of emotional intelligence of superiors, and provides solutions for enterprises. Enterprises should improve employees' work performance and customer satisfaction, improve the rationality and effectiveness of the company's management of employees, and promote the improvement of the company's talent management system. In addition, enterprises should pay attention to employees' emotional intelligence at the recruitment stage, conduct training and guidance in the later work, help employees manage their emotions in daily work, and establish a good cooperative relationship with others. And the superiors attach importance to improving their emotional intelligence and emotional management, which affects the employees' emotions. Achieve the purpose of improving employees' performance.

1.4 Research content

Through a large number of references and research, after summarizing the theoretical research of literature research at home and abroad, this paper selects M company's Bank project outsourcing employees as the key object of theoretical research, carries out literature analysis, takes survey data research and other activities as the main theoretical research methods, and analyzes and summarizes the relationship between employees' emotional intelligence and employees' job performance. According to the regulation effect of superior emotional intelligence on the relationship between employees' emotional intelligence and employees' job performance, this paper studies the basic interaction mechanism and mode between them, and puts forward feasible solutions to help enterprises achieve the purpose of improving employees' job performance. The main contents of this paper are as follows:

1. literature research on the concept, connotation and relationship of emotional intelligence and job performance.

2Based on the actual survey data, this paper empirically analyzes the relationship between employees' emotional intelligence and job performance.

3The moderating effect of superior emotional intelligence on employees' emotional intelligence and job performance.

1.5 Research methods

This paper mainly uses the methods of document study to review the relevant research results at home and abroad, and comprehensively analyzes the impact of employees' emotional intelligence on business performance in the outsourcing business scenario and the moderating effect of superior emotional intelligence on this impact. Specifically, the main research methods used in this paper are as follows:

(1) Document study and research method

The literature analysis research method mainly refers to various literatures related to the enterprise management of relevant people at home and abroad, mainly from the aspects of outsourcing management, emotional intelligence, emotional management, emotional stability, emotional labor, analysis of the reasons for employees' resignation, job performance, employee satisfaction and so on. Focus on understanding the recent trends and research results in the field of emotional intelligence, and learn from the essence of their excellent research, so as to provide a more detailed reference for the further analysis of this article.

(2) Investigation and research method

According to the human resource elements, taking the employees engaged in outsourcing services as the object, using appropriate scales, the questionnaire of emotional intelligence and business performance was prepared and distributed. The questionnaires were paired after collection, spss26.0. Amos240 and other professional statistical software to carry out data statistics and analysis, and study the relationship between employees' emotional intelligence, employees' work performance and online emotional intelligence.

At present, company M has more outsourcing projects in major banks, involving many fields, and has more research samples. This paper selects the employees of M company engaged in bank outsourcing service projects as the research object, representing the actual situation of the employees of the company's main bank outsourcing projects, making the research universal.

1.6 Research innovation

This paper is the background of banking IT service outsourcing in the financial industry. In this scenario, the emotional intelligence and employee performance of employees engaged in IT outsourcing business are studied. There are three innovations in this paper.

1.Theoretical innovation. The emotional event theory systematically reveals and analyzes the emotional impact and mechanism of enterprises on employees in the workplace and living place through the complete chain of "event emotion attitude behavior" (Li,2008) in terms of the relationship between employees' emotional intelligence and employees' job performance, this paper introduces the moderating variable of superior emotional intelligence, and matches it according to the superior subordinate relationship, which is an innovation in theory. It not only enriches the theory of emotional management, but also provides a reference for the theoretical research of emotional labor and other related fields.

Emotional intelligence and job performance are multidimensional concepts Chenmeng, Bian and (Wang,2012) this paper also goes deep into the dimension level in the research. From the four dimensions of employees' emotional intelligence's ability to evaluate and express their own emotions, the ability to identify and evaluate others' emotions, the ability to manage their own emotions, and the ability to use emotions, this paper discusses the correlation between employees' job performance and relationship performance, and the ability of superiors' emotional intelligence to recognize and evaluate others' emotions. The adjustment effect of emotional intelligence on the relationship between employees' task performance and relationship performance is also an innovation in theory.

2.Methods innovation, emotional intelligence, job performance and other data were collected using the survey method. The questionnaire design was consistent from top to bottom to reduce bias.

3. application practice innovation. In terms of the selection of research objects, this paper selects the banking outsourcing personnel as the research object, and selects the bank outsourcing project employees. It involves many different large and medium-sized banks. It involves system operation, network operation, application operation, monitoring management, application development, testing and other business areas. Application practice is innovation.

1.7 Research ideas and framework

Technology roadmap reference Figure 1-1 is divided into five stages: introduction, literature review, research design, data analysis and conclusion.

1. introduction: it mainly describes the basic definition and positioning of IT services and outsourcing, the current situation and problems of IT outsourcing in the banking industry, the background of M company, and the positioning and existing problems of outsourcing business of companies engaged in bank outsourcing services. It also discusses the significance of the research purpose, research content and methods.

2. Comprehensive literature to ask questions:through the collection, collation and analysis of literature, this paper discusses the current situation of emotional intelligence and job performance research, the development trend of scientific research at home and abroad, and the relationship between employees' emotional intelligence, superior emotional intelligence and employees' job performance.

3. Theoretical analysis and research hypothesis: analyze the relationship between emotional intelligence and job performance, build a theoretical model, and put forward hypotheses. Explain the sample sources and sampling methods used in the study, such as scale design, questionnaire distribution and data collection.

4. data analysis: conduct reliability analysis, validity analysis and common method deviation analysis on the characteristics of data analysis samples collected in the study, and then conduct hypothesis test.

5. conclusion: according to the research results, this paper summarizes, puts forward management suggestions, and analyzes the limitations and future prospects of this paper.

LITERATURE REVIEW

This part focuses on the theoretical basis of this paper, and widely collects, sorts out, compares and summarizes the relevant research literature of predecessors. It is mainly divided into the related literature research of emotional intelligence theory, the concept, connotation and mode of job performance, and the research on the relationship between employee emotional intelligence, superior emotional intelligence and employee job performance.

1 emotional intelligence

In 1990, Mayer and Salovey first proposed the basic concept of "emotional intelligence", pointing out that the content of emotional intelligence is mainly to help distinguish and regulate the emotions of yourself and others, and how to use emotional information to help him guide his thinking ability. In 1995, Goleman wrote that although the concept of emotion and intelligence has been widely spread around the world, the academic definition of the concept of emotional intelligence is not unified.

In1997, Mayer and Salovey modified the original model, emphasizing the cognitive component of emotion. In 2000, Mayer and Salovey made a significant improvement on the modified model. Emotional intelligence model mainly includes four aspects: emotional perception, emotional integration, emotional understanding and emotional management. In 2004, Mayer, Salovey, Caruso, etc. believed that the cultivation of emotion and intelligence is the ability and knowledge to promote emotion, emotion to promote thinking, and understand emotion and soul through feeling and expression; And found that they have the ability to effectively regulate their emotions and promote their emotional and cognitive growth (Nogami,2005)(Mayer J D, Salovey P ,2004)mayer, Salovey and Caruso in 2008 are the basic definitions of emotional intelligence, which are based on the ability to perceive and express their emotions, the ability to express their thoughts, the ability to understand, analyze and infer their complex emotionsAnd adjust to the ability to actively control various complex emotions of yourself and others.

Mayer's four models divide emotional intelligence into four levels. For example, how to manage our emotions to achieve specific goals. Understand emotion and emotional language, and express the signals conveyed by emotion. Use emotions to promote thinking. Accurately perceive the emotions of yourself and others. Each group of abilities under each location has its own development track, from basic simple abilities to advanced complex subtle abilities.

(Lujiamei,2005) said: "as the name implies, emotional intelligence is a kind of ability", "emotional intelligence is human feelings.

You can also define the capabilities of work objects in dependencies. "(2005)

Goleman, an American psychologist, said that people with excellent performance are significantly different from ordinary people. The key to the difference is emotional intelligence. The function and role of emotional intelligence is far greater than that combined with other professional skills and cognitive abilities. In other words, the development of emotional intelligence is one of the important factors that directly affect their work performance. Goldeman believes that emotional intelligence is good self-confidence, curiosity, motivation, self-control, interpersonal communication skills, communication skillsCoordination ability. goleman's view has become a widespread concern of social celebrities and scholars, but because the definition of psychological emotion and intelligence connotation is not clear, this is similar to bar on's early thought. Bar on believes that emotional intelligence is people's work to deal with environmental needs and pressures. I think it affects Lian's mood, personality and interpersonal relationship in general(Xu , Zhang,2002).

(Bar on,1997) defined emotional intelligence as "a series of non-cognitive abilities and skills that a person can properly cope with environmental requirements and pressures" as: in 2000, he more clearly pointed out that emotional intelligence is a series of physical, psychological, social science knowledge and physiological abilities that effectively and actively respond to the requirements of social environmental changes through the influence of emotions. " The term "emotion" is mainly used to emphasize that they may be a special type of intelligence different from our traditional cognitive sensory intelligence (Liu,2011).

Bar on's emotional intelligence model mainly includes five basic dimensions.

1.Personal internal: including five abilities of emotional self-awakening, self-confidence, respect for people, self-achievement, independence, etc.

2.Interpersonal relationship: have empathy, social responsibility and interpersonal relationship.

3.Adaptability: the ability to check reality, handle problems, and be flexible.

4.The component of stress management theory: it refers to two kinds of psychological abilities: self-bearing of psychological pressure and self-control of impulse.

5.Happy heart: it is a quality with a sense of happiness and optimism (Bar on R,2006).

From the content of the above different theories, it mainly involves two theories, namely, the ability model theory and the mixed model theory, and there are some differences between them. The common ground lies in regulating understanding and understanding, self-regulation, and mastering the ability and characteristics closely related to their emotions (Zhang,Wang2011). All these theories are trying to understand how an individual perceives, understands, uses and manages emotions, thus helping to predict and improve individual effectiveness.

Employees with high emotional intelligence quotient tend to resonate. In other words, we can think and understand the ways and behaviors to adapt to social development from the perspective of others, and it is easier to adapt to the environment and establish a better team cooperation relationship (Chang, 2008). Employees of companies with high emotional intelligence quotient are more likely to resonate with each other and understand the real intention of customers, so they can meet the requirements of users, more easily obtain user satisfaction, friendship and trust (Wang, Liu, 2013). Employees with high emotional intelligence can know how to express their feelings, share their emotional experience with others, and get help from others. Therefore, if you can adjust your emotions in time, be good at self-motivation, put yourself into work faster and adapt to rapid changes, the level of work performance will also be higher (Wang Rui, 2011). There is a positive relationship between emotional intelligence and job performance (Lou, 2008).

How does employees' emotional intelligence affect their job performance? Employees can be more rational when they are working by adjusting their emotional state (Wu,Guan,2011). Moreover, employees' emotional intelligence will have a significant positive impact on their work performance. In addition, due to the special authority of enterprise managers, they can master certain resources (Zhang et al., 2009). If employees want to obtain the resources of enterprise managers, they must obtain the preferences of enterprise managers through certain ways of work and expression, so as to get more praise and rewards from managers. Managers with high emotional intelligence have high work emotional sensitivity, are easy to identify and evaluate their own and employees' emotions, and can have good work communication and communication with employees. Therefore, managers' emotional intelligence also directly affects the work performance of their subordinates and employees in the enterprise (Yu, Yuan,2008) .

On the basis of studying the relevant literature at home and abroad, we elaborate and explain emotional intelligence as follows. Emotional intelligence mainly includes four basic aspects of specific abilities. (1) Ability to evaluate and express self emotion. Individuals can accurately perceive, recognize and recognize their emotional state, improve their emotional sensitivity, accurately perceive their emotions, give correct names to emotions, and actively judge and evaluate their emotions. They can express their emotions by appropriate language or behavior, action, and expression. (2) Ability to recognize and evaluate others' emotions. This ability means that individuals can accurately perceive, recognize and recognize the emotional state of others, accurately perceive the emotions of others, and accurately name others. People with this ability have higher emotional sensitivity. (3) Self emotion management ability. This ability refers to the ability of individuals to manage their emotions. That is to say, individuals can adopt appropriate emotional coping strategies to express, release, accept and transform their negative emotions. They are not easily affected by negative emotions, maintain a positive emotional state, and can quickly recover in their own psychological situation.

(4) Ability to use emotions. This ability enables individuals to make good use of and manage their emotions in order to develop in the direction of constructive behavior and individual performance. Individuals can use emotion related knowledge to promote the development of emotional intelligence and establish a good cooperative relationship (Mccrae, R.R., 2000). The core of emotional intelligence is emotional management ability.

Among the five kinds of personality, one is emotional stability, which is a very important part of personality. According to most literatures on organizational personality, personality traits can lead to work behavior and attitude, not the opposite (Tasselli et al., 2018) An important reason may be that the research in this area is dominated by the classic view of personality in the field of personality (McCrae, R.R., & Costa,1999). This view assumes that the direction of causality is from personality to life experience. The characteristic of personality is "internal character, which essentially follows the internal development path independent of environmental influence"(W,2018). However, according to the recent research of personality psychology, although personality characteristics are relatively stable, they can develop in adulthood as a person accepts new life rolesbleidorn (Donnellan, M.B,2015).

BUSINESS RESULTS

According to different research objects, business performance can be divided into individual performance, team performance and organizational performance. Business performance discussed in this article, especially personal performance.

Human resource managers always attach importance to work performance and hope that enterprises can maximize their value in the process of maximizing their own interests. Most studies before the 1990s regard work performance as a single level structure, and believe that the completion of work tasks is the win of work performance(Zhang Huan, 2015). However, with the in-depth study of employees' job performance, according to the empirical research results, two-dimensional, three-dimensional and other multidimensional structures have also been proposed.

In 1993, Borman and motowidlo proposed task performance and relationship performance. The study of job performance from these two levels has been widely recognized and widely used in the academic community (Caspi et al., 2005). Among them, task performance is a part of the behavior and business description in the role, which is mainly evaluated by ability. Relationship performance is mainly evaluated through motivation and personality, which is part of the behavior outside the role, and is usually realized through indirect managementBorman, (W.C., & motowidlo, s.j,1993) (Wang , Zhao,2015).

Task performance in an organization is usually expressed as the goal and performance level required for its own personnel to complete their own work, that is, the goal and effect required to complete a specific task. Task performance changes with the position and level of employees. Therefore, the reason why task performance can directly evaluate a person's completion of a task at work and whether its results are reasonable is that task performance directly affects the output of the actual effect of the work. Therefore, the responsibilities of enterprises to employees' specific positions should generally be determined according to their tasks and performance. Tasks and performance are also closely related to employees' competency, personal ability, work skills, work knowledge, etc. Therefore, as an indicator of business performance, task performance is one of the most basic elements of business performance (Fanjing,2013).

The relational performance is mainly reflected in the following aspects. (1) Have good teamwork and cooperation spirit. For example, when other colleagues encounter difficulties at work, employees can actively help them. (2) Strive to establish and maintain a harmonious team cooperation and mutual assistance relationship with other colleagues. (3) If these responsibilities are beneficial to the organization, you can take the initiative to undertake them even if they are not within your own responsibility. (4) Organizational rules should be strictly observed and implemented. Even if any rules and regulations cause inconvenience to yourself, (5) when completing various tasks, always be enthusiastic and proactive, and take supporting and ensuring the realization of the organization's goals as the primary task. Even if the organization does not clearly indicate what employees can achieve. It can be seen that relationship performance has no direct impact on task results in work, but provides a supporting environment for the good realization of task performance (Zhang, 2015).

On this basis, all worth adds adaptive performance and proposes a three factor model. Due to the lack of empirical research, it mainly focuses on how to measure adaptive performance. Domestic research mainly focuses on the discussion and influencing factors of business performance. Wenzie increased his efforts and expanded the four factor model. More importantly, the empirical analysis of these four dimensions is carried out. Among them, adaptive performance and effort performance are independent factors, and task performance and traditional task performance are also the same definition. The proposal of the business performance model and the development of the scale, whose standards are more in line with the reality of Chinese enterprises, provide important theories and tools for Chinese scholars to study business performance(Wen,2005) (He,Huo,2020).

Han Yi, liaojianqiao, longlirong, etc. made an in-depth study of the previous relevant literature, and combined with the key event method and questionnaire survey method, proposed a four-dimensional structure model of employee job performance. The model is based on the theory of social interaction exchange and learning, and uses the method of questionnaire survey to analyze the employees of Chinese enterprises. The rationality of the four-dimensional structure model has also been confirmed. The structural model is divided into four dimensions: task performance, relationship performance, learning performance and innovation performance. According to a large sample of ordinary Chinese employees, Han Yi and others divide the level of business performance, so this model is more common (Han , Liao, Long,2007).

Training provides employees with the knowledge and skills required for effective workpugh, (S.D., Dietz, J, Willy, J.W., & Brooks,2002) For service personnel, an effective customer service training program can enable employees to understand the potential social and emotional needs that may arise in the process of interacting with customers, regulate emotions and behaviors, and understand the skills required to respond to these needs (2002)castanheira, (F.,& chamber,2010). According to the research of huxiaoxiao, xujunji and other teachers, different types of human resource management practices can effectively alleviate the negative impact of customer mistreatment on different work results of service employees, so training is particularly important for performance results (Hu, Zhan,2017).

2.3 research on the relationship between employees' emotional intelligence, superiors' emotional intelligence and employees' job performance According to the theory of emotional events, aetWeiss, (H.M.,& Cropanzano,1996) aeeffective events theory mainly focuses on the basic structure, incentives and results of individual emotional reactions in their work process, and believes that the characteristics of a stable working environment will directly lead to positive or negative work activity events. The individual experience of these work activity events can directly cause other emotional reactions, and the individual attitude and behavior can be further regulated by emotional reactions. Emotional response affects employees' behavior in two ways. The first is to directly affect their behavior, and the second is to indirectly affect their behavior, through employees' job satisfaction, organization and commitment. So emotion theory distinguishes two different characteristics and nature of emotional behavior. One is directly driven by emotional response. For example, the leader criticizes the employee, causing him to have a frustrated or unhappy emotional response, and the next day he is late or absent from work due to the difference of the employee's emotional state. Another judgment driven behavior is attitude driven behavior, which is indirectly driven by emotional response. In other words, emotional response first affects employees' work attitude and continues to drive attitude behavior. For example, employees' resignation is not due to temporary emotional impulse. Changes in work attitudes such as job satisfaction and organizational commitment are due to the accumulation of long-term negative emotions and experiences. After careful consideration, the employees evaluated and judged the company's existing business. For example, "this company has no prospects". And then put forward counter measures (Weiss H.M, 2002). No matter what kind of behavior is caused by emotional reaction, job performance will decline.

The structure of employees' emotional intelligence is "emotion recognition", "emotion utilization", "emotion function" and "emotion understanding". Among them, "emotional understanding" and "emotional function" have a significant impact on employees' job performance after controlling demographic variables and the emotional labor level of work tasks (Jiang, 2008). A meta-analysis of the relationship between personal emotional intelligence and job performance was conducted by Zhang Huihua and Wang Hui. The results show that there is a moderate relationship between the two. Emotional intelligence can effectively predict job performance, and the strength of the relationship varies slightly under the influence of different factors (Wang, 2011).

One of the fundamental reasons why employees' emotional intelligence affects job performance is that employees can promote themselves to be more rational in their work by adjusting their emotional and behavioral states(Zhang,Wang,2009) If an employee's emotional intelligence level is not high, an employee is easy to form negative emotions. Improper handling will seriously affect their behavior or attitude, directly affect their work performance and reduce user satisfaction. In addition, the decline of user satisfaction is likely to directly lead to negative evaluation, criticism and improvement from users. This will directly lead to an increase in the negative emotions of outsourcing employees. Poor management of employees' emotions will further hinder the improvement of organizational performance and the realization of the strategic objectives of the enterprise.

People with high emotional intelligence generally have a high level of emotional management. They are good at emotional management, feel others' emotions, adjust their emotions, and will not convey their good emotions to others. Know how to take care of each other's psychological needs. Know how to express your feelings sincerely and intelligently. Superiors with high emotional intelligence tend to affect employees' emotions and regulate employees' work performance

The negative emotions of employees will hinder the improvement of organizational performance and the achievement of organizational goals (Ma et al., 2015). Interpersonal emotion management originated from personal emotion management is a two-way interactive emotion management strategy, which allows subordinates to adjust their own negative emotions. However, the subordinates' ability to solve emotional problems is insufficient, and they need the support and help of others, and adjust them appropriately. However, as an important part of the organization's work, the leader's words and deeds affect the formation of subordinates' attitudes and behaviors (Li, 2008). The effective management and regulation of negative emotions by subordinates and the solution of their emotional burden and psychological imbalance are also important links to reflect the effective leadership of leaders. Researchers call this kind of leadership behavior and management process that consciously manages the psychological negative emotions of subordinates and can effectively regulate them as leaders' interpersonal relationship emotion managementlittle (Williams et al., 2016) .

The emotional management of enterprise employees not only has a positive impact on job performance, but also the emotional management of enterprise leaders has a positive impact on employees' job performance.(Zhu,Lu,2018)it shows that superior emotional intelligence has a positive impact on employees' work emotions. By improving the emotional intelligence level of leaders, employees' organizational commitment and job performance can be effectively improved. (Wu, Guan, Hu,2011)

According to the research of Lu Jing and yuandenghua, employees' task performance and situational performance affect the emotional intelligence of employees and managers. The emotional intelligence of managers affects the task performance and situational performance of subordinate employees. The part of leadership exchange that employees can perceive is mediated by the impact of managers' emotional intelligence on employees' situational performance, and the weak part of leadership exchange that employees can perceive is mediated by the impact of managers' emotional intelligence on employees' task performance (Wu, 2008).

According to Chen Meng and other researchers, employees' emotional intelligence has a positive impact on job performance, and mediators and moderators affect the relationship between the two. There are some problems and deficiencies in the existing research, such as the difference and opposition of different theoretical models, the problem of testing tools, and the failure of research to go deep into the level. In future research, it is necessary to further refine and deepen the improvement and integration of theoretical models, the preparation of new test tools, the investigation of mediation and variable regulation, and the in-depth investigation of the relationship between emotional intelligence and job performance (Lu,2012).

In addition, the results also show that the quality of social relations, individual health and psychological status (including mental health, physical health and physical and mental health), individual stress coping, and individual work life satisfaction will be directly affected, and these factors will directly affect individual work performance. These variables are likely to mediate the relationship between emotional intelligence and job performance. At the same time, the relationship between employees' emotional intelligence and job performance is likely to be affected by regulatory variables such as work, situation, measurement methods and changes in participants.

CONCLUSIONS

This chapter summarizes the concept connotation and research status of emotional intelligence and job performance, analyzes, summarizes and summarizes the theoretical mechanism of the relationship and interaction among employee emotional intelligence, superior emotional intelligence and employee job performance, which lays a theoretical foundation for future research.

There are few studies on the impact of emotional intelligence on job performance of enterprise employees engaged in IT outsourcing services in China, and some research literatures have not conducted a general study on this issue. The impact of employees on job performance is a complex process. At present, most researches on employees' job performance consider the employees themselves, and superior emotional intelligence is a very important influencing factor. The research on how superior emotional intelligence regulates employees' emotional intelligence and its impact on job performance is insufficient.

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CONSUMER REPURCHASE BEHAVIOR IN THE NETFLIX ECONOMY

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ABSTRACT

After entering the 21st century, the popularity of the Internet in China is in a period of rapid development, giving rise to the Internet users network economy. The rise of e-commerce is due to the continuous development of mobile Internet and information technology, and e-commerce also involves all walks of life. New media is a young but extremely fast-growing industry, and its extreme interactivity and rapid dissemination make it possible for new media to realize the need for user participation and manufacturing information resources. With the intertwined collection of e-commerce and new media, through the new channels of new media social communication in the fragmented online life of consumers, and the dividends of this Internet users economy are rising rapidly in the past year or two. At present, the competition in various industries is also becoming increasingly fierce, with continuous technological innovation and service upgrades. How to carry out efficient marketing in the new situation, so that consumers can gain more reliance and satisfaction, stimulate the generation of subsequent shopping behavior and promote repeat purchase is the core issue of new media e-commerce development in the current situation. Therefore, how to improve the repurchase rate of new media e-commerce has important research significance and application value.

Therefore, how to improve the repurchase rate of new media e-commerce has important research significance and application value. This paper adopts a literature study approach, which is used to explore what factors are needed to form consumer repurchase intention in different Internet celebrity live. Repurchase rate is directly related to the number of repeat purchases, and the main profit of merchants comes from customers' repurchase, so increasing the frequency of customers' repurchase can maximize the profit of merchants.

After summarizing, we found that the research on e-commerce product repurchase rate in domestic and international academia is at a preliminary stage. Most of them are qualitative studies, lacking empirical analysis and data analysis based on objective actual data There is still much room for further exploration of the study of product repurchase rate in e-commerce.

Keywords: Internet celebrity economy, repurchase rate, service innovation, e-commerce platform

INTRODUCTION

1.1 Research Background

With the continuous development of economy and Internet technology, consumers have different requirements for online shopping scenarios. Users demand innovative shopping models, new consumer content, and more convenient sales channels. Since 1997, e-commerce platforms have emerged in China. Data from China's National Bureau of Statistics shows that from 2016-2020, China's e-commerce transactions grew from 26.10 trillion yuan to 37.21 trillion yuan, with an average annual growth rate of 9.3%. The scale of Chinese online shopping users has reached 782 million, maintaining the world's largest and most dynamic online retail market for many years. According to the 48th Statistical Report on Internet Development in China, as of December 2021, the number of Internet users in China was 1.032 billion, with 42.96 million new Internet users in December 2020, and the Internet penetration rate reached 73.0%, an increase of 2.6 percentage points from December 2020. Figure 21: Scale of Internet users and Internet penetration rate As of December 2021, the number of cell phone users in China was 1.029 billion, with 43.73 million new cell phone users compared with December 2020, and the proportion of Internet users using cell phones to access the Internet was 99.7%. While e-commerce shopping brings convenience to consumers, some drawbacks are also inevitably highlighted. Consumers can only buy goods through some pictures and expressive text, and cannot be the same as offline, through touch, smell, color identification, and other sensory inspection. Merchants may also exaggerate the functions, colors, scents, and tactile sensations in the product descriptions, and they may also make false packaging and false evaluations for the sake of product sales. The uneven quality of products and the increased cost of consumer identification are the reasons why it is difficult for consumers to repurchase.

At present, domestic and foreign research on live broadcast with goods mainly lies in the current situation and development status of live streaming, research on live marketing communication mode, research on live streaming with goods marketing strategy, etc. There is relatively little research on consumers' willingness to buy, and willingness to repurchase in live streaming. Due to the push of the epidemic in 2019, the live-streaming of Internet celebrity with goods has a larger audience and a higher economic value. Enhancing consumers, the repurchase good in the live broadcast, helps merchants and anchors to improve the sales and brand value of that brand. In summary, this paper will study the repurchase of consumers in the live broadcast under the Internet celebrity economy and make suggestions.

1.2 Research purpose

This paper takes consumers who have had repurchase behavior in the live broadcast of Internet celebrity as the research object, and explores what factors are needed to form consumers' repurchase intention in different Internet celebrity live broadcast, and explores the influence mechanism of them. Firstly, it can strengthen the cooperation between Internet celebrity and brands. Secondly it can give the platform to adopt better marketing strategies. Finally it can enhance consumer experience and improve customer loyalty. The main aspects are as follows.

1. Innovation points of live-streaming with goods model under the Internet celebrity economy. Want to understand the innovation point of live-streaming with goods.

2. traditional shopping mode and live-streaming shopping mode for comparison

3. the formation mechanism of the willingness to repurchase between live Internet celebrity propose a better marketing strategy

1.3 Research significance

1.3.1 Theoretical significance

1. With the arrival of the Internet economy in economic development, which has prompted the emergence of the Internet celebrity economy in China, consumers have become more and more important to their shopping experience. And the consumer's repurchase rate for goods shows a positive correlation between the anchor and the brand of the live broadcast. Currently, there is relatively little research in the literature on consumer repurchase in live streaming. In order to change this situation, this paper intends to enrich the research on the impact of live broadcasters on consumers' repurchase by taking Network celebrity anchor, products and consumers as the research objects.

2. This paper is based on the live-streaming scenario, which is a supplement and extension of the previous live-streaming repurchase scenario.

1.3.2 Relevance

This new innovation of live broadcast with goods is a new opportunity for merchants to help companies that make products with heart stand out in a crowd of products, and this is also a new employment growth point for practitioners in related industries, and for ordinary people to live broadcast without leaving home, and consumers can buy goods at good prices through new ways. How to improve the repurchase behavior of consumers in the live broadcast, and how to become a netizen anchor are the issues that need to be explored. Therefore this topic is of great relevance.

1.4 Research Method

Document study research method

This paper mainly uses the literature research analysis method, through subject search, keyword search, literature classification reading, check and sort out the domestic and foreign literature related to live broadcast, to better summarize the previous research results in live broadcast with goods, to summarize the previous research methods and results to find a suitable research topic and entry point, so as to determine the basic framework of the thesis, and to determine the basic framework of the thesis.

LITERATURE REVIEW

2.1 For the study of repurchase rate

2.1.1 Status of research on repurchase in domestic academia

The first research perspective is to study the general characteristics of product repurchase rate in e-commerce and the relationship between repurchase rate and other related factors. The relationship between the habits or characteristics of the post-90s consumer group and the repurchase rate is discussed.

The second research perspective is to study the repurchase rate of specific products or industries. This type of research further refines and specifies the analysis of product repurchase rates. The characteristics of the product or industry are usually important factors affecting repurchase rates, and the authors usually make suggestions or comments to improve repurchase rates in the conclusion section. The authors conclude with recommendations or suggestions for improving repurchase rates. Although the title of the article is "How to improve repurchase rates," the actual content points to repurchase rates in the pharmacy field, combining repurchase rate research with pharmacy marketing strategies.

In the third research perspective, repurchase rates themselves are not the focus of analysis; repurchase rates are data that attract readers, especially potential investment customers or consumers, and can be seen as advertising for popular investment information. The content of such articles tends to be simpler and lacks in-depth exploration of product reorder rates.

2.1.2. Status of foreign academic research

Although e-commerce in foreign countries started earlier, its development speed and scale, as well as its impact on the whole society's production, consumption and payment, are not as good as those in China. At the beginning of e-commerce, many foreign scholars conducted research on the issue of product repurchase rate in this new form of business. The paper "Determinants of consumers' repeat online buying of groceries" by Torben Hansen of the Department of Marketing, Hagen Business School, Denmark, empirically investigated the impact of repeat online grocery purchases. （Hansen,2006) empirically tested a model to explain which factors influence consumers' repeat online buying behavior. The study concluded that if online shopping is complex, it increases consumers' hesitation to repeat purchases, suggesting that the immaturity of e-commerce platforms has an impact on consumers' early repeat buying behavior. Fang Jiaming from the School of Management and Economics, University of Electronic Science and Technology of China, Benjamin George from the Bicom School of Business, South Dakota State University, and Shao Yunfei and Wen Chao from the College of Business, Eastern Illinois University, co-authored the paper "Affecting and Cognitive Factors Affecting Repeat E-Commerce Purchases," which draws on psychological theory to examine the psychological factors that influence repeat purchase behavior. （Fang, 2016) India is an emerging market in the global e-commerce boom, and Mehir Baidya and Gautam Ghosh of Madurai Tagaraj Institute of Management in India's paper, "An Empirical Investigation of Repeat Purchase Behavior of Customers of Two Brands in India. (An Empirical Investigation of Repeat Purchase Behavior of Brand Customers in India) investigates the effect of price and quality on the likelihood of repeat purchase by consumers. The standardization of research methods and data collection and processing in foreign academia has led to a more rigorous research design.

2.2 Definition of live broadcasting with Goods

From text Internet celebrity to audio Internet celebrity to video Internet celebrity, the development of Internet celebrity has gone through three generations, and now in in the existing research, there are various versions of the definition of the name of "anchor + e-commerce platform + live broadcast", and scholars have defined it as Scholars have defined it as "live broadcast with goods", "live broadcast with goods", etc. In a study of the current situation of new media in China,

（Tang Xujun et al. ,2020) argued that live e-commerce broadcasting refers to the form in which anchors recommend products and then lead consumers to form purchase behaviors and complete online transactions through live video broadcasting.

（Guo Yanlu et al. ,2021) argue that one of the classic models of live broadcasting is "watch live - plant - order". (Zhao Shumei,2021) believes that live broadcasting is a relatively new business service model in which the anchor answers questions, shows products, and recommends sales to participating users during the process of online live streaming through the Internet, and there are more and more specific forms with the development of technology, such as stores can open their own live streaming rooms to guide sales, or professional anchors, enterprise staff, and celebrities to jointly promote. celebrities, etc. for joint promotion. According to（Fei et al. ,2021), online live-streaming refers to a new online sales model based on a live-streaming platform with features that promote consumer participation and purchase.

2.3Netflix Live Streaming Research

2.3.1 Motivation of consumers to participate in live streaming

With the sudden increase in the speed of development of the Internet, consumers are increasingly concerned about the live-streaming economy.（Friedlnder et al. ,2017), through extensive observations of live-streaming users, learned that the main motivations for users to participate in live-streaming activities include interactive social interaction, the need to reach specific people, and pleasure.（Simon et al. ,2017) identified perceived enjoyment as the main motivation for consumers to participate in live social media, and their enjoyment of active and passive behaviors is strongly influenced by the shared experience in the live-streaming room. （Zhou et al. ,2021) study the purchase intention of consumers in live e-commerce from the perspective of social presence, and argue that the advantage of the live economy over the traditional e-commerce model is that consumers can learn about the product information and gain knowledge about the product in real-time interaction, while also satisfying their social emotions.

2.3.2 The marketing of live broadcast with goods

In the webcast economy, the live broadcasters can enhance the influence on consumers by changing various elements within the live broadcast.

Chen et al., (2017) consider the application of celebrity live-streaming in e-commerce to provide online marketing services as an emerging phenomenon, and argue that the effective introduction of products by the anchor, the similar values of the anchor and the user, and the good user experience in the live-streaming room will significantly enhance the original purchase intention of consumers. (Liu, Fengjun et al., 2020) considered credibility, interactivity, and attractiveness as the dimensions of consumers' classification of the characteristics internet celebrity information sources. Through further analysis of the data, it was found that the level of interactivity and trust in the information presented during the live streaming process would change consumers' tendency to purchase, and the impact was achieved through the perceived shopping value (including entertainment and practicality). （Liu, Pingsheng et al., 2020) found that when fans' purchase decisions change, then what plays a role in it is good quality content, high level of interaction, effective motivation, personal charisma unique to the Internet celebrity anchors and fans' trust in them.（ Meng Lu et al., 2020), in their study of the marketing process of Internet celebrity live-streaming with goods, found that when the consistency between the content of the marketing and the actual content shown is stronger, the stronger the sense of authenticity consumers think they feel, the stronger the sense of identification they perceive with the live-streaming room; when the characteristics shown by the Internet celebrity anchors are stronger, the more authentic consumers think they feel, the stronger the sense of identification they generate. At the same time the different categories of the characteristics of live broadcasters' information sources will prompt consumers' search and purchase behaviors.（Huang, Sihao et al., 2021) used the ELM model as a basis to investigate the factors that influence live-streaming viewers' willingness to make impulse purchases. It was found that under the primary path, consumers' satisfaction and immersion experience would be positively enhanced by the characteristics of the live streaming platform; under the marginal path, consumers' satisfaction and immersion experience would be improved by the characteristics of the anchor; and consumers' intention to make impulse purchases would be increased by satisfaction and immersion experience.

2.3.3 The existing situation of webcast with goods and related norms

From the existing problems and development trend of live broadcasting with goods, （Zhao Shumei et al. ,2021) believe that diversity is a typical characteristic of live-streaming with goods, which is mainly reflected in the diversity of categories and live-streaming hosts. At present, the problems of live-streamed goods are mainly manifested in the lack of industry standards and regulations, and the quality of products is difficult to be assured. For the future, the development trend of live broadcast with goods mainly includes more realistic scene experience for consumers and more comprehensive assistance to farmers. (Guo Yanlu et al., 2021) found that consumers face different product quality problems when dealing with different types of products. They also found that the functional benefits of products are positively related to consumers' motivation to defend their rights. From the perspective of relevant norms, (Yu Jinxiang et al., 2021) study the live marketing of Internet celebrity from the perspective of advertising spokespersons and argue that it would be more reasonable to adopt the principle of presumption of fault and the allocation of conditional untrue joint and several liability for advertising spokespersons. (Lai, Chengyu, 2021) argues that in the case of celebrities' participation in live marketing, celebrities should be held more strictly liable than ordinary operators, while the protection standard for blind consumers should be lowered. As for regulation, the relevant platforms and departments should be strengthened. Zhou Jianping, (2021) studied the regulatory issues in the process of live broadcasting with goods, and he explained it from the demand and supply side. He suggests that the diversified regulatory system should be a joint effort of government, market and society, and the principle of rule of law regulation should be minimal and relevant, while if the regulatory technology system is to work, it should be based on credit regulation.

2.4 Factors influencing online consumers' willingness to buy

Since online consumers cannot touch the actual product as offline consumers can, online consumers will pay more attention to factors such as the evaluation of other audiences and the store page during the shopping process. Through a review of the literature, the author focuses on the impact of online reviews and the influence of multiple factors on consumers' purchase intentions during the online shopping process.

Thorsten et al., (2004) found that consumers focus on word-of-mouth behavior because they want to get more interaction with others, and they want to get financial benefits.

Mudambi et al., (2010) investigate the ways in which online reviews influence consumers' purchase decisions, using the rules of information economics for product search and product experience to examine and test a model of customer review helpfulness. They examined and tested a model of customer review helpfulness using the rules of information economics for product search and product experience. Xia et al., (2012) investigated which elements of online communication changed consumers' propensity to purchase, and found that the strength of ties between groups and the group of ties The study found that the strength of ties between groups and the group of ties can cause a certain degree of change in consumers' original purchase intentions. In recent years, online water army has been one of the major challenges of online governance, and the large number of water army comments can be very misleading to consumers' purchase intentions. Chundong Zheng et al., (2015) studied the influence of online water army in consumers' purchase of goods or services in terms of the similarity and quality of online word of mouth. It was found that the positive and negative emotions of online water army can make consumers' original purchase intention change in different ways. With the effect of each characteristic of the online water army, the feelings of each consumer are different, and with these feelings, the consumers' propensity to purchase will be changed. (Huang et al., 2015) wanted to understand what information was available to change consumers' purchase intentions, and found that consumers' perceptions of the usefulness of the review were significantly affected by the tactile cues, and that the positive and negative nature of the tactile cues were positively correlated with consumers' purchase intentions. Also, the tendency of consumers' purchase behavior was different under the influence of different types of tactile cues. Xuemei Du et al., (2016) found that the more the number of online reviews, the better the quality, and the higher the effectiveness, the stronger the consumers' willingness to purchase. Wang (Wei et al.,2016) argued that users' perceptions of product quality would change due to different knowledge gained from online reviews, and their purchase intentions would also change. Zhu et al., (2017) found that the better the quality of the reviews, the more the consumers' purchase intention will be enhanced; the higher the reviewer's level, the better the consumers' purchase intention will be. The higher the effort spent on the product, the higher the quality of the review and the level of the reviewer, the stronger the purchase intention.

CONCLUSIONS

3.1 Research findings

This paper is based on Document study research method by reading a lot of literature, found that now the live with goods mode under the Internet celebrity economy, live interactive ceremony is an innovative point in live shopping.

Compared with the traditional shopping mode and live shopping mode is more novel, live shopping mode and TV shopping comparison different point is the commodity display way is different, bring different audience information difference, live with goods is video interaction mode, live broadcast room anchor through their own unique experience angle let the audience brought into it. And because of the real-time interaction, there will be more interesting interactions for those who are concerned about the Internet celebrity live broadcast.

The re-purchase willingness internet celebrity live consumers is more likely to be influenced by word-of-mouth, real-time interaction, and online reviews. This is due to the online goods, can not touch the physical as offline products lead to.

In general, the research on e-commerce product repurchase rate stays at a preliminary stage in both domestic and international academic studies. Most of the analysis is qualitative research, lacking empirical analysis and data analysis based on objective and actual data. Secondly, the level of e-commerce development in each country and region is different, the construction degree of the platform is different, and the characteristics of different commodities may become factors that affect the commodity repurchase rate, so the repurchase rate research must focus on specific commodities or services to have practical significance. There is great room for further exploration of the study of product repurchase rate in e-commerce.

3.2 Research shortage and prospect

In the study of online consumer experience and repurchase behavior, there are many shortcomings. We hope to make up for these shortcomings in the future research and make more and better theoretical contributions and practical significance to the research of the topic.

As for the outlook, we hope that the advent of the 5G era of communication technology will bring a new round of development opportunities for e-commerce businesses

We hope that the coming 5G era of communication technology will bring a new round of development opportunities for e-commerce merchants.I hope that in the future, I can work hard to improve and perfect myself in order to continue to make better research relative to myself.I hope to improve and perfect myself in the coming days to continue to make better research relative to myself.

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DIFFICULTIES IN BUILDING AND MAINTAINING THE CAPACITY TO INNOVATE

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ABSTRACT

Before a company can develop a creative idea, it must consider its long-term strategy and short-term goals. If an organization's innovative strategies were either poorly performed or could not be sustained over time, a large chunk of its failure can be linked to this. Some innovative concepts cannot support the expansion of a company. If the innovation strategy is accurately identified, decisions must be made in line with the institution's vision. Better driving experience and adaptive advances such as self-driving cars, for example, made by any company have been critical to its success. To achieve the organization's goals, the primary strategy should focus on its need for innovation.

INTRODUCTION

Organizational Goals and Innovation

Determining a company's goals and staying focused on accomplishing them secures long-term viability and development. It is difficult to weigh the benefits and drawbacks of crowdsourcing and consumer co-creation if a firm does not have a clear strategy. It will be more difficult for the organization to align diverse elements of the business with shared goals since they would have trouble developing a unified innovation system that meets their competitive needs over time. So, the corporation will have difficulty aligning various parts of its operations with common aims. For Corning, which conducts research into glass and materials, an innovation strategy must include how innovation would benefit future consumers, how the company may gain a share of that value, and what kinds of innovation to pursue (Mann, 2018). Although some critics emphasize disruptive innovation more than everyday innovation, which builds on a company's existing technical capabilities and business plan, such a view is simplistic at best. It is important to base a company's innovation portfolio on its current competitive position. Only the most senior members of a company's management team have the authority to define and implement an innovation strategy. Because of this, they must accept that the plan requires constant testing and tweaking to be successful.

2.1 Relationship among organizational Performance, Growth and ability to innovate

An organization's performance and growth are directly linked to its ability to innovate. Therefore, building an innovative culture within a business should be a top concern. Despite this, many organizations are still plagued by internal bottlenecks that prevent them from innovating. Thus, workers are unable to experiment or come up with fresh ideas. In addition, managers are worried that allowing their staff to engage in creative activities will cause them to become sidetracked from their primary responsibilities. As a result, 37 percent of workers lack the self-confidence to try new ideas or take risks (Trafimow, 2018). Therefore, a company's leadership and management must support innovation. Also, Workers must be prompted to devise creative solutions to challenges as their authority grows. Incentives like inventor award schemes, prizes, or even unstructured time might encourage employees to spend time innovating. One common objective of these plans is to reward employees for their dedication.

Every company venture necessitates the creation of a unique innovation strategy. An innovation strategy will decide the path that innovation will follow and how it will be implemented. If there is not one, there is a chance that innovation initiatives will not be coordinated. A single functional group is responsible for all of the company's new ideas. Research and development (R&D) or product development are two common examples of functional groups with innovation responsibilities. Innovation is slowed down, and false beliefs that one department is better able to solve customer problems than the rest of the organization are reinforced when one department believes it has a better understanding of customer needs than another. Even though many organizations know its importance, external collaboration's importance cannot be overstated.

ROLE OF VARIOUS STAKEHOLDERS IN INNOVATION

Innovation ecosystems bring together partners from different industries, clients, and competitors to advance the sector. It is more likely that a business will benefit from an abundance of ideas if it hires creativity and sets up a varied team of people (Furnham, 2005). Finally, product lines that are already on the market make money. Corporations are at ease when their current product line is a hit with customers. One of the most significant obstacles to developing new items is the fear that money, resources, or customer attention would be diverted away from existing offers. However, long-term success can only be achieved via constant innovation. Customers are often kept in the dark about what is happening because of missed opportunities to communicate with them. Customers' needs are the only way a firm can stay on top of the latest trends and design an effective strategy for dealing with challenges that may arise in the future. One strategy to ensure that a firm can meet its clients' needs is to have regular meetings to gather feedback. It must be monitored and evaluated to ensure that innovation grows and succeeds.

INNOVATION INDICATORS

4.1 Financial status of the organization

Sometimes, a company's sales and earnings may not be the best indicators of its success. Therefore, before embarking on any innovative endeavor, it is critical to be aware of and prepared for these potential roadblocks. Innovation, like customer-centricity, has been elevated to the rank of a strategic imperative in the business lexicon. Innovating can take many forms, from minor tweaks to completely altering old products and methods. The creation of new ideas, research, and experiments in an unwieldy manner, co-creating something with customers, merging seemingly unrelated items or ideas in new ways, transferring something between environments, discovering new insights in patterns or aberrations, and transporting anything between environments are all examples of innovation in this process. Instead, they are often the result of embracing a fresh perspective and a burning desire to learn more. Creativity and skepticism are not innate abilities found in the majority of the population. This contributes to the difficulty of generating new ideas. It has been established that humans are highly influential thinkers who strive to confirm what they already know in fields such as neurology, psychology, behavioral economics, and education throughout the last two decades of study.

4.2 Awareness on innovation

People tend to justify information that goes against their preexisting beliefs and overgeneralize information, hindering our ability to think clearly. Automatic thinking makes us confirmation seekers rather than critical or creative problem solvers. To be innovative, people must challenge themselves to think at a higher level than they are used to. Emotionally, adapting to a new way of thinking may be difficult. Individuals use the 3 Ds, denial, defense, and distraction, to protect their self-image, ego, and worldviews on an emotional level. Fear is a common emotion that many people struggle to control and is a significant impediment to creative endeavors. Protective reasoning is the impulse to defend what we think, a typical response to anxiety. Individuals may feel the urge to defend their opinions when they are concerned. In light of the preceding, thinking outside the box may prove difficult. When it comes to innovation testing, there is a massive challenge in the fact that mistakes are unavoidable. Failing and learning from mistakes are necessary to be an innovator. A key proponent of humanistic psychology argues that learning is impossible without being free of fear and confident enough in one's skin to take risks (Yaniv et al.). When it comes to being more creative, people need to change their mindset toward failing and making mistakes to succeed.

4.3 Knowledge

Intelligence is not identical to the ability to avoid making mistakes, despite the prevalent belief of the opposite. To qualify as intellectually sophisticated, being good at everything and well-versed in every subject is not enough. Knowing what one does not know, organizing their priorities, and seeking the answers that have the most evidence behind them are all part of being clever. What defines one is not what they believe but how open they are to new ways of thinking and their aptitude for critical and creative thinking. In most workplaces, employees are not allowed to overcome their apprehension of making mistakes or developing their creative thinking. In most businesses, the goal is to provide results that can be replicated and standardized. In these settings, mistakes and missteps are seen as a weakness.

4.4 Experience

Entrepreneurs need to learn from their failures while encouraging their staff to strive for operational excellence. For various reasons, adopting this dual perspective in the workplace may be difficult. Businesses like W.L. Gore & Associates and Bridgewater Associates could be role models for how people should conduct themselves in the workplace. Mistakes and failures are viewed as learning opportunities in these firms. IDEO sees failure as a good since they feel it helps build humility, a necessary quality for producing innovative solutions based on the end user's needs. Because of their place of employment, many employees are afraid to take risks. Many employees fear being judged or punished if they freely express their thoughts within the company. A meritocracy for ideas is the optimum environment for innovation, where individuals with the best ideas backed up by evidence are rewarded and recognized. There can never be two sets of regulations, and every person's idea must be thoroughly examined. These businesses encourage their employees to search for the truth that is entirely open and honest, which includes delivering open criticism and making a deliberate effort to go above oneself to overcome our emotional defenses.

4.4. 1 Innovation and emotional attachments

Intuit has worked hard over the past eight years to cultivate a company culture that rewards innovative thinking and encourages workers to take chances. Leaders' thoughts and deeds were scrutinized as part of this initiative (Harrington, 2018). Humility, empathy, and disregard for one's position in the firm were among the qualities required for this new culture to succeed. After months of speculation, CEO Brad Smith made a brief statement in a November 2012 blog post: The modern-day Caesar is the manager who delivers thumbs up or down on all decisions (Smith, 2019). These decisions are influenced by politics, the capacity to persuade others, and PowerPoint. He concludes that Caesar's time has arrived to be buried. The appropriate kind of organizational environment necessitates both innovative thinking and the right kind of environment. In other words, the invention is a challenging endeavor.

4.4.2 Use of knowledge to trigger innovation

To a great extent, a company's innovation ability can be influenced by how it manages its technological and human resources. Farhadi Mahalli's study aimed to determine how much human capital development aids in advancing innovative practices in Australian businesses. No matter how critical technological advancements are to the creative process, this study primarily concerns how well human resources are managed, including the learning and development system and its links to the tertiary education system. A wide range of human and technological elements can influence an organization's ability to innovate, according to the underlying paradigm of this project. All three characteristics are incorporated in the concept of innovation known as the Stimulus-Capacity-Performance model. As a result, innovation performance results from better usage of the company's existing innovation capabilities.

RESEARCH ON INNOVATION

It has already been studied in detail, but no one has attempted to put this model's components together in an overall strategy to increase innovation capacity with a strategic focus and objective of leading to a performance in inventive thought. On our side, we have made a significant error here. Much research has not been done on this topic, especially in Australia. Creative application of knowledge is innovation, described as a growth in procedures and items existing on the market (Farhadi Mahalli, 2021). By making additional industrial and transportation infrastructure investments, the author explains how this specific application can increase economic activity. The organization's and the economy's success depends on knowing the elements that affect new ideas and concepts (Farhadi Mahalli, 2021). Because it relies so heavily on the yet-unknown goods, processes, activities, organizations, and raw material sources of the future, the innovation process is complex and poorly understood. As a result, it is difficult to grasp the process and even more challenging to articulate. It is the role of innovators to bring about a shift, which results in the development of something new that cannot be precisely modeled. To get the most out of your study, you need a framework that helps you navigate the complexities of innovation. For a long time, businesses and economies have understood the importance of innovation in today's more globalized and competitive corporate climate.

Many Australian scholars and policymakers have recently begun paying more attention to this topic, even though Australia has a poor history of innovation compared to other affluent countries. When the Australian government created the Department of Innovation, Science, and Research in 2007, it also commissioned the Cutler report to examine the country's innovation capabilities (Bird et al., 2016). These initiatives underlined the Australian government's dedication to placing a high value on new technology development. A 2007 Cutler study found that Australia's innovation performance lagged well behind other industrialized countries and that government policy should play an essential role in encouraging private sector innovation. Reading the findings of this study, it became abundantly clear that Australia's manufacturing industry must become more innovative to meet the twin global issues of shifting away from debt-driven consumerism and high carbon emissions production and toward sustainable growth Stiglitz 2010. The economy of Australia is still heavily reliant on a few key sectors, making it vulnerable to domestic and foreign economic fluctuations, particularly in commodities, tourism, and education. 10 Enhancing an organization's potential to innovate by utilizing its human capital. There is significant pressure on Australia's innovative processes because of the need to diversify its economy and sectors to avoid financial and environmental crises in the future. This essay will focus on three types of innovation: product new goods and services, process alternative approaches to completing tasks, and organizational new and more productive ways of organizing work to support product and process innovation.

People's skills and competencies are increasingly regarded as the only natural source of a company's competitive edge, in contrast to other resources like technology, which competitors can duplicate quickly in the long run. An organization's human resources management is a critical component in ensuring that the talents and experiences of its employees may contribute to the growth of its capacity for innovation. Two more services need to be considered when looking at the role of human resources management in encouraging innovation as part of a larger picture (Bird et al., 2016). First, secondary and post-secondary education are both available in the United States of America. Learning and development, human resources management, and tertiary education all increase an organization's capacity for innovation. A literature review on HRM's role in employee development and creativity in "Faculty Opinions recommendation of Defective fatty acid oxidation in renal tubular epithelial cells has a key role in kidney fibrosis development" by Natarajan (2015) has shown four key findings. Organizational capacity, human resource management, and innovation performance are linked together circularly. First, while assessing an organization's capacity for innovation, both the soft and hard sides of human resource management (HRM) must be taken into account. Instead, than emphasizing the need to train people in order to improve business outcomes, soft approaches to human resource management concentrate more attention on the association among human resource management and the organization's strategic goals. An essential part of the innovative performance is bundling various approaches to dealing with human resources. This way, dynamic and unique bundles of human resource capabilities can be created based on the workforce's talents and attitudes. To successfully foster a company culture of innovation and enhance managerial abilities, training is an imperative necessity.

FUTURE WORK

An atmosphere that supports creative problem solving must be established and maintained by employing efficient ways of managing people. Management strategies like human resource planning, teamwork and work organization, performance evaluation, reward systems, and career management and training have all been successful in generating innovation in the academic literature. Knowledge management is the second type of human capital stimulation that can help companies innovate (Bird et al., 2016). Knowledge gathered within that organization must be utilized effectively and continuously improved to be regarded as a valuable asset to an organization. Developing an original innovation notion imagining, and then successfully incubating and demonstrating the idea necessitates applying new and unique information to the innovation process. This demonstrates how a company's capacity for innovation is closely linked to the volume of information at its disposal. It's crucial to remember that leadership philosophies are influenced by the HRM and L&D systems. Transformable from the inside out.

CONCLUSION

Creativity can be defined as generating new and beneficial ideas, while innovation can be defined as implementing these ideas in an organization. There are two distinct types of creativity: that induced by the management of individual personnel and that which occurs at a group and organizational level. It is essential to distinguish between creativity and innovation because the former is prompted by the latter in human resource management. Managers must pay close attention to the people they hire and the working environment they establish if they hope to succeed in their roles. Despite the fact that an individual's experience and originality are crucial in determining their creative potential, their drive motivates them to take action. You need to have a strong desire to finish a task for creative thinking to happen. However, it is critical to recognize the differences between motivation derived from internal and external sources of organizational recognition and rewards to create. However, if the extrinsic incentive does not support creativity, it may actively attempt to hinder that innovation. An organization's ability to innovate depends on its employees' availability of both the time and resources needed to think through new ideas. To be successful in the workplace, people need to be given the tools and opportunities to express their inner art. There are six distinct types of human resources practices that have an impact on creative thinking. Challenge, independence, resources, work-group elements, encouragement from supervisors, and organizational support are some strategies that help students succeed.

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ROLE OF JOB CHARACTERISTICS ON SERVICE QUALITY OF NURSING CARE IN CHINA

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ABSTRACT

This particular article seeks to take a look at job characteristics on service quality of nursing care working in hospitals of China. Service quality has been receiving a lot of attention by healthcare organizations due to increasing competition. For most corporate hospitals superior quality is at the core of their business strategy. Quality and care are the primary factors which differentiate one healthcare institution from another. Service quality provides an excellent opportunity to meet or exceed patient expectations regarding the overall service experience. In the part of job characteristics, there's a substantial direct effect of a) job characteristics on employee involvement and b) employee involvement on service quality.

Keywords: Job characteristics, employee involvement, service quality of nursing care.

INTRODUCTION

The main aspect of nursing is caring. Quality of caring need to be maintained throughout the provision of nursing care. Evaluation of service quality and patient satisfaction should be an ongoing process for improving the quality of patient care. (Mohebifar et al., 2016). Researchers around the world found association between patient satisfaction and quality of patient care thus patient satisfaction is a key feature evaluating quality of nursing care (Peprah and Atarah, 2014; Chan et al., 2015). Reduction of patient satisfaction is a result of nurses who do not consider the quality of caring (Aiken et al., 2018). From research of E.T. Jagoda, E.A.K.K. Edirisinghe & M.K.D.L. Meegoda found that evaluation of service quality and patient satisfaction should be an ongoing process for improving the quality of patient care. Quality of caring behaviour significantly impact on patient satisfaction. Jean Watson's theory of care, bedside handover, information provision to the patients, empathetic approach and patients' awareness on ideal nursing care are recommended to further increase quality and satisfaction. Area of culturally appropriate therapeutic touch is recommended for future research.

For Sweta D'Cunha, Sucharita Suresh (2015) found that Quality is what customer wants. In other words, quality is the measure of customer satisfaction. Customer focussed quality management is one of the most important ingredients of successful organizations because the customers are the ultimate judges of service quality. In the healthcare industry the patient perception of service quality positively influences patient satisfaction. When a gap exists between expectations & perceptions of quality attributes and outcomes, dissatisfaction follows. When expectations are met by service performance, patients are satisfied. When performance exceeds expectations, there is delight with the service quality. It is evident that healthcare providers need to be aware of how patients perceive their quality of care. In identifying patient perceptions the primary indicator used to evaluate quality of care is patient satisfaction.

Service quality provides an excellent opportunity to meet or exceed patient expectations regarding the overall service experience. An organization generating services requires to measure the quality of service offered to the customer. This enables them to identify the errors and to follow-up corrective measures and focus on specific areas for improvement. So the identification and measurement of quality dimensions is necessary for patient satisfaction and continuous improvement. Hence the administrators should collect data for patient satisfaction in several ways like discharge interviews, patient complaints on service provided, and periodic surveys for knowing patients' expectations on service.

SERVICE QUALITY DIMENSIONS

The interest to conduct studies on service quality has been raising since the last decades. The growth of studies on this matter has been considered slower than the ones on product quality. Measurements on quality product are considered advanced, even in the early 1980, a massive implementation of total quality management (TQM) and any other measurements started. However, studies on service quality have just started to adjust in only particular field. As a part of economic development, service sectors also grow rapidly lately. This development demands exact measurement to evaluate and control the service quality (Seth et al., 2005). Studies on the service quality was initiated by a study conducted by Parasuraman et al. (1988) that investigated the quality service of appliance repair and maintenance, retail banking, securities brokerage, long-distance telephone and credit cards. In this study, five dimensions to measure service quality are proposed. The dimensions consist of tangibility, responsiveness, assurance, reliability and empathy. The five dimensions have been generally implemented in almost any kind of service providers. Carman (1990) suggested several modifications on the five dimensions of service quality in various industries. For instance, in the hospitality industry, a modification called DINESERV is being implemented, which is often applied in restaurant service (Kim, 2011; Stevens et al., 1995). Meanwhile, some researchers of education field still apply the five dimensions proposed by (Parasuraman et al., 1988) as seen in several studies conducted by Afridi et al. (2016), Kanakana (2014), Mansori et al. (2014) and Yousapronpaiboon (2014). The concept of service quality proposed by Parasuraman et al. (1988) has inspired other researchers to investigate this concept in various fields of service. According to Singh (2018), quality measurement of Indian commercial hospitals, using a SERVAQUAL framework, is relevant to the present-day context in the healthcare sector.

Service quality research and its influence on important organizational objectives has been a topic of inquiry over the past few decades in both general management literature (e.g., Slatten, Svensson, & Svaeri, 2011) and within sport settings (e.g., Ko & Pastore, 2005; Yu et al., 2014). From a customer behavior perspective, service quality has been linked to positive organizational outcomes such as purchase intention (Cheung & Woo, 2016), brand loyalty (Yoshida, 2017), and overall consumer satisfaction (Shonk & Chelladurai, 2008). In the organizationally focused perspective, scholars have examined how customers' views on service quality affect employee and managerial behaviors such as turnover intention, job satisfaction, and organizational commitment (MacIntosh & Doherty, 2010). Within service quality studies in the sport context, scholars generally explore the relationship with customer outcomes in team-based sport settings, both professional and intercollegiate (Kim & Trail, 2011). One of the primary reasons for examining customer-focused service quality stems from the idea that customers are the better judge of the overall service experience. Considering that service quality is based heavily on the interaction between the organization and the client (Chelladurai & Chang, 2000), this trend is sensible. However, understanding perceptions of service quality from within the organization (i.e., the frontline employees and customer contact staff) is an area that has been under researched. Previous research has covered service quality from the consumer's point of view, and this research has been applied to several outcome variables such as purchase intention, retention, and loyalty (Cheung & Woo, 2016).

Recently, however, researchers in service-related fields have begun to further explore how employee training influences service quality (Dhar, 2015; Slatten et al., 2011). Within sport, prior research indicates that perceptions of frontline employees are related to several outcomes of interest for sport organizations (Martinez, Miller, & Koo, 2016). Therefore, it is prudent to explore service quality, and its related antecedents and outcomes, from the employee perspective.

Quality of service is a worldwide concern of medical institutions. Healthcare structures have created, the standard of service offered by nurses has turned into a main concern for the health and nursing management service system. The caliber of nursing service is exclusively associated with patient safety as well as patient satisfaction. Patient problems is recognized as root cause of worldwide health issues, around 42.7 million unfavorable situations are faced by individuals across the globe (Dong et al., 2020). Thus, enhancing the quality of nursing service is able to have a significant influence on global wellness. The main issue for exploration on the caliber of nursing service will be the level to which medical service delivery system impacts nursing service quality. The service quality of nurses in medical structures will be the crucial job consequence. An evaluation of patients' perceptions of service quality of nurses determined a selection of common themes which could be good at improving the quality of nursing service (Mauno, Ruokolainen, Kinnunen, & De Bloom, 2016). Further, they found a considerable favorable relation among independent nursing quality indicators and very subjective assessments of nursing service quality. Hashish (2017) discovered that nurses' perceptions of great nursing service quality were related to a reduced chance of mortality along with other negative outcomes. There has been continuous research to identify the key dimensions of service quality in the hospital industry, and to measure customer satisfaction. However, problems inherent in identifying quality attributes and measuring intangible services continue to pose a challenge for health care administrators as well as academicians. It is critical, for successful implementation of quality initiatives, to have a comprehensive understanding of what constitutes quality in health care services.

THE JOB CHARACTERISTICS MODEL (JCM)

The job characteristics model, designed by Hackman and Oldham in 1975 and they expanded the theory in 1980, is based on the idea that the task itself is key to employee motivation. Specifically, a boring and monotonous job stifles motivation to perform well, whereas a challenging job enhances motivation. Variety, autonomy and decision authority are three ways of adding challenge to a job. Job enrichment and job rotation are the two ways of adding variety and challenge (Sabra, 2020). This motivational procedure depends on 5 key dimensions, including task identity, autonomy, task significance, skill variety, and feedback. Job characteristics are a helpful sign of job structure dysfunction, which may deepen our comprehension of the emotional perceptions of nurses' job experience (Sabra, 2020). The job characteristics model is useful because managers and human resources professionals can use it to enrich their workplaces. They can use the JCM to help their employees to tailor their jobs to be more engaging, which can boost employee morale, increase productivity, improve employees' quality of work and result in other benefits. The job characteristics model specifies five core job characteristics that have a significant impact on the psychological state of employees as well as the quality of their work. These five characteristics are: task identity, task significance, skill variety, autonomy, and feedback.

Table 1 : Five characteristics of job characteristics (Hackman and Oldham, 2010)

SKILL VARIETY	*Skill Variety*: The degree to which a job requires various activities, requiring the worker to develop a variety of skills and talents. Jobholders can experience more meaningfulness in jobs that require several different skills and abilities than when the jobs are elementary and routine
TASK IDENTITY	The degree to which the job requires the jobholders to identify and complete a workpiece with a visible outcome. Workers experience more meaningfulness in a job when they are involved in the entire process rather than just being responsible for a part of the work
TASK SIGNIFICANCE	The degree to which the job affects other people's lives. The influence can be either in the immediate organization or in the external environment. Employees feel more meaningfulness in a job that substantially improves either psychological or physical well-being of others than a job that has limited effect on anyone else.
AUTONOMY	The degree to which the job provides the employee with significant freedom, independence, and discretion to plan out the work and determine the procedures in the job. For jobs with a high level of autonomy, the outcomes of the work depend on the workers' own efforts, initiatives, and decisions; rather than on the instructions from a manager or a manual of job procedures. In such cases, the jobholders experience greater personal responsibility for their own successes and failures at work
FEEDBACK	The degree to which the worker has knowledge of results. This is clear, specific, detailed, actionable information about the effectiveness of his or her job performance. When workers receive clear, actionable information about their work performance, they have better overall knowledge of the effect of their work activities, and what specific actions they need to take (if any) to improve their productivity

However, Job Characteristics Theory's introduction into the organizational literature, there have been many changes to the field and to work itself. Oldham and Hackman suggest that the areas more fruitful for development in work design are social motivation, job crafting, and teams. Social sources of motivation are becoming more important due to the changing nature of work in this country. More jobs are requiring higher levels of client-employee interaction, as well as increasing interdependence among employees. With this in mind, it would make sense to investigate the effect the social aspects have on affective and behavioral outcomes. While Job Characteristics Theory was mainly focused on the organization's responsibility for manipulating job characteristics to enrich jobs there has been a considerable buzz in the literature regarding job crafting. In job crafting the employee has some control over their role in the organization. Hackman and Oldham point out there are many avenues of inquiry regarding job crafting such as: what are the benefits of job crafting, are the benefits due to the job crafting process itself or the actual changes made to the job, and what are the negative effects of job crafting?. Finally, they brought up the potential research directions relevant to team work design. Specifically, they discuss the need to understand when to use work-design aimed at the individual or team level in order to increase performance, and what type of team is best suited to particular tasks (Oldham, G. R., & Hackman, J. R. , 2010). Besides the concept and models utilized, the experts assessed previous research on the issue of employee effectiveness concerning the five job attributes that are skill variety, task significance, task identity, feedback, and autonomy. Skill variety will be the example where in a job needs different things to be able to handle a complete function and entails different abilities and skills (Russell, Liggans, & Attoh, 2018).

Task Identity is the ratio at which a specific task must have the realization of an entire portion associated with a job. Job uncertainty is linked with insufficient clarity of employment scope, function, and responsibility of each team member, unclear job description, and also incoherent direction from superiors. Along with other parts of a project, job identity is seen as having an optimistic impact on the production along with typical employee efficiency (Russell et al., 2018). Task significance is discussed as the speed at which the fundamental things of the task are important on the business and also have a pertinent impact on jobs and livelihood of peers as well as those without the group (Hassan, 2014). Task significance is an important component of employment characteristics, which increases employee performance. The study blended literature in social judgments and task significance to be able to assist explain employee participation in its 2 dimensions: job and business engagement. Information was collected from 337 individuals. As an outcome, the relations between task significance with the thought social impact and worth showed the variance inside hindrance stressors as established with the moderated mediation analyses (Saks, 2019). A research on the impact of autonomy on job benefits that are work stress, employee performance, and satisfaction, with self efficacy because of the intervening variable. The descriptive analysis sought to set the effect of job satisfaction on work performance as well as career pressure on work performance (Jermsittiparsert, Suan, & Kaliappen, 2019). Employees receive responses from the outcomes which result in the maintenance and construction of the jobs of theirs.

ROLE IN QUALITY IMPROVEMENT IN NURSING

Improvement in nursing is similar to continuous quality improvement in nursing and to continuous quality improvement in healthcare overall. The terms continuous quality improvement and quality improvement are often used interchangeably in healthcare, as is the older term quality assurance. *Quality improvement theory in nursing* is the same as in healthcare generally.

Increasingly, healthcare organizations are creating positions and hiring professionals including nurses — who are focused only on healthcare and nursing quality improvement. An increasingly common job title is *quality improvement management nurse*. The person in that job does the following:

1) Combines expertise in healthcare, quality improvement, and management to lead systemic improvements in policies and processes.

2) Continually assesses performance data and trends in healthcare metrics.

3) Continually works with other organization managers to ensure that problems in healthcare processes are identified and fixed.

4) Ensures the organization complies with requirements from state and federal agencies and the Joint Commission, which accredits hospitals.

5) Helps design and execute training programs.

6) Provides feedback and recommendations for improvement to an organization's top leader.

7) Solicits and collects feedback from patients, employees, and members of the public.

Healthcare professionals, including nurses, play important roles in quality improvement in nursing. Sometimes, these healthcare professionals come together as organized groups to shape the role of nursing in the healthcare industry. Here are some important titles and groups: (Kate Eby , 2019).

- **NURSE EXECUTIVE:** This person sets up the structure and ensures that resources are available for quality improvement work.
- **NURSE MANAGER:** A nurse manager oversees staff nurses and can implement a structure to encourage quality improvement.
- **QUALITY ASSURANCE COORDINATOR:** This person assists in executing quality improvement processes and collects data to show that the organization meets the requirements set out by insurers and regulatory agencies.
- **QUALITY CIRCLES, QUALITY COUNCILS, AND QUALITY IMPROVEMENT FORUMS:** These groups help coordinate effective quality improvement work.
- **QUALITY IMPROVEMENT NURSING TEAMS:** These teams focus on specific ways in which professionals can improve nursing and healthcare in a facility.
- **STAFF NURSE:** This person has the most direct role in delivering healthcare to patients and seeing where care isn't as effective as it should be.

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EXPLORING THE SUPPOTTING EFFECTS OF THE INNOVATION OF FINANCIAL AND TAX SYSTEM ON SMES

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ABSTRACT

Small and medium-sized enterprises play an important role in my country's economic development. Due to their small scale of operation, low production efficiency and improper management, small and medium-sized enterprises often face greater financial pressure. In response to this phenomenon, the state has promulgated many fiscal and taxation systems to support the development of small and medium-sized enterprises and promote the steady progress of small and medium-sized enterprises. Based on this, the article introduces the financial and taxation system through the current development of the financial and taxation system and its development significance, and explores the effective measures for the innovation of the financial and taxation system in the small and medium-sized enterprises by expounding the problems arising from the financial and taxation system in the process of supporting small and medium-sized enterprises.Under the rapid development of the market economy, some small and medium-sized enterprises have gradually developed and grown under the support of policies, becoming an irreplaceable driving force for the economic market. Although SMEs are limited in size, their contribution to social economic reform and development cannot be underestimated. China's fiscal and taxation system affects the development of SMEs to a certain extent. By adjusting the tax system flexibly, planning scientifically, and increasing support for small and medium-sized enterprises, the tax burden of small and medium-sized enterprises can be reduced to a certain extent, and a win-win situation between taxation and enterprise development can be achieved.

Keywords:finance and taxation, institutional innovation, small and medium-sized enterprises

INTRODUCTION

As the call of "Mass Entrepreneurship and Mass Innovation" has been deeply rooted in the hearts of the people, the number of small and medium-sized enterprises in my country has grown rapidly in recent years, bringing great vitality to the market economy. Fiscal and taxation system, one of the means to control macroeconomics, plays an important role in the process of my country's economic development. Through fiscal taxation and other means, my country can effectively realize the rational distribution of resources and ensure the steady progress of my country's economic development. An effective and reasonable fiscal and taxation system can not only promote more rational resource management in developed regions, but also promote the development of small and medium-sized enterprises. Therefore, fiscal and taxation policies are of great significance to the development of my country's internationalization and urbanization.

1. Overview of the Innovation of the Fiscal and Taxation System and Its Significance

As a basic economic regulation system in my country, the fiscal and taxation system has a significant impact on the development of enterprises, especially small and medium-sized enterprises. In recent years, in order to further promote the transformation of my country's high-quality economy, the state is actively innovating the fiscal and taxation system, aiming to reduce the tax burden of small and medium-sized enterprises and help small and medium-sized enterprises occupy a place in the market enterprises. The specific development achievements of the current fiscal and taxation system are mainly reflected in the following: First, my country can actively build a corresponding taxation system, and multiple departments cooperate well with each other in the reform of the taxation system, which promotes the further improvement of operational efficiency. Secondly, my country's tax structure is increasingly reasonable, the proportion of my country's income tax in my country's economic structure is further optimized, and the quality of domestic economic operation is fully improved. Finally, compared with the previous years, my country's tax revenue has entered a stage of continuous growth, and the proportion of tax revenue to GDP has been increasing year by year. Because of the continuous innovation of my country's fiscal and taxation system, its importance in improving the financing of small and medium-sized enterprises is self-evident. This is not only conducive to solving the financing problems of small and medium-sized enterprises, but also can reduce the financing risks of enterprises and establish a sound financing guarantee system for small and medium-sized enterprises [1]. As the name implies, SMEs are small and medium-sized enterprises. From the perspective of the current development of the industry, compared with large enterprises in related fields, their overall scale, including the size of their population, assets and operations, is smaller. This type of enterprise has fewer internal personnel, and can be composed of funds raised by a single person or a small number of personnel, while the number of internal personnel and the turnover of the enterprise are small. In the business process, it is usually directly managed by the main workers and is not affected by most of the external environment. In the process of deepening and improving the economic market, SMEs have occupied an important position in the national economic system, and have gradually demonstrated their contribution to the development of the national economy. With the gradual improvement of my country's socialist market economic system, the important functions of small and medium-sized enterprises have gradually emerged. The Chinese government has paid more attention to the development of small and medium-sized enterprises, and has also issued relevant policies to promote the implementation and improvement of related work, such as export tax rebate policy, value-added tax Reform policies, the real fiscal and taxation system are more in line with the development needs of small and medium-sized enterprises, and are also committed to the improvement of the modern economy and society (Zhang Lu, 2020).

LITERATRE REVIEW

Problems existing in the management of finance and taxation of small and medium-sized enterprises

2.1 There are differences in tax policies

my country's tax reform has made great achievements in continuous innovation, but it cannot be ignored that there are also many problems in the reform. The content of many policies does not match the actual situation in our country, mainly because there are regional differences in the national fiscal and taxation systems, and the policies of each province and city in my country are different. Small and medium-sized enterprises have regional characteristics in the development process. The tax collection points of enterprises have not been unified, and small and medium-sized enterprises in each region must be supported by classification, so it is difficult to achieve unified planning. In addition, there are no targeted policy evaluation criteria for SMEs in different regions. In addition, there are no specific criteria for determining whether enterprises in different regions need support. Based on this, most small and medium-sized enterprises look forward to the state's support for small and medium-sized enterprises, but the relevant local departments still encounter great obstacles in the process of implementing specific policies, and it is difficult to achieve the expected effect of financial and taxation support for small and medium-sized enterprises.

2.2 The financial and taxation system lacks scientific planning

As an important part of my country's social and economic system, small and medium-sized enterprises are in a basic position in market competition, and their market adaptability is slightly insufficient. In this regard, actively relying on the fiscal and taxation system is the key to promoting the high-quality development of SMEs. However, in the actual implementation process, the fiscal and taxation system shows a lack of scientific and systematic planning. Many policies and measures have not been combined with the actual development of SMEs in a timely manner, and it is difficult to provide targeted support to SMEs. In addition, there are great restrictions on the regional scope of policy dividends, especially in the current society, the technology industry and emerging technology industries have not received targeted support, which is not conducive to the sustainable development of enterprises.

2.3 A single means of policy support

Judging from the current state support methods for small and medium-sized enterprises, the main support methods of the state are through special funds and tax optimization. However, in the actual policy support process, it can be clearly found that the current small and medium-sized enterprises are facing many development problems in the market economy. If only relying on these two means for support, it is difficult to help SMEs break through the constraints and be able to innovate and develop. In the long run, the policy support work will not be as effective as it should be, resulting in a waste of financial resources. In this regard, relevant departments should pay attention to it, and further refine the content of tax support policies in light of the actual development of enterprises.

METHODS

Fiscal and taxation system innovation measures in small and medium-sized enterprises

3.1 Improve the fiscal and taxation system and laws and regulations

The government can support SMEs by adjusting tax policies and improving laws and regulations. The fiscal and taxation system has made progress in the continuous reform and development of our country, but there are still many problems. These problems have seriously hindered the development of my country's tax system. A sound taxation system can provide a more comprehensive impetus for national finance, ensure a good circulation of national financial funds, and achieve long-term development of relevant departments. When building a fiscal and taxation management system, it is necessary to implement preferential tax policies according to specific market needs and the specific needs of small and medium-sized enterprises, adjust the development model of small and medium-sized enterprises in combination with relevant laws, and truly play the effective role of the fiscal and taxation system. First of all, it is necessary to carry out effective investigations by relevant state management departments, promote the rapid development of small and medium-sized enterprises, and link small and medium-sized enterprises with the support work of national fiscal and taxation policies. Secondly, it is necessary to grasp the effective form of tax management, and on this basis, further improve the management level and reflect the results of the improvement of the tax system. Finally, enterprises must follow the pace of development of the country from the inside out, respond to the call of the country, and constantly improve the management regulations of finance and taxation to reflect the role of management (Zhang Hongfeng,2020).

3.2 Establish a professional financial and taxation management team within the enterprise

Any industry needs professional personnel to lead management, especially in financial management, and it needs people with professional financial knowledge to manage. Fiscal taxation is a major issue, and it is even more important for enterprises. And at present, since the internal financial personnel of SMEs have more theoretical knowledge than practical knowledge, attention should be paid to the cultivation of practical work experience of financial personnel. quality ability. At the same time, SMEs should strictly require financial personnel to fully understand the internal situation of SMEs and the development status in recent years before participating in financial work, and make corresponding financial budgets and plans according to the relevant conditions, so that tax support work can be implemented. Good and stronger. Small and medium-sized enterprises need to set up a professional financial and taxation management team to manage financial and taxation affairs, so that the financial work of the enterprise will be better improved.

3.3 Strengthening the administration of tax support for SMEs

In the management of taxation support for SMEs, it is first necessary to strengthen the taxation and financial management of SMEs. Every activity and every transaction of SMEs should formulate a reasonable financial budget, and send relevant supervisors to supervise the allocation of funds, starting from the financial budget until the end of the project. Each financial expenditure must be clearly recorded, and the whereabouts of each fund should be clearly recorded. At the same time, the purpose of expenditure should be clearly defined, so as to reduce the shortage of funds for small and medium-sized enterprises and prevent the occurrence of misappropriation of funds. Secondly, with the rapid development of network technology in recent years, small and medium-sized enterprises can rely on this technological advantage to reasonably manage and control capital expenditure income, bill management, and bill verification (Wang Lili, 2020)

3.4 Reform and innovate fiscal and taxation policies, and increase support for small and medium-sized enterprises

In the implementation of fiscal and taxation support, the state should promote the internal transformation of small and medium-sized enterprises through supportive policies, thereby promoting the long-term and effective development of small and medium-sized enterprises. In this way, small and medium-sized enterprises can continue to develop their core advantages, so as to be able to occupy a place in the fierce market competition. In this regard, the relevant national financial departments should firstly conduct research on the market development of small and medium-sized enterprises, understand the internal structure and development planning of small and medium-sized enterprises, and provide targeted support for emerging industries, technology-based industries and scientific research-based enterprises. Give policy preference. Secondly, the government should also export talents to small and medium-sized enterprises, connect with universities and employment agencies, and absorb high-quality professional talents. This will not only increase the employment rate of colleges and universities, but also effectively alleviate the problem of talent shortage in enterprises, achieve a win-win situation between talents and enterprises, and contribute to the efficient development of the national economy.

At the current stage, my country offers a 15% discount on the income tax of high-tech enterprises, but this kind of preferential treatment is difficult for small and medium-sized enterprises. Policies can adapt to future market development and changes, and can also follow policy changes, so that small and medium-sized enterprises have more opportunities to enjoy policy support. Relevant management departments should also do a good job in the detailed division of enterprise types, and formulate support policies in line with the actual situation according to the nature of different enterprises, so that relevant policies can be more implemented in life, which can be reflected in all aspects of help to small and medium-sized enterprises. The enthusiasm and development initiative of small and medium-sized employees can mobilize personnel to provide stronger impetus for the development of enterprises. my country's market development model is also relatively complex, and small and medium-sized enterprises are faced with many changing factors and have greater work pressure. Due to limited conditions, some small and medium-sized enterprises are difficult to enjoy support policies. In order to reduce the probability of such a situation, more effective system publicity should be carried out, so that the managers of small and medium-sized enterprises can recognize the problems of the enterprise at the current stage, and continuously strengthen and improve, so that the enterprise has More development opportunities and move closer to policy standards. In this way, the relevant management departments should also lower the standards appropriately, so that small and medium-sized enterprises have a greater possibility to feel the benefits of the supportive policies and achieve long-term healthy development(Huang Qiuli,2020).

3.5 Improve the financial guarantee system

Undoubtedly, it is more difficult for SMEs to achieve effective financing in the process of construction and development. When SMEs apply for loans to banks, banks will take into account the credit risks and the risks faced by SMEs in the development process. There are many variable factors, it is difficult to agree to the loan application of SMEs, or the loan amount is too large, which will also cause SMEs to struggle. In order to improve such phenomena, relevant management departments should improve the financial guarantee system, so that small and medium-sized enterprises have more opportunities to receive policy support, and also avoid huge pressure. 0 While innovating the fiscal and taxation system to become the driving force for the development of SMEs, it is also necessary to think about financing issues. It is necessary to clarify the main problems in the development of small and medium-sized enterprises, to realize effective strategic adjustment according to the specific situation of financing phenomenon, to give full play to the macro-control function of the government, and to provide certain help for the overall development of small and medium-sized enterprises. For example, the government can provide guarantee opportunities to enable SMEs to receive effective support and to obtain more financing funds. According to the specific needs of small and medium-sized enterprises, a combination of debt and equity should be used to apply for loans from banks, so as to improve the credit risks that the banks are worried about, and provide more funds for on-lending to small and medium-sized enterprises. In the process of solving financing problems, it is also necessary to break through the traditional market mechanism, form a multi-level capital structure from the interference caused to enterprises, continuously improve the market development mechanism, promote the perfect development of small and medium-sized enterprises, and obtain a better market competition position. To achieve policy guidance and truly optimize financing issues. In the process of implementing specific work, first of all, government departments should strengthen the improvement of the credit system of small and medium-sized enterprises, realize the effective integration of the credit system and financial guarantee, and conduct credit ratings according to the actual state of the credit system. Small and medium-sized enterprises with good ratings can obtain funding opportunities. After a period of time, professional evaluation agencies are arranged to re-evaluate the credit rating of SMEs, and then divide them according to the actual situation to ensure the accuracy of the rating results. Secondly, the government also needs to allocate funds from the government as special funds to support small and medium-sized enterprises, and then pass the guarantee of a third-party agency to achieve effective support for small and medium-sized enterprises. Enterprise managers must fully realize that support is not a gift, but It is an effective way to help small and medium-sized enterprises to obtain financing funds, and an important way to reduce the pressure on small and medium-sized enterprises' funds and fiscal and taxation work. Finally, in order to achieve support for small and medium-sized enterprises, it is necessary to reflect the effective role of third-party guarantee institutions, and formulate more targeted tax preferential policies according to the actual situation. When small and medium-sized enterprises encounter development problems, the government can also give a certain degree of financial subsidies. The amount of financial subsidies that can be given matches the credit rating of the enterprise. The higher the financial rating, the more financial subsidies can be obtained, while companies with low credit ratings may not be able to obtain subsidies, or may receive less subsidies. When realizing financial support, it is also necessary to grasp the market principle of good faith, and implement an open policy for enterprises with good performance, so that such small and medium-sized enterprises have more development opportunities.(Zhang Lu,2020)

CONCLUSION

The development of small and medium-sized enterprises in our country is beneficial to my country's economic construction. The article first briefly analyzes the general situation of the innovation of the fiscal and taxation system and its significance, and then introduces the problems that the fiscal and taxation system has in supporting small and medium-sized enterprises. It is precisely because these problems have seriously affected our country. Tax reform, the state should pay more attention to. This article summarizes the innovative measures of fiscal and taxation system in small and medium-sized enterprises by analyzing the role of my country's fiscal and taxation system in supporting small and medium-sized enterprises. Only by continuously improving the management system, perfecting the supervision system and strengthening the financial control, can the development of small and medium-sized enterprises go further and further.

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BUSINESS MODEL INNOVATION AND MANAGEMENT UNDER THE BACKGROUND OF E-COMMERCE

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ABSTRACT

With the development of Internet technology, big data, artificial intelligence and other technologies of continuous innovation and progress. Business models are also constantly being innovated and reformed. The increasingly mature e-commerce model and technology provide better convenience for customers. Some companies have begun to try to launch unmanned economic business models, and have received widespread attention. There will inevitably be some problems in the development and implementation of new business models. Under the background of the new business environment formed by the development and application of Internet technology, innovation management plays an important role in business model innovation. Innovation management, knowledge management, ability evaluation and risk assessment in innovation management theory provide theoretical support for business model innovation. Under many factors, such as technological innovation, consumer preference and the change of business environment, the business model innovation is the inevitable trend of the sustainable development of enterprises.

Through the research of innovation management, business model, and the innovation factor analysis of business model under the background of e-commerce. The theory of innovative management will be applied to the new business model to strive for new vitality and competitiveness for enterprises. So as to achieve the sustainable development of enterprises, for shareholders to obtain more rights and interests.

Keywords: business model innovation, innovation management, e-commerce

INTRODUCTION

China's rapid business development in recent years has attracted a large number of investment from international giants. The development of e-commerce is also becoming more and more mature. The rapid development of Internet technology has brought great convenience to consumers, narrowing the consumption level of small and medium-sized cities and first-tier and second-tier cities. According to AliResearch, sales growth in some western China, where China has less active sales, even exceeds that in first-tier cities. Based on the development of AI technology, big data, GPS positioning, cloud computing, mobile Internet, social network and other information services, the global data volume is in explosive growth. The development of online e-commerce is also changing the business environment.In order to provide better services for customers, To improve the competitiveness of enterprises,many enterprises actively improve the digital level of their stores, and simultaneously carry out online and offline business. More novel business models have come into being.

Driven by innovation management, enterprises are constantly innovating their business models. This paper investigates the theory of innovation management and business model innovation, combined with the background of e-commerce environment. I have also analyzed and studied the knowledge management, organizational management and innovation ability evaluation in innovation management. In order to realize enterprises to improve market competitiveness, open up new markets, and maintain sustainable development.

Innovative management ： Innovation management is the activity and combination of management functions through decision-making, planning, command, organization, incentive and control, to improve the possibility of the whole organization to adopt new technologies, new equipment, new materials and new laws, and to provide new products and services for the society with technological innovation and organizational structure and institutional innovation. Innovation management is multi-dimensional, including technological innovation, system innovation, product and service innovation, strategy innovation and so on.

business model: The business model is constantly evolving, which is a problem that any enterprise needs to face and solve. There are many reasons for changing business models, including internal and external factors. Internal factors include: Business owners' business planning, human resources and organizational structure changes, etc, and external factors include: market competitiveness, policy changes, environmental changes, science technological progress,, market demand changes, etc.

In the context of e-commerce, the business model can meet customers 'needs and reduce customers' time and physical strength costs. On the other hand, enterprises can reduce offline costs. Only by constantly innovating business models can enterprises maintain strong market competitiveness.

LITERATURE REVIEW

The existing e-commerce model itself is the result of a business model innovation. In the rapid development of the global economy, especially the progress of science and technology and information technology, the existing e-commerce model has been in the continuous innovation and change. Under the application of innovative management, the new business model will bring greater development space for enterprises, and some will even affect the development direction of the whole industry. So to the innovation management research and the business model research under the background of e-commerce is of great significance.

Schumpeter (1912) first put forward the concept of innovation, and then many scholars have studied it from different perspectives. Economists Kaman and Schwartz started out from the relationship between technological innovation and market structure. Profit (Tao, 2022) is obtained by combining technology, factors of production and production conditions. In recent years, there have also been studies and suggestions that technological innovation, business model innovation and institutional reform and innovation influence mutual evolution (Guo Hui et al., 2015). Some studies also believe that innovation originates from market demand, and in the WENYUE (2019) study shows that most of the innovation is caused by demand factors (Wen Yue, 2019). No matter what the factor, enterprise innovation is an inevitable trend. Innovation management process also has the management strategy, management mechanism and other aspects of innovation. Can be applied to the upgrade and change of the business model. Of course, not all innovation can bring positive effects, and there is also a risk of failure in the process of innovation, so the risk control is also very important.

Through literature research, most scholars believe that business model is a system to meet customer needs, and organizations provide customers with products and services for customers by managing and using enterprise resources (Diao Liangpu, 2018). Business model is summarized as "customer value proposition". The (Bai Hong, 2022) business model is an important factor in the business style and strategy. Business model innovation is a process of continuous reshaping of enterprises.The innovation of business model is a process in which enterprises provide new value for customers and adjust the various elements of the enterprise by integrating resources.

E-commerce environment has a promoting effect on business model innovation, with the development of e-commerce, and associated with cloud computing, big data, the Internet, the Internet of things, mobile terminals and other technologies have greatly changed the customers' consumption habits, through these technologies make enterprises can more accurately meet the needs of customers, to provide services for customers. Logistics and warehousing With technological innovation, enterprises can provide customers with more timely and effective services at the lowest cost. Therefore, with technological innovation, customer needs are also constantly changing, and enterprises need to constantly innovate their own business model, adapt to the development of The Times, and even lead the development of the industry. It is precisely because of the influence of various uncertain factors in the process of new economic business model innovation process, enterprises need to do strict planning and control in financial management. To ensure that the enterprise's business model innovation can be carried out steadily, and has the ability to take risks, readjust the direction, and integrate resources.

The innovation of business model depends on innovative management theory. In the process of business model innovation, management strategy innovation, knowledge management innovation, human resource management innovation, financial management innovation risk assessment innovation and other management contents have played a great role in the practical application. Under the background of e-commerce, enterprises should quickly respond to the changes of the external environment, timely innovate their knowledge management, adjust human resources, and stimulate the enthusiasm of employees to realize the matching of resources and needs. Through the selection of employees, through effective communication to form the design creativity. The collision and penetration of all kinds of new innovative thinking have formed new knowledge. Through the absorption, screening and integration of knowledge, the practical and available innovative knowledge is formed. Provide team support and knowledge support for business model innovation.

Business model innovation is a kind of innovation behavior, and it is difficult to accurately grasp the innovation results. By establishing a risk evaluation model, conduct risk control, and establish a collection of risk indicators. In the process of business model innovation, conduct management and control, and formulate countermeasures and suggestions (Bi Boyu, 2021). It is precisely because of the influence of various uncertain factors in the process of new economic business model innovation process, enterprises need to do strict planning and control in financial management. To ensure that the enterprise's business model innovation can be carried out steadily, and has the ability to take risks, readjust the direction, and integrate resources.

In the context of e-commerce model, enterprises want to continuously meet the diversified needs of consumers. The innovation and upgrading of material supply, product and service upgrading, precision distribution and other links can improve the probability of success of business model innovation. Business model innovation is not only the innovation of a certain enterprise, but also the consensus between enterprises and enterprises, pursuing the same value goal, and obtaining benefits together. This creates a stable and viable business model. In addition to the market and industry drive, national policy support and guidance are also an important support for business model innovation. That is, it provides a direction for business model innovation, but also provides a guarantee in policy and law. In a good institutional environment, the business model innovation can be completed more efficiently

According to the e-commerce environment and the own conditions of enterprises, different factors play different roles in the business model innovation path. According to the research of Chen Yang (2020), the summarized influencing factors include: 1, customer value proposition.2. Cost factor.3. Your own factors.4. Efficiency factor.5. Resource development factors.6. Fill the gap factor.7. Main body structure changes. According to the above factors, enterprises combine different depths, ways and means to form different innovation paths.The company eventually develop their own business model.

RESEARCH METHODOLOGY

This paper mainly adopts the literature research method and the element analysis method. The relevant theories and research status in this field at home and abroad are summarized. Includes important journals, doctoral theses, and master theses. From the perspective of management innovation, the definition of e-commerce model and research, to the analysis of the factors affecting innovation management. Analysis of Internal and External Factors of Business Model Innovation. It reflects the current situation and development trend of this research topic, and provides methods for how to build business model innovation.

CONCLUSION AND, DISCUSSION

Business model has become an important issue of enterprise innovation. With the rapid development and maturity of e-commerce technology, the convenience and experience provided for customers have been greatly improved. The gap of consumption level in different regions is also shortened by the development of e-commerce. This paper takes the e-commerce environment as the background, and studies through the innovation management and business model innovation. Analyze the process of business model innovation, apply the innovation management theory to the business model innovation, reduce the uncertainty factors to the minimum, and provide feasible solutions.

After research, the innovation of business model is a problem that the sustainable development of enterprises must face. External factors such as changes in customer needs, technological innovation, and changes in the industry environment promote business model innovation, and internal factors such as human resource management innovation and knowledge management innovation contribute to the formation of new business models. Risk management provides higher success rates for new business models through innovation. The new business model is inseparable from the support of innovative management theory.

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THE ROLE ORGANIZATIONAL RESILIENCE IN THE HOSPITALITY INDUSTRY OF CHINA UNDER THE COVID-19 ERA

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ABSTRACT

Many nations have lifted COVID-19-related entry restrictions for travelers and provided an additional flow of demand for reopening hotels. And while hotel occupancy improves, levels remain well below pre-pandemic levels with full recovery not expected for years. There are nations recovering quicker than others, however, and China stands out with performance well ahead of most of the world. While the hospitality industry is slowly recovering, the COVID-19 crisis continues to have a profound impact on the operations of the hospitality industry. This article corresponds to the latest demands on responding strategy. It develops a conceptual framework underpinned by develop and support hospitality customer-facing employees in the post–COVID-19 era. The COVID-19 pandemic raises new challenges. Their study finds that when the organisation's key human resource elements are coordinated and integrated at the organisational level, the organisation can maintain a higher ability to cope with and adapt to sudden changes in the environment, demonstrating a higher organisational resilience. From an internal perspective, organizational resilience can be affected at three levels: individual, team, and organizational.

INTRODUCTION

The world economy was shut down almost overnight as a result of the COVID-19 pandemic (UNWTO, 2020). The pandemic has presented unprecedented challenges to the hospitality industry. Strategies to flatten the COVID-19 curve, such as community confinement, social alienation, home orders, travel, and travel restrictions, have led to the temporary closure of many hotel businesses and significantly reduced the need for businesses that are allowed to remain in business (Bartik et al. , 2020). Almost all restaurants have been required to limit operations to take-out only. Restrictions on travel and home-stay orders have led to a sharp drop in hotel occupancy and revenue.

It is expected that the hotel business will undergo significant changes in the COVID-19 business environment to ensure the health and safety of employees and customers, and to increase customers' willingness to patronize the hotel business (Gossling et al., 2020). Some employees are required to take immediate action to change the way they work without prior preparation and under the guidance of the company or organization. Also, many employees show greater fear, worry, and psychological stress in the face of COVID-19. The work performance of employees will be affected as a result. Since individual performance is crucial to the recovery and development of the hotel after COVID-19, the managers of hotel need to pay attention to the internal and external factors that affect employee’s work performance.

For several decades, tourism has grown rapidly throughout the world, acting as a significant source of export revenue for many countries, accounting for approximately 10% of global GDP (World Travel and Tourism Council, 2020). Tourism has emerged as the primary engine of growth in a number of countries and areas. Due to the industry's high level of social engagement, it is susceptible to recession, terrorism, natural disasters, and contagious diseases. The hospitality industry is one of the most vulnerable to both crisis and disaster, and can be affected by internal and external factors (Henderson and Ng, 2004).

The current COVID-19 pandemic is unprecedented in its worldwide scope and' affects the very DNA of hospitality' (Rivera, 2020). At the national level, the COVID-19 pandemic has heightened the need of ensuring the sufficiency of health care systems, prompting the development of a variety of intervention measures aimed at reducing the virus's spread. These measures imposed social segregation, prohibitions on mass gatherings, and a slew of travel restrictions, including border closures. As a result, it's unsurprising that travel and leisure-related industries, particularly the hospitality sector, are the most adversely affected sectors of the economy. Slowing the virus's spread, on the other hand, prolongs the length of business interruption. Indeed, predicting the duration of a pandemic is challenging, which shifts the risk to undefined persistence and heightens business worry.

The world tourism and Travel Council (WTTC) divided the common crises in tourism into four categories: terrorism, social unrest, natural disasters and epidemic outbreaks, and considered that epidemic outbreaks had become the new normal. Due to its inherent industrial characteristics, the production and operation process of the hospitality industry is obviously vulnerable to natural disasters, epidemic diseases, economic crisis, international political relations and other related factors. As an important part of tourism, the hospitality industry is most likely to expose its "weaknesses" in the process of development and structural problems in production and operation. The emergence of a crisis always makes the hospitality industry make progress in reflection and brings enlightenment to the sustainable development of the hospitality industry.

CONCEPT OF ORGANIZATION RESILIENCE

At the beginning of 2020, black swan events occurred frequently. In particular, the new crown epidemic has not only posed many threats to the safety of people's lives but also brought layers of haze to the development of the national economy. Yet, with turbulent environmental responsibilities, some companies are able to bounce back while others fail. What enables individuals, organizations, communities, and even nations to survive, adapt, and thrive in the face of the most unexpected adversity? The answer to the question is that resilience makes the difference (Ishak and Williams, 2018; Ma et al.,)

Resilience is derived from adversity, and organizational resilience can help companies identify and respond to opportunities and challenges brought about by environmental uncertainty, turn danger into safety, and take advantage of opportunities to promote the sustainable development of enterprises (Ortiz-de-Mandojana and Bansal, 2016). Research on resilience has been extended and extended in fields such as physics, ecology, psychology, and engineering (Carden et al., 2018;Ma et al., 2018), until Meyer (1982) took the lead in introducing resilience into the field of business administration, thus ushering in a new chapter in organizational resilience. The conceptualization of resilience varies from discipline to discipline (Linnenluecke, 2017). Fan Bo and Nie Shuang (2017) say that the research on resilience in the field of organizational management is still very scattered and unclear. The concept of organizational resilience needs to be improved and developed in a systematic way. The organizational resilience is different from adaptability, agility, flexibility, improvisation, recovery, redundancy and robustness. Resilience involves the reaction of the organization under destruction, which emphasizes the ability of recover and develops in a state of uncertainty, discontinuity, and emergency. In particular, organizational resilience has the following characteristics 1) Resilience is a capability under discontinuous, emergent internal and external environment. The organizational resilience is a potential capacity which cannot be perceived in operation activities of organization. But when the environment becomes disruptive and emergent, organizational resilience can take advantage for organization. 2) Resilience emphasis on survival, adaptability, bounce back and development under disruptive situation. Organizational resilience is recovery ability after destruction rather than a resistance to unexpected event. Organization with high resilience can adjust timely and shape a new capacity confronted with a variety of dramatic changes. 3) Organizational resilience is a multi-level conception and related to the organizational resources, routines and process. Resilience across levels including individuals, groups and organizations and depends on the interactions among different levels. Meanwhile, resilience is a process which affected by resources and routine of organization.

Some literatures put forward the factors and specific measurements of organizational resilience in various angles, this paper only list few representative ones. E. Cunha et al. (2013) deconstructed organizational resilience from three levels: individual level, group level, and organizational level. The employee is the basic elements of organization system and the individual resilience is the main source of organizational resilience. Individual has resilience does not mean that groups or organizations he or she belongs to also have such characteristics, there need some process to realize it.

THE THEORETICAL MODEL OF ORGANIZATIONAL RESILIENCE

Organizational resilience is a newer tradition in organizational theory that incorporates insights form both coping and contingency theories. Although some literatures have analyzed the concept and measurement of organizational resilience, there is still a lack of integrative construct. The empirical research is also difficult due to the unpredictability of crisis disasters and the lack of samples. Some scholars thought that organizational resilience is contextual which means a resilience specific to a certain situation. It is important to realize that resilience arises from a complex interplay of many factors at different levels of analysis (Van Der Vegt et al., 2015).

Linnenluecke (2017) pointed out that the context of resilience, organizing for resilience, measuring resilience and multi-level and cross disciplinary work are the primary research in future. Especially under the crisis and disaster situations, utilize the organizational resilience theory to makes organizations overcome adversity. Resilience capacity can be developed and managed. For example, in the human resources management, managers can take specific HR principles and HR policies to enhance the employees and the overall organizational resilience. Organizational resilience has been considered as an important field in management. The model includes lot of factors, relations and mechanisms. (Lei XIAOa , Huan CAO, 2017) Organizational Resilience: The Theoretical Model and Research Implication, ITM Web of Conference 12, 04021 (2017).

INFLUENCING FACTORS OF ORGANISATIONAL RESILIENCE

The improvement of organisational resilience includes a cyclical and iterative process of 'recognizing changes in the external environment, identifying critical vulnerabilities, and taking effective actions' (McManus, Seville, Vargo, & Brunsdon, 2008). Therefore, it is necessary to identify the influencing factors affecting the whole process. At present, scholars have studied the influencing factors of organisational resilience from multiple perspectives. For example, high organisational resilience is usually seen as the result of resource coordination and optimal allocation, and an organisation's physical resources, human resources, and economic resources have an impact on the improvement of organisational resilience according to the perspective of organisational resources.

Their study finds that when the organisation's key human resource elements are coordinated and integrated at the organisational level, the organisation can maintain a higher ability to cope with and adapt to sudden changes in the environment, demonstrating a higher organisational resilience. At the level of organisational governance, leadership, social networks and culture play significant roles in organisational resilience. Folke et al. (2004) consider that organisational leadership is responsible for important tasks such as collecting critical information, making emergency decisions, coordinating social relations, and managing conflicts. Therefore, they argue that organisational leadership is the key factor in improving organisational resilience.

Organizational resilience is a situational concept, and situational factors bring a double test to organizational resilience: on the one hand, the organization needs to maintain an open and shared mentality with the outside world; on the other hand, the organization has a flexible and free structure for domestic needs. Therefore, on the basis of systematically sorting out, summarizing, and integrating the literature related to organizational resilience, this paper is devoted to examining the influencing factors of organizational resilience at the internal and external levels according to organizational boundaries.

Some scholars have analyzed organizational resilience in the context of government transformation. It helps companies redefine business models and corporate strategies dynamically before their needs become very clear (Bouazis and Day 01110, 2018). as well asSecond, economic factors can affect and determine the development strategy and direction of companies. Some scholars have analyzed the background of the economic crisis. The lower tissue can reflect the stability and flexibility of organizational resilience from the two dimensions of loss degree and recovery time (DesCardino et al., 2019). Third, social factors include both subjective social relations and objective natural conditions. Sullivan-Taylor and Wilson (2009) analyzed that British tourism and leisure organizations faced the terrorist threat brought by the hostile relationship between the government and terrorist organizations. Managers can enhance organizational resilience through autonomous actions. Tisch and Galbreath (2018) analyze the organizational resilience of the New Zealand agricultural sector in the context of climate change. Finally, the upgrading and rapid development of technological factors will have an impact on the core expertise and competitive position of enterprises. In the context of disruptive business model innovation, resilience, as an organizational capability, can rely on new organizational routines and processes to deal with the challenges and opportunities brought about by innovation (Dewaid and Bowen, 2010), and the application of technologies such as information systems will benefit It improves tissue toughness (Bustinza et al., 2019).

From an internal perspective, organizational resilience can be affected at three levels: individual, team, and organizational. The influencing factors at the individual level are mainly psychological state. For example, Kahn et al. (2018), based on the theory of inter-group relationships, believe that when key departments are under creep pressure, adjacent departments may take three paths of integration, denial, and transformation, which ultimately shape the organization as a whole. resilience level

As the background for these times, volatility, uncertainty, complexity and ambiguity have become the consensus norm of global change (Li, 2020), and some argue that the production, operation and living environment of enterprises are more unpredictable than ever before (Fan & Tian, 2019).

Furthermore, the existing literature on organisational resilience mostly focuses on corporate practices in Western developed countries (Cotta & Salvador, 2020; Kim, 2020), and fewer studies consider China's unique situation in organisational resilience research. Therefore, exploring organisational resilience in the Chinese management context is of both theoretical and practical significance.

THE ORGANISATIONAL RESILIENCE IN THE HOSPITALITY INDUSTRY OF CHINA UNDER THE COVID-19 ERA

Recent studies have addressed these adverse psychological impacts on hospitality service staff, such as occupational stressors (Wong et al., 2021), job insecurity (Vo-Thanh et al., 2021), turnover intent (Bufquin et al., 2021; Jung et al., 2021), amplification of disadvantaged groups (Baum et al., 2020), and organisational resilience (Khan et al., 2020; Melián-Alzola et al., 2020; Ngoc Su et al., 2021). However, these studies did not discuss how to leverage the micro-level leader-member relationship as a longitudinal recovery plan and preventive strategy. With the rollout of mass vaccination programmes, some regions show a promising prospect of the hospitality sector and are reopening the business to welcome international visitors again after a long time (Miles et al., 2021). Nevertheless, fluctuating COVID-19 restrictions and guidelines, threats of new virus variants and individual readiness for in-person contacts have led to a distinct extent of uncertainty in the post-pandemic era (Ateljevic, 2020). Hence, such ‘new normal’, including vaccination passports, varied mask requirements in different venues, or the government’s various restriction plans, requires psychological adjustments and new skills for employees to accommodate varying possibilities (Kaushal and Srivastava, 2021). We acknowledge many people lost their jobs during the COVID-19 pandemic; however, the scope of this study only focuses on customer-facing staff who are still employed.

The hospitality service staff often suffer from emotional exhaustion (Wong and Wang, 2009). In theoretical discussion builds upon Prayag’s (2018) recent call for shifting the focus of crisis and disaster management research towards a bottom-up people-focused approach. This micro-level interpersonal approach is under-researched in the context of crisis management. This article corresponds to the latest demands (Khan et al., 2020) on long-term recovery and responding strategy in the future. It develops a conceptual framework underpinned by psychological interactions to manage, develop and support hospitality customer-facing employees in the post–COVID-19 era. The COVID-19 pandemic raises new challenges for HRM in the hospitality sector. Differing from other types of disasters or crises, the uncertainty of not knowing when the pandemic will be over puts massive pressure on hospitality employees' psychological wellbeing, particularly causing stress and anxiety (Bufquin et al., 2021). In addition, the uncertainty of the post–COVID-19 era and the potential subsequent financial recessions resulting in a decrease of demand and unclear career (Cheer, 2020) differentiate the pandemic from other crises in the recovery stage. Compared with knowledge workers who can work remotely (Waizenegger et al., 2020) and perceive less impact from the COVID-19-related a customer-facing hospitality staff is more vulnerable in terms of the unpredictability of returning date, job security and health-related issues in the post–COVID-19 recovery.

CONCLUSION

The COVID-19 pandemic and resulting economic fallout caused significant hardship. In the early months of the crisis, tens of millions of people lost their jobs. While employment began to rebound within a few months, unemployment remained high throughout 2020. impact of the COVID-19 Outbreak on Individuals and Communities. The COVID-19 (coronavirus) outbreak has the potential to increase stress and anxiety, both because of the fear of catching the virus and also because of uncertainty about how the outbreak will affect us socially and economically. Organizational Resilience is the ability of an organization to anticipate, prepare for, respond and adapt to incremental change and sudden disruptions in order to survive and prosper. The benefits of resilience will allow organization to: Upgraded capacity for anticipating and responding to opportunities and threats. Acquire the ability to recognize and address vulnerabilities before having a material influence.

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THE IMPACT OF TECHNOLOGICAL INNOVATION INVESTMENT ON ENTERPRISE PERFORMANCE

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ABSTRACT

In the current context of economic globalization and fierce market competition, innovation has increasingly become the driving force and source of sustainable development of enterprises. High-tech enterprises are an important force in China's innovation economy, and their development issues have received great attention. However, as the complexity of innovation activities rises, how to achieve technology optimization becomes an important challenge for enterprises to gain a competitive advantage in the market and enhance their innovation capability. Faced with a market environment full of uncertainties and risks, enterprises usually choose related technology fields or enter into brand new technology fields to undertake R&D activities based on the development of core technologies in order to reduce risks, and thus technology diversification strategy is widely used in enterprises. R&D investment can integrate internal and external resources of enterprises and play an increasingly important influence between technology and innovation. Cooperation between industries, universities and research institutes can also promote the integration between diversified technologies and generate synergistic innovation effects. Therefore, under the strategy of technological diversification, how to invest reasonably in R&D activities and seek industry-university-research cooperation has become an important challenge to improve the innovation performance of enterprises and promote the long-term development of enterprises. Through literature research method, this paper aims to explore the influence of technology diversification on enterprise innovation performance, and provide reasonable suggestions for China's high-tech enterprises to formulate technology development strategies.

Keywords:technological innovation, enterprise innovation performance, R&D investment

INTRODUCTION

1.1. Research Background

In the increasingly competitive market environment, the speed of technological change is getting faster, and innovation plays an increasingly important role in development. High-tech enterprises are an important force in China's innovation economy, and their survival and development are inevitably linked with their technological progress. Therefore, it is necessary to speed up the technological exploration of high-tech enterprises, promote technological change, enhance the vitality of technological innovation of enterprisesand achieve sustainable development.

In the fierce market environment, enterprises need to rely on a diverse and irreplaceable technology base, and equally rely on the integration between technologies and R&D in the business process in order to achieve profitability. R&D investment plays an increasingly important role between technology diversification and enterprise innovation performance.The increase in R & D investment will achieve diversified technology, so that enterprises can often gain a market competitive advantage. Technology diversification can indeed expand the enterprise technology base and bring into play the innovation effect, but it only provides a variety of technology resources in the enterprise innovation process. If an enterprise wants to exert the effect of multi-technology integration and innovation in the fierce market competition, it is inseparable from the collaboration and innovation in the process of production, education and research.The participants in the process of industry-university-research cooperation include enterprises, universities and research institutes, which can provide a platform for technology integration and technology absorption, thereby forming an open, solid and well-organized technology infrastructure. Therefore, how to enhance R&D investment activities and actively seek industry-university-research cooperation under the development of technology diversification strategy becomes a key challenge to enhance the innovation performance of enterprises, optimize the core competitiveness and promote the long-term development for them.

1.2. Research objectives

This paper explores the impact of technology diversification on enterprise innovation performance, and provides reasonable suggestions for China's high-tech enterprises to formulate technology development strategies.

1.3. Research significance

The significance of this paper is to provide new ideas for enterprises to enhance their technological innovation capability and provide a reference basis for the formulation of technological strategies. It helps to maximize the beneficial effects of diversified technologies on the innovation performance of enterprises. By studying the mediating role of R&D investment, it provides a useful reference for enterprises to improve their technology strategy mechanism, and is of practical significance to cultivate, stimulate and protect technological innovation and guide collaborative innovation in the new era.

LITERATURE REVIEW

The important purpose of R&D investment among organizations was innovation, and scholars had conducted more studies on the influence relationship between the two, most of which proved a positive relationship between them, while some research results showed that R&D investment had a negative influence on innovation performance.

The R&D activities of enterprises promoted information exchange and knowledge transfer in their collaborative innovation process, enhanced their internal technology integration and technology absorption capacity, facilitated knowledge integration and knowledge spillover, and strengthened their innovation capacity.Vancauteren (2016) positively promoted patent output with the intensity of R&D investment in enterprises in the food processing industry.Zhu et al. (2019) demonstrated that the input of R&D personnel had a positive relationship with regional innovation performance, and the enhancement of regional innovation capacity dependedon the increase of R&D personnel's input.The study found that the firm's absorptive capacity positively regulated the relationship between R&D input and regional innovation performance. Gong Yifei and Xia Yanchun (2017) proved that R&D investment had a positive impact on enterprise performance through empirical analysis, which affirmedthe positive correlation between R&D investment and enterprise performance. Wang Sulian (2018) showed a positive effect between R&D investment intensity and firm innovation performance. Zhang Fengbing and Wang Huizong (2019) selected 906 high-tech enterprises in Shandong province, and through negative binomial regression analysis.The study found that R&D funding investment positively affectedinvention patent output, and R&D personnel investment positively affectedinvention patent output and utility model patent output. SuTaoyong et al. (2019) found that R&D investment hada positive effect on the long-term performance of enterprises.

Yu Yan (2014) foundthrough their study that R&D investment could have a negative effect on enterprise performance. In a study by Guo Meiqing and Zhang Chengpei (2017), R&D investment was significantly and negatively related to performance without considering the length of the firm’s operation. WangJiali (2018) investigated some GEM-listed companies from 2012-2015 to explore whether there wasa certain relationship between government subsidies, R&D investment, and corporate financial performance. The findings showed that R&D investment had a suppressive effect on the short-term financial performance of enterprises. Yuan Xiaoyu (2019) used 91 manufacturing enterprises and found that R&D investment was significantly associated with innovation performance. Zhang Yongan and Yan Jiaxin (2020) found that since the innovation environment of enterprises in central provinces of China was not as superior as that in the east and the government support was not as great as that in the west, enterprises in central provinces increased their R&D investment, and instead they increased their production costs and madetheir innovation performance decrease.

THE STATUS AND PROBLEMS OF SMALL AND MEDIUM-SIZED ENTERPRISES

Modern technology has two kinds of influence on the industrial technology and equipment and product development. On the one hand, it is developing in the direction of large-scale and centralization.On the other hand, it is developing in the direction of miniaturization and decentralization. The miniaturization of products and decentralized product provide favorable conditions for the development of small and medium-sized enterprises. Under the condition of the new technological revolution, the founders of many small and medium-sized enterprises are often scientists and technicians of large enterprises and research institutes, or university professors, who often are managers, owners and inventors. New technological inventions can be put into practice immediately. Because of this, new technology-based SMEs have sprung up since the 1970s, and they have achieved great success in microcomputers, information systems, semiconductor components, electronic printing and new materials, etc. Many SMEs have grown rapidly into world-famous large companies such as Hewlett-Packard, Microsoft, Yahoo, Sony and Xerox in just a few years or a dozen years.

3.1. Large capital investment and poor ability to resist business risks

Whether it is the growth rate of market share or the rate of scale expansion, enterprises in the growth period enjoythe fastest change. This means that companies must invest a lot of money in production and market expansion. Specifically, it includes not only hardware investment such as production sites, production equipment and raw materials, but also the cost of introducing experienced and talented business managers, paying skilled employees and investing in advertising and market development. Therefore, during this period, the ratio of enterprise cost to product sales is relatively high, and low-profit operation is a common situation.

3.2.Unclear business managementstrategy

When an enterprise moves from the pre-growth stage to the growth stage, its company management strategy will also change. In the early stage of growth, enterprises are mainly busy with technology research and development and product development, which is the key to determiningthe core competitiveness of enterprises in the future. Once the product is introduced to the market and the enterprise enters the growth period, the focus of the enterprise will shift from R&D to product production, product sales and market development, and the focus of the allocation of enterprise resources will also shift from R&D to products and market, thus moving forward to the mature stage. Therefore, if companies have not been aware of this change and ignored the market investment, the enterprise will inevitably face the phenomenon that it is difficult to sustain its operation. This situation is more prominent in high-tech enterprises. The technology developed with a lot of human and material resources. If the technology is not well promoted and applied, the high-tech enterprises will a failure.

3.3. Good growth prospects of enterprises

There are two mismatches in the growth period. First, the growth of enterprise value cannot be reflected in net income in the short term because the expansion of production capacity and the development of the market are difficult to reflect in the current period. Second, the proportion of cash dividends is small. The limited cash in the growth period of the enterprise is difficult to distribute to investors in a large proportion as dividends and income. However, as long as growing enterprises launch products with certain competitiveness, establish a certain popularity, and have a group of fixed customers, they can have good prospects that can be foreseen. This requires management to allocate corporate resources rationally to ensure orderly growth in all areas of the business.

3.4.Risks in enterprise operation

Under the situation of growing sales, even if the growing enterprises get abundant cash flow, they will invest a lot of them into all kinds of costs to achieve their strategic goals.However, once the investment of a growing-stage company fails to meet the growth expectations, there will be a shortage of cash flow, and the operational risks of enterprises will be quickly exposed. Therefore, the financing needs of enterprises in the growth period are still very strong and the risks still exist.

OPTIMIZATION SUGGESTIONS

4.1. Carrying out technology diversification strategy to enhance enterprise innovation capability

Technological innovation is an important means for high-tech enterprises to achieve long-term development. Technological diversification can expand the technological base of enterprises, provide technical support for product upgrading, and avoid R&D risks, which help to promote the improvement of innovation performance of enterprises. Therefore, carrying out a technology diversification strategy is an inevitable choice for high-tech enterprises to formulate technology strategy.

On the one hand, enterprises should pay attention to deep diversification in related technology fields, which means that while enterprises concentrate on developing core technologies, they should also be aware of the technicalfields related to core technologies and dig deep into the knowledge resources in their neighboring technology fields. At the same time, enterprises should enhance the enterprise technology integration ability, reconfigure and combine multiple technologies into new technology architecture. For small-scale enterprises with limited R&D capability, they should focus on technological innovation within the scope of their core technology neighboring fields, which is conducive to achieving product upgrading, increasing the intensity of their core competitiveness, and thus enhancing their innovation performance.

On the other hand, it encourages breadth diversification in non-related technology fields, which means that enterprises should pay attention to the expansion activities in non-related technology fields in addition to the development in core technology fields, and effectively use heterogeneous knowledge to expand the scope of the enterprise's technology base. Diversification in non-related technologies is conducive to cooperative innovation. Therefore, enterprises should also cultivate the concept of cooperation and openness, actively seek cooperation and better carry out diversification strategies. For enterprises with larger scale and higher R&D capability, they should focus on technological innovation in the field of non-related technologies of enterprises, which is conducive to achieving economies of scale, and cross-fertilization.

4.2. Focusing on the complementary and dynamic balance of related and non-related technology diversification

With the complexity of the competitive environment and the rapid development of technological updates, a moderate range of technologies is a prerequisite for the growth of enterprises and the establishment of dynamic capabilities. In the process of technology diversification, enterprises choose the appropriate diversification strategy for their own scale and enterprise characteristics. Moreover, in the process of enterprise development, the choice of relevant technology diversification strategy or non-relevant technology diversification strategy is constantly adjusted, both to develop the enterprise's core technology deeply and consolidate core competitiveness, and reasonably explore technology in other non-relevant technology fields to reduce core rigidity, achieve economies of scale, and attract more cooperation opportunities.

Just like NetEase, Huawei and other high-tech giants, they not only carry out technology innovation activities in the core technology field, but also carry out technology expansion outside the core technology field. Enterprises should recognize the influence of relevant and non-relevant technology diversification on enterprise innovation by fully grasping the synergistic advantages of both and relying on relevant technology diversification to deepen the core technology field and consolidate the core competitiveness of enterprises. Enterprises should rely on non-relevant technology diversification to broaden the technology application field and realize cross-field innovation.

4.3. Increasing R&D investment to enhance enterprise innovation performance

R&D activities are an effective way for enterprises to carry out technological innovation and gain competitive advantages. When carrying out a technology diversification strategy, enterprises should reasonably carry out R&D investment activities according to different strategies of technology diversification. With the increasingly fierce market environment, enterprises should recognize the important role of R&D investment and must pay attention to technological innovation, and put the diversified technology strategy into practice through R&D activities to maximize the innovation performance of enterprises.

When enterprises carry out relevant technology diversification, they should increase the financial investment in the process of technology integration to enhance the enterprise's technology integration capability and promote the in-depth development in relevant technology fields. When the technological innovation activities of enterprises are expanded to non-related fields, they should pay attention to the R&D investment in the cooperation process, which will maximize the acquisition of heterogeneous knowledge.Furthermore, it can acceleratethe speed of technology integration and enhance the innovation capability of enterprises.They should recognize the continuity of R&D activities, which is a long process and requires a long stage from capital investment to innovation output.They should carry out non-related technology diversification, continuously invest R&D funds, train

R&D personnel with high innovation ability for enterprises, and enhance their innovation ability.

4.4. Actively carrying out University-Industry-Research Cooperation and promoting collaborative innovation

In the context of increasing the technological capability of high-tech enterprises in China, it is important to guide enterprises to actively seek cooperation and promote thedeep integration ofindustry, university and research. University-Industry-Research Cooperation is the process of achieving technological innovation by integrating internal and external technologies and knowledge, and carrying out cooperation enables enterprises to obtain more heterogeneous resources and promote them to achieve competitive advantages.

The process of industry-university-research cooperation focuses on the acquisition of heterogeneous knowledge. When an enterprise develops related technology diversification, it is more about the integration of knowledge between related technical fields.The existing technology integration ability of enterprises is not enough to promote the coordination of heterogeneous knowledge and homogeneous resources, and will rely on other factors. Therefore, if enterprises implement diversification strategies in related technology fields, they should first focus on improving their technology integration capabilities, and then carry out industry-university-research cooperation when their technology capabilities are sufficient to allocate and coordinate heterogeneous resources. In the process of non-related technology diversification, enterprises should actively carry out cooperative R&D activities with universities and research institutes, improve the efficiency of knowledge transfer between enterprises and external allies, and promote the internalization of heterogeneous knowledge and the deepening of homogeneous knowledge in the process of cooperation.

CONCLUSION

In today’s rapid development of science and technology, technological innovation has become a crucial topic. It has become an eternal truth that technological innovation can promote the progress of the times. However, in practice, it is difficult for many enterprises to break through this barrier of technological innovation, so that they are gradually eliminated by the market. Enterprises need to constantly break through this problem in order to usher in a huge breakthrough.

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THE INFLUENCE OF INCLUSIVE LEADERSHIP ON THE INNOVATIVE BEHAVIOR OF GEN Z EMPLOYEES

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ABSTRACT

In today's internal team development of Chinese enterprises, in order to improve the overall innovation level of enterprise development, each member needs to constantly try different paths from the previous ones, and it is possible to discover and create new objects and new tools. During such exploration, employees often make mistakes due to lack of prior knowledge. Therefore, in the team, it is necessary to implement a set of correct error identification and error handling methods for the errors that occur within the team members. Members of the team should communicate with each other on errors, share error knowledge, and form a fixed error management procedure within the team. Such a common team practice process will be referred to by scholars as the error management atmosphere within the organization or team. A specific leadership style affects the characteristics of team climate, and inclusive leadership has a greater explanatory power for error management climate than other leadership styles. If the team can tolerate and understand the generation of internal errors, and help employees solve the problems that arise in the errors, it is conducive to the formation of an error management atmosphere in the team. In order to further explore the influence mechanism of inclusive leadership on the innovative behavior of Gen Z employees in China, this paper uses the literature research method to introduce error management climate as a mediating variable from the perspective of team climate, and puts forward relevant hypotheses. Through research, it is found that inclusive leadership has a positive impact on employee innovation behavior under Gen Z. This research not only enriches the theory of inclusive leadership, but also expands the research on the impact of inclusive leadership on the new generation of employees, and provides a new direction and reference path for the management style of corporate leaders.

Keywords: generation z employees, innovative behavior, inclusive leadership, error management climate

INTRODUCTION

1.1 Background of the Study

According to the China Social Science Network, in the "2015 Special Survey Report on the Growth and Development of Chinese Entrepreneurs", a questionnaire survey of 2446 business operators showed that enterprises' investment in innovation continued to increase. However, compared with developed countries, the innovation capability of Chinese enterprises is still weak, and some core parts of the latest technological achievements still need to seek support and help from Western developed countries.

Throughout the existing research, there are mainly two factors that affect the level of employees' innovative behaviour, one is the personal characteristics of employees, and the other is the environmental characteristics at the organizational level. Due to the innate and stable personality characteristics of employees, enterprises are more inclined to use organizational situational factors (leadership style, organizational atmosphere, etc.) to stimulate the innovative ability of their own employees. Members of the team have many aspects of performance and understanding of innovation, such as innovation cognition, innovation ability and innovation motivation. And these aspects will be affected by the team leader and show different degrees and levels, such as the leader's personal characteristics, handling style and the type of relationship with members, etc. (Clapham, 2000; Qu Rujie et al., 2009). In order to promote the generation of innovative behaviour of employees within the enterprise and further stimulate the innovative vitality of the enterprise, the enterprise needs to seek a more effective leadership method.

In today's internal team development of Chinese enterprises, in order to improve the overall innovation level of enterprise development, each member needs to constantly try different paths from the previous ones, and it is possible to discover and create new objects and new tools. During such explorations, employees often make mistakes due to lack of experience and knowledge. Therefore, in the team, it is necessary to implement a set of correct error identification and error handling methods for the errors that occur within the team. Members of the team should focus on errors, communicate more, learn more, and form a fixed error management system within the team. Such a group common behaviour will form the error management climate within the team (Guchait Petal, 2015). A specific leadership style affects the characteristics of a team's climate, and inclusive leadership explains the error management climate more strongly than other leadership styles. If the team can tolerate and understand the generation of internal errors, and help employees solve the problems that arise in the error, it is conducive to the formation of an error management climate in the team. At the same time, it further gives employees confidence in the face of errors, making them more motivated to create more innovative behaviours.

In an organization, the leadership's personality, work style and other aspects will have an impact on employees, so the impact of leadership on employees' innovative behaviour is worth conducting in-depth research. Gen Z is gradually filling entry-level positions as millennials move up the ranks and begin to dominate the workforce. It would be a mistake to think of Gen Z as millennials, as their exposure to digital technology as a child has changed their social relationships, consumer behaviour and, more importantly, their perception of what constitutes a good career opportunity. This generation will be as disruptive and revolutionary as the digital technologies they grew up with. Today, the oldest Gen Z is 27 years old. This age means that, although Gen Z is still called the new generation, but they were born in 1995-2009, their generational front end has become a "real worker".

In order to further explore the impact mechanism of Inclusive Leadership on the innovative behavior of Gen Z employees in the Chinese context, this paper introduces "error management climate" as a mediating variable from the theoretical perspective of organizational climate, and attempts to verify that Inclusive Leadership in the Chinese context has It is beneficial for the organization to form an organizational climate for error management, and most of the innovative behaviors of employees will be more frequent because of such an organizational climate. In other words, the Inclusive Leadership method may further stimulate the production of innovative behaviors of employees through the error management climate, so that the Employees are more bold and unburdened to carry out innovative activities that benefit the organization and contribute to the organization.

1.2 Research Question

Generation Z employees yearn for safe, stable and simple work. They can constantly switch between various jobs, and once they are dissatisfied with the work they do or encounter difficulties at work, they will choose to quit. Their attitude towards innovation is like living in a metaverse world. At work, mistakes are commonplace. However, under the existing management system of enterprises, once employees make mistakes, they will definitely bring certain punishments. The patience and self-esteem of Gen Z employees are vulnerable under the pressure of corporate work.

The management method of organizations and enterprises for mistakes at work is error prevention, and preventive measures are taken to reduce the opportunities for employees to make mistakes. But in complex work situations, the chances of making mistakes are great. Most enterprise organizations regard employees as a factor of production and manage employees as a resource. But under the management style of Gen Z, employees should be regarded as employees with innovative value. This research aims to enrich domestic research on inclusive leadership theory, summarize and expand the research on the influence mechanism of inclusive leadership on Gen Z employees' innovative behavior, provide a new direction for business leaders to shape management style, and also provide a new direction for enterprises to stimulate employees' innovative behaviour. A new reference path is provided.

1.3 Research Significance

1.3.1 Theoretical Significance

This article enriches related research on Inclusive Leadership Theory and Gen Z analysis. Throughout the existing research on inclusive leadership, most of them emphasize the "tolerance for difference" in Inclusive Leadership, while few studies focus on "tolerance for error" and the representative role of employee failure in inclusive leadership. . Therefore, from the perspective of "tolerating errors and supporting employee development", this paper enriches the relevant research on Inclusive Leadership theory by using the scale developed in the existing research on Inclusive Leadership in the context of China.

This paper summarizes the research on the influence mechanism of inclusive leadership on employees' innovative behavior, and extends the research object to Gen Z employees. Existing domestic and foreign studies have shown that the Inclusive Leadership approach can promote the generation of employees' innovative behaviors, but there is less research on the Gen Z employees and the process mechanism of how inclusive leadership promotes the generation of employees' innovative behaviors. In a small number of studies on the mechanism of inclusive leadership affecting employees' innovative behavior, few scholars have looked at this research issue from the perspective of organizational climate. This paper uses error management climate as an intermediary variable to explore the mechanism of Inclusive Leadership on Gen Z employees' innovative behavior. From the perspective of organizational climate theory, it further analyzes the internal mechanism of its correlation to supplement the insufficiency of existing research.

1.3.2 Practical Significance

This research provides a new direction for business leaders to shape management style. In a team, the leader is the core figure, and the style of its behavior will affect the behavior direction of its employees. In today's era, the international development environment is becoming more and more complex, and the domestic market competition is becoming more and more intense. The Inclusive Leadership style satisfies the new demands for leadership style in the current corporate living environment. This paper further enriches and verifies the effectiveness of the Inclusive Leadership approach to employees' innovative behavior in the context of Chinese enterprises, which not only has important practical significance for improving leadership, but also helps organizations build an Inclusive working environment. This research provides a new path for enterprises to stimulate employees' innovative behavior. The overall innovation level of an enterprise is largely determined by the innovation level of employees within the enterprise, and the leadership style of leaders affects the extent to which employees' innovation potential is exerted. From the perspective of team climate, this paper verifies the path of Inclusive Leadership's "tolerance for errors" mechanism in the Chinese context to shape and stimulate employees' innovative behaviors. Companies can build an error management climate through Inclusive Leadership, allowing employees to maximize their innovation potential in such a work environment.

LITERATURE REVIEW

2.1 Generation Z

Generation Z mainly refers to the generation born from 1995 to 2010, whose growth period is synchronized with the formation of the Internet and the period of rapid development. A generation strongly influenced by technological products such as the Internet, instant messaging, smartphones and tablets. According to the United Nations, the "Generation Z" population will be 1.85 billion people in 2020, accounting for 23.7% of the global population. China's "Generation Z" population is 264 million, accounting for one-fifth of the country's total population. Gen Z has become the most populous generation in the history of the world and is gradually becoming an important force affecting the world.

The distinguishing feature of Generation Z employees is that they are highly dependent on the Internet, create their own imaginations through the Internet, and build their own life circles through the Internet. Most of them are independent, have a strong sense of self, pay attention to experience, have distinct personalities and strong self-esteem, embrace changes, and are willing to try all kinds of new things.

The characteristics of Gen Z employees are greatly influenced by the Internet. Their growth environment is accompanied by the development of the digital economy. With the continuous enhancement of society's consumption power, employees of Generation Z have great expectations for the return of work, but the real world is difficult to meet the consumption desire of young people of Generation Z. Therefore, in the daily work of enterprise organizations, many employees will be full of uncertainty in the future under the situation of huge work pressure and constant mistakes. The innovation and development of enterprises will be closely related to the employees of Generation Z. Compared with the post-60s, post-70s and post-80s employees, the new generation of employees such as the post-90s and post-00s are quite different in personality, needs, growth, concerns and interests. Various measures such as organizational development, hierarchical care, and corporate culture are taken simultaneously to enhance the recognition and sense of belonging of the new generation of employees.

2.2 Inclusive Leadership

The term "inclusiveness" was first used in the field of pedagogy. "Inclusive education" refers to treating students of different races, social classes, creeds, and genders equally, and managing schools with inclusive thinking. In the field of organizational management, Nembhard & Edmondson, (2006) formally proposed the concept of Inclusive Leadership for the first time, applying "inclusiveness" to leadership research. Current research mainly defines the concept of Inclusive Leadership from three perspectives: trait, behaviour and process.

From the perspective of traits, Temple et al. (2009) started their research in the field of education and believed that Inclusive Leadership is a leadership style that accepts and embraces differences in education and learning and empowers students. Carmeli et al. (2010) believed that Inclusive Leadership means that employers pay attention to the needs of employees, are open and effective in the process of interaction, and are very friendly in the process of getting along with employees.

From a behavioural point of view, Nembhard et al. (2006) proposed that Inclusive Leadership means that employers are good at listening to employees' opinions, encourage employees to express their views and participate in decision-making, and will affirm employees' work. Fang Y (2014) believed that Inclusive Leadership would treat employees equally and accommodate employees' errors. Peng W et al. (2017) conducted a study on Inclusive Leadership in the Chinese environment, and believed that inclusive employers would attach importance to the development of employees, be willing to accommodate others, and respect, consider and recognize employees.

From the perspective of process, Hollander (2009) pointed out that inclusive leadership is a relational leadership style, and the two-way relationship between leaders and subordinates is based on respect, recognition, response and responsibility, and stimulates the potential of employees to achieve a win-win situation. Gao H (2010) believes that inclusive leadership emphasizes fairness, pays attention to equal opportunities, equal distribution, shares development results, and realizes the function of leadership in a dynamic process.

2.3 Error Management Climate

Errors refer to behavior that deviates from expected goals due to unconsciousness or lack of professionalism at work (Van Dyck et al., 2005). Although both error and mistake have the meaning that the result deviates from the expected, error is a neutral word, the error is caused by the unconscious, and the error is unavoidable. Error management emphasizes actively dealing with errors after they occur and learning from them, so as to reduce the negative impact of errors, exert their positive effects, and avoid the same problems in the future (Van Dyck et al., 2005; Guchait, 2012).

Klein et al. (1994) believed that when enterprise management pays attention to error management, a good atmosphere about error management will be formed in the enterprise, and the concept of error management atmosphere is put forward. Subsequently, Van Dyck et al. (2005) formally defined the error management climate as the employees' common perception of the organization's attitude and way of dealing with errors, and believed that the error management climate included four aspects: error communication, error competence, error risk-taking and error aversion. Wang Chongming et al. (2005) believe that the error management climate is the attitude, practice and procedure that employees perceive the organization to be beneficial to error management. Frese et al. (2015) believe that the core of the error management climate is the employee's attitude and handling of errors and the error management climate emphasizes the principles of action, innovation and experimentation. Yin Kui et al proposed that the error management atmosphere is the practice and procedure of errors in the enterprise, and its purpose is to reduce the negative effects of errors and improve the positive effects of errors.

To sum up, this paper believes that the atmosphere of error management is the common perception of employees on the organization's error thinking, error learning and error communication. Error management atmosphere is a positive organizational atmosphere, which emphasizes treating errors with a positive attitude, communicating, thinking and learning about errors, so as to reduce the negative impact of errors, exert their positive effects, and avoid the same errors in the future.

RESEARCH METHODOLOGY

3.1 Inclusive Leadership and Employee Innovation Behaviour

Existing research basically directly adopts the definition and scale of inclusive leadership of Western scholars to measure its relationship with employees' innovative behaviour, that is to say, most scholars start from the perspective of inclusive employee diversity, and Few studies have examined the impact of employee failure on employee innovation behavior from this perspective. This paper selects Fang Yangchun (2014) on the basis of the Carmeli (2010) questionnaire, and based on the particularity of Chinese corporate situations, through structured interviews and design modification of the three-dimensional scale of inclusive leadership, Divide inclusive leadership into three dimensions: tolerance, openness, and support.

Tolerance refers to a leader's tolerance for mistakes made by employees and failures of employees. In order to achieve innovation, team members must not be afraid of mistakes and failures, which are by-products of innovation. If members cannot face up to the risks that these by-products may bring, such as harming personal interests and reducing group performance, it will be difficult to tap their own innovation potential. Therefore, maintaining a good attitude to face such a process is a prerequisite for achieving innovative results, and the formation of this condition is largely influenced by the leadership style of the individual team. If individuals in the team perceive that the leader is not a person with high tolerance, their enthusiasm for innovation will be reduced, innovation enthusiasm will be easily hindered, and individual innovation will not be able to play effectively. The way the team operates inside will become obsolete and unable to adapt to the constant changes in the external environment. And inclusiveness 17 Research on the influence of inclusive leadership on employees' innovative behaviour: the mediating effect of error management climate Tolerance in leadership reflects the "error tolerance" of inclusive leadership, which makes employees not afraid of the trial and error brought about by innovation. Costs and risks, more boldly and unburdened to give full play to their innovative potential, and stimulate their own innovative behaviour. Openness means that leaders encourage employees to actively participate and discuss in order to achieve team and team goals, thereby improving the level of knowledge sharing among team members and enhancing employees' innovative ability. Support refers to the guidance, training and support that leaders provide to employees for learning and innovation. Support in inclusive leadership is a resource platform for employees to promote more frequent innovation behaviours within the team.

This paper proposes the following hypotheses:

H1: Inclusive leadership has a positive relationship with employees' innovative behaviour.

H1a: Leadership tolerance positively affects employees' innovative behaviour.

H1b: Leadership openness positively affects employees' innovative behaviour.

H1c: Leadership support positively affects employee innovation behaviour.

3.2 Inclusive Leadership and Error Management Climate

The tolerance of inclusive leadership can make employees in the organization dare to think carefully about their mistakes or failures, and prevent the next failure of the same nature, leading to a vicious circle of mistakes. Employees do not take the attitude of avoiding problems because they are worried about the harshness of their leaders. Employees don't always keep silent about their failures to each other. Under a fault-tolerant and inclusive leadership style, employees will face and face up to the mistakes that occur in their own work, and treat them with "normal heart". The openness shown by inclusive leadership encourages employees to discuss in public with other employees why things go wrong, to come up with ideas that don't fit the norm, and to try new ways to solve problems with other employees. Under an open and inclusive leadership style, "off the beaten path" error management behavior is allowed, and employees constantly communicate with each other and exchange error content, which will help to promote the formation of an organizational error management atmosphere. The support in inclusive leadership is conducive to promoting the generation of error management behaviors of employees in the organization, and the guidance and suggestions given by leaders provide a benign channel for employees to conduct error management. In response to problems arising from mistakes, employees can not only seek help from colleagues, but also obtain guidance from leaders, so as to continuously learn and share new knowledge, new skills and new problem solutions obtained from mistakes. There is a stronger atmosphere for error management in the organization.

This study proposes the following hypotheses to be tested:

H2: Inclusive leadership has a positive effect on the error management climate.

3.3 Error Management Climate and Employee Innovation Behavior

Error management climate is an important factor that affects employees' innovative behavior. First, the error-thinking climate can help employees gain new ideas to better solve problems that arise from errors. In the team's error-thinking atmosphere, members can also search for helpful information, which encourages members to think deeply about errors, and alleviates employees' "frustration" when they encounter failures in the work process. The final thinking result is beneficial to improve the work performance of members and achieve different innovation effects than before. Secondly, the error communication atmosphere can help members to integrate into the team more quickly. Individuals will not face errors alone, and can quickly and efficiently ask other members about errors. Employees within the organization will communicate with each other about all historical errors, improve the level of error knowledge sharing within the organization, and employees can obtain sufficient resource support when implementing their own innovative ideas production increases the possibility. In a team with a good atmosphere of error communication, the members of the team help each other to face the generated error behavior, and establish a connection and bridge of mutual trust, and the exchange of error information and error knowledge within the team is frequent, which is conducive to speeding up the formation within the team. The pace of new ideas or new solutions. Finally, in a team with a strong atmosphere of error learning, the wind direction of humility and eagerness to learn will guide members to make continuous efforts, correct errors in a timely manner according to the error knowledge formed within the team, and gain more experience and skills that are beneficial to their own development. The members will not avoid talking about mistakes or have a shallow taste, and will not only focus on superficial information, but will pay more attention to how to deeply analyze the potential causal relationship behind the mistakes, so as to improve their own innovation ability and level. A good error learning atmosphere will make team members dare to disclose errors, actively discuss errors with other team members, which is conducive to the formation of tacit error knowledge within the team, and further dissemination within the team, so that members of the team can share knowledge and knowledge. Experience, so that employees can more successfully and creatively solve the problems they face (Li Yi, Ma Li, 2014).

This study proposes the following hypotheses to be tested:

H3: Error management climate has a positive effect on employees' innovative behavior.

H3a: Error thinking climate positively affects employees' innovative behavior.

H3b: Error communication climate positively affects employees' innovative behavior.

H3c: Error learning climate positively affects employees' innovative behavior.

3.4 The Mediating Role of the Error Management Climate

Different individuals have different behavioral frequencies and behavioral characteristics, and individual behavioral levels in different environments will also be different. Therefore, members in different types of team atmospheres will have different individual behaviors. In a team with a good error management atmosphere, the internal members of the team will conduct sufficient error communication, error learning and thinking based on errors, and then find new ideas and new ways to solve problems, and the innovative behavior of employees within the organization will be more frequent. At the same time, the innovation ability will be further improved. Specifically, first of all, in order to promote the generation of employees' innovative behaviors, inclusive leadership, when employees have misbehavior in innovative trial-and-error work, leaders will affect individual employees' attitudes toward errors through their own attitudes and behaviors, such as using Tolerance encourages employees to think carefully about mistakes, rather than choosing to be harsh and harsh on employees' mistakes, which leads employees to avoid and cover up mistakes. Under this leadership style, multiple individual employees will maintain a consistent attitude towards errors, so that an atmosphere of error thinking in the organization will gradually form. Therefore, inclusive leadership is to motivate employees by promoting the formation of an atmosphere of error thinking in the organization. innovative behavior. Secondly, the openness of inclusive leadership encourages employees to communicate and communicate with each other, so individual employees will openly discuss errors, ask each other for opinions and help, and promote the formation of an atmosphere of error communication in the team, so that new ideas and solutions can be created. It will come out in the full communication of team members, and stimulate the innovative behavior of employees. Finally, in the process of employee innovation, inclusive leadership will give full recognition and support, and guide employees to learn from failures after thinking and communicating about mistakes. The employees digest, learn and further absorb the acquired new knowledge, and finally apply it to the practice of innovative behavior in the good atmosphere of error learning in the team.

This paper makes the following hypotheses:

H4: Error management climate mediates the relationship between inclusive leadership and employee innovative behavior.

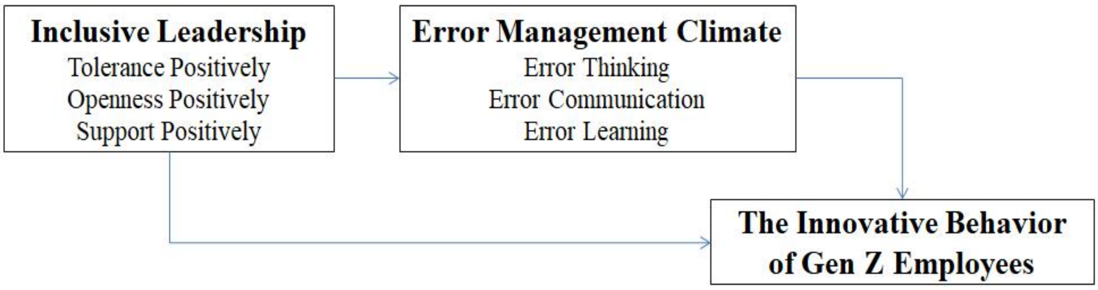
H4a: Error thinking climate mediates the relationship between inclusive leadership and employee innovative behavior.

H4b: Error communication climate mediates the relationship between inclusive leadership and employee innovative behavior.

H4c: Error learning climate mediates the relationship between inclusive leadership and employee innovative behavior.

3.5 Theoretical Model

This study takes inclusive leadership and error management climate as team-level variables for the following research design and data analysis, and takes employee innovation behavior as an individual-level variable, in an attempt to verify and explore the impact mechanism of the team-level on the individual-level.



CONCLUSION AND FINDINGS

The impact of inclusive leadership on the error management climate. This study found that inclusive leadership had a significant positive impact on the error management climate, that is, the more inclusive the leader, the stronger the error management climate in the team. Inclusive communication and communication between leaders and employees, and actively encourage error communication between employees, such as cross-departmental work communication, etc., further affect the consistency of error management measures taken among employees, thereby making The team forms a strong atmosphere of error management. Existing research has not yet come up with a conclusion about the positive relationship between the two. This research analyzes and verifies the positive relationship between the two through the deduction of theoretical hypotheses and the data collection of questionnaires, which further enriches the research on leadership style.

The influence of error management climate and its dimensions on employees' innovative behaviour. The research shows that the error management climate has a significant positive impact on employees' innovative behavior, and the error thinking climate, error communication climate and error learning climate also have a significant positive impact on employees' innovative behavior. That is to say, the stronger the atmosphere of error management in the team, the more frequents the innovative behavior of employees, which is consistent with the existing research conclusion.

Implications for managers. First, build inclusive leadership styles and develop inclusive leadership competencies to foster innovative behaviors among employees. In the daily operation of the team, the team leader cannot ignore the important suggestions of the team members, and must respect the voice of each member. Team leaders should be good at using and mining the individual behavioral characteristics of team members at work, and communicate with employees in a timely and effective manner, provide effective guidance for employees, and emphasize employee participation in decision-making. These behaviors can effectively promote employees to complete work tasks creatively.

Secondly, establish and improve an effective error identification mechanism and fault tolerance exemption mechanism. According to the conclusion of this study, the higher the tolerance of the leader, the more frequents the innovative behavior of the employees. In the face of the constant challenges of fierce market competition, some employees lack the courage to innovate and take the initiative to take responsibility. They think that the more they do, the more likely they are to make mistakes. The fault tolerance and exemption mechanism can create an inclusive working environment for employees. A mature fault tolerance and exemption mechanism can become a "reassuring pill" for employees who have the courage to carry out innovative practices within the enterprise, so that employees are willing to innovate, dare to innovate, and fully mobilize employees' enthusiasm for innovation. Don't do it out of fear of making a mistake. At the same time, in order to avoid the negative effects caused by over-tolerance, an error identification mechanism is added, and the categories and degrees of errors that can be tolerated and exempted are divided, so that valuable errors can be properly handled and better play the positive effect of inclusivity.

Finally, focus on the influence of leadership style on team atmosphere and create a positive error management atmosphere. According to the conclusions of this study, the more inclusive the leader, the stronger the error management atmosphere in the team. Leaders need to use an inclusive leadership style to actively encourage mutual communication among team members. Instead of transparently disclosing the individual mistakes of employees to the collective, they regard the mistakes of each individual employee as a common problem of the team, so that employees can feel being valued but not publicly instructed, it is a diversified, participatory and open common communication, which will form a team atmosphere of error management.

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SELF-MOTIVATION OF PRIMARY SCHOOL TEACHERS UNDER THE "DOUBLE REDUCTION" POLICY --A STUDY BASED ON SELF-MOTIVATION THEORY

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ABSTRACT

Since September 2021, all primary and secondary schools in Mainland China have been implementing the "double reduction" policy. The "double reduction" refers to the effective reduction of the excessive burden of homework and off-campus training on students in compulsory education. According to the Ministry of Education's monitoring platform for basic education "double reduction", as of the end of September, 65.6 per cent of compulsory education schools nationwide provided after-school services for students, of which 86.4 per cent organised the completion of homework, 79.6 per cent arranged for students to read independently, 68.6 per cent carried out moral, physical education, aesthetic and labour education, and 60.6 per cent of schools provided after-school services. aesthetic education and labour education, 60.2% of schools organise after-school popular science activities and 58.2% organise club activities (Source: Ministry of Education of the People's Republic of China, 2021.10). The implementation of this policy, in which teachers are involved in the entire teaching process mentioned above, places higher demands on their professionalism and overall competence.

INTRODUCTION

1.1 Background

Firstly, by regulating the out-of-school training market, the state allows students more time to stay in school and engage in in-school learning. The pursuit and demand of society for the quality of education within schools has become higher, and teachers must provide more efficient knowledge transfer to students without increasing the amount of homework or instructional time. It is worth noting that there is a great conflict between the need for teachers to further enhance their professional competencies while ensuring the personalised development of students and the limited time and energy available to teachers.

Secondly, the implementation of the "double reduction" policy has not fundamentally changed the evaluation and assessment mechanisms and objectives of primary and secondary schools, nor have the expectations of society, parents and schools on the work of teachers. As the link between school and home, the teacher community is in a relatively vulnerable position. On the one hand, parents are desperate for a better education for their students, while on the other hand, the education authorities and schools are still exploring and improving their policies. It is evident that primary school teachers are under pressure from both the demand side and the regulatory side. Not only do teachers need better protection of their rights and interests, but more importantly, the "double reduction" policy is currently only reducing the academic burden of primary school students. Without corresponding reforms in the overall education system, the "double reduction" policy at the primary level will be ineffective if the score-based assessment and selection mechanism is not reformed accordingly. Given the current realities, how primary school teachers can adapt to the changes in a proactive manner and promote the timely transformation and sustainable development of educational self-awareness is an issue that requires attention.

As a personal quality, "educational self-awareness" refers to the reflection and awareness of the purpose, function, path and method of education, and was proposed by Mr. Fei Xiaotong (1997). Educational self-awareness runs through the whole process of a teacher's career and is closely integrated with social development, with distinctive national characteristics. According to Zhang Chuting (2011), educational self-awareness necessarily manifests itself as a philosophical self-awareness that respects the individual development of people in educational practice and takes the discovery of the intrinsic value of the individual as the purpose of education.

Due to the special nature of their profession, teachers assume a dual role in the practice of 'educational self-awareness': they are not only the teachers who impart knowledge to students and lead them to feel 'educational self-awareness', but also the educated who practise 'educational self-awareness' in their personal life development. educational consciousness' in their personal development. Teachers' educational consciousness is a concrete manifestation of their sense of responsibility, based on their conscious knowledge of the nature and laws of education, and in the process of teaching, they elevate their professional experience to a career pursuit from the law of students' growth, and ultimately influence students' conscious development (Jiang Li, 2014).

While the "double reduction" policy has benefited students, it has also shifted a large amount of non-teaching work to the teacher level.

As a result, primary school teachers' working hours have been extended and their work has become stressful, their work has been greatly affected, and it is difficult for them to return to the classroom. This requires effective physical and psychological regulation based on organisational guidance and self-adjustment, so that teachers can fully adapt to the extension of their work role and enhance their initiative and rationality in career planning. In this context, it is important to study the educational self-awareness of primary school teachers.

1.2 Research questions

This paper proposes to use self-motivation theory to study the moderating effect of "emotional arousal" and introduce "educational self-awareness" as a mediating variable to form a chain of mediators to study its key contribution to "self-awareness behaviour", as well as its effect on "self-awareness". "It also introduces 'educational self-awareness' as a mediating variable, forming a chain of mediators, to investigate its key contribution to 'conscious behaviour' and the important impact of the two together on the achievement of the final goal.

The research questions in this paper revolve around three main areas.

Firstly, a practical analysis and case study of the 'double reduction policy' is conducted to explore the experiences and problems in the implementation of the policy.

Secondly, using a self-motivation model, we examine the changes in primary school teachers' personal perceptions of the "double reduction" policy and the impact of subjective motivation on teaching and learning.

Thirdly, based on previous research findings, this paper explores whether 'educational self-awareness' plays a mediating role in the process of self-motivation.

LITERATURE REVIEW

2.1 Self-motivation theory

The theory of self-motivation was proposed by the American psychologist Albert Bandura (1986), who believed that self-motivation consists of three components: self-observation, self-evaluation and self-reaction. Coleman defines self-motivation as one of the five components of human emotional intelligence, and emphasises that self-motivation begins with the cognitive level of making rational demands on oneself to overcome difficulties and adhere to goals, and resisting negative thoughts such as instinctive withdrawal. The self-motivation process begins with the cognitive level of making rational demands on oneself to overcome difficulties and persevere in goals, resisting negative thoughts such as withdrawal, and instead immersing oneself in the experience of positive emotions filled with confidence in order to achieve goals. In the CANE model of motivation (a model of factors influencing goal commitment) proposed by the renowned scholar Clark (1998), the higher the individual's level of self-motivation, the more likely they are to complete the given task. Self-motivation is therefore a dynamic process whereby individuals take the initiative to motivate and encourage themselves at the right time through their awareness of themselves, as well as putting into practice and maintaining uplifting work behaviours and productive work outcomes. It is the use of certain triggers to keep one's potential in an activated state, to mobilise self motivation and creativity, and to put oneself in a good state of energetic and conscious action.

A synthesis of previous findings reveals three key elements of self-motivation: cognitive evaluation, emotional arousal and conscious behaviour. The mechanism by which it occurs and operates is that the individual is goal-oriented and through self-cognitive appraisal, including a comprehensive perception of the size of the goal, one's abilities and qualities, the difficulties that may arise in the process of achieving the goal, and the external conditions available to oneself, one continues to motivate and encourage oneself, arouses positive emotions, continuously overcomes difficulties, maintains an invigorating work behaviour and ultimately achieves the desired goal.

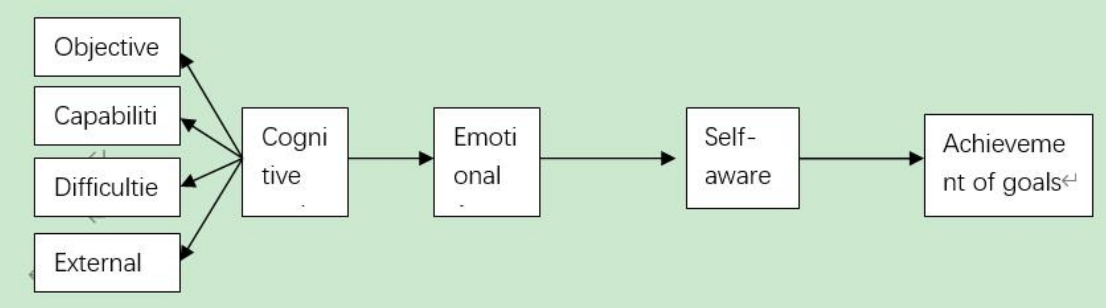

Figure 1.1 Self-motivation mechanism of action

2.2 Building a model of self-motivation for primary school teachers

2.2.1 Cognitive Evaluation (Cognitive Evaluation Theory)

Cognitive evaluation was proposed by Deci and Ryan in 1975 and is also known as self-determination theory. It refers to a person's perceptions and judgments of objective events and things. Cognitive evaluation theory introduces the concept of 'intrinsic motivation', also known as intrinsic motivation theory. Cognitive appraisal is a key factor, i.e. people's psychological evaluation of situational factors as supporting or controlling behaviour. Cognitive appraisal theory suggests that an over-emphasis on extrinsic motivators can lead to an atrophy of intrinsic motivators, as over-emphasis on extrinsic rewards tends to reinforce external sources of control over behaviour, 'externalising' people's perceptions of work behaviour and the reasons for receiving rewards, thereby reducing the intrinsic motivational value of behaviour and goals. Cognitive appraisal theory has implications for the design and use of intrinsic and extrinsic rewards.

Primary school teachers' self-perceptions are insights and understandings of themselves, including self-observation and self-evaluation. Self-insight is an awareness of one's own perceptions, thinking and intentions, and is an individual teacher's awareness of his or her interests, hobbies and goals for developing competence. Self-evaluation is an individual teacher's judgement and assessment of his or her own thoughts, expectations, behaviour and personality traits in the context of the school's development goals, and is an important prerequisite for individual development, as expressed in the evaluation of the school's development strategy goals, individual development, campus environment, salary design and other relevant factors. The level of teachers' individual evaluations directly affects the extent to which teachers put in effort, with higher individual evaluations stimulating individual conscious effort and lower individual evaluations reducing individual conscious effort.

2.2.2 Emotional Arousal

Emotional arousal is when the body or mind is aroused or reactive to external stimuli, i.e. the brain is activated by highly arousing emotional elements, which mobilise all the organs of the brain, so that the brain is highly focused and ready to respond accordingly.

In the emotional arousal experiment proposed by Schachter and Singer, emotions are influenced by three aspects: environmental, physiological and cognitive factors, with cognitive factors, including contextual assessment and experiential recall, playing a key role in the process of emotion formation.

Daniel Chabot (2009) argues in his book "Emotional Pedagogy: Applying Emotional Intelligence to Learning" that the real learning process is not "cognitive" but "emotional" and proposes an emotional pedagogy. For a long time, problems and difficulties in learning have been explained from a cognitive perspective.

In educational psychology, emotional arousal is considered to be an important influence on self-efficacy in theories of motivation. Emotional regulation is an important way for individuals to regulate their maladaptive emotional states through certain strategies to achieve adaptive emotional responses to the external environment, and Gross uses factor analysis to classify emotional regulation strategies into two main categories: cognitive reappraisal and expressive inhibition. Cognitive reappraisal is a strategy for cognitively reinterpreting the meaning of an emotional stimulus or event in order to change the emotional experience; expressive inhibition is the suppression of an emotional expression that is about to occur or is occurring, without changing the emotional experience, but rather enhancing the emotional arousal response (Gross, 1998).

In this study, the term 'teacher emotional arousal' refers to the fact that individual teachers go through two stages of 'teacher self-perception' and 'teacher self-evaluation' and have a deeper understanding of their self-perception, which is more objective and realistic. This is a more objective and realistic understanding. A correct self-awakening will guide teachers to readjust their personal development goals to make them more scientific, objective and reasonable, thus awakening their sense of mission, belonging, honour and responsibility, which can influence their work performance.

2.2.3 Educational self-awareness

The essence of educational self-awareness is to guide individuals to discover and realise their self-worth in the process of being educated (Zouya, Lee, A. Lee, 2017), a self-learning common sense of all human beings. Teachers, as living beings themselves, have personal ideals in life and pursue self-growth and progress. Their love for their profession is the most stable and enduring motivation when they work and can drive them to overcome difficulties and achieve professional success, which determines the inner motivation and direction of teachers' teaching behaviour and is the source of their motivation and personal value.

The theory of "educational self-awareness" is a theory with traditional Chinese cultural values and has not been discussed internationally by other countries, but there is a great deal of research by foreign scholars that is in line with the idea of "educational self-awareness". The most similar theory is the Perceived self-efficacy or sense of self-efficacy proposed by Bandura, A. in 1977, which refers to people's confidence or belief in their ability to achieve behavioural goals in a particular domain. According to Wu (2020), teachers with educational self-consciousness should possess three main characteristics: a proper sense of teaching professionalism, a noble teaching professionalism, and a solid teaching professional competence.

2.2.4 Self-motivated behaviour

The level of individual self-motivation is actually the level of conscious action in the process of achieving goals.

Self-motivated primary school teachers are goal-oriented according to their own needs. They evaluate their goals, their educational mission, their school culture, their work environment, their salary design and other relevant factors, and assess their own perceptions of the relationships between them. overcome dilemmas and negative emotions that arise in the workplace, and ultimately achieve their goals (Chen, Feng, 2021).

Teachers' conscious behaviour refers to the process in which teachers consciously and voluntarily put into action according to their self-perceptions, in which they evoke their own positive emotions at the right time, maintain a good working state, continuously overcome difficulties and the negative emotions that appear in their work, and eventually achieve their goals. The specific meaning is: teachers' conscious behaviour requires a good working environment, including good interpersonal relationships, a management system conducive to teachers' autonomous work, and a beautiful working environment; teachers are able to self-manage, self-assess and complete their teaching and research tasks with full emotion in accordance with the established educational and teaching objectives; teachers are enabled to enhance their sense of subjectivity, promote their self-improvement, self-improvement and continuous innovation, and Maximise the professional value of teachers.

2.2.5 Variable relationships

The Korean scholar Jo Sang Ho et al. (2018) pointed out that self-motivation is the main factor in reducing teachers' psychological drain. In management, it is the responsibility of managers to arouse employees' awareness of self-management and self-motivation, to make them realise that the company has given them room for development and that employees themselves are consciously responsible for their own development, working independently to take responsibility and at the same time independently taking responsibility for their own self-development, motivating and improving themselves. By establishing a positive working environment, leadership style and open communication channels, employees are willing to work positively and pursue progress. The demands of employees in terms of development go far beyond the demands for salary and benefits, and it is incomplete and lacking in vision to view employees as mere economic agents.

It follows that by viewing teachers as a special profession, by seeing them as social beings, by recognising their need to be respected, to be recognised and to realise themselves, school administrators can better exercise their management function and more directly assist teachers in their self-motivation.

In conclusion, self-motivation of teachers means the maturity of school managers and the perfection and development of school management, and the two are complementary.

RESEARCH METHODS

Problems of self-motivation of primary school teachers

3.1 Imbalance between needs and goals

The self-motivation of primary school teachers also starts from their own needs. By analyzing their own needs, choosing reasonable goals and seeking practical means to realize their own values and gain more space for development. Teachers' lack of motivation is often due to the absence of a goal that matches their own needs. The implementation of the "double reduction" policy has made it difficult for primary school teachers to find a scientifically sound combination of service objectives and personal needs.

The "double reduction" policy has shifted the responsibility of school teachers to extra-curricular institutions, and the blind apportionment of teaching tasks has hindered the need for teachers to work autonomously. At present, in western China, due to socio-economic development factors, there is an imbalance in the teacher-student ratio at the primary level and a shortage of teachers, resulting in a certain degree of compulsion, randomness and lack of autonomy in the choice of subjects to be taught by teachers. This is evidenced by the fact that, firstly, the courses undertaken by teachers do not correspond to the professional direction of their studies; secondly, teachers are overloaded with courses and have serious overloads in terms of teaching hours. The above phenomena hinder the need for primary school teachers to be self-selecting, self-managing, self-controlling and working autonomously.

3.2 Imbalance in pay and performance assessment

The remuneration of primary school teachers consists mainly of basic pay and performance bonuses, which in fact have little relevance to the actual development performance of the school, resulting in a lack of specificity in the setting of performance appraisal indicators, ignoring the differences between different age groups, different educational backgrounds, different teaching and research abilities, and different psychological needs. The design of performance indicators tends to be generalised and unified, lacking in personalisation and unable to stimulate teachers' 'individual development needs'.

A sense of self-worth is the recognition of a teacher's ability to do his or her job. Remuneration is the reward that teachers receive for their work and, in monetary terms, is recognition of their self-worth. In his theory of fairness in motivation, Adams stresses the importance of relative fairness in the remuneration of work. He argues that "employee motivation is influenced not only by the absolute amount of compensation, but also by the relative amount of compensation; equal compensation may not have the same motivational effect, and it is only through comparison with others that we can know whether equal compensation has the same motivational effect. If the design of the incentive mechanism violates the principle of fairness, it will lead to a decrease in the incentive effect". At present, there are inequities in pay distribution among primary school teachers: firstly, there is an imbalance in pay distribution between teaching and research posts and administrative posts; secondly, there is a lack of incentive mechanism for talent training and a lack of motivation for work; thirdly, there is a lack of encouragement and support for spiritual incentives.

CONSTRUCTION OF THE RESEARCH MODEL

As a kind of "knowledge employee", primary school teachers have their own characteristics. This paper introduces "educational self-awareness" as a mediating variable, "emotional arousal" as a moderating variable, and establishes a model of primary school teachers' self-motivation according to their different levels of development needs, as shown in Figure 4.1. The model is based on the different levels of primary school teachers' development needs.

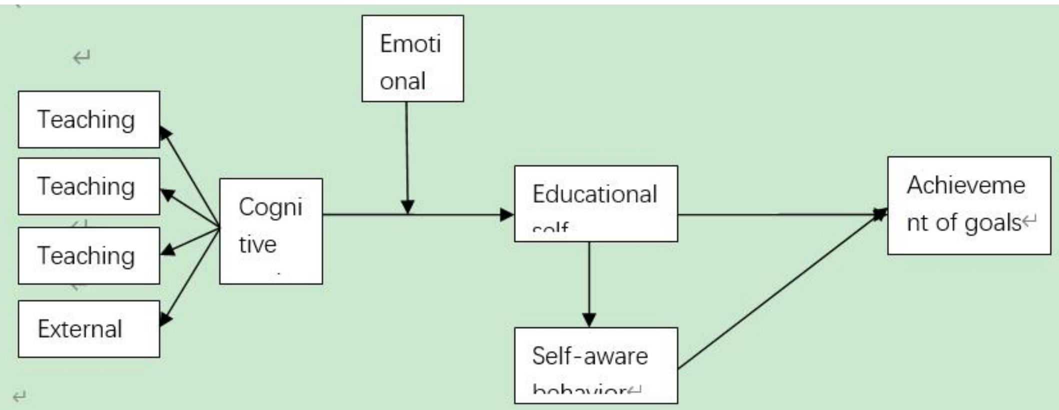

Figure 4.1 The self-motivation model of elementary school teachers constructed in this paper

CONCLUSIONS

Application of the model

5.1 Combining needs and goals

Goal-setting theory holds that specific, clear and difficult goals will keep people focused and energised and can stimulate the urge to achieve it. Therefore, primary school teachers must first be guided to carry out scientific and reasonable career planning.

As knowledge workers, teachers have a motivation for teaching achievement and a need for self-actualisation. Career planning enables teachers to correctly understand their own personality characteristics and potential resource advantages, so that they can position themselves accurately for their own development goals. The career planning process enables teachers to understand their own personality traits and potential resource advantages, so that they can position their development goals accurately.

Refine teaching assessment indicators according to the individual differences of primary school teachers. Combining different titles, specialisations and positions, different teaching assessment indicators are set, with objectives set to be scientific and reasonable, operable and enforceable. Refined teaching assessment indicators are highly targeted and can effectively mobilise the enthusiasm of teachers with different titles in their work. It can be divided into three levels: the first level is for those who can do well in teaching and scientific research independently, encouraging further study and exchange, prompting teachers to study professional knowledge, enrich teaching methods and means, and further improve their teaching work. The teaching assessment workload can be set at a low level, leaving room for young teachers to do a solid job in teaching and encouraging them to do a good job in scientific research, and also facilitating the self-growth, continuous, healthy and steady development of individual young teachers. The second level is for teachers with certain organisational and management skills, who can be used as candidates for middle management in schools. The third level is those who have a strategic vision and can participate in the formulation of long-term development plans for teaching and research in the school. This group of teachers can be used as candidates for top management in the school. This career orientation, for each level of teacher, designs a career development space for them, giving each teacher a stage for development and allowing each teacher to see their future development goals. This hierarchical division of careers both guides and motivates teachers' career development and is of great importance in motivating teachers to work and improve school management.

5.2 Shaping a conscious sense of mission in education

The mission of education refers to the role and responsibility that education should assume in social progress and socio-economic development. It can promote teachers' self-growth and enhance their sense of subjectivity and internal drive. Primary school teachers draw on their training and expertise, experience and insight, as well as their professional concerns and commitments, to influence the learning process of their students and to work in a way that promotes the free and comprehensive development of the individual teacher. The development of teachers requires a greater focus on 'professionalism', guidance in understanding the role of primary school teachers, a deeper understanding of the profession and its evolution, reasonable regulation of teacher expectations, and attention to the physical and psychological health of primary school teachers, especially their psychological well-being.

The school has a key 'nurturing' function, and primary school teachers are respected and recognised by society as they fulfil their mission, so it is important that teachers' perceptions are coalesced through the stimulation of a sense of educational mission, so that they act in ways that are consistent with their own subjective intentions, i.e. the 'educational consciousness' introduced in this paper. "educational self-awareness". This is demonstrated by the fact that schools are constantly strengthening the leadership of values and constantly improving teacher moral and ethical standards. School values are the highest level of behavioural standards and judgements agreed upon by all members of the school organisation. For teachers, values are not only a function of evaluation and regulation, but also a kind of guidance and connotation for their professional development, so schools must first ensure that the values they advocate are scientific, correct and appropriate when leading in values. This allows primary school teachers to have clearer goals and higher standards for their current work and long-term development, and ultimately to develop an internal educational consciousness.

5.3 Creating a supportive working environment

Focus on training and promotion to improve primary school teachers' education and teaching standards. In the context of the "double reduction" policy and the ongoing reform of the primary school curriculum, teachers need to use training and self-education to raise awareness, update their ideas and knowledge, and expand and improve their teaching skills. Therefore, teachers should be guided to innovate in a variety of ways to develop new professional competencies and educational skills in the areas of parenting, teaching methods, curriculum development and the promotion of students' individual growth.

Respect for the individual differences of students and teachers, the early implementation of stratified education for students, the speedy improvement of the secondary and tertiary education system in line with the "double reduction policy", and the fundamental change of the "score-based" selection mechanism for further education; and the adoption of positive administrative interventions to reduce the interference of non-teaching matters with primary teachers. The school should also adopt positive administrative interventions to reduce the interference of non-teaching activities with primary school teachers.

At the same time, the school's educational research system should be improved to guide and encourage teachers to become more aware of problems, research and results in their teaching and management, to identify problems, to actively research and innovate, and to effectively solve them, so that their personal growth and the school's development can benefit together. Teachers are encouraged to consciously build their own teaching system and develop their own personalised teaching style, awakening their consciousness and thus condensing their own personalised teaching system and teaching style, and using this to further develop the rich connotations of classroom teaching, enhance the efficiency, effectiveness and efficacy of their teaching work, improve their teaching influence and help them realise their personal development vision.

5.4 Improving pay allocation design

Redesign the pay allocation for primary school teachers to highlight the role of pay incentives.

Innovate primary school teachers' evaluation to promote their comprehensive and personalised holistic development. Emphasise the irreplaceable explicit and implicit roles that students play in teacher evaluation, giving them more autonomy in their curriculum, classroom, activities, clubs and mentors, and the freedom to choose the teacher of their choice. This implicit evaluation of teachers can profoundly contribute to their self-examination and improvement.

Improving the fairness and professionalism of the teacher incentive mechanism is the key point. Reform the promotion and assessment mechanism of primary school teachers' positions, adjust the differences in the treatment of positions, ensure that the scope of teacher appointments and the content of evaluations are comprehensive, raise the governmental level of the title evaluation and supervision department, ensure the fairness of performance distribution, build a comprehensive evaluation index system appropriate to teachers' work and improve the professionalism of job evaluations; promote the The Government should promote a shift in the concept and optimisation of strategies, follow the basic principles of differential incentives, fair competition and the combination of material and spiritual incentives, fully balance the relationship between job content and pay performance, and highlight the intrinsic rewards of work, so that teachers feel fair and well-treated and gain a high sense of professional identity and job satisfaction.

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MEDICAL INNOVATIONS: WAYS TO TREAT OBESITY – ENTEROBACTERIAL TRANSPLANTATION (FMT)

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ABSTRACT

"Five people walk, there must be two fat people" is the current situation of the global population. The proportion of overweight people in the world is about 40% and obese people are about 13%. In China, there are more than 300 million overweight and obese people, and obesity increases various diseases. The risk of disease seriously reduces the quality of life. Obesity has become one of the important public health problems in various countries. In this paper, by researching previous published articles related to intestinal flora and obesity, we obtained the results that intestinal bacterial transplantation can assist in fat and weight loss, quickly overcome plateaus, prevent weight rebound, and also regulate metabolic function to prevent the development of diseases or alleviate the symptoms of diabetes.

Keywords: Fecal Microbiota Transplant (FMT) Obesity Diabetes new medical technology

INTRODUCTION

According to statistics from the World Health Organization, about 3.4 million adults worldwide die of chronic diseases caused by obesity every year, becoming the second preventable risk factor for death after smoking. Obesity can lead to dyslipidemia, and obese people are more prone to hyperlipidemia. Obesity will increase the risk of cerebrovascular accident, the risk of high blood pressure, the risk of diabetes, increase the workload of the heart, cause fatty liver, sleep apnea syndrome, affect the growth and development of adolescents, affect the pregnancy of women, and cause bone and joint diseases. In addition, obese people are more likely to develop cancer.

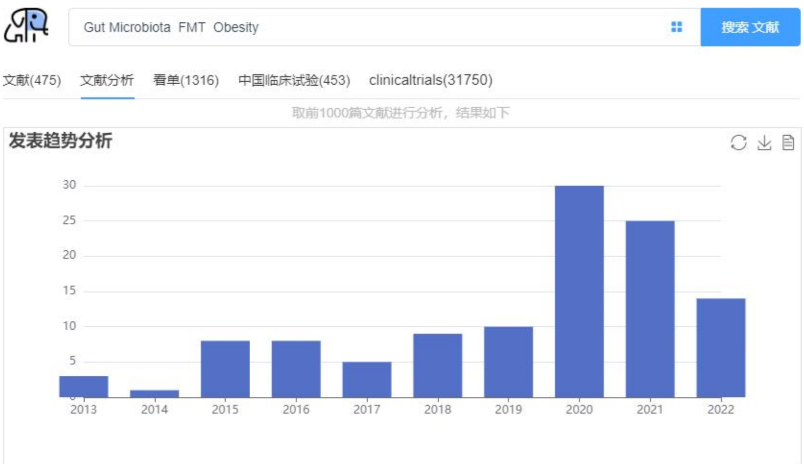
The situation of overweight and obesity among Chinese residents is severe. The overweight rate and obesity rate of adult residents are 34.3% (24<BMI<28) and 16.4% (BMI>28), respectively. Chinese adult residents are abdominally obese (male waist circumference ≥90 cm, female waist circumference ≥ 90 cm) 85 cm) with a detection rate of 29.1%, and an estimated 277.8 million people in the country have abdominal obesity. Clinical experience shows that more than 90% of "big belly" are visceral obesity. (Source: "2019 China Cardiovascular Health and Disease Report" Patterson E, et al (2016))

"Losing weight" and "weight loss" have always been hot topics for people. People often focus on how obesity affects the body and obesity reduces the appearance. But did you know that obesity is also a disease? There are two high walls in the weight loss process, one is the plateau period and the other is the weight rebound. There is increasing evidence that the abundance, diversity and stability of the human gut microbiota are closely related to obesity. Adjusting the structure of intestinal flora by means of fecal bacteria transplantation and correcting the disorder of the flora provides a new perspective for the treatment of obesity and related metabolic diseases.

RESEARCH METHOD

Literature search methods were used

1. Literature search: PubMed Pro was used to search for the key words intestinal flora obesity intestinal bacteria transplantation, and the literatures with an impact factor of more than 15 points were selected, and 475 literatures were obtained. Animal experiments and clinical trial cohort studies were selected, and those with clear conclusions were selected for summary analysis.

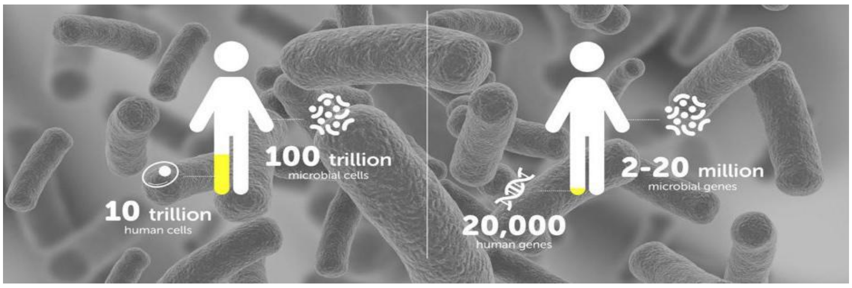


2. Website search: Open the official website of Mr-gut (www.mr-gut.cn), enter the keywords of intestinal bacteria transplantation and obesity in the search interface, and get 171 results. According to the summary content, find the relevant literature for analysis.

LITERATURE REVIEW

1 Gut microbiota

The number of intestinal flora is about 100 trillion, 10 times the number of our human cells, with a total weight of about 1-2kg, accounting for 1/3 of the dry weight of feces; the total number of genes in the intestinal flora exceeds 3.3 million It is 150 times the number of the human body's own genes; it is called the "second genome" of the human body, the functional "organ" formed by us the day after tomorrow, and the exchange of matter, energy and genes with our host to form the "gut micro-ecosystem".



2 Obesity is associated with gut microbiota

Obesity is an energy imbalance caused by chronic caloric intake exceeding energy expenditure. There are many reasons for obesity. In addition to the genetic factors and dietary structure that we are familiar with, the "gut flora" in our gut also plays an important role. They can extract about 10% of their energy from the undigested portion of their diet, which can have a significant effect on weight gain and fat storage over time.

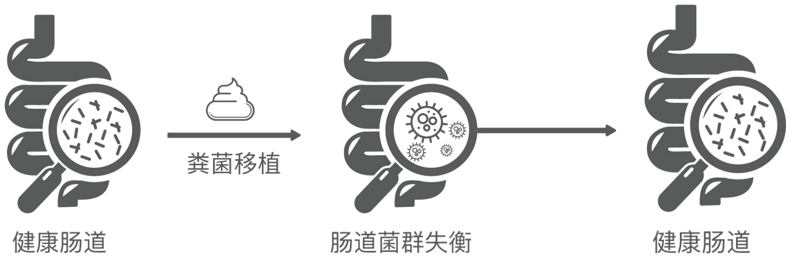
The structure of intestinal flora is affected by diet and environment. Once imbalanced, it will lead to the increase of obese bacteria (such as the number of Firmicutes). These obese bacteria will increase fat absorption and increase fat storage. In addition, Proteobacteria, Bacteroides, Campylobacter, and Shigella increased in overweight or obese people, while the "anti-inflammatory" bacteria Akkermansia mucus decreased. These changes lead to loss of mucosal barrier integrity, mucosal layer degradation, and increased oxidative stress. This results in a fat stress response and increases fat storage.

Intestinal flora participates in the digestion and absorption of our gastrointestinal tract, helping us metabolize substances that cannot be digested and absorbed by ourselves, and synthesize nutrients such as vitamins and short-chain fatty acids. In the intestinal flora of obese people, the carbohydrate fermentation capacity of bacteria increases, releasing more short-chain fatty acids. Short-chain fatty acids can regulate the emulsification and absorption efficiency of dietary fat to affect fat oxidation, synthesis, transport, and storage. and so on. Thereby controlling our weight.

3. Fecal Microbiota Transplantation (FMT)

Enterobacteriaceae transplantation is to transplant the functional flora in the feces of healthy people into the patient's intestine in a certain way to regulate the imbalance of intestinal flora, rebuild the intestinal micro-ecosystem with normal functions, and achieve the treatment of intestinal and extra-intestinal diseases. or adjuvant therapy. It is also commonly referred to as a "fecal transplant" or "microbiota transplant."

Fecal microbiota transplantation is the most effective and rapid method to reconstruct the intestinal microecology. It is a new and far-reaching treatment option for difficult diseases in and out of the intestine that are ineffective in traditional treatments and are closely related to intestinal flora disturbances.



In 2013, the U.S. Food and Drug Administration officially（FDA） included enterobacteriaceae transplantation for the treatment of recurrent C. difficile infections into clinical guidelines. It was selected as one of Time Magazine's "Top Ten Medical Breakthroughs" that year. The flourishing stage of enterobacteriaceae transplantation was started. Subsequently, guidelines and consensuses on the clinical application of intestinal bacteria transplantation have been issued around the world.

Experts at home and abroad are working hard for the safety and effectiveness of fecal transplantation. In 2017, there was a European consensus on FMT clinical practice abroad, an international consensus on the fecal bacteria bank in 2019, an Asia-Pacific consensus and an Australian consensus in 2020. In 2017, China published a consensus on the technical specifications of fecal bacterial transplantation in children, and in 2020, published an expert consensus on the establishment and clinical application of FMT standardized methodology. Experts in the FMT field in these consensuses have standardized and standardized all aspects of FMT.

4. FMT and obesity

American scientist Jeffery Gordon confirmed that the structure and function of the intestinal flora of obese and thin people are different. Through dozens of pairs of identical twins with obvious differences in obesity and obesity, the relationship between intestinal flora and obesity was studied:

The gut microbiota of different fat and thin twins were transplanted into germ-free mice fed the same low-fat, high-fiber diet, and the mice that received the fat girl's fat flora were fatter than the mice that were transplanted with the lean girl's lean flora. Much more, once again proves that the intestinal flora of different people is different, and the intestinal flora of obese people can cause obesity.

In 2017, Ruud S. Kootte et al. published a study in the journal Cell Metabolism.The study recruited 38 obese subjects and divided them into two groups, one receiving FMT and the other receiving placebo. The following conclusions were drawn from the research: 6 weeks after receiving FMT, subjects found that insulin resistance was significantly relieved, indicating that the metabolic disorders caused by obesity in patients improved.

After receiving FMT, the levels of short-chain fatty acids (SCFAs) in the intestinal tract of patients were altered: acetate and propionate levels increased, but butyrate levels did not change significantly; The -gut" axis regulates the body's lipid metabolism and improves obesity. Through the detection and analysis of intestinal flora, it was found that the content of bifidobacteria increased, and bifidobacteria are the key bacteria that produce acetate.Elevated triglyceride levels are an important feature of obese patients. Studies have found that FMT can effectively improve blood triglyceride levels in obese patients after meals; at the same time, it can accelerate the excretion of bile acids from feces and reduce energy absorption, thereby improving obesity.

This paper found that after FMT, the content of beneficial bacteria in the intestinal tract of obese patients increased, which changed SCFAs, thereby affecting the body's triglyceride content and insulin sensitivity, thereby improving the obesity symptoms of patients.

In 2018, Wenjing Sun et al. published a study in the journal BioMed Research International. This study used a high-fat diet to induce obesity in a rat model, and then transplanted the intestinal flora of normal rats (FMT) into obese rats to study the effect of FMT on obesity. The main conclusions are as follows:

Intestinal flora can produce deoxycholic acid (DCA) and bile acid (CA). These metabolites are secreted and absorbed by the body and then cause the body's bile acid metabolism disorder, and the bile acid metabolism disorder is an important cause of obesity. FMT can cause obesity. Modulate the biotransformation of bile acids to improve obesity; intestinal flora metabolites such as DCA and CA can affect the synthesis of the neurotransmitter serotonin (5-HT), thereby regulating gastrointestinal motility and enabling faster absorption of nutrients , so that excess nutrients accumulate in the body and cause obesity; FMT can effectively reduce the content of metabolites DCA and CA and 5-HT, and improve obesity.

In this study, the authors found that the disturbed gut microbiota would synthesize higher levels of DCA and CA, which would subsequently affect the synthesis of 5-HT, thereby affecting gastrointestinal motility, resulting in excessive accumulation of nutrients and triggering obesity.

5. The application of fecal bacteria transplantation in the treatment of obesity and diabetes

In 2020, Elaine W. Yu et al. published a study in the journal PLOS Medicine. The study recruited 24 obese patients, divided them into two groups, received 12 weeks of FMT and placebo treatment, and finally evaluated its effect. The main conclusions are as follows:

During the 12-week treatment, there were no serious adverse events in either group, indicating that FMT treatment is safe; After treatment, there were differences in the composition of the intestinal flora of the two groups, and the composition of the intestinal flora of the patients in the FMT group was close to that of the donor. Insulin resistance is a hallmark of metabolic dysfunction in obese patients. FMT can effectively improve the insulin resistance of patients and can effectively reduce body weight, indicating that FMT is effective in the treatment of obesity.

In this paper, FMT was used to treat obese patients, and it was found that the patients did not have obvious side effects after FMT, and the symptoms of obesity were relieved. However, due to the complexity of the body, the treatment effect was maintained for a short time.

By analyzing the composition of the intestinal flora and the role of the intestinal flora in patients with obesity and diabetes, we can find that the impact of the intestinal flora on the development of disease mainly depends on four points: dietary intake, changes in the composition of intestinal flora, Bile acid metabolism and short-chain fatty acid metabolism. Among them, changes in the composition of intestinal flora play a central role, so the treatment of obesity and diabetes can start from regulating the intestinal flora.

Pathological changes in the gut microbiota were found in obese people with or without type II diabetes. FMT can transplant the functional flora in the feces of healthy people into the gastrointestinal tract of patients, and rebuild the intestinal flora with normal functions. FMT can restore the normal intestinal microecology of the body by regulating the intestinal flora, thereby improving insulin resistance and improving Insulin sensitivity, ultimately helping diabetics to resolve their pain.

RESULTS

Obesity is the root of all diseases, and the health problems caused by obesity can even seriously threaten people's lives, so we must not take it lightly. Existing studies have shown that intestinal flora is related to the occurrence and development of various diseases, such as digestive system diseases, nervous system diseases, and metabolic system diseases. Although there are not the most articles on the treatment of obesity with intestinal bacteria transplantation, and some are still controversial, most of the results of the literature show that intestinal bacteria transplantation is beneficial to obese patients. There are many obese patients in the world, and weight loss has become a rigid need, but it is easy to lose weight. Enterobacteriaceae transplantation will undoubtedly open a window for patients who have rebounded and cannot persist in the plateau period.

DISCUSSION

Obesity can lead to the occurrence of a variety of chronic metabolic diseases. This article reviewed some representative studies of intestinal bacteria transplantation in the treatment of obesity in recent years, and found that insulin resistance not only causes obesity. And it can lead to diabetes. The gut microbiota is associated with insulin resistance. Several studies and clinical experiments have proved that intestinal bacteria transplantation is effective in obese patients with diabetes. The method of enterobacteria transplantation in the treatment of simple obesity is also beneficial.

Technology is advancing, and intestinal bacteria transplantation is now recognized as a low-risk medical new technology in China. The next 3 to 5 years will be the stage of explosive growth of intestinal bacteria transplantation. It is hoped that this technology can solve the problem of diseases for patients and let everyone have a healthy body.

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THE EFFECT OF PSYCHOLOGICAL CONTRACT ON EMPLOYEE INNOVATION BEHAVIOR IN FOREIGN ENTERPRISES

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ABSTRACT

China officially joined the World Trade Organization (WTO) in 2001, marking a new stage in China's industrial opening-up. China enjoys comprehensive competitive advantages in market size, industrial supporting facilities, infrastructure and business environment, and has granted a series of preferential policies to foreign companies, which have attracted a large number of foreign companies to invest and set up factories in China. According to the statistics of the Ministry of Commerce, by The end of December 2019, China had established a total of 1,001,635 foreign-invested enterprises, with a total amount of US $2.29047 billion of foreign capital actually used. After entering China, foreign enterprises need a large number of professional and knowledgeable excellent technical personnel and management personnel to provide high-quality professional services to ensure the sustainable and healthy operation and development in China.

By reviewing the existing literature, it is found that the current research on the impact of employee innovation behaviors is mostly done from the individual, organizational and leadership levels, and the factor of the psychological contract is often ignored. However, the psychological contract runs through employees and organizations. the entire process of connection. In view of the above deficiencies, this study takes foreign company employees as the research object, selects psychological contract and employee innovation behavior as research variables, and explores the impact mechanism between the two.This paper draws on relevant mature scales to design questionnaires, which are distributed and collected online. Through data screening and sorting, empirical analysis draws the following conclusions based on valid data :(1) psychological contract has a positive impact on employees' innovative behavior; (2) Organizational identity has a positive impact on employee innovation behavior; (3) Psychological contract has a positive effect on organizational identity; (4) Organizational identity plays a partial mediating role in the relationship between psychological contract and employee innovation behavior. According to the research conclusion, this paper puts forward the following suggestions: Organizations should actively establish and manage the psychological contract of employees, so that employees can have trust and dependence on the organization and be willing to bravely implement innovative behaviors. In addition, employees should be guided to improve organizational recognition and enhance their sense of responsibility in the organization, so as to better encourage employees to contribute their own strength to the enterprise.

Keywords: psychological contract; organizational identity; employee innovation behavior

INTRODUCTION

With the increasingly fierce global economic competition and the rapid development of technology, innovation is more and more valued by enterprises, and employee innovation is the cornerstone of enterprise innovation. For foreign enterprises, in order to achieve sustainable innovation, we must tap the advantages of human resources of employees themselves, give full play to the creativity of employees, and fully tap the innovation ability of employees. The realization of employee innovation behavior is conducive to the enterprise's innovation of technology, improvement of service, increase of output, and can effectively promote the organizational reform and transformation of development mode. Therefore, in the era of innovation driven development environment, innovation has become the important driving force of the development of the leading enterprises, is the effective way to maintain competitive advantage, how to effectively promote the staff to carry on the innovative work become the important issues facing the organization, organization fully stimulate the staff's innovation behavior to promote the sustainable development of enterprises is becoming more and more important.

Based on the fact that the innovation behavior of employees in foreign enterprises is of great practical significance to the development of enterprises, based on the previous studies and a large number of domestic and foreign literatures, it is found that there is a correlation between psychological contract and the innovation behavior of employees in foreign enterprises. Because there is an implicit contract relationship between employees and their organizations, it can have an impact on an employee's innermost perception of the organization, which determines how they behave within the organization. In addition to the psychological contract, employee's identity in the organization may also affect its behavior, but few scholars organizational identification as the intervening variable, influence mechanism between the three, namely when employees feel a sense of belonging in the organization, there is the cognition of responsibility between itself and the organization, whether can improve the organizational commitment, It is worth further thinking whether strengthening the sense of organizational identity can enhance the sense of responsibility of employees in the organization, further break the phenomenon of employees' silence, and promote the generation of employees' innovative behavior.

Based on the above analysis, this research will study the innovative behavior of employees of foreign companies from the perspective of psychological contract. At the same time, it will discuss the mediating role of organizational identity between the two, hoping to enrich the content of employee innovation and establish harmony between the organization and employees. Relationships provide a theoretical basis and help organizations improve their core competencies.

Employee innovation is the most precious capital of an organization and the source for an enterprise to enhance its core competitiveness. Especially in today's fierce competition environment, it is necessary for employees to give full play to their subjective initiative and make positive contributions to the development of the enterprise. However, due to the characteristics of employees with open growth background, high education level and strong autonomy, it is often difficult for them to develop high organizational loyalty and identity. Through the study of this article, not only can help enterprise managers more clearly understand employee expectations to the organization, to master the real needs of employees, and to strengthen the construction and management of employees' psychological level, through the establishment of psychological contract, let employees to the organization trust and rely on, can also help employees see their inner demand, right more clear positioning in the organization, Increase identification with the organization to encourage active involvement in the day-to-day management of the business. This can not only help employees realize their personal value, but also help to enhance the sustainable development of enterprises, so as to achieve a win-win situation for employees and enterprises.

The research objectives of this study are:

1. To identify the impact of psychological contract on Innovation behavior of foreign employees.
2. To identify the impact of the dimensions of psychological contract on Innovation behavior of foreign employees.
3. To find the mediation effect of Organizational identification between the psychological contract and Innovation behavior of foreign employees.

LITERATURE REVIEW

2.1 The psychological contract

The concept of psychological contract comes from social psychology. In 1960s, Argyris, an organizational psychologist, called the implicit relationship between ordinary workers and managers, which is different from the formal labor contract, "psychological work contract", namely psychological contract. In 1962, Levinson redefined the concept on the basis of Argyris' research results, and he proposed that psychological contract should be the sum of all kinds of implicit, non-public expectations existing between organizations and employees. In 1973, Kotter carried out a further study on the variable of psychological contract. He proposed that it was a relatively implicit contract between an individual employee and his organization, and this contractual relationship made certain constraints on both parties' efforts and expectations.(Schein ,1978) emphasized that although psychological contract is not a clear and definite formal written agreement, it plays an important role in the operation of various organizations and can have a significant impact on the behaviors of employees in the organization. This is the definition given by some early scholars for psychological contract. It can be seen that the key point emphasized by scholars is that psychological contract is an implicit contract between individuals and organizations.Currently, the main about the definition of the concept of psychological contract is divided into general school and narrow school two views, the former is based on the thinking of early scholars to continue to think the psychological contract should be organized and employees expect of each other, the concept of the psychological contract position in two levels of individuals and organizations, and on this basis to carry out the follow-up studies; The latter is a narrow school of thought. (Rousseau et al,1990) believed that the organization itself cannot produce psychological contract. Psychological contract is a belief perceived by employees, and the organization is only an external environment for forming psychological contract. (Robinson ,1994) such as delve into this belief, they concluded this belief is exchange relationship between employees and the organization's perception, understanding and commitment, the body is employees, including exchange comes at a personal contribution to the employees as well as the organization provided incentives (such as pay, promotions, etc.) between the exchange.

Based on the research results of Lu Fucai (2012) and Zhang Dan (2019), this paper divides psychological contract into three dimensions: transactional psychological contract, developmental psychological contract and relational psychological contract.

2.2 Organizational identification

The concept of organizational identity is developed on the basis of social identity theory. Organizational identity is not only a prospective research topic in the field of organizational behavior, but also a new thinking in management practice. Mael&Ashforth first used social identity theory to explain member organization identity in 1989.

Organizational identification is a kind of psychological identity, is also a form of psychological dependence, when members will organization characteristics when applied to their own definition, the definition of this kind of psychological phenomenon occurs individuals tend to see themselves and belonging to a group as intertwined, advantages and disadvantages, success and failure are Shared, is the fate of the universe, This cognitive state refers to the psychological identification of an organization with attached values and emotional meaning.

Simon believes that employees will redefine their organizational identity in the process of feeling the organization they belong to, thus generating organizational identity. Edward's research conclusion shows that organizational identity is from the perspective of an individual employee, who feels the relationship between himself and the organization he belongs to at an implicit level of psychology, and this perception will affect the behavior of employees. The higher the degree of employee's identification with the organization he belongs to, the more favorable the behavior will be to the organization.

2.3 Employee innovation behavior

Employee innovation behavior is a novel idea or behavior introduced by employees in production activities and manufacturing process that can bring certain effectiveness.

The connotation of employee innovation behavior is very rich, and scholars generally believe that this kind of out-of-role behavior beyond the current tasks of employees is spontaneous in the heart of employees rather than the behavior required by the organization with rules and order (Katz&Kahn,1978). Employee innovation behavior refers to the novel ideas or behaviors introduced by employees in production activities and manufacturing process that can bring certain effects (Richer&Hirst,2012). The innovative behavior of employees can promote the research and development of new products and process optimization, and is the personal behavior of employees to purposefully think and apply creative ideas to the organization at work (Janssen,2005). CAI Qitong and (Gao ,2004) defined innovation behavior as the process of germination, establishment and execution of ideas by employees in the process of developing new technologies, new techniques or new products.

The definition of employee innovation behavior covers a series of activities during the implementation of innovation. Innovation is a process, and innovation behavior includes the generation and realization of novel ideas (Lu Xiaojun, Zhang Guoliang, 2007). The process of innovation is the combination of a series of actions, from the germination of ideas to the final implementation, the connotation is very rich.

Some scholars believe that innovation behavior is a series of processes that start from identifying existing problems, generate new ideas or solutions to problems, then seek resources to support their ideas, and finally "produce" them (Scot&Bruce,1994). Employee innovation behavior is a complex combination of problem identification, conception generation, conception promotion and conception realization (Jong&Hartog,2010). Just because of the breakthrough and complexity of innovation, employee innovation behavior is regarded as a dynamic and procedural variable.

2.4 Social identity theory

Social identity theory is proposed by Henry Tafel and perfected by John Turner. Social classification, social comparison and positive differentiation constitute social identity theory. Social identity theory is an important theory in the field of social psychology. The background of this theory was in the 1970s, when social psychology believed that a group was just an increase in the number of individuals without anything special. Tajfel et al. conducted a series of experiments with the "minimalist group experimental paradigm". It is found that although people are grouped into the same group for no reason, they still tend to allocate more resources to their own group, which overturns reductionism.

In the 1970s, Tajfel put forward the social identity theory, which has been widely applied in psychology, sociology, economics, management and other fields. It plays an irreplaceable role in empirical research and also plays a positive role in the implementation of employee management in enterprises.

Social identity theory is a theoretical system gradually formed by combining the idea of "identity" in sociology and psychology. Social identity theory holds that people tend to describe themselves within the social framework and classify themselves and others into different social categories. Social identity is defined as an individual's perception that he belongs to a specific social group. Social identity is mainly to locate the relationship between an individual and social category, social status or social state. At the same time, social identity also brings positive emotions and values to individuals as members of a group. Social identity is not the same as individual identity. Individual identity is distinguished as a unique individual, not a member of a group. It is the description of an individual's own characteristics, while social identity is the description of an individual by all members of a particular group, and refers to the role of social identity. In order to gain recognition from other members of the group, an individual defines himself or herself by the attributes and characteristics of the group to which he or she belongs, thus forming social identity. When a group member identifies with the group, he or she considers himself or herself to be the representative of the group, and his or her emotions, attitudes and even behaviors will be consistent with the performance of the group members. To sum up, social identity theory mainly discusses how group relations and belonging affect individual behavior and social relations, and has been expanded in the study of group behavior.

THEORETICAL FRAMEWORK

3.1 Relationships and assumptions among variables.

Psychological contract has a positive impact on organizational identity.

Transactional psychological contract has a positive impact on organizational identity.

Developmental psychological contract has a positive impact on organizational identity.

Relational psychological contract has a positive impact on organizational identity.

3.2 The relationship between organizational identity and employee innovation behavior.

Organizational identity has a positive impact on employee innovation behavior.

3.3 The relationship between psychological contract and employee innovation behavior.

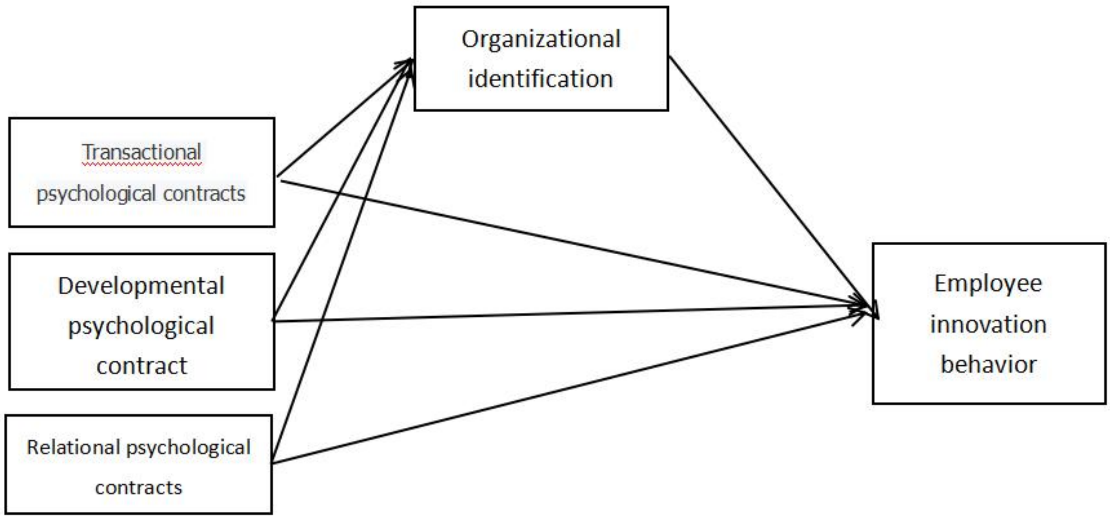
Psychological contract has positive influence on employee innovation behavior.

Transactional psychological contract has a positive impact on employee innovation behavior.

Developmental psychological contract has a positive impact on employee innovation behavior.

Relational psychological contract has positive influence on employee innovation behavior.

Figure 3.1 Conceptual Framework



METHODOLOGY

Qualitative research is adopted in this study.Document study is retrieved from the database, involving the relationship between psychological contract, organizational identity and employee innovation behavior. Based on Web of Science, Scopus, Science Direct and other databases, references were extracted from journal articles, book chapters and full-text documents, and the selected related articles were sorted out.

CONCLUSION

5.1 Research results

This paper argues that organizations should actively establish and manage the psychological contract of employees, meet the fun of employees in work, let employees establish a deeper connection with the organization, and then improve the innovative behavior of employees. Psychological contract is a process of gradual establishment, which is perceived in a series of interactions with the organization. Therefore, when an organization contacts with employees, it is necessary to have a thorough and comprehensive understanding of their emotional, professional development or material needs, and meet them in a targeted way, so as to better establish a firm psychological contract with employees. Organization shall regularly to interact with employees, both sides open up to each other, frank and sincere communication, in the process, on the one hand, can be directly and timely learn about the inner fluctuation, requirements and expectations, on the other hand also can let the employees feel organization for their attention, helps to establish the psychological contract between the employee and organizational management. From the perspective of social exchange, when the psychological contract of employees is satisfied, employees will have trust and dependence on the organization, and then they will be especially energetic in behavior, which will generate incentive effect. Moreover, employees will also play a feedback role in the operation of the organization and be willing to bravely implement innovative behaviors.

In the organization's relationship with employees, organizational identification plays an important role, through the research can draw the conclusion and the social exchange theory, after the individual identity on organisation, with the improvement of identity, belonging to the organization will also gradually increase, the individual will be more willing to question, we need to carefully examine from the Angle of organization in behavior exhibition show no tendency and organization of the same features, And adopt more behaviors that benefit the organization. In an organization, in order to promote employees' innovative behavior, employees should be guided to improve their sense of identity with the organization. For example, by vigorously propagating corporate culture and other ways, employees can be aligned with the values of the organization, so as to achieve the effect of enhancing organizational identity. It can be mainly carried out from the following aspects: first, regular organization of corporate culture publicity activities in daily work, such as broadcasting corporate propaganda videos, conducting essay solicitation activities, conducting outreach training and other ways to deepen employees' understanding of corporate culture, so as to strengthen the sense of organizational identity; Second, in the early stage of employee recruitment, more attention can be paid to candidates who share the same values with the organization. It will be easier for employees to identify with the organization if they maintain ideological consistency and value alignment.

Psychological contract is the important factors that affect employee innovative behavior, therefore, to improve the employees' innovative behavior, start from the root, is the only thing that is actively to establish and management of psychological contract, employees get satisfaction in the work and organization, improve staff to the organization's identity, so that employees have the sense of responsibility to the organization, and promote the production of innovation behavior, Give full play to the huge role of employees in the development of the organization, which is also a win-win situation between employees and the organization.

5.2 The research conclusion

This paper studies the relationship between psychological contract, organizational identity and employee innovation behavior in foreign enterprises. This study divides psychological contract into three dimensions: transactional, developmental and relational, and explores the correlation between three dimensions of psychological contract and employee innovation behavior. At the same time, the mediating effect of organizational identity in the whole influencing mechanism is discussed. The conclusions are as follows:

(1) Psychological contract and all dimensions have a positive impact on employee innovation behavior.

(2) Psychological contract and its dimensions have a positive impact on organizational identity.

(3) Organizational identity has a positive impact on employee innovation behavior.

(4) Organizational identity plays a partially mediating role in the relationship between psychological contract and employee innovation behavior.

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EXPLORING THE FACTORS THAT INFLUENCE OLDER CONSUMERS' ADOPTION INTENTION TO USE SELF-SERVICE TECHNOLOGY IN RESTAURANTS

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ABSTRACT

This study collates researches on the adoption of self-service technology by older consumers through a document study. Based on Innovation Diffusion Theory, we analyze the factors that can influence the adoption of self-service technology in restaurants by older consumers, from three perspectives: individual characteristics, self-service technology characteristics and interpersonal interactions. The study also establishes a conceptual framework based on the hypothesis of the relationship between the variables, and provides a new research idea for the existing technology adoption field of elderly consumers, and provides a reference for companies that apply self-service technology in practice.

Keywords: Self-service Technology (SST); older consumer; restaurant; Innovation Diffusion Theory; adoption intention

INTRODUCTION

With the continuous development of mobile technology and intelligence, our lives have undergone many changes and the consumer experience is being upgraded. The development of mobile Internet and the popularity of smart terminals continue to revolutionize the shape of the service industry. Today, more and more manual services are replaced by self-service, especially under the new crown epidemic, driving the application of technology in life. The "no-touch" is from the outbreak of the epidemic in 2020, but the application of self-service terminals is not limited to the epidemic, but rather that the epidemic has promoted the development of the self-service terminal application market. Now, hotels, banks, restaurants and many other fields have introduced self-service technology to improve their services. In the restaurant stores, customers only need to order directly from the touch screen on the self-service ordering machine, and then through the self-service ordering terminal, the order content is sent to the back kitchen printer through the local area network to realize the fast ordering, payment, meal preparation and delivery process. This process does not require restaurant waiters to order for customers, customers can be waiters role, portable ordering efficiency, to bring customers a new experience of ordering. At the same time, as an operator, the assistance of intelligent equipment can also greatly reduce the investment in labor costs and improve operational efficiency.

However, not all consumers are comfortable with this new change. Currently, seniors are not very receptive to self-service technology. Because older adults are slow and less receptive to new things, and because of the relative decline in physical function and learning ability due to age, this makes it difficult for them to use self-service devices (Lee, Cho, Xu & Fairhurst, 2010), but data from the seventh Chinese census show that the population of people aged 60 and older in China reached 264 million, or 18.7% of the total population. This represents 18.7% of the total population. According to the report of China's Aging Industry Development and Indicator System, the total consumption of China's elderly population will be about 40 trillion to 69 trillion yuan by 2050, and the ratio to national GDP will increase to 12.2% to 20.7%. This indicates that the large base of the elderly population with strong consumption potential is a group that cannot be ignored (Nunan & Di-Domenico, 2019). Then, only by increasing the self-service usage of this group can the full-scale application of self-service as a technology be truly launched, and customer satisfaction can be ultimately achieved.

Currently, academically, not many studies have been conducted with only older adults as the subject of study, and more studies have been conducted comparing older adults with younger adults (Moschis 1994; Sternthal & Bonezzi, 2009). However, this does not reflect the older consumer group, and some scholars suggest that older people should be studied as a separate group (Wang, Redington, Steinmetz & Lindeman, 2011). In summary, the question that this study seeks to address is what factors can influence elderly consumers' adoption of self-service technology in restaurants? Based on this research question, the purpose of this study is to investigate the factors that influence the adoption of self-service technology in restaurants by older consumers using a literature review approach.

LITERATURE REVIEW

2.1 Innovation Diffusion Theory

Theories commonly used in the study of consumer adoption of a technology are the Theory of Reasoned Action (Fishbein & Ajzen, 1975); Technology Acceptance Model (TAM) (Davis, 1989); Theory of Planned Behavior (Ajzen, 1985) and Innovation Diffusion Theory (Rogers, 1962). Theory of Reasoned Action (Fishbein & Ajzen, 1975) is mainly used to analyze how attitudes consciously influence individual behavior, focusing on the process of attitude formation based on cognitive information. The theory of Reasoned Action (Fishbein & Ajzen, 1975) is mainly used to analyze how attitudes consciously influence individual behavior, focusing on the process of attitude formation based on cognitive information. The Technology Acceptance Model (TAM) (Davis, 1989) is a model proposed by Davis to study users' acceptance of information systems using rational behavior theory. The Theory of Planned Behavior (Ajzen, 1985) states that attitude, subjective norm, The Theory of Planned Behavior (Ajzen, 1985) states that attitude, subjective norm, and perceived behavioral control together shape individuals' behavioral intentions and behaviors.

This study uses Innovation Diffusion Theory by Rogers (1962) to analyze the self-service technology adoption behavior of older consumers because, for older consumers, self-service technology is an innovation. And self-service technology is currently under-adopted. Older adults tend to be late adopters of an innovation. Using Diffusion of Innovations Theory can well explain the process of self-service technology adoption by older adults.

Innovation Diffusion Theory, introduced by Rogers in 1962, describes "Innovation Diffusion" as the diffusion of new products, ideas and concepts, technical information, and specific time in a social system, which is this diffusion refers to the flow of innovation from one source individual to another recipient through the exchange of information and influence that can change the likelihood that the recipient will accept the innovation. The four elements of innovation diffusion are: Innovation, Communication Channels, Time and Social system.

(1)Innovation: Rogers' definition of innovation is not necessarily a new product, but an idea, thing or product that is seen as new by the user is an innovation. Rogers believes that an innovation should have five basic characteristics: Relative Advantage, Compatibility, Complexity / Easy to use, Trialability, in general, innovations with these characteristics are more likely to be adopted by people.

(2)Communication Channels: The diffusion of innovations always takes place through certain social networks. In the process of diffusion of innovations to society, mass communication and interpersonal communication are the most effective ways to spread new ideas and convince people to use these innovations, while mass communication can effectively provide information and interpersonal communication can change people's attitudes and behavior. Mass communication is more effective in the early process of diffusion - the acquisition stage of information - while interpersonal communication is more effective in the later stage of diffusion - the persuasion stage of the effects of diffusion.

(3)Time: Within a social system, not everyone accepts new products at the same rate, and some people are more open-minded and more willing to adopt innovations than others. Depending on how quickly individuals accept new products, there are five types of adopters: innovators, early adopters, early majorities, late majorities, and laggards. Older consumers are less receptive and slower to accept new things, so they tend to be late majorities or laggards.

(4)Social system: The process of diffusion takes place within a social system. This means that the social structure of the system will also affect the diffusion of innovation.

According to the innovation diffusion theory, the characteristics of the innovation itself, the differences of individual adopters, and the Communication Channels play an important role in whether an individual adopts an innovation or not.

2.2 Service quality

Self-service technology in restaurants, although a technology, is one of the service options offered by restaurants for consumers. Based on Lehtinen & Lehtinen (1991)'s view, quality concepts were fairly adequate for analyzing restaurant services. to analyze service quality, they used a three-dimensional approach and a two-dimensional approach. in the three-dimensional approach, they considered the dimensions of service quality according to the elements of a service in the three-dimensional approach, they consider that the dimensions of service quality are classified according to the elements of a service in the production process, and consumers assess the quality of a service according to these three dimensions. The three dimensions are physical quality, interactive quality and corporate quality. Physical quality is determined by the physical elements of the service process, such as physical equipment and the surrounding environment, while interactive quality is determined by the interaction of the service process. quality is determined by the interactive elements of the service process.

According to Lehtinen & Lehtinen's (1991) concept of service quality, the service quality of self-service technology in restaurants consists mainly of physical quality and interactive quality. In the use of self-service technology in restaurants, physical quality is mainly determined by the physical element of the characteristics of self-service technology; interactive quality is mainly determined by the interactive element in the use of self-service technology, and in general, in restaurants, interaction occurs mainly between customers and self-service technology, and between different customers (Lehtinen & Lehtinen, 1991). In conclusion, according to Lehtinen & Lehtinen's (1991) view of service quality, the main factors that can have an impact on the assessment of the service quality of self-service technology in restaurants are: the characteristics of the self-service technology itself, and the interaction between consumers and other consumers.

2.3 Prior Research of the determinants of the SSTs

Through a review of the literature on the factors that influence self-service technology adoption. Meuter, Bitner, Ostrom & Brown (2005) examined the use of mail-order pharmacy for refilling prescriptions in terms of innovation characteristics and individual differences through in-depth interviews with consumers and a review of relevant literature. Wang, Harris & Patterson (2012) suggested by Meuter et al. (2005) study findings, in the context of supermarket self-checkout machines, to examine the actual use or choice of self-service technology from three perspectives: SST characteristics, Individual Differences and Past SST Experiences to investigate the actual use or choice of self-service technology by consumers in the context of supermarket self-checkout machines. Lee & Lyu (2019) based on innovation diffusion theory, studied consumers' intention to use self-checkouts in grocery retail stores from two perspectives, SST characteristics and personal characteristics, using consumers over 55 years old as the target population. Yang, Liu & Ding (2012) based on the TAM model and the social contagion theory, studied consumers' intention to use self-scanning checkouts from three perspectives: SST characteristics, individual differences, and social pressure. Hsiao & Tang (2015) based on TAM model and the social contagion theory, studied consumers' behavioral intention towards Automatic book stop (ABS).

According the literature review, it can be found that researchers have largely reached a consensus that, attitudes toward using a SST are the primary determinants of its use. These attitudes are in turn influenced by two types of antecedents: individual differences and SST characteristics. Among them, for SST characteristics, most scholars have used two variables, perceived usefulness and perceived ease of use, to conduct their studies under the suggestion of TAM model. For individual differences, scholars have used a rich variety of variables in different research contexts to conduct their studies, including technology anxiety, technology readiness, previous experience, and need for interaction.

In summary, this study examines the behavioral intentions of older consumers using self-service technologies from three perspectives:

(1)Individual characteristics

Rogers (1962) innovation diffusion theory also states that the speed at which an individual acquires knowledge about an innovation determines the speed of its adoption. Therefore, this study uses the term "product knowledge" to analyze individual characteristics.

(2)SST characteristics

According to Curran & Meuter (2005), SSTs may be useful to consumers, but they will not be adopted if they are difficult to use. In a review of the technology acceptance literature on older adults, Chen & Chan (2011) found that perceived ease of use and perceived usefulness differ for older and younger adults, with perceived ease of use being more influential for older adults and less influential for younger adults. Since the population of this study is elderly consumers, perceived ease of use was used to study SST characteristics.

(3)Interpersonal Interactive

Rogers (1962) innovation diffusion theory mentions that during the diffusion of an innovation, interpersonal communication channels are more influential in changing adopters' attitudes towards an innovation and persuading them to adopt it, and according to Lehtinen & Lehtinen's (1991) service quality perspective, in addition to self-service technology, the interactive element, the interaction that occurs between consumers, is also crucial in assessing the quality of a service. Therefore, this study innovatively proposes to examine the impact of interactions between customers in terms of their adoption of self-service technology in restaurants by older consumers.

FRAMEWORK PROPOSED

3.1 The relationship between product knowledge and adoption intention

According to Beatty & Smith (1987), customer knowledge is the perception of and understanding of a product by the customer. Schmidt and Spreng (1996) argue that the more product knowledge consumers acquire and the more they know about a product or service, the more confident they will be in the decisions they make during the purchase process. Pillai and Hofacker (2007) argue that the level of product knowledge is an important factor that influences purchase decisions. Moorman et al. (2004) found that product knowledge affects all aspects of consumer decision making and that the level of product knowledge can make a significant difference to the final consumption decision. In the context of this study, the more older people understand how to use self-service in restaurants, the more information they have about self-service, the more confident they will be when using self-service for ordering, and the more willing they will be to use self-service technology; conversely, the less information older consumers have about self-service and the less they know about self-service technology, the more afraid they will be to try to use the self-service. On the contrary, the less information they have about self-service and the less they know about self-service technology, the more they are afraid to try to use the self-service, and the more they prefer to use the more confident human service for ordering and other services.

In summary, this study makes the following hypotheses.

H1: The more product knowledge older consumers have, the stronger their intention to adopt self-service technology in restaurants.

3.2 The relationship between perceived ease of use and adoption intention

Ji et al. (2010) explored the issue of influencing factors of social networking sites from the perspective of the elderly and showed that perceived usefulness and perceived ease of use can significantly influence the adoption intention of the elderly. Rose & Fogarty (2006) used elderly consumers as a study subject and extended the TAM model to find that ease of use significantly influenced the attitude of elderly Taufik & Hanafiah (2019) focused on self-check-in Kiosk Services in airports and found that perceived ease of use significantly influenced passengers' intention to adopt the self-service technology.

In general, older adults have limited years of education, less awareness of thinking, and less ability to accept new technologies. The less effort it takes to use smart devices, the simpler the system process, and the lower the dual cost of time and economy, the more it will enhance their self-identity and thus their willingness to adopt.

Therefore, this study makes the following hypotheses：

H2: The greater the perceived ease of use of self-service technology in restaurants by older consumers, the stronger their intention to adopt self-service technology in restaurants.

3.3 The relationship between Customer-to-Customer Interactions and adoption intention

Tomazelli, Broilo, Espartel, & Basso (2017) used a qualitative research technique using an interview method, focus group discussions, using older adults as the study population.The study found that older adults would see shopping as a means of social contact and when they did not find a nearby employee, they had to rely on the help of other customers, and that the interaction with Altinay, Song, Madanoglu & Wang (2019) studied the social interactions between older consumers and other customers in a café and found that social interactions significantly affect older people's satisfaction and social well-being.

In this study, when older adults may encounter various problems in using self-service technology, interactions with other consumers present can help older consumers increase their confidence in using self-service technology and thus increase their willingness to adopt it.

Therefore, the following hypotheses were made in this study：

H3: The more interaction between elderly consumers and other consumers, the stronger their intention to adopt self-service technology in restaurants.

3.4 Framework proposed

Based on Rogers' (1962) Innovation Diffusion Theory and Lehtinen & Lehtinen's (1991) concept of service quality, this study analyzes the adoption intention of self-service technology in restaurants for the elderly from three perspectives: individual consumer characteristics, self-service characteristics, and customer interaction in the service scenario. The influence of product knowledge, perceived ease of use and customer-to-customer interaction on adoption intention was investigated to establish the conceptual framework of this study, as shown in *Figure 3.1*. The independent variables of this study are product knowledge, perceived ease of use and customer-to-customer interactions, and the dependent variable is adoption intention.

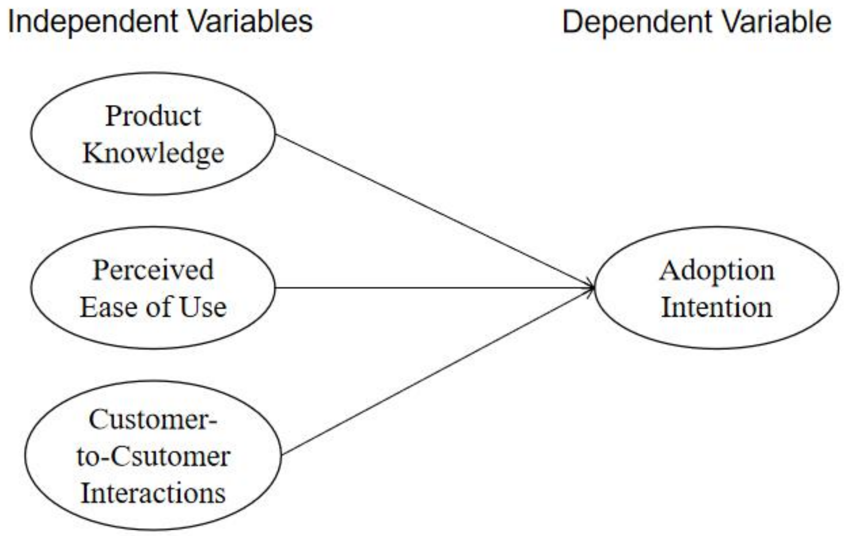

Figure 3.1 Conceptual Framework

METHODOLOGY

A qualitative research approach was used to establish the conceptual framework of this study by means of document study. All literature was collected in English databases, mainly from Web of Science, Scopus, Science Direct and Google Scholar databases. The search was conducted for keywords such as "self-service technology", "restaurant", and "older consumers". First, the articles on self-service technology were sorted to analyze the factors that could influence the intention of self-service technology adoption in restaurants for the elderly. Secondly, the relationships between variables were reviewed, the possible relationships between variables were inferred, and research hypotheses were made. Finally, the conceptual framework of this study is established based on the relevant theories and hypotheses.

CONCLUSION AND FUUTURE RESEARCH

This study uses a literature review to find the influencing factors that can have an impact on older consumers' restaurant self-service technology adoption intentions, and establishes a conceptual framework based on the combing of relationships between variables. Fewer previous studies have been conducted with only older consumers as the subject of study, and the results of this study can provide new ideas in the area of technology adoption among older adults. For restaurant operators, they cannot just follow the trend of introducing self-service technology, but also need to pay attention to the elderly as a group. The service pages of self-service technology should be debugged so that they can be operated more easily. Moreover, the role of other consumers should be given full attention, and other consumers should be managed as "part-time employees" to give full play to their role. In addition, it is necessary to popularize self-service technology among the elderly group and improve their familiarity and experience with self-service technology in order to greatly improve the adoption of self-service technology among the elderly consumers.

This study also has some limitations, as this study only uses qualitative research to establish a conceptual framework, and does not use empirical research to verify the relationship between variables. Moreover, this study focuses on self-service technologies in restaurants and does not discuss self-service technologies in other consumption scenarios. Future research can use empirical studies to validate the conceptual framework of this study from multiple contexts and verify the generalizability of the conceptual framework。

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SERVICE PRODUCT INNOVATION OF TRAVEL AGENCY COMPANY A---BASED ON O2O MODEL

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ABSTRACT

With the rapid development of China's economy and the overall progress of science and technology in recent years, the e-commerce model based on computer communication technology is in a period of vigorous development. With the continuous increase in the disposable income of Chinese citizens and the number of holidays, tourism has also become the preferred way for people to relax. Nowadays, a large number of travel e-commerce companies and OTA (Online Travel Agency) companies have appeared in the market, and people have different choices for travel agencies. The emergence of the O2O (Online to Offline) model has accelerated the development of e-commerce and has also had a huge impact on the traditional tourism industry. The travel agency company A in this article is a traditional travel agency. It changes its operating model, improves its competitiveness, and perfectly integrates online business and offline business to form online transactions and offline consumption experience, undertake its innovation and development in the fiercely competitive online travel market is the primary task of travel agency company A. Through literature research method, this paper mainly explores the existing prolems in service product innovation of travel agency company A and provide suggestions to deal with problems in order to help travel agency company A to develop fast.

Keywords: Travel agency, service product innovation, O2O

INTRODUCTION

1.1. Research background

With the advent of the "Internet +" era, the application and popularization of Internet information technology have entered thousands of households, and China's B2B (Business to Business), B2C (Business to Customer) and C2C (Customer To Customer) models have been widely accepted.The emergence of the O2O (Online to Offline) model has accelerated the development of e-commerce. The core of the O2O model is to provide customers with services such as information and discounts. Customers can make reservations and purchasesonline, and finally enjoy services in physical stores (Li, 2018).Today, companies, such as Meituan and Didi,have long become well-known representatives of outstanding O2O enterprises.

Compared with other industries based on the O2O model, the tourism industry started later (Yang, 2018). As one of the three pillar industries of tourism, travel agency plays a vital role in promoting the development of tourism (Sun, 2019).Under the leadership of excellent tourism O2O model enterprises such as Ctrip, Qunar, and Tuniu, the online tourism market has developed rapidly. The competition among travel agencies is fierce, and the traditional tourism industry market is gradually suppressed.Nowadays, a large number of travel e-commerce companies and OTA (Online Travel Agency) companies have appeared in the market, and people have different choices for travel agencies. At the same time, it also has a huge impact on the traditional tourism industry (Yang, 2018).In addition, *The Beltand Road*strategy involves more than 60 countries along the route and a population of about 4.4 billion, so it is also known as the most dynamic and potential golden tourist route in the world.According to the estimates of the National Tourism Administration, during the 13th Five-Year Plan period, China has transported about 150 million Chinese tourists to countries along *the Belt and Road*, bringingthe tourism consumption of about 200 billion US dollars.At the same time, it will attract 85 million tourists from countries along the route to travel to China, bringingthe tourism consumption of about 110 billion US dollars. The total international tourism consumption will account for more than 70% of the world (Sun, 2019).Tourism enterprises based on the O2O model should conform to the trend of the times, and under the new policy background, itwill lead China's tourism industry to a new stage of development.

1.2. Research purpose

Through O2O online consumption and offline experience, it can reduce the capital investment in each link of the tourism industry value chain, provide more efficient servicesto customers, and increaseoverall corporate profits. The traditional tourism industry's business model is cumbersome and complex, and labor and other related operating costs are huge. This paper takes the traditional travel agency company A as the research object, promotes the informatization development of the tourism industry based on the O2O model, promotes the transformation and upgrading of enterprises, and proposes strategies to promote the innovation and development of the O2O model.

1.3. Research significance

With the rapid development of Internet information technology, the "online + offline" interactive consumption experience model of the O2O model has also ushered in new opportunities for development, which makes the traditional tourism industry sales and business models no longer satisfy consumers'changing consumption habits and patterns. At the same time, some tourism companies based on the O2O model, lack the overall view, and these companies will eventually be eliminated in the O2O model business wave.

This paper takes travel agency company A as the research object. Under the background that many tourism companies in the tourism market are pursuing the greatest economic benefits, travel agency company A should be based on the O2O model, and integrate online and offline resources to enrich and expand the theoretical knowledge of Internet tourism O2O. The innovative development of tourism service products that conform to the advantages of travel agency company A can also serve as a theoretical basis for the transformation of the traditional tourism industry to the O2O model, so that it can strive to gain more market share.

For consumers, based on the O2O model, travelling consumers can directly browse and experience travel service products offline through PC and mobile phones, which will improve consumers' awareness and desire to purchase travel service products.For operators, the O2O model can effectively reduce operating costs, which will help travel agencies to achieve the connection between online and offline sales and bring new development opportunities for enterprises.

LITERATURE REVIEW

Zhong et al. (2019) was the first to analyze the reasons for the lack of innovation in the tourism industry. He concluded that the bad seasons, lack of knowledge, lack of manpower and lack of management experience and other factors were the incentives for enterprises to lack innovation.Hou et al. (2020) analyzed from the perspective of the value chain and concluded that profitability wasthe main driving force of innovation activities, and its various links in the value chain can have an impact on tourism innovation activities.Gu and Yao (2020) proposed tourism-level innovation, network-level innovation and system innovation from the perspective of the framework.Liu et al. (2018) proposed that the competitiveness of tourism enterprises dependedon their degree of innovation. In order to maintain a sustained market share, tourism companies should meet the needs of potential tourists with low cost and high quality.Kourtesopoulou et al. (2019) applied the concept of network innovation to the tourism field for the first time. He suggested that tourism enterprises should seek profit growth points and use innovative ways of thinking to find innovative points from within the enterprise, so that enterprises couldbe in an invincible position in the highly competitive tourism market.Martínez-Costa et al. (2018) studied the relationship between tourism product innovation and internationalization, and he emphasized that internationalization wasan important way in the innovation process.Siraphatthada et al. (2022) believedthat in underdeveloped areas, the innovation of tourism products requiredthe coordination of various local departments and institutions.Kitsios and Grigoroudis (2020) explained the differences between traditional and online travel, and the reasons for such differences. He also proposed to establish a new business model to deal with the current development.

Liat et al. (2020) considered the role and development prospects of the O2O model in the marketing of tourist attractions.Pikkemaat et al. (2019) concluded in practice that the O2O model wasan important channel for tourist attraction tickets and hotel reservations.Prassida et al. (2021) took China International Travel Service and China Youth Hostel as the research objects, discussed the specific process of the traditional travel agency's transformation to the O2O model, and put forward reasonable suggestions.Hollebeek and Rather (2019) solvedthe practical problems faced by enterprises in the process of O2O customized tour marketing through the internal analysis, external analysis and competitiveness analysis of China International Travel Service.Pimpan et al. (2020) opened up a new angle in the research on service product innovation of travel agencies. Through a questionnaire survey, he empirically analyzed the problems existing in travel agencies based on customer complaints and put forward reasonable suggestions and opinions.Mahdzar et al. (2021) made a comparative analysis of a large number of well-known OTA companies in China and the UK and the USA, and put forward new innovative research suggestions for the tourism O2O business model based on the perspective of supply chain collaboration.Li (2019) put forward innovative development suggestions for the transformation and development of state-owned enterprises China International Travel Service.

PROBLEMS IN THE DEVELOPMENT OF TRAVEL AGENCY COMPANY A BASED ON THE O2O MODEL

With the advent of the “Internet +” era and the development of China’s network information technology, more tourists choose to book travel service products directly online.It has become the fastest-growing field in outbound tours, group tours and independent travel. The major OTA giants have opened numerous offline physical stores to expand their market share and form an O2O model tourism enterprise that has begun to take shape.While the tourism O2O model is in full swing, traditional travel agencies represented by travel agency company A have also increased their investment in the innovation of tourism service products, but they still face many problems in the process of innovation.

3.1. Insufficient innovation of service products

The innovation of tourism core service products is to impress tourists in a highly competitive market environment. For example, the core travel service products of Ctrip.com in OTA enterprises are to provide air tickets and hotel reservations.The core travel service products of Lvmama Travel.com are to provide scenic spot ticket reservations, and the core travel service products of Mafengwo.com are to provide homestays and independent travel bookings.Tourism enterprises adopting the O2O model may not necessarily gain an advantage in the industry competition.If a travel agency would like to successfully transform into the O2O model, it must have its own core tourism service products that can impress tourists, because products are the fundamental reason for gaining market advantages.

3.2. Lack of differentiated innovation capabilities in publicity and promotion methods

Some traditional tourism enterprises represented by travel agency company A are still in the conservative mode of publicity, and the way of publicity and promotion is too simple. In addition, the innovative methods of some traditional tourism companies remain on the surface, so that differentiated marketing cannot be achieved, which is difficult to attract tourism consumers' desire to buy. Although the word-of-mouth effect is sometimes the best marketing model, this promotion model is too limited, and inefficient. And this model requires a long period of word-of-mouth introduction from old customers to new customers.This model requires the long-term introduction of new customers by old customers and word of mouth, but this marketing model cannot be abandoned. Relying on online travel platforms to release travel information may be very effective. For some travel companies that have just entered the O2O field, this is a means of quickly returning funds to increase sales.Relying on the promotion of online travel platforms will boost the development of such O2O travel OTA enterprises, but it also restricts the willingness and motivation of enterprises to develop the O2O model.

3.3. Lack of big data analysis system

Big data is the process of screening, analyzing, sorting, and summarizing the relevant validity data in a timely manner from massive fragmented information data.The impact of big data on the tourism industry is comprehensive, and it plays a vital role in the formulation and transformation of management decisions in the entire industry.Traditional tourism companies represented by travel agency company A generally do not have big data and decision-making analysis, and only rely on experience, intuition, suggestions, or a financial statement to make policy decisions, which is obviously not comprehensive and scientific.

The establishment of a big data analysis system is an inevitable trend in this era of informatization and digitization. Tourism enterprises need to track and analyze the personalized information of tourists.Big data analysis can accurately identify travel consumers without seeing customers, discover user behaviors and preferences, and finally analyze target customers and formulate targeted and refined marketing strategies. Big data analysis can avoid the risk of customer churn, but it also causes the phenomenon of low activity in the tourism market.

3.4. Lack of integration of innovative ideas

Many traditional travel agencies only use the O2O model as a tool, rather than using O2O as a business model to conduct in-depth operations.These traditional travel agencies only established corporate websites, established corporate WeChat public platforms, or spent a lot of money to build corporate APPs, and then input all travel service products to these output platforms.However, the fact is that the O2O model is an important business model for traditional tourism companies to gain unlimited development space in the future, rather than a simple marketing tool. If traditional travel agencies would like to continue to survive and develop, tourism companies must transform to the O2O model. Only when travel agency company A truly integrates into the O2O model and regards it as a new concept of business management and combines online and offline,does this serve as an important way for traditional travel agencies to transform.

If travel agency company A wants to successfully transform into the O2O model, it must abide by the O2O business philosophy and business rules.If travel agency company A just blindly inserts various travel service products into the O2O model without conducting big data receipts and market research and analysis, such travel service products will not be substantially attractive to consumers.

SERVICE PRODUCT INNOVATION STRATEGY BASED ON THE O2O MODEL

4.1. Service concept innovation

In the context of China’s increasingly stable economy, tourism has become a normalized way of life for the common people (Wang, 2021). People’s pursuit of tourism service products has gradually evolved from the initial economic sightseeing tour to a quality experience tour.Tourist satisfaction has become a key factor in the measurement of tourism service quality, so high-quality service is still the focus of the construction of travel agency company A in the future.Tourist accommodation service, tourist shopping service, tourist catering service, tourist transportation service, tourist entertainment service, tourist attraction service, tourist guide service and tourist public service are all indicators of tourist’s overall tourism evaluation and satisfaction degree, and these should be included in the evaluation of tourism service quality.

Travel agency company A should follow the trend of the times and establish its own service satisfaction system of tourism O2O model. Tourists can give feedback to the travel agency their real feelings during the trip through the mobile terminal at any stage, so that the travel agency can timely feedback the unpleasantness of the tourists during the trip to the travel agency in the travel destination.During the tour, travel agency company A can take remedial measures to appease the tourists and avoid the adverse consequences of tourists complaining at the end of the tour. In fact, the real advantage of traditional travel agencies represented by travel agency company A lies in service.Traditional travel agencies can rely on their years of industry experience to gain a favorable grasp of all aspects of the travel process, and to deal with disputes in tourists' travel experience in a timely, efficient and proper manner.The upgrade of the service concept of the O2O model of travel agencies has changed from the original dominant consumption to service consumption, and more attention has been paid to the quality of travel service products and the online and offline evaluation of the O2Omodel.

4.2. Marketing model innovation

The marketing development of travel agencieshas entered a new period. First of all, traditional ground marketingis still the easiest and most direct way to communicate (Chen, 2020).No matter how rich the information on the Internet is, it cannot catch up with a travel agency that the potential travel customers ask travelling consultants for more information, which are s the biggest advantages of traditional ground marketing.

Secondly, due to time and space constraints, many people are reluctant to spend so much time and energy entering travel agencies to choose travel service products. Network marketing has a wide coverage, and the PC-side browsing interface is comfortable and convenient, which is very suitable for office workers and people who often work on the computer.However, this marketing model is very limited, and it is not suitable for some people who have difficulty in computer operation, such as children and the elderly.

Finally, the marketing of the mobile Internet makes up for this shortcoming. Anyone can reach a transaction with any travel agency at any time, any place, and any travel agency through mobile terminals such as mobile phones and IPADs.

The combination of traditional ground marketing, online marketing and mobile Internet marketing constitutes the O2O whole network marketing model. The whole network marketing model maximizes the use of customer resources and maximizes the benefits of tourism enterprises' publicity.

4.3.Innovation supported by technology

Big data ecological network marketing refers to the process of capturing, managing and processing customer information within a certain time.Travel agencies can rely on big data technology to allow advertisements to find the right target at the right time, through the right carrier, and in the right way.Through big data analysis, advertisements can be placed more accurately, and tourists can be developed multiple times.When the travel agency obtains customer data information, it can judge, analyze and summarize the preferences of tourists, continuously organize new customers, systematically organize and serve old customers, and finally form the big data ecology network of travel agencies. This marketing model ensures the continuity of marketing and the stability of the travel agency's customer base.

The construction of the big data ecological network can well record the habits, purchasing preferences and consumption patterns of each tourist. Whether it is an OTA company or a traditional travel agency, sorting and summarizing the needs of tourists through big data analysis is an important means of corporate competitiveness, and it plays a key role in the protection of customer resources, and the development of future market refinement and customized tourism.

4.4. Enterprise transformation and innovation

It is imperative for the tourism industry to rely on the Internet. The O2O model is the best entry point for the transformation and innovation of travel agencies, but if they blindly pursue the O2O transformation, they will deviate from the original operating advantages of their own companies, and even the best tourism companies will be eliminated by history.In the tourism industry, there are countless cases of failure to transform O2O. Traditional travel agencies represented Travel agency company A should insist on building their own brands and services, and seize the entry point suitable for the O2O model.Otherwise, they will fail.

CONCLUSION

This paper takes Travel agency company A as the research object, analyzes its development status, and problems in the operation process, as well as proposes innovative strategies based on the O2O model, which serves as a reference for the promotion of the tourism O2O model.The emergence of the tourism O2O model is the general trend of the development of the "Internet +" era. Its convenient search mode, personalized humanistic care, and safe and reliable payment methods are all important driving forces for the strong development of tourism O2O.At the same time, the development of the tourism O2O model still lacks corresponding theoretical support, and its development and growth in China haveonly been five years. Therefore, more business practices are needed to summarize and explore, and scientific and technological guidance and innovation are needed.It is hoped that the research in this paper can provide some help for more tourism enterprises, and can also lead to more scholars' research in the field of tourism service product innovation.

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INNOVATION OF TEA ENTERPRISE MANAGEMENT INFORMATIZATION MODE IN THE ERA OF BIG DATA

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ABSTRACT

Tea is an important part of Chinese traditional culture, which occupies an important market position in the market, and its popularity has always maintained a high level. However, industrial enterprises still face many limitations in the current development process. On the one hand, they are unable to achieve further optimization and upgrading, obtain more consumer groups, and are unable to sneak into the international market to participate in the competition. On the other hand, tea enterprises generally have small production and processing factories, and the operation mode is lagging behind. In view of this phenomenon, the above problems can be contacted with the mainstream information management platform in the current era of big data to achieve further upgrading and optimization. In fact, at present, industrial enterprises have also vigorously introduced the information platform, but in the process of specific operation still has not explored a detailed development path. In this context, this paper will be under the era of big data tea enterprise management information mode innovation way to explore, first analyze the era of big data for the influence of tea enterprise management mode, then combined with the actual research visit, summarizes the typical problems faced by tea enterprises, finally for the above problems targeted to solve the Suggestions.

Keywords: big data era; tea enterprise management; information mode; innovative research

INTRODUCTION

Tea enterprises are a traditional and an important part of China's economic development. The overall management level of Chinese tea enterprises is relatively low, which greatly hinders the rapid development of China's overall economy (Yu Luchen, 2021). Combined with the business conditions of the Chinese tea industry, the tea enterprises are generally small and medium-sized enterprises. Therefore, there is a big gap between the requirements of modern thinking or business system science and now, especially for tea enterprises in the era of big data (Liu Yijun, 2022), they should timely upgrade their management mechanism, optimize their management thinking, and constantly innovate to adapt to the specific needs of the current development era. Therefore, this paper explores the innovation of tea enterprise management information mode in the era of big data.

1.1 Research background

The development of the era of big data is mainly based on the information-based computerized electronic platform. By introducing or creating electronic platforms within the enterprise management architecture, various management processes and links are combined with the electronic platform, and the corresponding management and operation links are completed through the operation mode of the electronic platform (Wang Yingying, 2022). The most important characteristics of the big data platform are large data storage and automatic data storage. The large amount of data storage is mainly based on the continuous expansion of the development scale of various enterprises and the continuous performance of production and operation content, resulting in the continuous growth of data and information. In addition, the flap information of the big data platform not only includes the internal data information of the enterprise, but also further includes the internal data information of the competitive enterprises and the internal industry, so as to provide the corresponding decision information for the overall production and operation decision of the enterprise. On the other hand, the big data platform data storage speed is very fast, and mostly relies on the automated processing mode. This mode breaks the previous workflow that requires manual data analysis, further improves the overall work efficiency, and brings qualitative changes to the transformation and upgrading of the work mode (Wei Rubing, 2022).For tea enterprises, the application of big data platform not only updates the enterprise management mode, innovates the enterprise management thought, but also brings a practical impact to the development of enterprises. Specifically, mainly includes the following two points: one is to improve the overall operation efficiency of the enterprise, tea enterprise production link is more complex, not only includes the front-end tea planting contact tea farmers, including late tea processing and tea sales, brand maintenance, each link between contact degree only limited in the main production products tea field, but the nature of the production has a big difference, from the production end to the brand marketing end. Therefore, for tea enterprises, the production management work is very complex, but with the help of the big data platform, the above links can be transformed into an electronic management mode, input into the big data platform, for systematic and one-click operation, which greatly improves the work efficiency and optimizes the work process. Second, it further enhances the brand competitiveness and brand influence (Wang Xiaoyu, 2022). For tea enterprises, the tea with strong market and brand influence is still mainly based on traditional tea brands, relying on a better tea planting foundation, and has little correlation with post-processing and brand marketing. But at present, with the help of the modern development mode, many emerging tea brands have also flooded into the fierce market competition, with strong management ability and brand marketing ability, occupy a position in the market. To sum up, the big data platform has changed the information management mode of tea enterprises and innovated the development path of tea enterprises. It is an important development direction in the next development process of tea enterprises, and helps to promote the continuous update and upgrading of tea enterprises, and achieve stronger market competitiveness in the market.

1.2 Research Significant

1.2.1 It is conducive to promoting the optimized development of enterprises.

In the era of big data, higher requirements are put forward for the management of tea enterprises. In terms of human resource management and production technology, enterprises need to be strengthened and optimized, so as to keep pace with The Times and always maintain their advantages in the tea market (Liu Jiping, 2018). However, many tea enterprise management is lagging, mainly because many tea enterprise is small, enterprise management itself management idea lag, management is traditional, no perfect management system, so tea enterprise management can't keep up with the pace of the era of the development, but with the advent of the era of big data, tea enterprise managers can share experience with the same industry, to learn abroad, so as to promote the optimization and development of their enterprise。

1.2.2 Improve the market competitiveness of tea enterprises.

With the development of Internet-related technologies and the progress of global trade, tea enterprises need to constantly seek appropriate development paths and management methods, enhance the market competitiveness, and promote the long-term development of enterprises. In the era of big data, tea enterprises can use big data technology to collect domestic and foreign market, consumer demand, policy changes, and after the collected information classification, induction, using big data analysis results to understand the domestic and abroad market information, improve market share, enhance the market competitiveness of their enterprise (Yang, 2018).

1.3 Problem Statement

The development of tea enterprises can be traced back to hundreds of years ago. As a traditional planting product in China, tea has gone through many historical stages. Because the traditional tea management mode was relatively popular in ancient times, there are still many tea enterprises that still use the traditional tea enterprise management mode. But to be specific, the traditional management mode of tea enterprises with the development of The Times will inevitably show the pace of the process of The Times, thus generating a lot of problems (Wang Xin, 2017). Therefore, at present, the management mode of tea enterprises needs to combine the production and operation mode of traditional enterprises and the information management mode of modern enterprises, and to further innovate the overall operation mode of enterprises. Through visiting and investigating several mainstream tea enterprises in southwest China, we summarize and analyze the current traditional management mode of tea enterprises, and there are the following problems.

1.3.1 Smaller scale and low operational efficiency.

Although there are several competitive companies in the market with strong big-brand tea enterprises, the internal production and operation of tea enterprises is not an integrated business model (Jia Guanying, 2021). Specifically, these tea enterprises are more responsible for the brand marketing and sales work of the head office, and the production and operation work and tea processing work are jointly composed of various OEM factories and small workshops, which results in the fact that the tea production end enterprises are still small in scale. In addition, the tea brands that occupy the long competitive strength on the market, after all, only occupy a few parts of more brands. Market competitiveness is insufficient, cannot be known by consumers, its production scale may be smaller, and even some tea enterprises may follow the family, workshop production mode. For the tea processing link, there are still many tea farmers who use manual technology to fry tea for tea, although manual tea for tea taste is relatively good, but the whole work efficiency is low, and the quality of fried tea is also uneven. In general, the most important problems in tea enterprises is still a small scale. The direct consequence of the low overall workflow efficiency is that the development process of tea enterprises is relatively slow, and there is no way to adapt to the rapidly changing market environment. It is possible to be relatively backward compared with the market development trend, resulting in the lack of market competitive strength and poor tea sales and promotion effect. However, with the help of the information platform in the era of big data, this problem can be effectively solved. The information platform can connect all small and family tea planting and processing enterprises into the overall management system of the platform to realize systematic and model management. Through systematic management, further standardize the tea enterprises, high efficiency of production and processing efficiency, and the standardized management of tea product quality, make its quality can be universal standard, from the later screening workflow, effectively improve the operating efficiency of the overall tea enterprises, so as to cope with the rapidly changing market environment, timely update optimization in the market changes, in order to obtain stronger competitive strength.

1.3.2 High production and operation costs and insufficient capital circulation power.

For tea enterprises, the current factors that determine the market competitiveness are mainly manifested in the following two points: first, brand influence, mainly concentrated in some large tea brands with good reputation and strong traditional model. Another point is the market price. For most tea brands with weak brand competitiveness, the main decision of their market competitive strength is their own tea price. Due to the fierce price competition, there are generally insufficient cost control and limited capital flow among enterprises (Yu Yongliang, Xu Xingwei, 2021). Because for enterprises, the cost control difficulty is higher, so directly lead to smaller tea enterprises, the overall income profit is low, so there is no additional money into further production optimization and upgrading, thus forming a bad cycle, lead to tea enterprise development, for this problem, with the help of big data platform of information management mode can be eased. First of all, the information management mode can make the competition between tea enterprises project become more rich, rather than limited on the price competition, to give other cost control ability of small and medium-sized tea enterprises more development path, make it can make on the basis of price control more innovation mode, improve enterprise overall competitive strength. In addition, the information management and control mode can also use the big data analysis platform to scientifically analyze the internal cost and cash flow of enterprises. Comprehensive use of the past multiple data and internal data, as well as data between competitive enterprises for automatic analysis and processing, find out the main problems in the cost and cash control, and carry out targeted rectification. Only by solving the cost problem and the cash circulation problem, can the enterprise obtain more production profits, so as to use the production profit once again to invest in the optimization and upgrading of the corresponding links, and carry out innovative work, so as to realize the next stage of the development of the enterprise. If the enterprise cost control and cash flow problems cannot be solved, then not only the enterprise can not obtain the corresponding production profits, but also it is impossible to achieve the next stage of optimization and upgrading.

1.3.3 Lack of brand competitiveness and poor international influence.

Although tea brands have strong influence strength in domestic competition, more consumer groups and high popularity, they still show insufficient communication efficiency in the international market. For the international market, the main drinks is still mainly coffee. Compared with coffee, the competitive strength of Chinese tea is still in a secondary position, which leads to the consumption of tea in China is only mainly in the domestic market, but cannot effectively go out of the national boundaries and gain more business share in the international market (Liu Pengyuan, 2019). In addition, for some small and medium-sized enterprises, the brand communication power is a greater obstacle. Compared with the traditional large tea brands, such as Yunnan Pu'er tea, they have been in a weak position in terms of the traditional development strength. In the late stage of brand marketing can only pay more efforts to achieve the development position. Therefore, brand marketing ability is an important obstacle and trouble for industrial enterprises of all sizes. Only by achieving a strong brand influence can we expand more sales space and obtain more sales profits. Under the influence of the age of big data, with the help of information platform can be engaged in more advertising work, with the help of rich media to realize advertising, make more domestic consumer groups and international consumer groups can understand the advantages of the tea brand, with the help of modern marketing model to attract consumers to first consumption, develop more consumer customers.

1.4 Research questions

How to improve the operation rate of tea enterprises?

How to use the big data analysis platform to scientifically analyze the internal cost and cash flow of enterprises through the mode of information control?

How to improve the brand awareness and international influence of tea enterprises?

1.5 Research Objectives

To improve the operation rate of tea enterprises.

To use the big data analysis platform to scientifically analyze the internal cost and cash flow of enterprises through the mode of information control.

To improve the brand awareness and international influence of tea enterprises.

1.6 Study scope

Under the background of big data era, the management information mode innovation of Chinese tea enterprises is conducted.

LITERATURE REVIEW

2.1 Related concepts

2.1.1 Overview of the Big Data Era.

Big data is a term of the IT industry, which means that a large amount of data cannot be processed quickly. Its basic characteristics are large quantity, fast speed, many types, strong authenticity and low value density, which requires the establishment of a new data processing mode (Zhu Lujie, 2021). The era of big data has arrived. Based on the power of Internet computing and the development of data dissemination, it has gradually penetrated into all walks of life, and is closely related to the development of modern enterprise management. After accumulating the experience in experience management and system management, it has begun to move towards intelligent management. At the same time, the industry market competition is more and more fierce, because the era of big data has brought a lot of information magic, consumers have a wide range of information channels, consumer personalized demand is challenging the traditional enterprise management mode, how to innovate the market demand management mode, using information means to meet the arrival of the era of big data is the key challenges facing enterprises.

2.1.2 Business model of traditional tea enterprises.

In China, tea, as a special cash crop, is currently processed and sold mainly through the traditional business model. Most tea is managed through regional tea growers' associations or family enterprises, and there are few large-scale industrial companies in the tea-growing areas, and their management mainly depends on the subjective experience of the operators, and there is no systematic management to guide them (Wanda, 2019). In the era of big data, this traditional business model is too conservative to keep up with the trend of The Times, and will also be eliminated by the tea market. Comprehensive integration of the tea factory management data, through the objective data analysis, improve the decision-making ability, convenient for data storage and retrieval, and have a positive impact on the management of the tea factory。

2.2 Related review.

2.2.1 Restricted by traditional concepts, the management and enterprise organizational framework is not perfect.

An important concept of "Internet +" is "user-oriented", that is, "demand-oriented". This concept is not only reflected in the "Red Internet +", but also one of the key concepts to promote China's supply-side structural reform. Although this is an important trend, it is also a necessary choice for enterprise development. But in reality, many tea companies in China still follow the self-centered "downstream" management and product concept development. Simply put, it is what to give what, leaving the consumer needs, this is "after the event". In the traditional business era, due to the market competition is relatively small, product types are relatively few, the disadvantages of this idea is not obvious, but in the era of "Internet +", consumers used to express their needs, plus the Internet company user-centered model, China tea companies traditional research and development concept seems to be relatively declining (wen, 2020). In the market, some tea companies have begun to fail in recent years. In terms of market behavior, some tea enterprises have begun to decline in recent years. They do not fully understand "Internet +", do not really understand the frequency of consumption and consumers' consumer psychology.

Since the early establishment and development of China's tea industry span more than one thousand years, many tea enterprises in China today have evolved from the small family workshops in the past, and their organizational structure has the natural characteristics of small farms. When the economy is weak, this management system has its advantages, such as greater consistency. However, its drawbacks are obvious today: people from the same family have long held power in the company, which does not give suitable management people more freedom of action, no opportunity for upward mobility, nor improve the enthusiasm and innovation of lower-level employees. Like many traditional enterprises in China, many teahouses mainly use the traditional "pyramid" structure to organize revenue. In the traditional company era, this structure has advantages, such as stable structure, clear hierarchy, clear division of labor, but it also has obvious disadvantages, such as slow information communication, low operation efficiency and so on. In modern companies in the "Internet +" era, efficiency and cost are important, as is adopting a "flat" organizational framework. The only way to compete in a highly competitive environment is to improve efficiency. Looking at the actual operation and administration of Chinese tea enterprises, among the enterprises that do not directly implement market incentive measures, employees' personal innovation inspiration and plans may initially only refer to their management, and then carry out with the consent of the department head. They then restricted the report to the highest level of management, then layer by layer, and finally to the highest level of management. This is a tedious process, if there is a problem in the middle, it is easy to stop the innovation projects, the company loses business opportunities, resulting in huge losses. Even if there is no problem, the company executives also agreed to implement, but the late decision can easily lose the innovation project lead in the competition, leaving the company in a passive position, giving the initiative to others.

2.2.2 Low grasp of market demand, and information feedback management mode is not timely.

This defect is mainly reflected in the docking of enterprises and the market, in the previous market competition in the Internet, our country tea companies generally adopt the way of mass production to reduce the unit cost of enterprise production, but in the era of "Internet +", consumer demand is changing, a lot of network information: spread, all kinds of subculture map rapid composition and disappear, let the market demand is suspicious. The rapid emergence and disappearance of massive information on the Internet and of different subcultures has led to dramatic changes in demand. For example, the existence of webcast has led to the emergence of many "Internet celebrities", and the "IP" craze in movies and TV series has also led to changes in consumer habits and preferences. In China, the traditional business model of many tea companies is prone to prediction errors, resulting in certain cost losses, and the less the pressure on the product, the more the company's capital chain is tight, or even broken.

From a realistic point of view, almost all tea enterprises adopt the one-way communication mode, that is, through advertising and other ways, to provide product information to consumers, but they do not have a modern feedback channel. Generally speaking, there is a problem of information asymmetry between Chinese tea enterprises and the market (Zhu Lin, 2016). In the "Internet +" era, companies such as Xiaomi and Meitu attach great importance to consumer experience and opinions. Internet technology companies have long created their own fan forums to encourage and guide consumers to interact and express their opinions online. In this way, the company will be able to get a real experience of what consumers feel, and then scientifically and accurately predict a next product development plan. If Chinese tea enterprises want to move forward in the Internet era, they must make full use of the Internet technology and resources as soon as possible to change the current situation of information asymmetry between enterprises and consumers (Li Hang, 2020).

2.2.3 Personnel management mode is backward, and staff professional quality is low.

To explore and innovate the management methods of tea enterprises, we not only need the enterprise managers to have innovative ideas and attitudes, but also need to actively cooperate with the employees of the enterprises to promote the innovation of enterprise management methods. But in fact, in the process of management method innovation, tea enterprises are affected and restricted by certain factors, among which personnel factors are the most important influencing factor. In China, many tea enterprises are small and medium-sized enterprises, while tea enterprises are different from other enterprises, the production of tea enterprises is mainly manual labor. The quality of tea depends on the experience and skills of workers, which has high requirements for workers 'professional quality, but the cultivation of workers' professional quality cannot be achieved overnight. By requiring employees to accumulate rich experience in the tea production process, improve their own working ability, improve the company's tea making technology, so as to increase the economic benefits of the company (Lang Binkun, 2020). In the process of accumulating experience, workers will naturally lead to the quality of tea production, so that the profitability of tea enterprises is not high. In addition, the process of internal personnel flow of tea enterprises will affect the normal operation of industrial enterprises and increase the transaction cost of enterprises. Generally speaking, people working in the same environment will unconsciously produce a human instinctive sense of group, and develop together to meet their own safety and social needs, which is guided by human nature, and thus leads to the existence of various informal organizations in industrial enterprises. When a large number of personnel transfers occur within the enterprise, the workers cannot adapt to the new environment in a short time, so they must invest a certain amount of time and energy. During this period, the workers' working capacity and efficiency will be reduced accordingly. Therefore, this leads to that in the process of operation and management mode innovation of tea enterprises, the mobilization of employees causes the resistance and emotion of some employees to the new organizational form, which directly affects the development of operation and management mode.

RESEARCH METHODS

Measures to innovate the management information mode of tea production enterprises in the era of big data. Through the above analysis, we have listed several typical problems in the development process of tea enterprises. In fact, these typical problems can be alleviated by using information and big data management mode. Therefore, we put forward corresponding solutions, which are the following points.

3.1 Strengthen capital investment in the information industry.

In the era of big data, all walks of life have been integrated into the wave of information development, and with the help of the wave of information development, the development trend of efficiency improvement and scale expansion has been realized. For tea enterprises, they must also increase their capital investment, quickly integrate into this wave of development to go, through the wave of the development of The Times, to achieve a stronger competitive strength in the market. Strengthen the construction of informatization, on the one hand, need to make funding, because the information construction platform and big data platform need a lot of investment, establish the corresponding hardware facilities, the introduction of relevant professional management and technical personnel, these all need enterprise capital transferred special funds to special work (li chao, 2021). In addition, for the development of information technology, it is also necessary to further develop together with other enterprises, such as buying a third-party information platform, and sharing the industry development information platform with other enterprises in the industry. To sum up, the era of big data involves cloud computing and other advanced science and technology equipment, all need enterprise capital, only enterprise reverse ideology, deeply realize that the information industry brings major power to enterprise development, to be willing to increase investment in this aspect, thus obtain greater investment profits from the corresponding investment.

3.2 Innovate marketing and promotion mode and develop enterprise brand.

For tea enterprises, the most important profit link is still manifested in the sales or promotion stage, but currently through the above analysis, we find that brand development is an important problem in front of enterprises (Li Xiang, 2020), and for large-scale enterprises cannot achieve the development of the international market. For small and medium-sized enterprises, they cannot obtain the corresponding consumer groups in the domestic market and achieve brand development (Qin Jiao, 2018). The development of enterprise brands can make use of the current information mode in the era of big data, which includes a variety of brand communication and promotion methods. It includes not only the current popular "we media", but also other modes such as information platform sharing. With the help of these media and further innovating the communication content and brand marketing content on this basis, the brand promotion can be realized to a certain extent. With the help of information communication channels, more potential consumers can obtain the corresponding brand information, so as to evolve into a consumer group of new resources. In addition, the operating profit of tea enterprises is not enough to rely only on communication, but also need to further innovate marketing methods. At present, the marketing mode of tea enterprises is still the traditional sales model, but in fact, the sales model of other industries in the current market has appeared qualitative changes, derived from a diversified situation. Specifically, tea enterprises can make use of the current more popular hunger marketing mode, first experience marketing mode and wechat business marketing mode to further expand marketing channels, and realize more consumer groups' integration, so as to obtain higher economic profits and achieve the maximum economic benefits.

3.3 Build a systematic-management information management platform for tea enterprises.

Specifically, the tea enterprise information management platform (cui-cui Chen, 2019) should mainly include three parts, respectively is tea production, tea processing and marketing communication, for tea production and tea processing, the main object-oriented is still a large tea enterprises under small factories and OEM. For these factories, they are generally faced with the characteristics of small production scale and poor production efficiency, but with the help of the information management platform, their production status and production operation are included in the information management mode, and then the unified supervision, unified management, unified promotion of the management mode. The progress of the OEM work efficiency and work progress of normalized supervision and follow up, and the production link slow factory overall management, on the one hand, optimize the management efficiency of tea enterprises, on the other hand more realize the systematic management mode, also further ensure the unification of the product quality, save the late screening of the product. In addition, the production and processing end of tea should also be matched with the marketing communication end. Only when the marketing communication end fully understands the work details in the early production and processing, can it further innovate the content of marketing communication on this basis, and realize accurate and practical marketing promotion (Yu Sufang, 2021). In addition, in addition to the management of production link, should also include the staff performance management, staff overall work performance can also use information management platform, form a systematic incentive mechanism, to work quality and product quality as the main assessment target, equipped with scientific management mode of tea enterprise information management mode for further innovation and upgrade, realize the tea enterprise high efficiency, high operation, high quality development mode.

RESULT AND FINDINGS

4.1 Change the traditional concept and innovate the internal organizational structure and business model of the enterprise.

China's tea factories mainly adopt the traditional vertical pyramid structure, and their shortcomings will become more and more obvious in the new era. Therefore, we need to use the Internet + thinking to update the organizational structure of tea enterprises as soon as possible. First, we need to coordinate the information and feedback channels at all levels of the company, so that the ideas and opinions of ordinary employees can be transmitted to the decision-making level of the company as soon as possible. At the same time, the company senior decision distribution, including the first time to some employees of different departments, in order to better ensure the smooth of the information channel, but also to establish the corresponding supervision and reward system and punishment measures, for those who do not as, not timely provide information to lower staff management at all levels, if found, the corresponding punishment measures should be taken. These people or tea enterprises with conditions can also adopt the flat mode of Internet enterprise management according to their own conditions, unless necessary or virtual intermediate management, to realize the relationship between the upper and lower levels, and improve the operation efficiency of enterprises. First of all, the development of the marketing model should be consistent with the 020 model, combining the offline and online sales and marketing of tea products to complement and stimulate each other (Yang Dan, 2021). The functional positioning of offline and online activities should be distinguished. Offline tea sales is the basis and focus of the whole dialogue, while online activities are more related to product information, activity promotion and order receiving, logistics and sales management. Secondly, in order to make full use of the historical and cultural connotation of tea culture, and combine it with the thinking and methods of network marketing, the cultural marketing activities of tea products are carried out more and more on the Internet. Tea companies, for example, work with Alibaba's Taobao platform and JD's online store. Promote and market products in the "Double 11" and "618" and other major online marketing nodes, such as the free purchase of tea products in the national environmental protection and cultural tourism projects. For example, tea enterprises can also carry out main V network and wechat marketing and soft text release with well-known enterprises on network platforms such as Weibo and wechat, so as to improve product visibility and reputation. To this end, tea enterprises need to establish a team of marketing and management talents to better integrate into the "Internet +" era and achieve more sustainable and healthy development.

4.2 Good product management and timely completion of market feedback.

Advertising and sales play an important role in the development and construction of enterprises, and the construction of corporate image and product sales depends on the achievements of public relations. For tea enterprises, they should not only ensure the quality and diversity of the products themselves, but also do a good job in public relations and advertising to deepen the company's public relations content. To deepen the advertising promotion content, enterprises can take traditional culture as the entry point, take tea culture as the innovative advertising promotion object, rely on cultural subtle differences in various promotional activities, and play an important role in attracting sales through cultural advertising promotion activities. Moreover, at this stage of corporate development, this promotion is an effective practice because it embraces and promotes a traditional culture that should be valued and promoted in the development of the modern tea industry. In fact, due to geographical restrictions, most tea companies have very limited tea sales channels. Therefore, tea enterprises need to pay attention to online sales, increase the investment in online sales and brand promotion, create online and online attraction, and expand the tea sales channels. In the field of online sales, enterprises should not only make use of the popularization and ease of use of network platform applications, but also strive to strengthen after-sales service to avoid a negative impact on the transmission because customers think of poor product quality. In addition, the after-sales service platform is also a good channel for enterprises to listen to consumer needs, analyze and evaluate the market direction for product demand. In addition, tea companies can develop a range of healthy tea and soft drinks according to the time and personal needs of consumers to meet the needs of consumers of all ages, while improving their economic benefits and the added value of tea. Tea enterprises should pay attention to the traceability of products, strengthen the quality control and monitoring of tea products, especially to meet the international standards, they should strictly control the production process of tea products, and ensure that the produced tea products can meet the current public needs through the continuous improvement of tea varieties. Tea is a life-enhancing drink widely used in daily life, and in order to give tea products a greater market share and status, it is necessary to ensure that they are recognized and accepted by the public. The cultivation of tea has a few years. Only by further developing the traditional tea cultivation concept, promoting modern cultivation methods and introducing innovative varieties, can the yield, quality star and taste of tea be significantly improved. As for the tea companies themselves, whether individual trading companies or related production companies, they should strictly control the tea planting process, improve the awareness of food safety, so that the public can taste and drink tea with ease.

4.3 Strengthen personnel management and strengthen employees' professional quality.

Both the corporate governance structure and the different elements related to the business need to be optimized from the perspective of modern management to integrate several elements and create a modern business mechanism that adapts to the development of The Times. Because today's tea companies really focus on the relevant elements, and these elements are different, from the company itself of the financing to the optimization of the business process, all need to be realized by the employees. Therefore, strengthening the management of employees is the inevitable choice for the sustainable development of tea companies. The whole process of tea production and development has high requirements on the experience, ability and professional knowledge of the labor force, which requires the employees of tea enterprises to have excellent professional quality. Only through continuous learning and training can the professional quality be essentially improved. Therefore, tea companies need to give employees enough opportunities to enrich their professional vegetarian burial through the Internet, meetings, video or communication meetings according to their own characteristics. Only by focusing on building a professional staff team can we ensure that tea companies compete better in the market.

CONCLUSIONS

5.1 Conclusion.

To sum up, in the era of big data, tea companies need to develop their own sustainability potential. Companies need to innovate their management models to maximize their business value and avoid being eliminated by the market in a global economy. Tea companies fundamentally need to be able to process information, understand current market trends and consumer needs, and change production accordingly to maximize profits for their products. Industry leaders need to understand the opportunities and challenges of the development of tea industry in the era of big data, change the traditional way of thinking and management mode, make the management mode adapt to the development of The Times, and promote the development of tea industry.

5.2 Suggestions.

Through the above analysis, we find that although the overall management mode of tea enterprises has a certain lag, and the work efficiency needs to be further improved, these problems can be alleviated to a certain extent by using the information management platform in the current big data era. Next, the tea enterprises need to further increase investment, the introduction of third-party information technology management platform and industry internal sharing information management platform, the upstream production and processing of the tea factory into the overall management mode, the production and operation and staff management for overall management, overall optimization. On this basis, to further innovate the current communication, advertising and marketing channels, with the help of diversified communication media, to achieve more potential consumers to obtain the relevant product information, so as to expand the sales market, to obtain more marketing profits, to achieve the maximum economic benefits. In the next step, the development of tea enterprises is still still a long way to go, but with the help of the information management platform, we can certainly achieve more efficient and more rapid development. Information management and big data platform are the important tool support in the current development process of all walks of life, and also the only way for the development of The Times. Only by complying with the development of The Times, can we realize the improvement of economic benefits with the tide of The Times. Therefore, the management and development of tea enterprises are necessary to be highly combined with the information platform in the era of big data to achieve further upgrading and optimization.

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INNOVATION OF PERFORMANCE MANAGEMENT FOR MIDDLE-SIZED MANUFACTURING ENTERPRISE-BASED ON ENABLING EMPLOYEE IN THE ERA OF BIG DATA

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ABSTRACT

The scale and number of domestic enterprises have a great increase, especially middle- sized enterprises with the rapid development of China's economy. Which employees number around 500-1000 headcounts. It has been the main economic pillar so far in China. Especially manufacturing enterprise, it is the mainstay of industry.
Currently, enterprises face more and more internal and external competitive environment come over VUCA (unstable, uncertain, complex, ambiguous), accompanied by the increase of organizational environment uncertainty, which requires enterprises to change constantly Innovation. In the face of fierce competition in domestic and abroad, enterprises should not only innovate in technology, but also need to improve their management level, keep pace with times and improve their comprehensive strength.

Human resource is the most important resource in each organization. More and more leaders notice this recently. Traditional management style is not suitable now, how to better enable employees, how to develop the maximum potential of our staff is the key problem for current period. Performance management is one good tool to support the enterprise to achieve the goal and strategy. It has been serviced in China for long time, but most middle-sized companies do use it formality in a long time. There are some problems when doing performance appraisal especially in VUCA era. Some employees do not know well of the company's strategy and long-term plan, just focus on their own job and KPIs, they cannot understand the key factors that influence the company. Normally the employee's KPI result is good, but the company's performance is not good. With big data era's coming, performance management still need to innovation, tradition popular performance tool is KPI, but now with younger generation join the workforce, they need more freedom and better involved in company's development, the company need enable employees, bring out the best of employees. enable is much better than control. OKR is one system that focus on encourage employees that manage them. Big data will help the enterprise set up a management net internal, link all key position employees with the company's goal, empower employees to focus on company's & personal development. It is a mutually reinforcing process.

This article is target to analysis advantage and disadvantage of the popular performance method and enable employee method. According to the current situation and give the suggestion to China middle-sized manufacturing enterprise. How to better use performance system to support the company management, how to keep all key positions get the key data and involved. How to better enable and motivate employees.

Keywords : middle-sized enterprise, performance management, enable employee, big data

INTRODUCTION

1.1 Research background

Most enterprise are using performance management internal, like BSC, 360-degree appraisal system, KPI, OKR etc. and most company are facing lots of problems for the performance management. And most leaders do not have performance management system, they just doing the assessment work. It's difficult to motivate employees and hard for internal fair. In past several years, most companies were using KPI, it can extract the KPI easily according to employees' job and try to link the company's KPI, but sometimes cannot support all strategy, because it is an up-down method. the KPI is normally below six items, cannot cover so many areas. Employees are unable to participate voluntarily. When calculate the KPI result, tradition enterprises cannot calculate logically, each department or each employee has their own method. After several years' experience they found that there is a problem that most employees' KPI was linked with their job description, most times their KPI result is good, but the company's result is not so good.

Recent years, OKR is using by more and more enterprises, they are totally different method. During the performance management, some leaders also noticed that some employees cannot figure out the OKRs if no KPIs are listed.

So far, more and more company are using big data during business running. But for middle-sized manufacturing enterprise was far behind the innovation. Because this kind of company is running in tradition way and difficult to start innovation, and another reason is that employees' level is too different and has a big gap. But with the rapid change and rat race environment, the leaders notice that if no innovation in management, the company will not survive. In the past two to three years, big data was a good tool to support the business operation, is it can support the management?
With VUCA era's coming and for 00 generation enter the workforce, there is big challenge for the management team to manage the younger generation. How to enable them to better contribute to the company running, how to motivate them and manage them is a problem in hand.

1.2 Problem statement

Medium-sized manufacturing enterprises have unique characteristics, facing more challenge internal performance management. Summary as below:

The number of employees and the number of positions is large.

Five types of personnel layouts: management members, admin. Function, supply chain function, R&D function, manufacturing function.

The overall quality and education background of employees varies greatly. May from doctor level to middle school level.

The management focus of each link is very different.

The foundation of enterprise management is weak.

In middle-sized manufacturing enterprise, there are some problems for management internal.

Lack of systematic and comprehensive top-level thinking and strategic design.

Lack of system KPI setting logic and tracking and sharing.

With younger generation’s joining, difficult to manage them and motivate them.

Employees cannot be enabled fluently since they cannot really feel that be one part of company.

1.3 Research Significance

Middle-sized manufacturing enterprise is main economy part in China. The management level is needed to improve to accomplish higher level target. Human resource is the most important resource in enterprise, human resource management is very different from other asset management, which is related to competition for enterprise. Performance management innovation is the focus of enterprise development, directly affect the economic benefits of enterprises.

Most problems internal are management problem. Performance management system is the net link the company and employees. Only when employees are fully involved in company development, really let them know the strategy and each key factors, they will know the direction of company. Enable employee is the trend of management, only if the employees are empowered, they will have the feeling of ownership, then they will dedicate into the company’s development.

Innovation of performance management system will change the defects existing in traditional resource management, clarify the importance of human resource management, Collaborative symbiosis is a trend in future, enable employees is the key factor for company development. Performance management is a good tool to support this. And support middle-sized manufacturing enterprise to a good development. the enterprise can keep the benign development, innovation to bring more and better products and services for the society, Better implement the "Creative China" strategy.

LITERATURE REVIEW

2.1 Performance Management

2.1.1 Performance Management

Performance management is praised by many management experts as the "holy grail" of management. Refers to a series of closed-loop processes in which enterprises or organizations evaluate employees' work content and work objectives within a certain time range, to improve enterprise competitiveness and employees' ability and motivate employees' work results. Performance management is considered by human resource experts to be an effective way to guide employees' work and achieve goals, because its goal is to mobilize employees' enthusiasm and enthusiasm for the realization of goals (He qingjun, 2015).

Performance management is the performance of individuals and groups, and the two are inseparable. Individuals accomplish their work or achieve their goals so that the group may achieve their goals. Performance management can maximize the use of resources in enterprises, which is the key for enterprises to gain a foothold in fierce competition (Chu Rongyue, 2018).

In the specific operation and practice of performance management, performance management is a closed-loop system of cyclic and sustainable development (Yang Yang, 2013). Peter Drucker first proposed in The Practice of Management that performance management should start from setting goals, evaluate the completion of goals as intermediate nodes, and end with performance feedback (Peter Drucker, 2006). Overall, the above stages can also be summarized into PDCA cycle, which can be subdivided into performance planning, performance communication, data analysis, performance evaluation, application of performance results, personnel adjustment, performance feedback, etc. (Sun Zonghu, 2014).

At present, there are still many beginners in human resources who think performance management is performance appraisal. Although there are only two words of difference, performance management and performance appraisal are different, and there are differences in the content, operation and basis involved. Performance management is a system to ensure that the enterprise achieves the established goals and missions in the best way and method in the form of management, and to achieve the performance and strategic goals of the department and the organization by improving the performance and ability of employees (Li Xiaohong, 2016). And performance appraisal refers to the process of using certain scientific methods to evaluate the completion of work tasks and the performance of work and feedback the evaluation results to employees. From the perspective of their relationship, performance appraisal is the core content of performance management, but performance management is not limited to performance appraisal (Li Li, 2010).

Performance management system is a continuous process for managers and staff at all levels in an enterprise to design performance plans, performance guidance, performance evaluation, performance management application and continuous performance improvement to achieve the goals of the enterprise (Lu Xiongwen, 2013). In the implementation of performance management, it is not the business of a certain department, but the business of all the management and employees. Each department should perform its own duties and give full play to its management functions (Zhang Tingting, 2009).

Performance communication runs through the whole process of performance management, and every link of performance management in enterprises needs to be completed through full communication. Therefore, performance communication plays the role of lubricant, thickener, and catalyst in performance management (Yu Jing, Liu Bo, 2019). The significance of performance communication and guidance in performance management lies in the "gap" process to make both sides of the assessment achieve the effect of "communication" and finally reach a consensus (Kong Xiangmin, 2018). So, performance communication is also very important in performance management. In performance management, enterprise training and publicity are also of great significance. All employees should fully understand the performance management system and support the development of this work.

Performance management is a key part for human resource function, it will link all parts of other human resource functions. Before there is no whole data management in HR, after big data era is coming, it can realize this supporting function, establish intelligent assessment network (Liao Dongxian, 2022). Big data can support the performance management system providing the dynamic analysis and continuous improvement (Liu Xuanhui, Zhong Dingguo, 2021). this is more important in business running, will support the executive team make and change the direction accordingly.

2.1.2 KPI (Key Performance Indicator) Method

KPI (key Performance Indicator) is an assessment method put forward by some professional managers in the 1980s. It means that the performance management of the organization should be consistent with the strategic goals of the organization, and the work behavior and goals should be consistent with the goals of the organization, which produces key performance indicators. The core of this method is to determine the operational work indicators of departments and employees after decomposing, calculating, and extracting the strategic goals of enterprises (Qi Hui, 2018).

KPI is the quantification of the final business output of the position with key and obvious indicators, setting the final expectation. In the development of staff assessment items, not all the work content of the staff is included in the assessment but select some key work responsibilities closely related to the strategic goals of the organization as assessment items, so that the work of the staff has more focus and direction. KPI is an operational tactical target output after layer decomposition of strategic goals, and a monitoring dashboard of the implementation effect of strategic decisions (Liu Huiping, JI Jinwei, 2016).

KPI can play the overall role of performance appraisal in promoting the realization of organizational goals. It also means a new management mode and method derived from the practice of performance management (Wang Ang, 2011). The goal of KPI is to fully clarify the performance of the organization, improve performance methods, reduce the concerns and constraints of employees, reduce the cost of performance management, improve efficiency, and benefit the core competitiveness of the organization (Shao Jingang, 2013).

But KPI has some disadvantages after several years' experience. 1) In KPI performance review, the company extracted key performance indicators, but once they are implemented, because the key factor is too many and not align to each department. 2) KPI will lead the examiners into a mechanical way of assessment. Because all employees will only focus on KPI result but ignore other important works. 3) Because over care about gain and loss, the manager does not care about things that benefit the organization beyond KPIs. And as we get more and more indicators, Assessments can easily become mere formalities. 4) Last one is KPI is not suitable for all positions like supporting functions and administration department, especially for research and development department, it needs long research and development cycle, involve many people in different department.

2.1.3 OKR (Objectives and Key Results) Method

OKR was developed by Intel founder Andy Grove, is a set of management tools and methods for identifying and tracking Objectives and their achievement. OKR was introduced to China in 2014. After 2015, Companies such as Baidu, Huawei gradually used and promoted OKR. OKR is based on the popularization of humanistic management theory, management means of flexible and produced a management by objectives (Huang hongsheng, 2019).

The main goal of OKR is to identify the "goals" of the company and the team and to identify measurable "key results" for achieving each goal. A book on OKR defines OKR as "an important framework for thinking and an evolving discipline designed to ensure that employees work together and focus on making measurable contributions."

OKR performance management differs from KPI and BSC in major ways in, mainly by the enterprise overall planning to clarify the overall goal, specific key actions and problems fruit is determined by the grass-roots staff themselves. OKR represents a commitment and agreement of time and energy between employees and company, especially to prevent design the phenomenon of setting goals and then putting them on the back burner (Zhang Pengyue, 2020). When formulating the OKR, the employee must pay attention to your own situation and company leadership, colleagues, or family members strengthen communication, and then gradually develop more challenging related goals. In this process, employees can not only realize independent thinking, but also achieve their own goals Gradually intensified, will be their work enthusiasm and enthusiasm fully mobilized.

Under OKR performance management, the position of employees is no longer passive accept the instructions issued by the enterprise, blindly complete all kinds of data, but in the enterprise after the target is set by the industry, the employee gradually develops the actual response of different stages according to the target should be key behaviors and results to help employees enhance their sense of purpose, will employees individual value fully reflects, develops the innovation consciousness of the staff deeply (Wu Xiuhong, 2017).

But OKR has its disadvantages, the core value of OKR as a member of the company is to encourage employees to achieve autonomy and effective self-management. But not every department and level of a company can achieve self-consciousness and effective self-management. Second is OKR normally not link with employees' incentive and encourage, make lead to less passion of employee.

2.2 Enable Employee

Enable employee is a new concept in recent years. For organizations, it is important to value creativity, insight, and a strong sense of the external environment as an important treasure. And "empowerment" is an important means to stimulate the potential of people. Through the self-empowerment of employees, it can stimulate their sense of participation and mobilize their sense of ownership, so that employees can voluntarily and strive to share the achievements and responsibilities with the enterprise (Feng renmin, Zhu Jiangyan, Feng yuting, 2020). However, "empower" employees cannot be seen as a single task but needs to be underpinned by a complex system that enables employees to think, make decisions, act, and control the quality of work independently, leaving employees to their own destinies. Therefore, the enterprise must also pay attention to all staff, especially managers at all levels.

In the digital era, enterprises and employees are in a state of symbiosis not just employer and employee relationship (Zhang Shuyu, Zhang juncheng, 2021). The main factor for enabling employee is ensuring information is shared and staff receive the necessary support timely. Digital information sharing across levels and departments can greatly enhance employee participation and better stimulate employees' potential (Shan Yu, Xu Hui, Zhou Lianxi, Zhou Qi, 2021).

In digital era, cross-border mobility of employees and diversified "jobs" is more and more common, performance management should design a diversified and flexible contract system, which not only ensures that highly creative talents can be fully attracted, but also enables them to have a sense of responsibility and fully realize organizational goals.

To enable employees in time, the top-down single information transmission mechanism is no longer applicable. What enterprises should establish is real-time shared information transmission. If the enterprise operation, development and change related information, as soon as possible to the maximum allowable scope of the company known to all staff. Don't pay too much attention to let the employees know the information still can cause everyone's upset, because this must go through the process, but let staff know as soon as possible, and communication and explanation of its enterprises, instead more easily accepted by employees, make them aware of themselves as a member of the enterprise, if they expect to work in the enterprise, can make its voluntary work. The same desire, together hand in hand forward.

RESEARCH METHODOLOGY

This research is mainly documentary research, by literature review the related method and advantage and disadvantage analysis of the KPI and OKR tool, the employee management trend is enabling employees, this paper also lists the feature of middle-sized manufacturing enterprise. To find out the key factors that will influence enable employees and performance management.

CONCLUTION

According to the above analysis, this paper found that research of innovation of performance management under the background of big data is good to explore. This paper discusses the essence of performance management to discuss and think that promoting talent development and enabling employees is the key point of performance management.

OKR and KPI as the good performance method, have their own advantage and disadvantage. OKR covers the whole process of performance management, while the current KPI only covers part of performance management. OKR and KPI are complementary to each other. Only by integrating innovation and complementing each other can enterprises adapt to the performance management in the big data era that emphasizes creativity and flexibility.

In the era of big data, more and more attention has been paid to the importance of data. Performance information use theory provides a theoretical basis for the combination of performance management and big data. Through to strengthen the use of performance information and realize the strategic role of performance management Ability, management function and development function, let performance management return to people, the goal of talent development is to correct the current stage of performance management, is an effective way to solve the problem.

For the feature of middle-sized manufacturing enterprise, OKR combined KPI will be more suitable. Comparing and analysing the experience of KPI and OKR, this paper constructs build a simple performance management thinking model integrating OKR and KPI.

1. OKR and KPI correspond to different positions.
2. Use OKR for long term strategy, KPI for current business operation.
3. Use big data set up a performance management network internal.
4. Big data network drives all KPIs transparency.
5. Big data support communication. Set up enable employee environment and culture.

RECOMMENDATION

This paper is a brief review and analysis for the performance management perspective based on the big data background. Performance management is a system management not a concept. It will throughout the whole human resource management in enterprise. Like company strategy to ground, each employee's job description, high potential employee selection, employee training plan setting, salary increase regulation, bonus alignment etc. Middle-sized manufacturing enterprise is more complicated internal. The overall level of employees varies greatly, and department functions are broader. Younger generation will be the main workforce in coming years, their characteristics is so different with older generation. OKR & KPI combined system in one company still need further investigation and analysis.
Collaborative symbiosis between company and employees is a trend, enable employee in big data era is a necessary and trend, so far there is not a mature concept. it's need to further analysis by detail data and survey.
Use big data setting up an internal net is complicated and system work. Need human capital and working capital. The change of management mode is dynamic evolution and system plan. Should figure out the best solution, and worth long term sustained attention in future.

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RESEARCH ON CURRENT SITUATION AND INNOVATION MANAGEMENT OF TENCENT VIDEO MARKETING UNDER NEW MEDIA ENVIRONMENT

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ABSTRACT

This paper takes the new media as the background and the marketing strategy of Tencent Video, the pioneer of the video website industry, as the research target, and studies the two strategies of user differentiation and content optimization in order to provide reference for the video website marketing. It is believed that in the future development, Tencent Video will continue to make efforts in personalized customization, high-quality product experience, diversified content communication and other aspects, provide audiences with higher quality content products, bring inspiration and innovation for the whole video website industry, and better serve the society.

Keywords: New media environment; Tencent Video; The marketing strategy

INTRODUCTION

1. Development status of Tencent Video

Since 2004, the domestic video website has experienced continuous selection, adjustment and transformation, after the survivors of the sweep into the posing development are still positive in their exploration and development, in order to out of existence and development of a differentiated road, tencent video from the early simplex technology platform, to today's new media platform, working within the individual site of action, Tencent Video could even develop into an all-media platform in the future. Tencent Video is not a pure media attribute from the beginning of its birth. In the market economy environment, new media represented by Tencent Video website must support themselves and give full play to their advantages in industrial operation. With the expansion of the scale of video website industry, in addition to the traditional cost of bandwidth, copyright and other costs, Tencent video websites are also invested enormous content production cost, human resource cost and marketing costs, tencent video sites must be in a competitive market environment and the increasingly tighter policy environment for more effective profit model, bring more economic benefits, to maintain its benign operation, provide the audience with the rich and colorful content of high quality products, Enrich social and cultural life and realize the social value that video websites should have in the new media era. At present, Tencent video mainly faces three dilemmas: market environment, policy environment and profit model.

1.1 Competitive market environment

In June 2018, iUserTracker released the ranking of Chinese Netizens' online browsing time, and comprehensive video service ranked first with the monthly average browsing market of 1.69 billion hours. Network video service is still the most popular Internet service and gathers a large number of user traffic. ComScore released the ranking of monthly views of Video websites in China in March 2018. Heyi Group after the merger of Youku Tudou is in the leading position, temporarily ranking the top in the industry with 5.4 million views. Tencent Video has made continuous efforts in recent years, followed by 5.36 million views, depending on Tencent's strong strength. Other websites such as LeEco, IQiyi and Sohu have also achieved good results.

By the end of 2021, most of the established video startups that have grown up with angel funding have gone through several rounds of tie-ups with capital. The rapid development of economy has brought a lot of investment capital for video websites. Various commercial video websites take advantage of the situation and want to take the lead in the fierce market competition and realize the economic value of commercial media.

1.2 Tightening policy environment

China's economic system is a market economic system under the socialist system, that is to say, China's economic development is inseparable from the state's regulation and control. Domestic video sites early copyright issues is restricting the benign development of the site, simply rely on market forces cannot solve these problems quickly and efficiently, this time also need the government to guide, through means such as industrial policy integration of market allocation of resources, constraints, and the management of relevant industry and industry the main behavior, So as to ensure the benign development of industry and social and cultural security, but also to ensure the full popularization of information technology and citizens' information rights.

Throughout the formulation and promulgation of relevant industry policies of video websites in China, the existing policies tend to be mainly restrictive provisions, supplemented by encouraging policies. The state Administration of Radio, Film and Television and other policy-making departments have strict control and restriction on the development subjects, development channels and website contents of China's video websites. However, under the background of deepening domestic market economy and deepening industrial reform, the mandatory and restrictive policies are a shackle to the development of Tencent video website.

PROBLEMS IN THE DEVELOPMENT OF TENCENT VIDEO

2.1 Outdated marketing methods

In terms of advertising marketing, the first is that the long advertisement at the beginning and end of the credits will lead to the aversion of viewers; the second is that Tencent video website has recently added advertisements in programs and movies, and also interjects advertisements in the process of users watching movies. Inserting advertisements in the process of movie playing will bring great dissatisfaction to users, especially when users see the most interesting story in the program, and then suddenly inserting advertisements will directly reduce users' enthusiasm and interest, and at the same time, will bring users a very bad user experience. Worse, it will drive users to other video sites, reducing user traffic.

2.2 Single means of profit

Tencent video website profit can benefit from two aspects: on the one hand, advertisers name and sponsorship, on the other hand, users join the membership mechanism.

During the development of China's video industry, some major video websites have been losing money every year. In the first half of 2017, only Tencent video website was profitable, but why is Tencent video website profitable? Most of the resources come from original videos of homemade dramas. However, if it only relies on the video resources of Hunan SATELLITE TV and a small amount of self-made original videos, it will not have its competitive advantages and broad development prospects.

In order to make video websites better develop and bring profits, it is necessary to create more profit models according to the two profit methods, namely advertising and membership system.

2.3 Lack of interactive channels

There are few offline activities on Tencent's video website, and the few activities that do not attract attention. The popular homemade dramas on Tencent's video website are only a few offline activities, while other variety shows and online movies and TV dramas do not have any offline activities. In addition to the traditional offline press conference and interactive activities with fans, Tencent Video website does not hold offline celebrity meetings and concerts, nor does it hold frequent interactive activities with fans.

2.4 Lack of precision marketing

Personalized push may not seem like an important marketing approach, but once implemented, it will push users to the products they want, which will undoubtedly have a good effect. For example, jingdong and Taobao will inform users of the updates of their activities through emails, system messages and SMS messages. According to big data, JINGdong and Taobao will recommend relevant or similar products to users based on their browsing, collecting or store records and purchasing records. When pushing products, they should meet users' needs and preferences, so that users are more likely to buy. If the website does not recommend products that users want, but recommends products to users randomly, then the website will recommend products that users do not like or do not need. Over time, users will hate this recommendation method and will block the reception of all recommended information. Tencent video website has a push function, but it only provides the latest video information, which cannot achieve accurate personalized push information like JINGdong and Tmall. However, this push method does not play its maximum role.

STRATEGIES TO IMPROVE TENCENT VIDEO MARKETING IN THE NEW MEDIA ENVIRONMENT

3.1 Adhere to the path of precision marketing

The 21st century is the era of brand, and media management should also gradually enter the stage of brand competition, whether traditional TV media or emerging video websites, in order to gain a leading position in the market competition, we must establish our own brand advantages. Through brand competition, powerful brand communication can better win the goodwill and love of the target audience, and also better enhance the brand equity of the enterprise. Although, China's video website has gone through 7 years, but is still a new force in the media industry, with the increasing competition in the industry and the changing market environment, Tencent video must innovate and upgrade the business model, start their own brand, and adhere to the brand management line.

3.2 Establish a scientific copyright management system

As a new force of the traditional video industry, Tencent Video in the treatment of video content legalization, and other websites take not exactly the same way. First of all, actively cooperate with copyright owners, and strive to achieve simultaneous broadcast of popular dramas with TV, or even exclusive network broadcast or premiere. For example, in 2015, happy Century sold its premiere rights to Hunan SATELLITE TV and Tencent Video respectively. Thus, on the basis of the accumulation of a large number of users, Tencent Video and Hunan TV broadcast almost simultaneously, which also made the play get wide attention in different channels and platforms. The second is to establish the copyright cooperation management system, which means to set the rights for the copyright owner. Through the corresponding entrance, the copyright owner can ask the video website to handle the copyright content, and the copyright owner can upload, delete the video, and even share the advertising. The system is based on extensive cooperation and can clean up infringing videos on the site. This move promoted the legalization process of video websites to a large extent, and at the same time strongly supported high-quality original content in China.

3.3 Vigorously support original content and explore high-quality content

The gradual realization of legalization puts pressure on the operating cost of China's video websites. As we all know, people are not optimistic about the profit of video website. Therefore, how to promote advertising profit quickly become the current video site operators of the top priority. The idea of making original videos and seeking profits from them originated from the Internet spoof short film "A murder caused by steamed buns" and the rapid popularity of "the boy in the back dormitory". With the rapid development of Internet, more and more grassroots creative video fast emerging, a series of grassroots wisdom and creative video quickly on the Internet, its hits than even the hit drama copyright is expensive, even to a certain extent, and the full name of a heated discussion, its interactive communications features more obvious, effect is amazing. This phenomenon has stimulated the emergence of more and more high-quality original videos, and a large number of investors and advertisers have also seen the high returns brought by the low cost, and have provided sponsorship to obtain greater income. On March 6, 2015, Tencent video announced the joint domestic hundreds of content providers, including Wanhe Tianyi, Xudu Bar, violent comics, etc., to start the "Awakening of Zhe plan", Tencent video plan will focus on supporting quality PGC project in 2015, so as to build the largest original video platform in the whole network, It can quickly break through the upstream and downstream industry chain of PGC industry, so as to achieve a win-win content ecology of the industry. This one move also is explaining, the video website of home supports greatly original is general trend.

Along with the original video increase gradually, but the quality of the original short mass is worrying, as uneven quality of audit control is lax and the original content, led to the current market needs to be improved, the appreciation of the original video of visibility and this is also the major issues facing the tencent video, how to pursuit, improve the overall quality, is currently the tencent video need to solve the problem.

3.4 Activate fan economy and build exclusive brand

As emerging smart phones such as iPhone and Samsung gradually occupy the mainstream consumer market in China, domestic mobile phones represented by Huawei and Lenovo have also launched 4G services. And mobile video brings unlimited business opportunities, but also for Tencent video operation to provide a new idea. Through this way of innovation and rapid sharing mechanism, netizens can never leave home, don't even need to open a computer, only by mobile phone can share wonderful content to the world, and through a lot of interaction, can also be the fastest to find like-minded partners, a strong sense of belonging, thus greatly improve the user viscosity, Strengthened the brand loyalty of video website.

CONCLUSIONS AND PROSPECTS

This paper summarizes and analyzes the main marketing strategies of Tencent Video, which has certain reference significance for other video websites in the industry to develop relevant strategies in the future. But due to tencent video is in rapid development stage, its marketing strategies are also constantly update and adjust, by space, time and the author of the limited ability, can only capture the most value from the large amount of information content, unable to end all the arguments, in this paper is still inadequate, remains to be further study later, It is hoped that the research topic of this paper can trigger more scholars to think positively about the innovation strategy of network video marketing mode, and put forward solutions to the existing problems in this field, so as to further play the marketing advantages of network video and optimize the marketing effect.

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ANALYSIS ON DIGITAL TRANSFORMATION OF ELECTRIC POWER INDUSTRY ENTERPRISES

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ABSTRACT

In the wave of the new generation of scientific and technological revolution and industrial transformation, the development of digital economy has become an important means to promote high-quality economic development. At the annual work conference, senior leaders of State Grid and China Southern Power Grid accurately grasped the changes of domestic and foreign situations and proposed the working ideas of adhering to the innovation-driven development strategy and vigorously promoting the transformation and upgrading of enterprises. Digital transformation is an important measure to accelerate the cultivation of new power for the reform and development of electric power enterprises.
Keywords: new situation; Power grid enterprises; Digital transformation; Implementation strategy

INTRODUCTION

At present, a new round of scientific and technological revolution is deeply integrated with industrial transformation, and the new generation of information technology represented by artificial intelligence, Internet of Things, blockchain and big data is accelerating the breakthrough and application, which has exerted a profound influence on the development of energy and electricity in society. The fourth Plenary Session of the 19th CPC Central Committee included data as a "factor of production" in the distribution system for the first time, and defined that data elements determine remuneration by contribution, raising the role of big data in intellectual property protection and business application to a new level. Industrial big data resources system, put forward to 2025 fusion system, industrial system and governance system preliminary established, formed from the data sharing, data technology, data fusion is applied to the data management of closed loop development model, to make the industrial data as a key element to promote the development of high quality and value of innovation power play to their potential.

INEVITABILITY OF DIGITAL TRANSFORMATION OF POWER GRID ENTERPRISES UNDER THE NEW SITUATION

Under the new situation, the integrated application of blockchain, edge computing, Internet of Things, 5g and other technologies provides a solution for the open sharing and transaction of large-scale low-cost data. On the premise of ensuring effective data fusion, blockchain technology solves the problem that data is easy to be illegally copied and remote value fusion. The Internet and 5G solve the problems of low cost, low delay, low power consumption and large capacity data acquisition. As far as the energy industry is concerned, great changes have taken place with the reform of the electric power system and the development of new technologies such as distributed energy, power grid and energy storage. In particular, the price competition of renewable energy power generation is becoming increasingly fierce. From being unimportant in the past to decisive in the future, the uncertainty of the influence of a large number of distributed energy grid-connected power generation on the stability of power grid is increasing, which brings challenges to power grid technology and operation experience. According to the external environment, the electric power industry has changed from a single industry to a complex multi-level ecological industry, and the digital transformation of power grid enterprises is the process of the transformation of power grid enterprises. With the development of technology and the change of environment, the digital transformation of power grid enterprises is inevitable.

THE SIGNIFICANCE OF DIGITAL TRANSFORMATION OF ELECTRIC POWER ENTERPRISES UNDER THE NEW SITUATION

(1) Electric power digital transformation is imperative

Under the "dual carbon" target, the power industry is changing its power structure from coal based high-carbon energy to wind power, photovoltaic and other clean energy based low-carbon energy. However, new energy generation has the characteristics of randomness, volatility and intermittency, which will affect the balance adjustment of the existing power system and the stable operation of the power grid after large-scale development and grid connection. With the construction of new energy in full swing, the construction of new power system is imminent. Different from the traditional power grid dominated by one-way and step transmission, the power grid state of the new power system is composed of ac-DC hybrid large power grid, micro-power grid, local DC power grid and energy Internet with adjustable load. The power grid structure has also been transformed from the one-way hierarchical structure of "transmission and distribution" to the multi-directional hybrid hierarchical structure of "transmission and distribution + micro-grid". In addition, the operation of the new power system will also be transformed from the real-time source-load balance mode of "source with load" and the integrated operation control mode of large power grid to the incomplete real-time source-load balance mode of "cooperative interaction of source network with load and storage" and the control mode of cooperative operation of large power grid and micro power grid. In this case, digital power grid is the best form to carry the new power system.

By building a fusion of cloud computing, big data, Internet and other new ICT technology of digital power grid, the form with data as the core factors of production, can be used to promote energy, wind energy, solar energy and other energy flow and information flow, the depth of the fusion of digital technology and business, management, the depth of the fusion energy enterprises, forming a high diversity

Flexible power grid, to meet a high proportion of new energy, a high proportion of power electronic equipment needs.

If the construction of digital power grid can help power enterprises build new power system, realize the transformation to energy Internet, and then enable the "double carbon" goal; The integrated energy transformation can help electric power enterprises extend from the traditional power supply end to the user end, realize the transformation to the integrated energy service, and improve the energy efficiency and reduce the energy cost through the implementation of digital equipment and solutions.

In the electric power enterprise to the comprehensive transformation of energy services, with the aid of digital technology in data mining, can better integrate diversified energy and differentiated demand, promote energy flow, information flow and data flow efficiently fusion, connectivity between different energy category, promote energy by "complanation" single energy supply to the vertical

Transformation of integrated energy supply. In the future, whoever takes the lead in innovating energy production, supply and sales models through digital transformation and rapidly popularizing them will be able to control the "dominant power" of the market.

(2) Use data to understand customer needs

Under the background of Internet +, the power grid marketing mode has changed. The new power grid marketing mode based on big data is used to better track user demand, so as to build a more perfect power system and improve the effectiveness of power grid enterprises in facing customer demand. To do a good job in the innovation of the electric power enterprise, also must pay attention to every customer's demand, because the customer base is different, need is different also, so employees must understand the needs of customers, only by understanding customer needs, according to customer requirements, the electric power marketing innovation, believe that electric power marketing can better meet the diverse needs of customers, and promote the development of electric power enterprises.

(3) digitization to integrate resources

With the continuous popularization of the Internet, the application of big data in people's life is more and more extensive, using big data integration of power system resources has become an important means of power enterprise innovation. With the help of the Internet, big data and other related technologies, power employees can quickly collect a large number of data, can clearly understand the basic situation of enterprises and customers, after understanding the relevant information, can also use technology to remind customers, reduce the workload of employees. With the help of digital technology, electric power enterprises can also establish an exclusive database for each user according to the needs of users, so as to serve users more conveniently and quickly.

(4) Using digitization to improve the work efficiency of enterprises

The construction of digital technology support platform and capability system for power grid enterprises, and the deep integration of digital technology and power grid are the key for enterprises to realize digital transformation. To a new generation of ICT (information and communication technology formed by the combination of new technologies) to implement digital description of equipment, and the business, can perceive and comprehensive online, make digital techniques throughout the course of enterprise management, the formation of a holographic awareness in operation and resource sharing effective, safe and economic operation and the decision-making accurate intelligent digital power grid, Promote the transformation of enterprises into a "trinity" and make contributions to building a world-class enterprise for China Southern Power Grid. At the same time, the digital transformation of power grid promotes the reform of enterprise operation mode and improves the work efficiency of enterprise employees.

IMPLEMENTATION STRATEGY OF DIGITAL TRANSFORMATION OF POWER GRID ENTERPRISES UNDER THE NEW SITUATION

(1)Accelerate the construction of digital talents in enterprises

Digital technology can also enable existing large enterprises to use existing customers, infrastructure or technology to innovate across industries, such as power grid companies into insurance and new energy vehicles. For electric power enterprises, the establishment of electric power data platform has a unique advantage, how to effectively use these data content is of great significance. Power grid enterprises not only need a group of talents with information processing ability, but also need a professional talent team who can realize power grid digitization. Introducing digital talents into enterprises can not only bring huge benefits to enterprises, but also greatly improve their efficiency. At the same time, it is necessary to strengthen the technical training for employees, encourage them to continuously learn the professional knowledge of power grid and digital knowledge, effectively apply digitalization to power grid enterprises, and promote the long-term healthy development of power grid enterprises.

(2) Effectively mining and integrating enterprise data

The energy business model of the future will rely more on data and digital technologies and continue to evolve in a clean, efficient and distributed direction. At present, some domestic enterprises have carried out some successful exploration of digital transformation, and achieved certain results, and have advanced practical experience in data perception, business optimization and other aspects, but the value mining of data resources is still in a relatively primary stage. Also because of this, the world of power grid enterprises has just opened, there are broader world waiting for us to explore.

SUMMARIZES

With the advent of digital era, there is still a lot of space for electric power enterprises to carry out digital transformation and innovation. Only by seizing the opportunity and seizing the opportunity of innovation can we occupy a place in the future digital age.

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INTERIOR SPACE DESIGN OF ELDERLY APARTMENTS UNDER THE CONCEPT OF AGING

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ABSTRACT

With the increase of the elderly population, the number of elderly care institutions continues to increase. At present, in the existing domestic elderly care institutions, there are still facilities and space planning in the interior space design that are not suitable for the actual living needs of the elderly group, which seriously affects the elderly's living conditions. quality of life. Therefore, in this paper, the interior design of the elderly apartment is carried out according to the psychological needs, physiological needs, and spiritual needs of the elderly, in order to meet the real needs of the elderly. Through literature analysis, field research, and multidisciplinary comprehensive research methods, taking the concept of suitable aging as the starting point, the basic characteristics of the elderly are first analyzed, and then the interior space design points and design principles of the elderly apartments are used. Conduct analysis and research. It constitutes a database and project library for the space requirements of the aged-appropriate elderly care groups. This paper analyzes the deficiencies in the current development of interior design of elderly apartments, proposes solutions to improve the interior space of elderly apartments, and explores the root cause of the problem.

Key words: suitable aging concept; elderly apartment; interior space design;

INTRODUCTION

According to the in-depth research and investment prospect analysis report on China's pension industry market, with the intensification of population aging, pension has become a hot social issue. Elderly apartments have become more and more old-age options for the elderly, but some apartments for the elderly are too high-end in design, and are not really designed based on the psychological and spiritual needs of the elderly, resulting in poor living experience(Dan Li,2020).In this paper, the interior space design of elderly apartments will be based on the concept of suitable aging. By investigating the living characteristics or living needs of domestic elderly groups, and then carrying out the interior design of living space, activity space, public transportation space, etc., to provide the elderly with A comfortable space with a sense of belonging enables the elderly to experience the warmth of the family and gain emotional and spiritual comfort while living.

1.Basic characteristics of domestic pension groups

1.1 Physiological characteristics

As the elderly grow older, the functions of various organs of the body gradually decline, mainly manifested in the degeneration of the sensory system, the degeneration of the nervous system, and the degeneration of the motor system. (Xu et al,,2021).The deterioration of the sensory system is mainly manifested in the decline of vision, and the ability to distinguish color or light is not strong; the inability to obtain accurate information in hearing, which affects communication with others; the functional decline of taste and touch makes the elderly less interested in new things. Nervous system degeneration is manifested as poor memory, inability to regulate emotions, and severe illness.The degeneration of the motor system is mainly manifested in the inability to perform strenuous exercise and the slow recovery of the body after the disease.

1.2 Psychological characteristics

The deterioration of physical ability can easily lead to the psychological problems of the elderly, resulting in the lack of security, poor adaptability, and anxiety in the elderly. With the weakening of the functions of various organs in the body, the life safety factor of the elderly will be reduced, which will lead to anxiety, distrust of the space in which they live, and serious fear(George 2022). After the elderly enter the apartment for the elderly, their living space becomes smaller and more free time is available. With age, insomnia is increasing, causing the elderly to feel unhappy and anxious.

1.3 The needs of the elderly

When people reach old age, they have physiological needs, safety needs, belonging needs and esteem needs. Physiological needs mainly include eating, drinking, sleeping, walking, etc. Due to the decline of the body organs of the elderly, it is necessary to ensure their most basic diet, and to facilitate their activities as much as possible; safety needs are the next level after the physiological needs are met.(Yu et al.,2022) primarily seeking physical and mental safety. The spirit of the elderly is relatively fragile, and they need a convenient, safe and comfortable living space; the need for belonging is the social attribute of the elderly. One is to integrate into the social environment to find a sense of belonging, and the other is to gain the attention of others.

According to the statistics of the icon, in the past two years, domestic elderly care institutions have begun to invest in entertainment facilities and equipment for the elderly, even more than the proportion of investment in elderly care services.

The social roles of the elderly have changed, and they are prone to depression and loneliness, so they are very eager for a sense of belonging and love from family or society; esteem needs include respect for others and gaining respect from others. The elderly are in poor health and are prone to feel inferiority complex(Zhang et al., 2021). They need certain attention and respect from the society to protect their self-esteem.

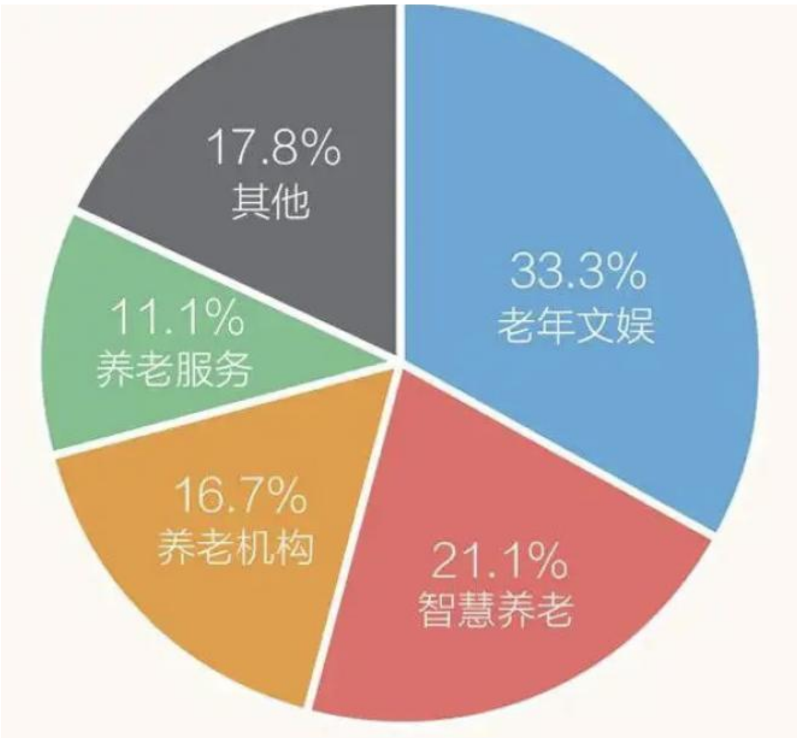

Table1

"Proportion of Investment in Recreational Facilities and Equipment for the Elderly by Domestic Elderly Care Institutions"

LITERATURE REVIEW

The main points of aging-appropriate design for the interior space of the elderly apartment.

2.1 Indoor light environment

In the interior design of the elderly apartment suitable for aging, the lighting factor should be tested first, because the lighting can meet the physiological needs of the elderly, and can also affect the psychology of the elderly. The use of natural light should be considered when designing the interior space of the apartment. The spacious and bright space can bring warmth to the elderly and can effectively relieve the pressure of the elderly. For spaces with complex interior structures and spaces where natural light cannot play a role, sunlight can be introduced into the interior space by relying on materials(Qiqi Jiang 2019). The use of safe materials can reduce the energy consumption of artificial lighting on the basis of ensuring the safety of interior design. Due to the aging of the eyeball function of the elderly, it is easy to see the indoor objects clearly at night. Under the condition of the main light in the bedroom, the downlight can be used to fill in the light. The color of the light should be mainly based on the adaptability of the elderly, so as to avoid the dizziness caused by the gorgeous colors.

2.2 Indoor acoustic environment

Sound is another important factor to pay attention to when designing the interior space of an apartment for the elderly. The state stipulates that the noise is 70 decibels during the day and 45 decibels at night, but when the elderly are doing things, the noise has a great impact on them. Noise will affect the work efficiency of the elderly and cause anxiety and anxiety in the elderly. Therefore, when designing the interior space, it is necessary to prevent the sound of the dynamic space from entering the static space. The sound-absorbing material can be used to absorb the noise, and the sound insulation effect can be improved on the basis of ensuring the indoor ventilation. In the specific design, double-layer noise reduction glass can be used to relieve the emotions of the elderly, and improve the dynamic feeling of the indoor space on the basis of improving the permeability of the space(Xiuling Cheng 2021).

2.3 Indoor color environment

When designing the interior space of an apartment for the elderly, two main colors are generally selected, and then other colors are used for regulation. The elderly are generally more sensitive to red, yellow or blue, while gray and black are easy to cause negative emotions in the elderly, so avoid using gray or black. According to the law of vision deterioration of the elderly, the sensitive colors of the elderly can be used in the space design, and different colors can be selected according to the different functions of the space, so that the elderly can realize that they have entered different space ranges according to the environment(Xiaole Wang 2021).

2.4 Indoor security facilities

Safety is the primary concern of the elderly in the apartment. In the interior space design, security facilities should be set up to ensure the personal safety of the elderly. Due to vision problems, the elderly cannot see things in the distance clearly. When designing the interior space structure, it is necessary to focus on a single line as much as possible to avoid complex lines affecting the judgment of the elderly. The concentration of the elderly is greatly affected by environmental factors. In the design of indoor security facilities, the setting of hanging objects should be avoided as much as possible, and an alarm device should be installed in an open space to ensure safety(Chengling Fu 2021).

RESEARCH METHODS

Design countermeasures for the interior space of elderly apartments for aging.

3.1 Design a comfortable living space

The living space is the most frequently used space for the elderly in the elderly apartment, and it is also the private space of the elderly. In the specific design, the concept of suitable aging should be followed, and the simple design should be carried out relying on suitable space. The apartment for the elderly should be designed with different types of living units according to the elderly with different economic conditions, in order to provide the elderly with a variety of choices. (Xiong et al,. 2021). Mastering the size of the space is the key to the design of the living space. The doors, sanitary facilities, activity areas, bedroom beds, etc. of the living space must be designed based on different size requirements. The design of the living space should be based on simplicity, and the material and color should be avoided.

Taking the balcony space design as an example, when the elderly feel tired in the indoor space, they can come to the balcony for ventilation to relieve fatigue. (Wang et al,. 2020). In order to reduce the obstruction of sight, the hollow form can be used when designing the balcony, the purpose is to restore the indoor environment to the maximum extent and provide a wider psychological space for the elderly. Plants such as vines can be planted on the railings of the balcony. One is to provide safety warnings for the elderly, and the other is to separate the indoor space from the outdoor space to bring joy to the elderly. At the entrance of indoor and balcony, translucent sensor doors and windows can be used for decoration, and at the same time, colors can be used for warning(Xiaole Wang 2021). One is to frame the beautiful scenery outside, and the other is to make the interior brighter, thus giving the elderly more sense of security. The toilet is an indispensable auxiliary space for the elderly to live in the apartment. According to the function, it can be divided into toilet area, bath area and toilet area. The toilet area should be equipped with toilets, handrails and pagers; the toilet area should meet the needs of the elderly in wheelchairs, and there should be a certain storage space; the bath area should use anti-slip floor materials, and set up safety alarm facilities to ensure The safety of the elderly is guaranteed on the basis of normal use. Taking the design of bedroom space as an example, the bedroom is an important place for the elderly to rest, and the principle of comfort and safety should be used in the design. In the design, it can be divided into functional areas such as sleeping area, reading area, storage area, and passage area. The sleeping area should be by the window to ensure sufficient light, and enough space for passage should be left beside the bed. The reading area is a place for the elderly to read newspapers and read books, and it is necessary to ensure comfort. The passage area should pay attention to the grasp of the space size to meet the activity needs of the elderly with different functions. The storage area should pay attention to the space and height to facilitate the use of the elderly.

3.2 Design a variety of activity spaces

In the interior space design of the apartment for the elderly, a variety of activity spaces should be designed to enrich the daily life of the elderly. The activity space can be set in a semi-open mode in the design, the purpose is to encourage the elderly to participate more in the activities and meet the entertainment requirements of the elderly. The activity room can be set up with a chess and card space to facilitate the daily entertainment of the elderly; a parent-child paradise area can be set up to facilitate family visits; a movie viewing area can be set up to enrich the spiritual life of the elderly; a fitness area can be set up to facilitate the elderly to exercise; a reading area can also be set up. It is convenient for the elderly to access information and read and learn.

Taking the interior design of the chess and card space as an example, the chess and card room can provide a platform for the elderly to socialize and enrich the daily life of the elderly. The design of the chess and card room can be divided into poker area, mahjong area, chess area, etc. from the classification of chess and cards. No matter what kind of chess and card area, it should be decorated in yellow to create an entertainment state for the elderly, and an alarm device should be set up to ensure the elderly's safety. Safety. Taking the interior design of the viewing space as an example, it is necessary to set up barrier-free handrails for the elderly, to design yellow guiding lines on the ground, and to design the walls based on the memories of the elderly. The purpose is to help the elderly break through communication barriers and establish good interpersonal relationships. The noise in the viewing space is relatively large, so attention should be paid to sound insulation when designing to avoid discomfort for the elderly. For the light source design of the viewing area, it is necessary to expand the space based on the ecological design concept on the basis of satisfying the lighting conditions, so as to relieve the psychological pressure of the elderly. Taking painting and calligraphy space design as an example, painting and calligraphy are the hobbies of the elderly, which can cultivate the self-confidence of the elderly on the basis of enriching the daily life of the elderly, relieve the negative psychology of the elderly, and prevent brain diseases on the basis of delaying the decay rate of the elderly's brain. In the painting and calligraphy space, cameras and alarms should be set up during interior design, and a display space for painting and calligraphy works should be set up. After the elderly have finished painting or calligraphy works, they can put the works in the display area for others to enjoy. Taking the design of reading space as an example, reading can exercise the memory of the elderly and meet the needs of the elderly to continue learning. When the elderly read books, they can effectively relieve psychological pressure, clear the side effects in their hearts, and solve doubts. In the design of reading space, blue is the main color to decorate, the purpose is to help the elderly relax, avoid anxiety, and then improve the reading effect. According to the appropriate aging, the height of the window sill of the reading space from the ground can be lower than normal, one is to ensure the safety of the elderly, and the other is to accommodate multiple light sources. Taking the living room design as an example, the living room is an important place for the elderly to rest and meet guests. The design of the living room should be designed according to the physiological functions and psychological needs of the elderly, so as to make the environment both functional and interesting. . The living room can be composed of a plant area, a fitness area, a seating area, and a passage area. The seating area can be placed with sofas for meeting guests or resting. The fitness area is generally by the window for the elderly to exercise. Indoor air, the passage area should be spacious enough to ensure the normal travel of the elderly. Taking the design of tea drinking space as an example, the tea drinking space mainly meets the needs of the elderly to rest and drink tea, and can rely on green plants for space partition. One is to block the line of sight, and the other is to create a good environmental atmosphere to ensure the privacy of the elderly. Small seats can be set up in the tea room, and green plants in big trees and small pots can be used to beautify the space. One is to bring the familiar feeling of enjoying the cool under the big tree to the elderly, and the other is to help the elderly quickly adapt to the environment.

3.3 Design convenient transportation space

Under the concept of suitable aging, the activities of the elderly in the elderly apartments should have convenient transportation space, the purpose is to facilitate the free access of the elderly, and lay the foundation for the elderly to participate in activities. The convenient design of foyer, elevator room, corridor, etc. is convenient for the temporary stay of the elderly. The foyer is the connection point between indoor activities and outdoor activities for the elderly, and obvious signs should be set up to facilitate the elderly to find the direction. The speed of the elevator should be as slow as possible to avoid discomfort for the elderly when riding. The corridor design should be simple, and plants can be used to provide a fresh environment on the basis of ensuring safety. Taking the corridor design as an example, the elderly apartments should be designed based on the concept of suitable aging to highlight the humanized characteristics. The purpose is to make the interior design more comfortable and safer on the basis of considering the practicality of the space. The corridor is an important space in the apartment for the elderly. In the design, in addition to paying attention to traffic evacuation, it is also necessary to pay attention to the rest function of the corridor. When designing, we should rely on the original space form and size of the corridor to expand the function. Corridors are generally composed of rest areas, decoration areas, etc. The design of different areas should be distinguished and awarded, and functions should be maximized on the basis of rational utilization of corridor space. The corridor should ensure light, the purpose is to provide a sufficient bright environment for the elderly to rest.

CONCLUSION

The interior space design of the aged apartment is a constructive study of the elderly apartment based on the living habits and physiological needs of the elderly. The purpose is to provide a safe and comfortable living environment for the elderly and improve the happiness of the elderly. The purpose of this paper is to solve the problem of over pursuing high-end in the design of old-age apartments, ignoring the psychological and spiritual needs of the elderly, resulting in poor living experience. By summing up and summarizing the basic characteristics of the elderly group, we can meet the emotional sustenance of the elderly group from the aspects of physiology, psychology and spirit, and carry out diversified design of the elderly space, such as relying on sound-absorbing materials to absorb noise, and using double-layer noise reducing glass to alleviate the emotional design of the elderly; Or according to different spatial functions, different colors can be selected for color control. Secondly, this paper focuses on the design of comfortable and livable space, diversified activity space and convenient public transport space of the elderly apartment based on the concept of aging, which can provide the elderly with a sense of belonging and provide a living place for rest and activities on the basis of providing high-quality services and paying attention to the psychological needs of the elderly. Finally, provide the most perfect security facilities for the old-age apartments, design single lines, install smart home equipment, select comfortable materials and other effective measures, and form a living space suitable for the elderly from form to function.

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This article aims at scientific research and technological improvement in related fields, and arranges and implements the research contents in a planned way. In the process of summarizing and summarizing the design of old-age space at home and abroad, the corresponding solution strategies are put forward, and new ideas and methods for the same type of space design are proposed. In the research process, I am very grateful for the research conclusions and contents in this field at home and abroad, which have guiding significance for this article.

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CREATION OF TV SERIES WITH MAJOR REVOLUTIONARY HISTORICAL THEMES

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ABSTRACT

The "TV series with the theme of major revolutionary history" is a historical drama with the main content of showing the history of the Chinese Communist Party leading the people to strive for national independence since 1921 and the history of major reform and construction after the founding of the People's Republic of China. It is a historical drama whose mission is to convey the mainstream values of China led by patriotism, and which has been strictly reviewed and allowed to be broadcast by the cultural departments at all levels under the Party Central Committee. Its creation plays an important role in carrying forward the socialist core values and the revolutionary tradition of hard work. Based on the literature analysis and script analysis, this paper summarizes the key points and difficulties in the current creation, summarizes the creative characteristics, and puts forward the reflection on the current situation of the creation of major revolutionary historical teleplays. It provides suggestions for the creation of TV dramas with major revolutionary historical themes, and also provides a theoretical basis for how to break through the tradition and further move from the plateau to the peak in the current era of all media content diversification.

Keywords: major revolutionary historic TV series, Key points and difficulties, Characteristic of Creation, Reflection of Creation (max 5 key words in English)

INTRODUCTION

Due to the existence of commodity and entertainment attributes of TV series, the market is full of a large number of TV series that only cater to the shallow spiritual pleasure of ordinary audiences and do not bear any social responsibility and cultural mission(Zhang Hongjun， 2009). Without guidance and regulation, TV dramas with major revolutionary historical themes are easily marginalized by the spontaneous market because of their small audience base and great creation difficulty. Even some heavyweight propaganda media and practitioners did not pay enough attention to the urgency and importance of major revolutionary historical TV dramas to the development and progress of the country, society and nation, let alone ordinary audiences. If the market subject is occupied by shallow mindless cultural commodities for a long time, over time, the national culture will be gradually eroded and dissolved, and the national spirit will gradually die out.

At present, scholars at home and abroad have carried out some research. Marx and Engels also expressed their views on historical themes. In their letter to Ferdinand

LaSalle, Marx and Engels criticized LaSalle's trampling on the truth of history in the historical drama " Franz von Sickingen "(He Xinyu， 2021). According to Marx and Engels, only by finding the real class relationship in the special environment of a certain historical period, so that the works can fit the historical reality as a whole, can we recognize that the historical drama has reached the artistic reality. In addition, Cassirer once said, "art and history are the most powerful tools for us to explore human nature."(Ernst, Cassirer， 2004) The historical drama view of historical TV dramas reflects the changes of contemporary social thoughts, reveals the differences and changing trends of human thinking ways of understanding themselves and the world, and can provide a more open and open-minded space for the future TV drama art construction.

On February 7, 1985, the Secretariat of the CPC Central Committee put forward four principles that must be observed for film and television works that express major revolutionary historical themes, which first involves the principle requirements of creative content. On July 4, 1987, at the proposal of the Central Propaganda Department, the Ministry of radio, film and television set up a "leading group for film and television creation of major revolutionary historical themes" to provide macro guidance and review on the creation of this type of TV series (Li Maohua， 2019). The document "joint notice on the establishment of funding funds for the production of feature films with major themes" issued at that time clearly stipulates that "feature films with major revolutionary history themes refer to feature films with the theme of major revolutionary struggles since the Opium War in 1884, especially since the founding of the Communist Party of China in 1921". In 1997, Sun Jiazheng, the Minister of radio, film and television, was at the symposium to further clarify the content of the creation of major revolutionary historical themes, including "reflecting the revolutionary struggle led by the party from the founding of our party in 1921 to the founding of People’s Republic of China and some major historical events after liberation. Describing the life and achievements of leaders of the party, the state and the army; historical events and characters must be real rather than fictional". On November 11, 2006, the National Radio and Television Administration issued the "Regulations on the administration of the approval and completion of screenplays for films and TV dramas with major revolutionary and historical themes ", "Films and TV dramas that reflect the life, achievements, work and life experiences of Party and state leaders, major events, important figures and major decision-making processes in the history of the Communist Party of China, the people's Republic of China and the Chinese people's Liberation Army are all films and TV dramas with major revolutionary and historical themes(Ding Yaping, & Chu Shuangyue， 2015).

It is noteworthy that the renamed "major revolution and major historical film and television series" reflects a more rigorous management attitude. "Major revolution" emphasizes the revolutionary history under the leadership of the Communist Party of China as the content of expression(Jiang Shengqing， 2010), and "major history" can broadly cover major historical events in ancient China. However, "film and television series with historical theme of major revolution" has become a conventional title, which is commonly used to refer to historical TV series with the characteristics of "major revolution".

At present, the creation of TV dramas with major revolutionary historical themes has always been the focus of social attention, but because such themes are not easy to grasp, they often fail to achieve both audience ratings and public praise. There is no relevant monograph on the research of TV dramas with major revolutionary historical themes. Some books on the film and television industry contain relevant chapters on TV dramas with revolutionary historical themes. Yang Hongtao selected the angle of "new posture" and "youthful narration" to analyze the revolutionary historical drama(Yang Hongtao. 2017). Chen Youjun specifically talked about the cultural characteristics and aesthetic pursuit of the creation of TV dramas with revolutionary historical themes, but the proportion of space is also very small(Chen Youjun， 2020). Li Maomin's analysis of major revolutionary historical TV dramas and socialist cultural values from the perspective of cultural values is mainly elaborated from the artistic expression and ideological function of this theme(Li Maomin， 2013).

In terms of research papers, relatively speaking, there are few articles on TV dramas with major revolutionary historical themes from the overall macro level. Among the few achievements in this part, the authors of the article are mostly research experts such as (Zhong Chengxiang， 2010), (Li Jingsheng， 2020), (Yang Weiguang， 2012), (Sun Jiazheng， 1997), (Li Zhun ， 2009), who have been in the forefront for a long time to focus on the creation of major revolutionary historical themes. Some of these articles review the production and development process, achievements of China's major revolutionary historical TV dramas since the 1980s, successful experience and analysis of shortcomings, and also clearly define the type of major revolutionary historical TV dramas. Summarizing their characteristics and creative rules, which has a very practical guiding significance for the creative breakthrough of major revolutionary historical themes

Generally speaking, the theoretical achievements of the existing major revolutionary historical theme TV series are still relatively scattered and difficult to concentrate; The main focus of the discussion is "how to deal with the relationship between historical truth and artistic fiction", which is a major difficulty in the creation of revolutionary historical themes. For the current era of all media content diversification, how to break through the tradition of major revolutionary historical themes and further move from the plateau to the peak needs more in-depth and comprehensive theoretical research. This is also the focus of this topic.

RESEARCH METHODS

Literature analysis

By searching the full-text database of Chinese journals and the full-text database of Chinese dissertations, making full use of Library and network resources to obtain literature, after collection, collation, analysis and induction, this paper combs out the narrative characteristics and methods of the research object, and builds a theoretical framework for this study

Scripit analysis

The script analysis object of this paper is mainly based on the major revolutionary historical teleplays that have been popular on the mainstream media platform CCTV since 2020, have high artistic standards, and have won important TV Drama Awards, such as "Qia Tong Xue Shao Nian", " Jiqing ranshao de suiyue", " Drawing Sword", " Ansuan", "lurk", "Ren Jian Zheng Dao Shi Cang Sang", "liberation", "before dawn", " Northeast United Resistance Army" Marshal Peng Dehuai", and other works are the reference objects of literary texts

RESEARCH RESULTS

Key and difficult points of creation

From a macro perspective, the creation of TV dramas with major revolutionary historical themes often requires strong realism, which is an extended expression of the national mainstream ideology and is expected to have far-reaching social influence. Therefore, in creation, it is not a simple image representation of a certain revolutionary history or historical phenomena of major events. It is necessary to express the creators' deep thinking on the revolutionary history from the needs of the times, fully excavate the profound significance of the revolutionary history, and transform it into the spiritual wealth of the times. For example, the TV series " Qia Tong Xue Shao Nian " tells the story of Young Mao Zedong's reading life in Hunan First normal University, which discusses how students should read and how teachers should educate people. The strong reality has aroused wide resonance among the audience(Li Yuesen，2008), creating a miracle of up to 8.92% audience rating;

Visibility has always been a difficulty in the creation of major revolutionary historical themes. Most of the audience, especially the young audience, have been in the textbook image of the revolutionary leaders in the middle school stage, while the shaping of a considerable number of major revolutionary historical characters in film and television plays has always followed the rigid image(Deng Yao, & Ouyang Hongsheng， 2019), which is difficult for people to get close to. Based on Mao Zedong's greatest achievements in his life, the TV series Mao Zedong shows the grand pattern of Mao Zedong's independence, freedom and liberation with the China and the Chinese, it always shows that Mao Zedong has always stood together with weak groups in life choices. Deeply presenting the characters' emotional world and inner thoughts through his growth experience and road choices from his youth to his realization of the dream of his youth and the establishment of new China,

The choice and game between historical reality and artistic reality. Many creators believe that major revolutionary historical themes are bound by an extremely rigorous censorship system and are difficult to be artistically expressed. In fact, the significance of pursuing historical truth lies not in the high reduction of historical phenomena themselves, but in the real respect for the truth of the more regular and essential historical spirit. The truth of history and the truth of art are more common in a sense. As far as shaping Mao Zedong is concerned, he has at least three images, the first is Mao Zedong in real history, the second is Mao Zedong written by historians, and the third is Mao Zedong beautified in people's beliefs. As a culture and art, TV series should be the coincidence of these three Mao Zedong, and carry out artistic sublimation on the basis of these three, so as to form an artistic Mao Zedong, which requires the creator to take the real Mao Zedong as the basis, learn from the historical Mao Zedong, and take care of the Mao Zedong in belief. For example, the TV series "Founding leader Mao Zedong" consciously pursues the perfect integration of historical reality and artistic reality, panoramically shows the complex historical features before and after the founding of the People’s Republic of China, structures the story with the shaping of the image of the revolutionary leader, especially Mao Zedong, as the core. It is strictly loyal to historical facts in the description of major historical events, and makes new efforts in deeply revealing the essence of historical development.

Characteristics of creation

Since the new century, the creation of TV dramas with revolutionary historical themes has gradually changed the old mode of narrative simplification and stereotype, showing flexible and diverse creative characteristics. In terms of content, it can be divided into the following three types.

Epic drama with major revolutionary events as the main body. In many TV dramas with revolutionary history themes, works reflecting major revolutionary historical events account for the majority. This kind of theme follows the principle of realism in creation. On the premise of maintaining the historical authenticity, the story is appropriately dramatized, which not only reflects the grandeur and documentary nature of the documentary, but also has the intimacy and dramatic tension of the feature film. Therefore, it is a revolutionary epic integrating historicity, authenticity, storytelling and interest. The revolution of 1911 truly reproduces the arduous revolutionary process of the revolutionary pioneer Sun Yat sen in overthrowing the feudal monarchy and establishing a Democratic Republic. In the play, major historical events such as the founding of the league, the Wuchang Uprising, the founding of the Republic of China, the second revolution, the war of national defense, and the abolition of the monarchy are truly restored, making the audience seem to be in that special era. "The red cradle" shows the early deployment work of the older generation of proletarian revolutionaries such as Mao Zedong, Zhou Enlai, Zhu De and Liu Shaoqi for the establishment of the Republic in the southern Jiangxi and Western Fujian Soviet areas. The play is interspersed with many historical events rarely touched on in previous similar works, such as the Futian Incident, the Communist Youth League and the Ningdu conference. At the same time, the play did not take an evasive attitude to sensitive topics such as inner-party contradictions and policy errors that existed at that time, It is to examine objectively from a higher perspective, give a fair evaluation, and outline the real picture of history with an epic pen.

A biopic with the life stories of great men and heroes. Typical representatives of such themes are "Mao Anying", "Jiang Jie", "general of national defense", "Deng Zihui", etc. The TV series "Mao anying" gives a panoramic representation of Mao anying's life and work, real emotional life and brilliant revolutionary deeds, and moves countless audiences with real, simple characters and touching feelings. The play depicts Mao anying and Mao Zedong's implicit and profound father son friendship, the national righteousness of the revolutionary family in detail, showing the side of great people living as ordinary people, eliminating the sense of distance and strangeness between historical figures and the current audience, and branding the vivid image of great people in the minds of the audience. The TV series "Jiang Jie" turns its perspective to the writing of female revolutionary martyrs, humanizes the screen image of Jiang Jie, penetrates the lens into Jiang Jie's emotional world, and truly tells the tortuous revolutionary love between Jiang Jie and her husband Peng Yongwu from love to marriage. Jiang Jie in the play is no longer a single strong and resolute female image in traditional film and television dramas, but an ordinary woman who is gentle and charming, emotional and has personality defects. The appearance of "Jiang Jie" also broke the situation that male heroes in the revolutionary history TV series occupied the leading role on the screen, and brought a fresh and tender atmosphere to the revolutionary history TV series.

Legend of civilian heroes with chivalry and courage. Since the TV series "Drawing sword", the civilian heroes represented by Li Yunlong have become the protagonists of many TV dramas with revolutionary historical themes. Compared with great heroes, civilian heroes are more plastic and operable. Because the display of civilian heroes does not need to load too much historical information and historical research, the creator can shape the character according to the plot needs, and even make up historical characters while diluting the historical background. The vivid and plump character modeling is more likely to arouse the resonance of the audience. Behind the popularity of every civilian hero drama, there is a "ruffian hero" who is promoted. Their unique personality characteristics have added many attractions to the revolutionary history TV series. Zhao laoga in the TV series "Zhong Guo Di" is a typical problem hero. He is arrogant and stubborn, moody, ignorant and unreasonable, but he is chivalrous and courageous, fearless in the face of danger. With his brutality and justice, he resists the Japanese invasion, and adheres to his hometown for years without being occupied by the Japanese army. He is a personality full of personality that can make the audience laugh with tears. Li dabenzhi, sun Chenghai and Sai DiaoChan in the TV series " Designation Forever " are all unknown people in the vast history. Because they met and gathered by chance, they shouldered the historical mission of safeguarding the country and fought bloody battles with the enemy. This group of underprivileged people showed their awe inspiring righteousness at the critical moment of national crisis, which made countless audiences burst into tears. During this period, the TV series with the theme of revolutionary history achieved a qualitative leap in art and technology. First of all, from the perspective of narration, dramatic narration and legendary narration are placed in a more important position than traditional narration. The addition of drama elements and espionage elements makes the TV series with revolutionary history less powerful and boring, and the tone of life and popularization is more acceptable to the audience. For example, the suspense construction of the TV series "Jiang Jie" can be described as one wave and two twists, and the thrilling plot mode is comparable to the TV series "Lurk".

Secondly, from the perspective of characterization, the characters in the revolutionary history TV series at this stage are more diversified and secularized. The patriotic hero is no longer a neat and unified noble image, nor a "divine Redeemer" above the divination of ordinary people, but a "grower" who, like ordinary people, needs to constantly overcome self-defects and self-correct. Such characterization is more in line with the true face of human nature and gives the audience a cordial and a real feeling. Finally, from the technical level, the production level of TV series with revolutionary history theme has made a great leap. The smooth and skilled lens editing and the ups and downs of plot arrangement are very similar to the style of Hollywood blockbusters. The clever setting of suspense, the multi angle use of flashback lens and the fast-paced lens splicing in the " Chinese expeditionary force " have become the highlights of the film. The producer's superb editing skills and flexible scene scheduling make the seemingly simple plot full of ups and downs.

REFLECTION OF CREATION

Topic selection and creation of TV dramas with major revolutionary historical themes from the perspective of theme and reality

Since modern times, the Chinese revolution has been magnificent, and there are countless major events and important figures in the history of the party, the military and the country. This part discusses how to select the most meaningful and valuable major revolutionary historical themes for the present and foresee the next three to five years, and how to determine the creative perspective, so that it can not only write history for the purpose of writing history, but also excavate historical and innovative works from a variety of perspectives, the height of the times, and the needs of reality, so that the revolutionary history can always be written and updated, and become a cultural classic that echoes history. In the "biography of Mao Zedong" of Heguang media, it's not about how to evaluate Mao Zedong, but how to make audiences of all ages like it. It really needs to be accepted by most people and get high rating. At present, the first thing to be solved is how to narrate and tell stories.

First, we should write about Mao Zedong from a cultural perspective. Specifically, Mao Zedong often blurted out a poem and mentioned an ancient allusion, which could resonate with the intellectual elite. Mao Zedong's personality charm reflected in this point is largely the charm of Chinese culture and the reflection of culture in Hunan Province on him. He has thoroughly understood Chinese culture, so when the great revolution failed, he was depressed at this time and wrote down " wide, wide flow the nine streams through the land, dark, dark threads the line from south to north." How can we express the realm of his poem? If we take his poems as a theme in a certain episode and explain how this poem came into being through a certain story in disguise, narration will change by writing in this way.

Another point is that our narration should have emotion. Big historical facts cannot be violated, but emotions can be expressed in details. Because emotion can purify people's pickiness about Mao and shorten the distance between great people and the audience. One of the biggest points in "in the prime of youth" is the expression of Mao Zedong's deep feelings with his mother. When it was written about the death of Mao Zedong's mother, the audience had an expectation that these leaders would be full of deep feelings. Expressing the deep feelings between Mao Zedong and his mother can resonate with the audience and deepen everyone's feelings for Mao Zedong.

Finally, our drama should have a height, which is the height of the nation. Meng Bing's "Mao Zedong's imagination in Xibaipo" is really well written. But at the end, the dialogue between Mao Zedong and Chiang Kai Shek lacks national height. Many of our TV dramas are about Mao Zedong's victory and Chiang Kai Shek's failure. They also dialectically summarize the reasons, which is too rigid and superficial. As political leaders, Mao Zedong and Chiang Kai Shek must consider issues from the perspective of the country and the nation, and must consider the interests of the nation. So we must observe the reality from the height of national history

Therefore, the creation of TV series must have culture, emotion and height. The power of emotion can really conquer all audiences. Finally, we should stand on the height of the nation and have a feeling of compassion. Don't just write about who wins and who loses.

Art of Director

In Contemporary Chinese TV dramas, the theme of major revolutionary history is unique. To some extent, one of the important standards to measure the quality of TV series is the shaping of characters[17]. In the shaping of characters with major revolutionary historical themes in special periods, it requires "three highlights"(Li Jun， 2019) -- the principle of "highlighting positive characters among all characters, heroes among positive characters, and main heroes among heroes". Under its guidance, for a period of time, the main characters in TV dramas with major revolutionary historical themes became deified and stereotyped images, and the artist's personal creativity was wiped out. In the writing of the mainstream, heroism is the eternal theme of revolutionary historical narration. It is the core of narration and shaping in both literature and film and television. The need of political propaganda leads to the rigidity of characterization and the routine of stories. With the gradual development of social thoughts, people's follow-up to revolutionary heroism is gradually fading. Coupled with the rigidity of characters and narrative patterning in the film, some audiences instinctively reject the phenomenon of shaping heroism in the horizon of expectation. What the audience wants to see is a real person with the characteristics of becoming a hero, not a deified figure.

The role selection of major revolutionary historical themes in China pays more attention to internal performance. In addition, in the previous major revolutionary historical themes, the weakened places such as talents, beauties and revolutionary love are now being used to enrich the personal image of great men in all aspects. Like ordinary people, they will be sad for love, and strive for love and family. Personal writing is added to the characterization, trying to reproduce the history ignored by the classic revolutionary narrative mode. In fact, this is a good complement to the traditional red characterization, and it is also a powerful attempt to break through the current historical discourse. The development of times and thoughts gives more freedom to shape the characters in TV dramas. The characterization pursues truth and emotional details

Performing arts and Star strategy of young actors

In the early major theme films, the actor scheduling adopts the processing method of news documentaries. Well-known and unknown historical figures appear in turns according to historical logic. Only a few main characters need to run through the whole film, and most of the characters fade out naturally. It only need to describe the main characters and major events. Major leaders always choose special actors who are close to the prototype of real people to play. In the early stage of TV series creation, the idea of choosing actors was that special actors with similar appearance could truly reproduce historical figures on the screen and increase the authenticity of the film effect. Using actors familiar to the audience is easy to produce the feeling of jumping and distract the attention of the film characters. From the perspective of ideology and propaganda, the government and creators can maintain the seriousness of historical facts and the image of leaders in major revolutionary historical works by using special actors to play the main leaders, and make the audience have a sense of trust in the works. As time goes on, special actors gradually encounter difficulties. For example, the audience's demand for special actors is decreasing, and they can accept divine actors; Special actors are a limitation on the development of actors, which is easy to limit the way of acting.

The performance technology of young actors will not only attract fans of all stars to watch, but also become a hot topic among the people, and the mainstream ideas under the entertainment packaging can be quickly spread. The commercial theme film continuously absorbs the production and publicity mode of commercial film and television dramas. This strategy satisfies the curiosity seeking psychology of the audience and adds attraction to the film. A large number of audiences watch TV dramas for their favorite stars, unifying commerciality and artistry by means of teaching in fun, which has made great progress in narrative and audio-visual language, so that the audience can actively contact historical knowledge. After all, TV series are not history textbooks and cannot bear the responsibility of recording all history. For the sake of film effect, they will be processed in the form of artistic adaptation and added with elements more suitable for market operation. The strategy of introducing stars has given fresh blood to the TV series with major historical revolution themes. The full gimmicks cater to the audience's appreciation psychology, and the audience gets a sense of relaxation in watching.

Major revolutionary TV dramas are full of vitality and rebirth. At the same time, there is another voice. Academia has always been skeptical of the star strategy. They believe that the use of the star strategy of several stars in major revolutionary historical films is a trick on serious history. Its mission of promoting core values is covered and diluted by entertainment and spectacle forms, which affects the narrative of the story and hinders the audience's understanding of the film content(Nan Jing，2010). To develop Chinese TV series with the main theme and take the road of industrialization, we must pay attention to the dual construction of cultural connotation and commercial packaging. The dual marketing of cultural connotation and commercial packaging is to make the mainstream film have the cultural surface structure that the main melody film and television script should have, that is, the cultural carrier. It also has the deep-seated cultural structure that the mainstream market needs and the theme culture lacks, that is, cultural rules. At the same time, it should also have the construction of cultural significance that can be provided by major revolutionary TV dramas in Chinese cultural ideology, that is, cultural connotation. Infiltrating cultural factors into the whole process of mainstream film marketing is the best way to improve the cultural products and added value of major revolutionary TV dramas.

CONCLUSIONS

Discussion

Although the creation of the current TV series with revolutionary historical themes presents a prosperous scene, there is a crisis of model and homogeneity behind it. Many works revolve around the themes of heroes, major events or small people, great feats and so on. In order to make the story and characters more authentic and vivid, the choreographer and director try their best to explore the privacy topics of the characters, such as "love experience", "personality defects", "family life", and some works even take love as the main narrative line of the whole play. In this way, the TV series with the theme of revolutionary history have been quietly transformed into "revolutionary idol drama", "revolutionary love drama" or "legendary hero drama".

Therefore, the TV series with the theme of revolutionary history have lost their artistic uniqueness and become "type hybrid drama".

First, the emotion-revolution model is highly respected. There is nothing wrong with the emotional topics involved in the revolutionary history TV series, because great men are not perfect saints. They have personality defects and ups and downs in life, emotional life and individual demands. However, the display of great people's emotions and personality should have the standard of degree and quantity. In order to meet the tastes of the audience, we should not seize the omnipotent straw of "love" to wantonly render marginal topics and subjectively reconstruct privacy without restraint and bottom line. For artistic creation, the contemporary interpretation of film and television creation is a blessing, but the imagination without thought and bottom line is a disaster of art.

Secondly, the excessive idealization of legendary narrative. In the revolutionary history TV series, there is often a legendary narrative mode that our army defeats the enemies with a few men and defeats the strong with the weak, or some small people can often turn bad fortune into good fortune in difficult situations, and finally become a qualified hero after enduring the long-term test and suffering of the party organization. Remote mountain villages with treacherous terrain, reckless and honest folk heroes, underground parties without trace and last-minute battlefield rescue have become the usual models of TV dramas with revolutionary history themes. Due to the lack of exploration of novel narrative mode and innovative theme, the idealization trend of TV dramas with revolutionary history theme has been very obvious.

Finally, espionage suspense is not equal to innovation. Since the popular drama "Lurk" set off an upsurge of watching, many film and television dramas have integrated spy elements and underground party secret work into text creation. When the traditional creation mode is old-fashioned, the creator will turn to mining new themes. The original "love in spy war" mode continues to split into "historical heroes in spy war", " Red Classics in spy War ", "joking in spy war " and other types(Sun Hao, & Yuan Mengchu,2021). Although these new elements add a lot of entertainment and interest to the works, they will inevitably damage the artistic strength and integrity of TV dramas with revolutionary historical themes. Revolutionary historical teleplays no longer adhere to the traditional spiritual values, but are dominated by market rules and commercial principles. Therefore, revolutionary historical teleplays will inevitably move towards homogeneity in the so-called innovation. If this situation is not reversed in time, its innovation and development may fall into an embarrassing situation.

Nowadays, the heroes in the TV series with revolutionary history theme have long broken the original type mode. The true and credible screen image has subverted the rigid political symbols, the diversified individual heroes have replaced the rigid collective heroes, the TV series has removed the heavy political burden, the original "red heroes" and "perfect Heroes" have been gradually replaced by "heroes with problems", and the folk heroes have experienced the process of changing from deification, sublimity Civilian to vulgar. Although in the current TV series, the creation of heroes has made a historic breakthrough, the problems of character typology and rigid still exist. The current TV series on revolutionary history basically follow the creation routines of equal perspective, restoring ordinary people and laying out love stories. It seems that the characters and perspectives of each work are different, but in fact, the molding methods and types are the same. Although the hierarchical and three-dimensional modeling of great men has narrowed the distance between great men and the audience, the noble image of heroes has been subverted and deconstructed by some imagined historical information. In this way, the national beliefs and spiritual pillars held by the Chinese nation for thousands of years are afraid to be submerged and disintegrated by the colorful history. Once a nation loses its spiritual beliefs, it will lose its way forward.

How to break the dualistic thinking of either or in characterization, accurately grasp the balance between human beauty and sublime beauty, and reach the ideal situation of harmonious resonance between human beauty and sublime beauty in hero characterization is the only way for future revolutionary history TV dramas to achieve transcendence. As an important member of the Chinese TV series family, the TV series with revolutionary history themes contains opportunities and challenges. It is time to sort out and feel the pulse of its creative achievements and shortcomings in the past two years. Objectively speaking, in recent years, TV dramas with revolutionary historical themes have made great progress in the shaping of heroes and the exploration of narrative methods. The typed traditional hero values have been gradually eliminated and replaced by rich characters and complex psychological contradictions, and new topics have been set for the arranging significance of traditional revolutionary historical themes. How to stick to the ideological bottom line and the spirit of the times in the game between art and business is a major issue that creators must face in the future.

Conclusion

①Reality, Visibility, game between historical reality and artistic reality are still the key and difficult points in the creation of major revolutionary historical TV dramas. The difficulty is mainly reflected in how to balance historical reality and artistic reality

②The creation of TV dramas with major revolutionary historical themes is still themed with major historical events, great men, and fictional civilian heroes. Because the display of civilian heroes does not need to load too much historical information and historical materials, it is the most flexible way to create TV dramas with major revolutionary history themes with civilian heroes as the theme.

③Creating TV dramas with major revolutionary historical themes requires culture, emotion and height

④The director has got rid of the rigid way in the past and began to pay attention to the deliberately weakened places in the past, which well complements the traditional red characterization and is also a powerful attempt to break through the current historical discourse

⑤It is a double-edged sword to introduce stars into TV dramas with major revolutionary history themes, which can not only significantly increase the popularity, but also may cover up and dilute core values

⑥Although the creation of the current revolutionary history TV series presents a prosperous scene, there is a crisis of modeling and homogenization hidden behind it. The endless excavation of the privacy of characters, the excessive addition of emotional elements, the excessive idealization of narration, and the imitation of hot TV dramas have made the TV dramas with revolutionary historical themes move towards the mud of homogenization in the so-called innovation.

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MULTIDIMENSIONAL CREATIVE DESIGN OF CHINESE ANIMATION SYMBOLS BASED ON TRADITIONAL CULTURAL AND ARTISTIC CHARACTERISTICS

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ABSTRACT

Nowadays, the animation industry, which is rooted in the traditional culture of the Chinese nation, is developing vigorously. At the same time, it is facing the dilemma of outdated creative ideas, insufficient innovation ability and weak cultural competitiveness. The reason for this dilemma is that the animation creators do not have a good understanding of the artistic characteristics of traditional culture. Therefore, grasping the "harmony" concept, the "integrity" consciousness, the "pluralistic" carrier and the artistic characteristics of the "inclusive" culture of traditional Chinese culture is an important cognitive basis for innovative design of Chinese animation symbols. Based on this, animation creators should deeply understand animation symbols, firmly base on national characteristics and re assign the connotation of animation symbols, so as to create more animation symbols that are in line with the mainstream values of the times and popular with the people.

Keywords: traditional culture; Artistic characteristics; Animation symbols; innovate

INTRODUCTION

Since the emergence of Chinese animation, the animation industry has been enriching the connotation and developing the content under the framework of traditional culture. The two films "making havoc in heaven" and "Nezha making havoc in the sea" represent the peak of early animation （Dianthus Green & Tian Xiaoyan， 2022）. The traditional domestic animation is full of strong national cultural flavor, and the way of teaching in the film makes the domestic animation character symbols have a special brand belonging to our country and become more easily accepted by the Chinese people. However, this traditional and conservative animation creation concept also makes the development of China's animation industry enter into a dilemma under the current multi-cultural value demand. The rapid development of science and technology has greatly promoted the rapid development of the animation industry. Under the influence of foreign cultural concepts and the current network multiculturalism, the content and creation form of China's animation industry are becoming more and more single. For example, Sun Wukong and Nezha series （Huang Liyuan， 2021）, it seems that the essence of traditional national culture has become increasingly difficult to express through animation. It is undeniable that the production level of domestic animation has become higher and higher, but the high level does not mean that the culture that the animation should show can be broken through and innovated by this limited creation mode and concept. Creators stubbornly believe that only by quoting folk stories, myths and other themes can the Chinese national characteristics be reflected. In fact, this creative concept is too limited, and the creative framework fixed by the traditional culture has also been restricting the ideas of domestic animation creators. Nowadays, western countries have been designing many animation images that even Chinese people can't put down, based on the animation symbols in Chinese literary works and painting art. Ah Bao and Hua Mulan are the representative works. Their design concept mainly focuses on entertaining the public, rather than sticking to the form of "animation education film" in China. For example, the short video animation form of "healing Department" created in Japan （ Zhang Panpan，2022） and the theme of "Disney" series created in the United States （Chen Maotao， 2018） further weaken the influence of Chinese animation in the world. Exploring how to innovate Chinese animation symbols in the perspective of traditional cultural and artistic characteristics is an important issue to be solved urgently in animation design.

THE ARTISTIC CHARACTERISTICS OF TRADITIONAL CULTURAL SYMBOLS

The Chinese nation has a history of 5000 years, and its traditional culture has a long history. Whether it is from history and humanities, or from mythology and legends, it is the mainstream culture and core values of our country. It is the crystallization of the diligence and wisdom of the working people, and has its strong artistic characteristics.

（1）The concept of “Harmony culture”

China's philosophy is the product of thousands of years of civilization of the Chinese nation. It contains not only Confucian culture, but also other cultural thoughts. China's mainstream culture belongs to "harmony culture", which pursues harmony, unity, integration and symbiosis. The idea of the unity of heaven and man and the balance of yin and Yang is the core idea of Chinese traditional culture. For example, the ink painting animation landscape is famous for its comprehensive exposition of Chinese traditional philosophy. The beautiful and flexible sound of the ancient Qin, the ink painting artistic conception of the combination of the virtual and the real, the secluded and remote landscape pictures and the vivid characters are organically combined to show the unique form of ink painting animation in China to the extreme. The work expounds the harmony and unity of heaven, earth and man in nature, and truly realizes the lofty realm of heaven and man. It can also combine the animated ink and wash elements with real people to create new works. For example, the domestic animation "Kung Fu rabbit and vegetable bag dog" is the interaction between real people's images and hand-painted elements （Xu Shan, 2018）, and the story "proud general", which tells the story of pride and defeat. （Zhang Weihua & Jia Yufeng, 2022）

（2） Consciousness of “Integration”

Modern animation character design uses Chinese traditional cultural symbols to explore its inner character from these profound thoughts, which are mainly reflected in people's daily life style, aesthetic concepts, customs and other aspects, and then shows the connotation and values of the works. For example, although the classic animation work Mulan of American dituny uses a large number of traditional Chinese cultural symbols, it can still be felt that this work is an American inspirational film in the cloak of ancient China. The extensive use of Chinese traditional cultural symbols in the works is limited to the appearance, while the connotation still reflects the American traditional cultural spirit of personal thoughts and personal heroism. No matter what kind of artistic expression form can reflect the national culture and the public aesthetic concept of the corresponding period, so is animation. The aesthetic concept of our country advocates the whole consciousness, which is different from the aesthetic form of the West which regards the individual as the artistic beauty. Only by recognizing and understanding the beauty value of Chinese traditional art and applying the traditional excellent culture to the animation modeling design can we create the animation modeling with national cultural characteristics. Chinese painting art attaches importance to the similarity of spirit, pursues artistic conception, and then develops a special way of ink animation.

（3） Carrier of “Diversification”

In China's traditional cultural creation, there are many creative carriers that are unique to China, such as ink painting, calligraphy, drama, etc. These unique creative carriers are not owned by foreign countries. The character modeling in the first Chinese ink painting animation work, little tadpole looking for his mother, made full use of the small animals created by Qi Baishi. Subsequently, there were animation works such as pastoral flute, landscape and deer bell. They borrowed the modeling elements from the works of famous Chinese painting masters Fang Jizhong, Cheng Shifa and Li Keran. The modeling of these ink and wash action films focuses on the relationship between "like" and "not like" and uses "virtual" instead of "real" to vividly display the verve of "white as black" in the freehand ink and wash paintings. The aesthetic concept in the works originates from the emptiness and quietness thought of Chinese historical Taoist culture, which emphasizes quiet and gentle, quiet and harmonious. The way of leaving white space in the picture is consistent with the dialectical concepts of "knowing white and guarding black" and "great form Is beyond shape" in Lao Tzu's thought, showing the outlook on life and values in China's humanistic thought. With the rapid development of science and technology and the continuous transformation of aesthetic concepts, the traditional aesthetic concepts of our country are still affecting the modern animation character design. The organic combination of the advanced three-dimensional technology and the traditional ink painting animation has shaken off the design form of the traditional ink painting animation on the technical level, but it still complies with the composition principle, modeling method and color matching of the Chinese ink painting creation in terms of expression.

（4） "Inclusive" design

The modeling design in the animation character design in China has experienced profound reflection after the award of why the crow is black, to the success of the Oriental School style, and then returned to the mechanized imitation of Korea and the United States, and finally developed to the return and self-consciousness of the current national value subject. It can be seen that the folk art modeling of Chinese traditional cultural symbols provides unlimited creative inspiration for the modeling design of animation characters. The representative work of Chinese animation style, the proud general, has made full use of the facial makeup art of Beijing Opera in China with its unique colorful face of the hero and the white nose of the diner, reflecting the artistic realm of expressing the verve with shape. The so-called "meaning is created by the mind, and the image is generated by the mind". The "meaning" is finally reflected by the "image", and the "image" needs to be integrated into the subject. The paper-cut cartoons "pig Bajie eats watermelon" and "golden conch" all have a strong rural flavor. A lot of animations, such as "making havoc in heaven" which is inspired by early bronzes, Dunhuang murals, operas, lacquerware, folk New Year pictures and murals, and "three monks" which is an organic combination of traditional images and contemporary animation, constitute the heyday of Chinese animation. In recent years, countries all over the world pay close attention to our traditional culture, and our traditional cultural symbols often appear in foreign animation works. Kung Fu Panda, created by American DreamWorks, uses Chinese traditional folk art elements such as paper-cut New Year pictures, shadow play and seal cutting. It radiates a strong oriental cultural flavor and has become a touchstone for entering the Chinese market and even the international market. After all, whether the film can arouse the audience's resonance of the times and conform to the unique industrial culture is the key to obtaining the audience's sustained support.（Zhong Ji & Zhu min，2022）

THE DESIGN CONCEPT OF CHINESE ANIMATION SYMBOLS IN MULTI DIMENSION

Chinese traditional cultural symbols are the cultural accumulation and precipitation of the Chinese nation for five thousand years. They are the crystallization of the wisdom of the Chinese people. Their diverse forms and rich connotations show the broadness and profundity of Chinese culture. Now, the animation industry has entered a period of vigorous development. Animation and many fields, such as film and television, games and music, have begun to integrate.（Qiu Si Si，2019） if they want to win their own place in the increasingly competitive animation industry, instead of local animation symbols, they can only be known to the world through foreign animation. It is imperative for creators to update their design concepts.

（1） Deep interpretation of animation symbols

When Na Zha took up his sword and committed suicide in front of the heavenly soldiers and generals, he left us a deep impression. His image of sacrificing his life for justice deeply touched us. Undoubtedly, the design of this animation character symbol is excellent, because Na Zha embodies a kind of Chinese values and has a strong moral representative significance in the long history of the Chinese nation. In Chinese culture, there are many people who can design and convert such animation character symbols. In western countries, the most representative is undoubtedly a series of animation characters of Marvel company, and most of the characters in its works are mainly super power to save the world. This kind of European and American superheroes makes readers have a kind of psychological admiration and pleasure, and the values and outlook on life contained in them also affect readers invisibly. From the past to the present, the creation of animation in China is inseparable from Chinese culture. The significance of animation in China is not only for commercial profit, but also to provide positive energy for the people, especially the next generation. Fortunately, Chinese ethical culture and nationalized animation can be combined with each other to become an excellent domestic animation film, which is also a main theme that Chinese animation creators have always followed.

Nowadays, how to integrate the characteristic elements of our country into the animation industry is an urgent problem for every animation creator. In the past, Chinese animation creators often made great efforts in the image design of animation characters. Through in-depth interpretation of animation characters, they vividly portrayed the characters of animation characters through various means with imaginative methods. The typical representative image is the image of Sun Wukong in "Monkey King". In the whole cartoon, Sun Wukong's clothing, decoration, words and deeds are very consistent with his own personality, successfully integrating his external image and internal essence as Bi Mawen, the monkey king and the great sage of Qi Tian. The animation creators also integrated temple culture, Peking Opera facial makeup and other traditional elements with distinctive national characteristics, integrated and re created the image of the monkey king, and completed the image of the thin monkey king with peach face and tiger skirt, which is popular among Chinese people. In this film, the design of Sun Wukong, an animated character, perfectly reflects his seventy-two changes of God shape, resourceful human shape and clever and lively monkey shape.

In fact, the difference between Chinese animation and foreign animation is also reflected in the different views on the visual performance effect. Most of the foreign animations win by the magnificent scenes, while our country pays attention to the matching of colors. Chinese animation creators have a good and accurate grasp of the color preferences of Chinese people. They mix and match the three basic colors, and add bright and exquisite lines and contours to make the animation character symbols on the paper. This combination of animation characters with Chinese characteristics and local customs always makes the viewer feel very comfortable. In the contemporary society, if an animation is to go to the international market and be praised and loved by the people of all countries, it is necessary to constantly explore and understand the cultural and artistic essence of the country, so as to create more distinctive and interesting animation images. One of the biggest characteristics of visual language of new media animation is symbolization. In the animation elements, characters, background music and animation colors are symbols, and an animation is an organic combination of symbols. （Wang Yunhui，2020） It is impossible to cater to the preferences of people in the global village by repeating the same old tune. In the 5000 year long cultural history of our country, countless cultural heritages can be used for reference. Whether it is lively Beijing opera or beautiful paper-cut, these are elements with Chinese characteristics. Integrating them into the creation of animated character symbols will make it easier for the characters to move the audience.

（2） Firmly based on national characteristics

Animation creators are inevitably affected by China's profound cultural heritage. Of course, this is not to say that this impact is negative and negative, but we should correctly understand that the display of national characteristics in animation is the most intuitive cultural output. （Wang Lin，2022） Animation creators should design animation character symbols with distinctive advantages on the basis of their understanding of their own culture. For example, in 2010, an animation short film named "Japan, the strange country" began to be popular on the Internet, which was the masterpiece of Japanese designer kenichitanaka （Wang lingxuan，2018）. China's animation industry should have distinct national characteristics, create Chinese characteristics, promote it to establish a "Chinese faction" with strong influence in the world, and produce more "new national style" factions and animation. （Zang Jinying，2021） First of all, we should realize globalization on the basis of nationalization. "The more national it is, the more world it is." We can't think that animation with Chinese characteristics can only have Chinese factors. This is a one-sided view. Nationalization and globalization should be able to achieve harmony and unity in a broad sense. Animation creation cannot be done behind closed doors. It should be based on the local. On the basis of firmly establishing the tradition and nationalization, it should broaden its vision to the international field, criticize and learn from foreign cultures, take their essence and discard their dross, so as to make the created animation more attractive. In this regard, foreign countries actually do better than us. The famous animation "Kung Fu Panda" has achieved great success, and even Chinese audiences are very fond of it. It is because foreign animation creators have integrated Chinese characteristics of "Kung Fu, Panda" and other factors in the continuation of their heroic salvation feelings, making it an international animation, It is loved by people all over the world. In fact, it is also one of the manifestations of "retyping animation", which meets the cultural needs of the people at present. （ Liang Siyuan， 2022 ） In this respect, China often only borrows a single element and does not know how to integrate some excellent foreign cultures, which leads to the weak competitiveness of China's animation industry in the world. Secondly, we should realize the modernization on the basis of nationalization. In fact, in recent years, some animation characters in China have begun to be integrated into the elements of modern style by the creators. The once popular "the devil child of Nezha" can be said to be the best representative. However, it can not be denied that it still has Japanese connotation, while "under one person" has a logic and thinking with Chinese characteristics. （Xiang Chaochu & Dai Yuhong，2022） Another example is the return of the great sage. In this play, the well-known Monkey King is still covered with a golden cloak, and the three types of God, monkey and man gather together. However, this character has more modern and humanized words and deeds, which makes it closer to the reality of our life and makes the image of the monkey king in this play more popular with us, This is also one of the important factors for its box office success. Therefore, the modernization of animation is essentially a connection of cultural symbols in time and space. Whether China's animation is to inherit Chinese culture and art or to occupy the international market, nationalization is the basic point of its development. Then, how to express the rich and colorful traditional characteristic culture in modernity is the key factor for the prosperity of China's animation industry. According to the data, since 2015, There are 20 domestic animation films with box office of more than 100 million yuan. （Su Feng，2022） in fact, there is still a lot of room for improvement. Finally, we should construct the cultural symbol of our animation. The films on the screen provide semiotics with a variety of cultural objects in time and space. As soon as many movie symbols appear, the audience can instantly understand the meaning they represent. For example, high-tech equipment, jeans, spaceships, etc. often appear in Hollywood blockbusters. Such established symbols can even be called the representatives of a certain kind of films. The Dutch "Miffy rabbit" and "Baba dad" are also very popular animation symbols. （ Yan Wanqi & Feng Xuening，2022） The symbols in many Chinese cartoons can clearly reflect the characteristics and contents of the film. For example, the costumes of characters in an animation can show the identity, social information, psychological characteristics and personality characteristics of the characters. This is where the charm of traditional costumes lies. （Wen LeYang， 2021 ） In the social contract constructed by this animation culture, the understanding of this kind of culture and the national identity and sense of belonging can greatly help people understand the connotation of this animation. This is based on a certain traditional culture and has the common emotional understanding of the broadest masses of the people. It can better help the people understand and accept the symbols closely linked with the development of the times. Constructing the cultural symbol of the times of Chinese animation can guarantee the visibility of animation to the greatest extent.

（3） Redefining the connotation of animation of symbols

"An excellent screenwriter must break the rules and break the current rules, and have the ability to perfectly present his world outlook in a unique way." (J.M. Evanson, 2017) Most of the early animations in China were produced by exaggeration, freehand brushwork and personification. The characteristic of this technique is that it can give the audience a lively, vivid and vivid visual impression. In essence, animation can not only rely on exaggeration and deformation to establish its own subjectivity. Technically speaking, animation is the creation of non real movements. (Zhu Yilun & Gong Chengbo, 2022) under the interactive situation, The design of the animation character should be concise and vivid, vividly reflect the characteristics of the character, and at the same time, due to the nature of the animation itself, it should also incorporate a certain degree of interest. A good animation character image can conform to the development of the mainstream culture of the times, make the audience love and leave a deep impression on them. The appearance should grasp the needs of the development trend of the times and the public's aesthetic outlook. Its words, deeds, personality and psychology should have the characteristics of high recognition. The cartoon should not only face children, but should give its characters strong affinity, so that the audience of all ages can have a sense of closeness, psychologically close, cognitively agree, and form a strong emotional resonance. The emotional resonance realized in this interactive situation can make the audience have a strong love for this imagination, thus improving the popularity of the animation character and forming a brand effect. The modeling of animation characters is simple and exquisite. After the connotation characteristics are fixed, there should be a space for people to fill the gaps and form imagination, which is more conducive to the design and development of accessories. Each animation character on the screen should have its own unique connotation and characteristics. Enriching the character with stories and activating the character with personification can make this animation character more popular. In the contemporary world animation industry, there is a tendency of abstraction in the animation character modeling. A brand-new animation character symbol is created by abstraction, which is convenient for communication with people in other countries and easier to distinguish. Japanese Doraemon, one piece king, American hulk and transformers are all examples of this kind. No matter which abstract animation character is from which country, its purpose is to highlight its own characteristics in modeling and facilitate the audience to accept and remember. The advantage of this animation character abstraction is that it can effectively reduce the creation cost and improve economic efficiency. Chinese animation creators should dare to innovate, deconstruct animation symbols through the "three-stage method" （Xu Dan & Chen Xuesong， 2019）, endow classic animation images with new connotations, and create excellent domestic animation character symbols such as "the return of the great sage". The research on animation symbol characters is not to shape through simple and rapid design. Symbolic character design needs to leave a deep impression in the hearts of the audience. This is the most valuable aspect of animation character design. It needs to constantly enrich the connotation of animation symbols and better display the character image through symbols.

CONCLUSION

With the development of economy, countries all over the world have increasingly emphasized the construction of their own cultural system, and the recognition and importance of IP has become an important symbol to judge the development degree of a country or region's modern civilization characterized by the spirit of contract. （Xue Feng，2019） in fact, the long history of Chinese traditional culture should become the source of inspiration and realistic basis for animation symbol design, rather than become a cage that imprisons creative ideas. Clarifying the artistic characteristics contained in Chinese traditional culture has important theoretical and practical significance for the innovative design of animation symbols in China, It can further help Chinese animation designers to sell local animation symbols to the world and realize cultural self-confidence, self-reliance and self-improvement.

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INNOVATIVE RESEARCH ON THE DESIGN AND DEVELOPMENT OF INTANGIBLE CULTURAL PRODUCTS IN ZHUHAI CITY, CHINA

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ABSTRACT

Zhuhai city is a young city with both dreams and romance.In the 25-year journey of the special zone, Zhuhai people have built this emerging tourism city with their diligence and sweat.The culture of the special economic zone, which has relied on economic development, has also become a new highlight of the development of Zhuhai region.In the emerging industry of culture, university culture, as a new force, has injected new vitality into the cultural cause of Zhuhai and the overall construction of Zhuhai.Intangible cultural heritage is the precious crystallization and wealth of human civilization, and the continuous cultural lifeblood of human society, including human thoughts, intelligence and emotions. It has rich content and immeasurable multiple values.Under the fierce impact of global economic integration and foreign cultures, some intangible cultures are rapidly changing and even disappearing.In this case, it is necessary to establish a systematic evaluation system, to study the value of the tourism development of the intangible culture, and to promote the protection and inheritance of the intangible culture and the development and interaction of the tourism economy. It is of great theoretical and practical significance to correctly understand the connotation and tourism value of intangible culture, the tourism status quo, the economic value of intangible culture, study its characteristics, and explore its transformation mechanism and mode.The problems existing in the development of intangible cultural economy are sorted out, and the countermeasures are put forward to realize the maximum benefit of the economic value of intangible culture.

Keywords: Intangible cultural heritage; art design; development; economic value

INTRODUCTION

In the long history of human society, our ancestors have created many splendid cultures and left a rich cultural heritage for our future generations.Compared with material culture, intangible culture pays more attention to the inheritance of human-based knowledge and skills.It is the source and core content of human culture. It fully shows the unique way of life, life wisdom, thinking mode, imagination and cultural consciousness of the core existence and development of a nation. It is rich in content, and it is very rich in resources and rare and scarce resources in the treasure house of a national civilization.

1.1 Background of the study

In order to implement the spirit of the Opinions on Further Strengthening the Protection of Intangible Cultural Heritage (Song Yan, 2021), this study studies the principles of further excavating, sorting out, protecting and inheriting Zhuhai's intangible cultural heritage, and the protection of Zhuhai municipal government and Zhuhai city's intangible cultural heritage.It is precisely because of the promotion of intangible culture in some tourism projects that their functions have been continued and their vitality has been strengthened.For example, the legend of "Legend of the White Snake" infused the West Lake Bridge and Jinshan Temple in Zhenjiang, where the story took place.Tourists to Meizhou, Guangdong province, are often intoxicated with the melody of Hakka folk songs.Some local ethnic performances, visiting activities, festivals and holidays are even more popular programs for tourists.The production process of Jingdezhen porcelain cloisonne is also an important tourism project (Lin QS, 2004).Zhuhai municipal government and Zhuhai intangible cultural heritage protection working group in 2005, 2009 and 2010 collection and through research, evaluation, has published three batches of Zhuhai intangible cultural heritage list, including folk, traditional sports skills projects including doumen lion, doumen lotus dragon dance, phoenix chicken dance, men dry color, loading mud fish, three kitchen crane and lishan Buddha 7 (Liu Ya, 2021).

1.2 Research significant

1.2.1 Necessity for the protection and development of the intangible culture.

Intangible cultural heritage is an important carrier of national spirit and emotion, and is the concentrated embodiment of human wisdom.However, under the impact of economic globalization and modernization, the intangible cultural heritage is facing unprecedented drastic changes, and a large number of the intangible cultural heritage with historical, cultural and scientific values have been damaged to varying degrees, or even dying due to the passing of the inheritors.For example, as the Three Gorges sang the ——Xiajiang boatman, with the mobility of manpower instead of manpower, the human boatman gradually reduced, descendants disappeared and skills lost. Xiajiang haozi, with a history of more than 2,000 years, will become the "swan song" of the Three Gorges.Although the government and all sectors of society pay more and more attention to the protection and inheritance of intangible cultural heritage, the passive protection is difficult to stop the declining momentum of intangible cultural heritage under the strong cultural impact.On the other hand, the protection project investment is huge, but the economic output is very small, a large number of intangible cultural heritage protection will be difficult to rely on the government investment. Therefore, some intangible cultural heritage projects with good economic potential value and high market possibility should move towards the industrialization road of self-map strength and self-development.

1.2.2 The particularity of the intangible cultural and economic value.

It is of great significance to understand the economic value of the intangible culture, while the intangible cultural heritage has many different values and meanings, such as politics, economy, history, geography, religion and art.The economic value of intangible culture is obviously different from other forms of economic value, and it has its own characteristics:

(1) Non-material nature.

The economic value of intangible culture will not be directly expressed, and it often needs to be realized through certain carriers.The problem of this carrier is actually the mechanism of economic transformation. The carrier can be various compilation, weaving, pottery, carving and other crafts and crafts, as well as music, dance, drama and other folk art programs integrating artistic, ideological and ornamental qualities.Without these carriers of immaterial culture, its economic value is difficult to achieve.Therefore, the economic value of the immaterial culture is immaterial.

(2) Potentiality.

The originality and non-regeneration of intangible culture makes its scarcity very prominent (Fang Lili, 2017).But this scarcity often takes a certain amount of time and space to be further reflected.And the economic value of many intangible cultures is not invisible.Because the development of the economic value of such scarce cultural resources reflects, some must have certain subjective and objective conditions, when these conditions are not yet met, their economic value can only be a possible, may only be potential.At the same time, because the intangible culture itself does not have any independent physical form, but often needs to be embodied in people or objectively transformed into cultural products, the economic value is covered with a veil of material carrier and becomes more latent (He JW, Wang FD, 2022).

(3) Scarcity.

In the field of economics, the items used to satisfy human desires are divided into two categories: free supplies and economic goods.Natural supplies exist in the objective world, relative to human desire, its quantity is infinite, and do not cost.Economic goods need to be produced, and production needs to use resources, so they need the cost.Under the established resource cost, its quantity, quality and type are limited, and can only meet the needs of some human beings.In other words, the quantity, quality, and type of economic goods are always insufficient compared with the endless human desire, and this deficiency is the scarcity.In terms of scarcity, intangible culture is more prominent (Yu Jiangwei, 2018).

(4) Regional (Ai Juhong, 2020).

Intangible culture is created by a specific group or individual in a specific area, and it is the culture that a group has precipitated in the long-term production and living practice in a specific area.For example, Chuanjiang haozi could not be produced on the bank of the Yellow River, and Volga boatman qu could not be produced on the Nile River.Each nation has its own specific living and activity area, and the natural environment of this region has a great influence on the formation and development of the national culture.Usually, intangible culture is produced in a certain area and is closely related to the regional environment. The unique natural ecological environment, cultural traditions, religion, production, living standards, daily living habits, and customs determine the regional intangible culture from all aspects.

1.3 Research questions

How to protect the intangible heritage and the principles it follows?

How to design the intangible cultural tourism products that highlight the original ecology?

1.4 Research objectives

To summarize the principles that need to be observed to protect the intangible heritage.

To carefully design and highlight the original ecological nature of the intangible cultural tourism products.

1.5 Scope of the study

The innovative research on the design and development of intangible cultural products in Zhuhai mainly discusses the design, development and protection of intangible cultural regret in Zhuhai.

LITERATURE REVIEW

2.1 Related concepts and theories.

Intangible culture and material culture.

UNESCO divides cultural heritage into material cultural heritage and intangible cultural heritage.And the intangible cultural heritage is also known as the intangible cultural heritage, this concept emerged in the 1960s and 1970s, the first one that proposed the protection of the intangible cultural heritage of the organizations.In October 2003, UNESCO in the 32nd session of the general assembly adopted the convention on the protection of intangible cultural heritage, the definition of "intangible cultural heritage" is as follows: intangible cultural heritage refers to " by groups, groups, sometimes as their cultural heritage of various practices, performances, forms, knowledge and skills and its related tools, arts and crafts and cultural places.With the changes of their environment, mutual relationship with nature and historical conditions, various groups and groups constantly innovate this intangible cultural heritage from generation to generation, and at the same time make them have a sense of identity and history, thus promoting cultural diversity and human creative ability.The Convention on the Protection of the Intangible Cultural Heritage divides the intangible cultural heritage into five aspects (Gong Bin, 2020): (1) oral legends and expressions, including the language used as a medium for the intangible cultural heritage.(2) Performing arts.(3) Social customs, etiquette and festivals.(4) Knowledge and practice about nature and the universe.(5) Traditional handicraft skills.In China, the concept of "cultural space" is added on the basis of the original convention (Zhu T, Chu ZY, 2022).

In fact, the protection of intangible cultural heritage is an extension of the protection of cultural relics in China to the recent and modern cultural protection work. The main objects of protection are the various traditional cultural forms with historical, artistic value and academic value retained by various ethnic groups since the late Qing Dynasty.However, the intangible cultural heritage has its own different characteristics from the ancient cultural relics. For example, it is a living culture, which is very late in time, and it is currently in an endangered state.Therefore, we should be in the global economic integration, China's social transformation, will be in the endangered Chinese intangible cultural heritage rescue and protection, or in the form of text, or the use of modern technology for audio and video, or the representative physical namely folk physical collection, sent to the museum.And on the basis of the above, carefully screened, to determine the level of the protection object, to develop a specific protection plan.In the process of protecting the intangible cultural heritage in China, the relationship between the intangible cultural heritage and the material cultural heritage should be treated correctly.

First of all, the vast majority of folk culture is tangible and appears in material forms, such as various production skills, food, clothing, housing and transportation, text scripts, musical instruments and props, etc., which are all attached to certain substances.It is unthinkable to abandon the material cultural heritage to rescue the intangible cultural heritage.In fact, the above material cultural heritage contains a lot of intangible cultural heritage factors, and the latter exists according to the former.

Secondly, it is possible to divide cultural heritage into material cultural heritage and intangible cultural heritage from the form, but in practice, the two are intertwined.For example, paper cutting can be said to be a visible and tangible material cultural heritage, but if it should be classified into the category of intangible cultural heritage, it should refer to the skills of paper cutting and the spirit contained in it.For paper cutting, the process involved includes: must choose paper material, to use scissors or carving knife to cut, carve, cut to brush grass sample before cutting, cut to post in a certain occasion.In addition, in order to inherit this skill, we need to use oil lamps to smoke out the paper samples, or put the excellent paper-cut works in the books, for the preservation and inheritance.Not only paper cutting, common ceremonies, festivals, traditional daily life, handicrafts, life customs, they have a certain materialized form, and contain rich humanistic spirit.In short, the above examples show that intangible cultural heritage does not exist in isolation, and its relationship with material cultural heritage is interlinked, so it is difficult to completely separate.

Third, under certain conditions, the intangible cultural heritage can also be transformed into material cultural heritage, such as celebration ceremony, manual craft, festival culture, etc., it is difficult to summarize in language, however, once through words or video recording recorded and make it into text, CD, image, it is materialized, "solidification" as part of the material cultural heritage.Intangible cultural heritage and material cultural heritage are interdependent and inseparable, which are two aspects of folk culture.In the protection work should be both, not one or the other.In the past, we have damaged a lot of folk culture and not done enough.Even the world praised cultural relics work is the same, in addition to the revolutionary cultural relics, the national cultural relics, folk cultural relics lack of due attention.Therefore, at the time of global economic integration and China's social transformation, coupled with the impact of market economy, folk culture has been greatly impacted, and destroyed and lost seriously.There are both "intangible" intangible cultural heritage and "tangible" material cultural heritage (Soojung Kim et al., 2019). In the current protection work, we should give consideration to both material cultural heritage and intangible cultural heritage, and we should not neglect one end. This is also the basic starting point of our work.While using various means to record, protect and carry forward the intangible cultural heritage, we should also carefully collect ethnic cultural relics and folk customs and send them to museums at all levels for use by future generations. This is also one of the ways of cultural inheritance.In fact, folk cultural relics are also the historical witnesses of scientific research, display, national unity and patriotism education.

2.2 Characteristics of intangible cultural heritage.

In the academic circle, many valuable opinions and theories are put forward on the characteristics of intangible cultural heritage, and through the understanding of the concept and classification of intangible cultural heritage, the following typical characteristics are summarized.

2.2.1 Native nature.

The so-called local refers to the living space, the foundation.In essence, the intangible cultural heritage is not introduced from a specific space, but native in this spatial region, with this regional characteristics.Its generation is influenced by the historical environment of the region, which is formed by people through long periods of living habits and passed down from generation to generation.Most intangible cultural heritage of different ethnic groups and different regions is different, and even the same ethnic group and different regions may be different.

2.2.2 Nationality.

People's survival and activities are a kind of practice based on the historical premise. The survival methods and practical activities of different ethnic groups have different differences, and the results are bound to have certain ethnic differences.Therefore, the intangible cultural heritage, created by different ethnic groups, has a strong time and regional cultural differences, that is, an important feature of the distinct national intangible cultural heritage.

2.2.3 Integrity.

This point is derived from the internal structure of intangible cultural heritage. Any kind of cultural heritage contains three essential elements: historical environment, inheritance carrier and spiritual connotation.The interaction between the three, to form a unified whole, the lack of any one can not be called cultural heritage, and the intangible cultural heritage is no exception.

The specific historical environment, inheritance carrier and spiritual endoplasm are organically combined together to form a unified cultural whole, resulting in the emergence of intangible cultural heritage forms, which must be followed in the generation of intangible cultural heritage, and also must be paid attention to when learning intangible cultural heritage.

2.2.4 Inheritance.

Compared with the traditional material cultural heritage, the intangible cultural heritage is a cultural heritage that is ongoing and will continue to be inherited in the future.It still has quite exuberant vitality in specific groups, time and regions.And these are what the material cultural heritage does not have.Intangible cultural heritage is still being passed on and changing among the group.The change here is based on the specific cultural subject, and the original inner spirit will not change.For example, the national languages, songs and dances in the inheritance.

In short, if the protection project can be carried out under such a principle, it can be certain that the greater the protection intensity, the more beneficial to the recovery and development of the vitality of the object, while avoiding new damage, and truly realize the "effective protection" (Fu Xiaobing, 2016).

RESEARCH FINDINGS

Principles to protect intangible cultural heritage.People have become more and more aware of the importance of protecting the intangible cultural heritage, but how to protect it to achieve better practical results, we should follow the following principles:

3.1 The Principles of Life.

As a crystallization of human spiritual creation, the intangible cultural heritage has its own vigorous vitality, the existence of which contains the existence of many conditions.Therefore, if we want to continuously maintain and enhance the vitality of the intangible cultural heritage, we must find the fundamental existence of this life and grasp its spiritual soul through research and other means.That is, the core values embodied by the specific national spirit and psychology, so as to accurately understand and carefully protect them at the source and root.

3.2 Innovation Principles.

Logically, this is a necessary extension of the first principle.Since the intangible cultural heritage is a kind of life existence, it inevitably is constantly changing in the interaction with nature, society and history.This mutation, has two positive and negative directions: its negative direction is distortion- -toward the distortion, leading to the damage of its own gene lineage and even fracture.Its positive direction is innovation- -it is the result of intangible culture in the face of new ideas, assimilation in the face of a new living environment.This positive innovation promotes the protected object to change, bring forth the new, and endless.

3.3 Overall principles.

There are two meanings: one is the ecological whole- -which is determined by the ecological characteristics of the intangible cultural heritage.Second, the culture as a whole.A nation with a long history, the intangible culture she creates is diverse and colorful. Although it is different in its specific connotation, forms and functions, they are all derivatives of the spiritual emotion of the nation, with internal unity, and it is a cultural community of identical symbiosis and sound and air communication.It is just such a cultural whole that we want to protect.

RESEARCH RESULTS

4.1 Attach importance to the economic value of intangible culture and establish corresponding policies and regulations.

Nowadays, when the world economic development mode is changing rapidly and the cultural economy is receiving more and more attention, we should pay attention to the economic value of the intangible culture and raise it to the height of cultural resources and cultural capital.Carefully analyze and study its potential value and its transformation mechanism, and study its reasonable allocation problem.From the perspective of economic value to open some traditional skills of portal, learn to use economic leverage of powerful internal power to carry forward the economic value of non-material culture, combined with advanced high and new technology, improve awareness, cultivate well-known brands, increase competitive advantage, form characteristic economy, promote the development of tourism economy.

In addition, the cultural departments of local governments should formulate specific construction plans for the protection and inheritance of intangible culture, deal with the value of intangible cultural resources, economic and social benefits, and sustainable development, and put the development and construction of intangible cultural tourism and cultural resources in the first place.Tourism planning should be carried out on the basis of a comprehensive general survey and scientific evaluation of the intangible cultural tourism resources and environment, so as to determine the characteristics and protection scope of cultural resources.We should be market-oriented, carefully design intangible cultural tourism products in accordance with the principle of reasonable layout, key development, based on development and orderly development.To achieve the development and utilization of intangible culture and effective protection.Implement the cultural and environmental impact assessment system for project development, adhere to the principle of "effective protection, unified management, reasonable development and sustainable utilization" (Zhou XF, 2021), and take practical measures to limit the adverse impact of cultural and tourism resources development on the non-material cultural environment to the minimum scope.The protection and development of intangible culture into tourism and other economic and social policies, regulations and management, so that the policies and regulations are not only conducive to the protection of intangible culture, but also in line with social needs and economic laws.Not only consider the carrying capacity of intangible cultural resources themselves, but also pay attention to the economic and social endurance.

4.2 Take the industrialization road of intangible culture.

On the protection of intangible culture, UNESCO claims, whether tangible cultural heritage, or intangible cultural heritage, should be on the premise of ensuring that the intangible culture is not destroyed, as far as possible to enter the market, and through the feasible market operation, complete the protection of intangible culture and its potential development, and realize the virtuous cycle of intangible culture protection and economic development. Only by taking the industrialization road of intangible culture, and making the traditional culture continue to develop and grow, and after forming the industrialization scale, can the win-win social and cultural value and economic value of traditional culture be realized, and make the cohesion of traditional culture more concentrated.

The so-called industrialization is a dynamic process, and simply speaking, it is a comprehensive marketization, and it mainly includes the following key points: the form of operation of the market economy. To a certain degree of scale.With capital and close contact for the purpose of profit. Intangible culture from the perspective of industrialization.The first is to change our thinking and realize that intangible culture is not only a traditional "artistic treasure" (Cui Zhe, 2020), but also a potential resource that can be transformed into products, that is, it can make money by "buying and selling".The market is the carrier of intangible cultural production process and the space of communication. Intangible culture cannot exist independently, and it must be attached to a specific carrier to display, spread, store and inherit.Generally speaking, the carriers of intangible culture can be roughly divided into symbols, general material entities and people. Tradition believes that the inheritors are the most important carrier of intangible culture, but in the modern social environment, the market has become the best carrier and communication space of intangible culture.

To realize the industrialization of intangible culture does not mean that it need to completely cancel its ideological function.The intangible culture of the intangible culture embodies the public values, thinking ability, aesthetic judgment and spiritual standards. The industrialization road is conducive to the protection and development of the intangible culture, but it should not throw away the public consciousness of its essence ——.At the present stage, we can adopt the modern science and technology, such as turning the traditional intangible culture into the animation form or the online game console form in the new media era, which will be more conducive to the communication.The protection of intangible culture is most afraid of too much of a good thing, to keep the "material" lost "immaterial". The "modification", innovation and even "re-youth" of the "intangible culture" is also a kind of protection.The development and utilization of intangible culture can not only promote industrial upgrading, but also be the best way to protect them from being demolished and built.

4.3 Carefully designed intangible cultural tourism products that highlight the original ecology.

The design of tourism products should highlight the characteristics and personality of tourism resources to meet the needs of the tourism market.Because the intangible culture has the original ecological gene, in the tourism development, we should make full use of its unique original ecology to innovate to design tourism products.At the same time, the intangible culture has a diversity. In the planning and development of the intangible cultural tourism, we should choose the appropriate development mode to form a unique tourism products and projects.

4.3.1 Combination form.

For the dispersed intangible culture that reflects a certain period, certain region and certain cultural connotation.We can concentrate it, not only highlight the characteristics, but also find out the common ground, to show a distinct theme, the combination, complementary joint development.In addition, we can also choose the same category of intangible culture for centralized development. For example, traditional music folk songs, folk songs, flowers and song songs can be performed and combined to fully show the charm of intangible culture in different regions but the same type.

4.3.2 Independent development type.

The independent development mode requires that the intangible cultural resources must have strong attraction, unique value and rich content.Therefore, in the development of tourism, we can combine a variety of forms of expression, design rich tourism projects and links, in order to achieve both highlight the theme, the content is not a single purpose.For example, the Kunqu Opera Art Museum will be established, and this world-class intangible culture will be centrally exhibited in the museum through cultural relics display, opera performance, and on-site learning and participation.

4.3.3 Attachment type.

There are two main types of intangible culture based on the dependent development mode: one is the unique value, the near extinction, the narrow distribution area, and the products form a single intangible cultural resource after tourism development.Such as the primitive tribe of music and dance, an ancient custom, and so on.The other is the intangible cultural resources that are widely distributed with strong adaptability but have single product content after tourism development.Such as storytelling, embroidery, porcelain making technology, etc. This kind of intangible culture can be attached to the main local tourism brands to promote the protection and development.

4.3.4 Attention should be paid to the construction of talents of intangible cultural inheritors.

The inheritors are the individuals or groups that directly participate in the inheritance of the intangible culture and can inherit the intangible culture, and they are an important living carrier of the intangible culture.Intangible culture has a long history, passed down from generation to generation, and it faces the impact of foreign culture and commercialization.In many places, the inheritors of folk skills, ethnic songs and dances, and acrobatic dramas have been seriously lost or replaced. Some tourist attractions, in pursuit of high tourism income, have temporarily pieced together non-inheritors to perform ethnic songs and dances, and acrobatic dramas.If tourists are fooled in this way for a long time, the result will inevitably lead to the destruction of the image of tourism places, the decrease of tourists, and the significant decrease of tourism income.

In order to avoid the fault of the intangible cultural inheritors, we should establish a professional team to rescue and protect the intangible cultural resources, excavate and protect the old artists who are good at the traditional folk customs, and attract the young people to participate in the inheritance and protection of the traditional culture, so that the endangered intangible cultural resources will not disappear.The artists with unique traditional crafts will be awarded corresponding titles and certificates to protect the production of their products and the inheritance of skills, so that tourists can know that every craft is made by the craft culture and the best artists with raw materials and traditional techniques, and there will be no flood of "fake crafts".The research institute of Ethnic Culture and Art shall be established, cooperating with relevant departments of institutions of higher learning, and employing folk inheritors for guidance, so as to provide sufficient human resources support for the utilization of intangible cultural resources.

CONCLUSIONS

In today's rapid development of the global economy, we should realize that not only economic capital and social capital can bring benefits. Intangible culture can also be used as capital, and once it is transformed into capital, its intrinsic potential is incalculable.Using culture to develop tourism and prosper the economy has become the general trend and the main trend of the world tourism development. We must adapt to this form of development.Clarify the relationship between the protection of intangible culture and the development of tourism economy, comprehensively strengthen the construction of tourism culture, enhance the brand of tourism culture, enhance the survival ability and competitiveness of the market, and promote the faster and better development of tourism economy.In a matter of fact, the time of the "protection" of the international intangible cultural heritage is very short, far inferior to the material cultural heritage, and its theory is also very immature. Many studies are basically for the protection, and the research results of tourism development are very few, so the research on the intangible cultural development needs to be deepened.

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EXPERIENCE VALUE OF OUTDOOR CAMPSITES IN THE GRASSLAND OF EASTERN INNER MONGOLIA

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ABSTRACT

Because of my love for outdoor camping, a way of travel, I have a preliminary understanding of the development of outdoor camping in China through reading a lot of literature. Take the northern grasslands of Inner Mongolia as an example, the main motivation for traveling to the grasslands of northern China is to appreciate the natural environment dominated by the grassland scenery, feel the life and folk culture of the grassland ethnic minorities, and find the spiritual relaxation away from the hustle and bustle of the city. According to the unique geographical environment of the grasslands in northern China, the vast majority of travelers will choose to drive by themselves. Driving on the vast grassland, outdoor camping can well improve the travel quality and experience. However, the author's personal experience and some of the results of the interviews tell us that very few travelers choose to do outdoor camping in northern China. Based on this situation, this paper mainly analyzes the current situation of outdoor camping in eastern Inner Mongolia based on the experience value. Analyze the camp environment theme, camp activity theme, camp experience cost and camp experience frequency of the eastern Inner Mongolia grassland campground, find out the existing problems and put forward suggestions.

Keywords: Inner Mongolia grassland, Outdoor campsite, Experience value

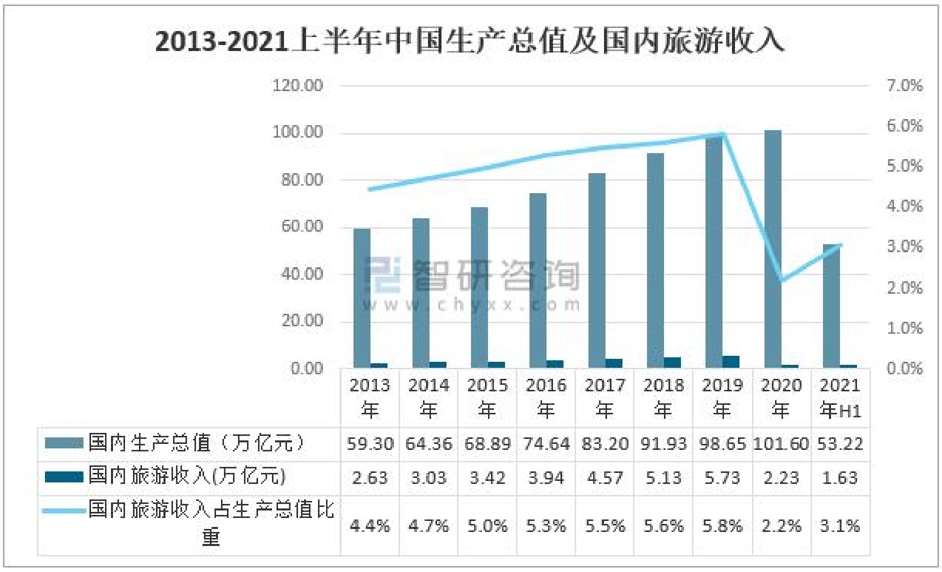
INTRODUCTION

The main grassland area in Inner Mongolia Autonomous Region is 86.667 million hectares, of which 68.18 million hectares of effective natural pasture, accounting for 27% of the national grassland area. It is the largest grassland and natural pasture in China. The most famous one is the Hulun Buir Grassland, which is the largest natural grassland reserved area in the world.The Inner Mongolia ethnic culture is a representative of the grassland culture, involving food, clothing, painting, religion and other cultural forms. The people of the grassland are very hospitable.These cultural forms all show the national cultural spirit of a region. This advantaged geographical and cultural environment is one of the best options for outdoor camping. Inner Mongolia is located in the north of China, adjacent to China's Beijing-Tianjin-Hebei economic circle, with obvious geographical advantages and a very large number of potential outdoor camping site participants.This paper briefly analyzes the current situation of outdoor camping in Inner Mongolia grassland based on the experience value. In the long human history, experience only has its cultural significance, and only after being integrated into economic activities and becoming the source of economic benefits, experience is pushed to a crucial position in the economic field.

1.1 Research background

Residents' increased willingness to travel will promote the vigorous development of the tourism industry. As a way of leisure and entertainment, tourism is no longer only the needs of a few people, but also a way of public life. With the further improvement of people's living standards and the change of consumption subjects and consumption concepts, the demand for tourism is constantly increasing. During the epidemic period, people are more identified with good services and high-quality products. At the same time, consumer demand is further refined, prompting people's spending on tourism. In the first half of 2021, China attracted 1.871 billion domestic tourists, with an average cost of 872.3 yuan.

Table 1. China's GDP and domestic tourism revenue in the first half of 2013-2021



Source: National Bureau of Statistics, Zhiyan consulting and sorting

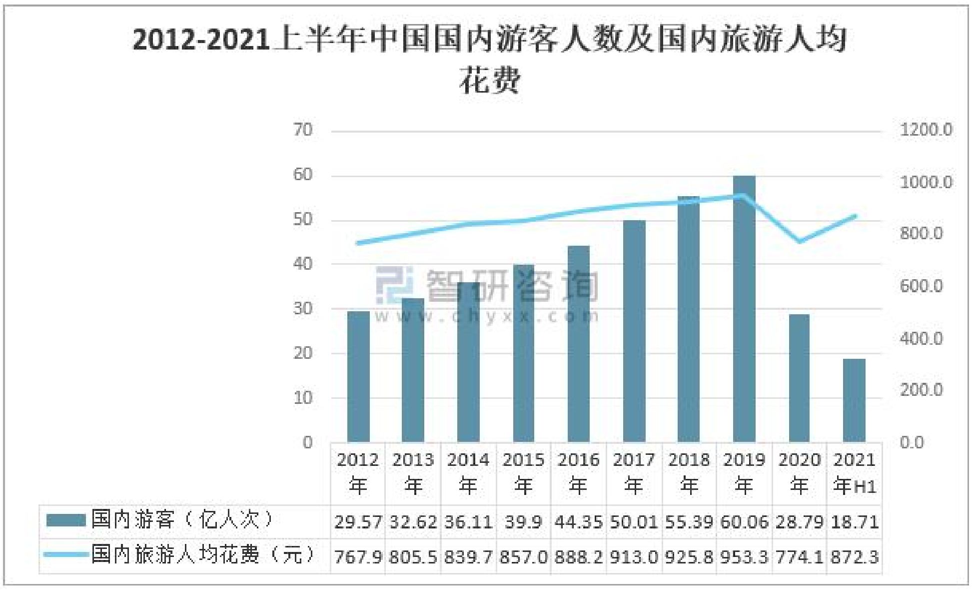


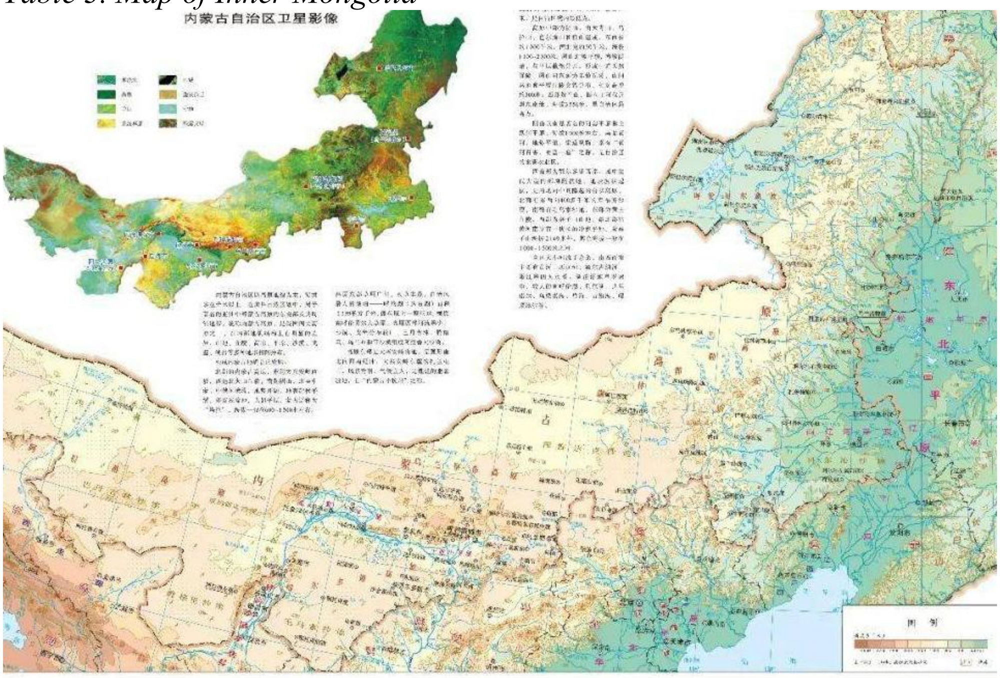
Table 2. Number of Chinese domestic tourists and per capita expenditure of domestic tourism in the first half of 2012-2021

Source: National Bureau of Statistics, Zhiyan consulting and sorting

In 2021, Inner Mongolia received 56.2 percent of domestic tourists by Self-Drive, up 16.4 percent from the same period last year and 12.2 percent from the same period from January to March. Among them, 52.6% of domestic overnight tourists travel by car (Inner Mongolia Bureau of Statistics 2021). Tourists who drive by themselves are the main participants in outdoor camping, so there are a large number of potential participants to participate in Inner Mongolia for outdoor camping activities. In the first half of 2016, Inner Mongolia received 31.6034 million domestic and foreign tourists, up 11.68% year on year. In the first half of this year, customers from outside the region accounted for 62.92%. North China is an important tourist source market in Inner Mongolia, accounting for 25.97%, among which Beijing accounted for the highest proportion of 9.72%, followed by Hebei and Tianjin (Inner Mongolia Tourism Bureau 2016). A good outdoor camping experience can attract more outdoor camping participants.

With the Beijing-Tianjin-Hebei region as the source of tourists, passing through the Xilin Gol Grassland in Inner Mongolia, and taking the Hulunbuir Grassland as the destination of outdoor camping in Inner Mongolia, an outdoor camping site route is clearly visible. This route is the main research scope of the current situation and experience value of outdoor camping sites in Inner Mongolia.

Table 3. Map of Inner Mongolia



Source: Map of China 2019

1.2 Problem Statement

The number of outdoor camping sites along the trip is small, making it difficult to form outdoor camping routes. Most of the outdoor camping sites in Inner Mongolia grassland are built based on the attached scenic spots, and the camp theme is single. It is difficult to obtain accurate information of outdoor camping sites by self-driving in Inner Mongolia grassland, and lack of information platform and related management information. Analysis the current situation of 6 outdoor camping sites in the eastern grassland of Inner Mongolia and find out the existing problems.

The main information of the outdoor camping site in the eastern grassland of Inner Mongolia was obtained through the Internet and field inspection.

Table 4. Summary of outdoor camping sites in the eastern grassland of Inner Mongolia

order number	**Camp name**	**location**
1	The Greater Hinggan Mountains RV outdoor camping base	Hulunbuir Menggenhe City, Inner Mongolia Autonomous Region
2	Hulun Lake Self-drive Camp	Inner Mongolia Autonomous Region Hulunbuir League Chen Bar hu Banner
3	The Luming Lake Campground, Arshan National Forest Park	shan City, Hinggan League, Inner Mongolia Autonomous Region
4	Xilin Gol League Uragai Reservoir RV Camground	East Wumuqin Banner of Xilin Gol League, Inner Mongolia Autonomous Region

Source: Internet and multimedia

1.3 Study Purpose

Based on the experience value of the outdoor camping ground in the eastern grassland of Inner Mongolia, find out the existing problems and put forward meaningful suggestions for promotion.

Table 5. Outdoor camping area location

Source: Baidu Map

LITERATURE REVIEW

2.1 Overview of outdoor Campgrounds in China

The tourist campground originated in the United States in 1860, and is recognized as one of the world's tourism projects that has never declined since its birth. The International Camping Association was founded in the Netherlands in August 1932 (F.L.C. C), is a sign of the global promotion of camping activities. In the development course of more than one hundred years of development, the developed countries and regions in Europe and the United States have experienced the early initial stage, national park development stage, recovery stage and prosperity stage after World War II. They not only have a complete system and diversified products, but also become an important form of national outdoor tourism. With the booming development of China's tourism industry and the rapid growth of private car ownership and expressways, the proportion of self-driving travel has been steadily increasing, and car camping sites, as a new way of tourism, have received more and more attention and popularity. Since 2015, the Ministry of Culture and Tourism of the People's Republic of China and other departments have issued several Opinions on Promoting the Development of Self-driving Travel Tourism, Standards for the Construction and Service of Leisure Camping Places (GB / T 37170-2015), Guide to Infrastructure and Public Service for Self-driving Destinations and other documents and industry standards. The rapid development of campgrounds has become a hot area for cultivating consumption and driving investment. However, at present, a large number of outdoor camping sites have been built in China, but the construction and overall management of outdoor camping sites also have problems such as outstanding theme, uneven distribution and unclear route planning. There is still a big gap between the practical experience and theoretical research of campsites and the developed countries. Inner Mongolia is located in northern Xinjiang of China with rich and diverse tourism resources and multi-ethnic culture, and is close to the Beijing-Tianjin-Hebei consumer market, and has a high correlation research value of outdoor camping sites.

In particular, the economic value itself, and its progressive nature- -from products, goods, services to experience- -is the experience economy develops.

2.2 Outdoor camping activities have a very good experience value

Outdoor camping activity is a very good outdoor experience activity, which has a very good educational value for the growth of teenagers, and also plays an important role in the construction of family cohesion. Li Bei (2012) "The development and construction of campground conforms to the development trend of tourist experience in the era of experience economy. Tourist experience theory and campground have the same characteristics of educational, entertaining, experiential and participatory, which are not only the requirements of tourist experience theory but also the characteristics of camping ground practice".

Cheng Haiqing (2007)."The customer's experience value is obtained through the perception of the enterprise's products (or) services, is a sublimation of the service value, is a kind of spiritual satisfaction from the heart, and will form a deep memory or produce a good aftertaste".

2.3 Theme diversity of outdoor campsites helps to improve the experience value

Outdoor camping activities is also a good heart participation activities, Joseph Pine, James H. Gilmore (2003) "When a person reaches a certain level of emotional, physical, intellectual, and even mental levels, the good feeling generated in his consciousness is the result of the interaction between his own state of mind and those planned events",

More thematic outdoor camping sites and related activities have a good role in this regard. Xiao Yinan, Xia Mo (2008) " What the theme park tourists are pursuing is a kind of novelty, happiness and deep experience in the park. With "feeling" as the core and subject of theme park products, emphasizing that tourists' participation and "emotional resonance" can form a more profound and lasting influence on tourists."Compared with other types of scenic spots, strong participation is a unique part of theme parks. Theme parks create a more three-dimensional experience for tourists.Abraham H. Maslow (1954) needs hierarchical theory and different priorities of customers to meet the spiritual needs. The thematic diversity of outdoor camping sites helps to improve the camping experience and experience value.

2.4 Regional clusters of outdoor campsites will promote camping experience value

Regional clusters of outdoor camping sites will first increase the effectiveness of travel time and reduce the cost of camping experience. Lu Guoqing.(2002). The intensity of catch-up between enterprises in the cluster is higher than that of the selection mechanism of survival of the fittest outside the cluster is more thoroughly played in the cluster than outside the cluster.The increasingly fierce competition, is the enterprise constantly seek new ways out and unique selling points.

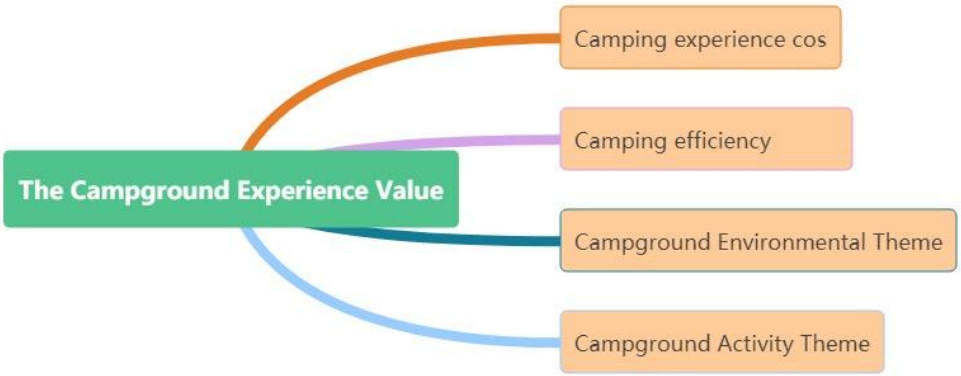
B. Joseph Pine、James H. Gilmore (2003) "When a person reaches a certain level of emotional、physical, intellectual, and even mental levels, the good feeling generated in his consciousness is the result of the interaction between his own state of mind and those planned events"

Table 6. Camp cluster variable relationship

Source: CNKI

2.5 The Conceptual Framework

Table 7. The Conceptual Framework



Source: CNKI

2.6 Study scope

Self-driving camping travel routes from Beijing to Hulunbuir, in line with the basic functions of outdoor camping (RV parking, tent camp, water, electricity, toilet), it is determined to have the following outdoor camping sites for camping activities. And analyzed this.

Table 7. Information on outdoor camping areas in eastern Inner Mongolia

Camp name	**location**	**Distance from Beijing to the campground**
The Greater Hinggan Mountains RV outdoor camping base	Hulunbuir Menggenhe City, Inner Mongolia Autonomous Region	1900 Kilometers
Hulun Lake Self-drive Camp	Inner Mongolia Autonomous Region Hulunbuir League Chen Bar hu Banner	1700 Kilometers
The Luming Lake Campground, Arshan National Forest Park	shan City, Hinggan League, Inner Mongolia Autonomous Region	1350 Kilometers
Xilin Gol League Uragai Reservoir RV Camground	East Wumuqin Banner of Xilin Gol League, Inner Mongolia Autonomous Region	1022 Kilometers

Source: Baidu net

RESULTS

3.1 Camping cluster situation

Based on the data analysis of the experience value influence factors of outdoor camping sites, the camping cluster and camping theme, respectively.(In the tree river.2004). Interest-driven development is the fundamental reason for the formation of the cluster industrial innovation system. The spatial agglomeration of regional economic activities will reduce the cost of innovation and thus stimulate economic growth.Data analysis of the camp cluster (camping experience frequency, camping experience cost) from Beijing to Hulunbuir Campsite.

Table 8. Frequency and experience cost of camping experience

Campground cluster	Camping experience frequency	One camping trip of 300-400 km one way
	Campground experience costs	Based on the number of required hotel visits in the camping trip route, once visit for every 300-400 km is reduced by 1 point.

Source: Baidu net

Table 9. Experience frequency and experience cost of the eastern grassland outdoor camping sites in eastern Inner Mongolia

Camp name	location	From Beijing, we go to the campground	Camping experience frequency	One-way participation costs	Campground Experience Cost (accommodation)
The Greater Hinggan Mountains RV outdoor camping base	Hulunbuir Menggenhe City, Inner Mongolia Autonomous Region	1900 Kilometers	4	Two nights in the hotel + self-drive	0
Hulun Lake Self-drive Camp	Inner Mongolia Autonomous Region Hulunbuir League Chen Bar hu Banner	1700 Kilometers	3	Two nights in the hotel + self-drive	0
The Luming Lake Campground, Arshan National Forest Park	shan City, Hinggan League, Inner Mongolia Autonomous Region	1350 Kilometers	2	Two nights in the hotel + self-drive	0
Xilin Gol League Uragai Reservoir RV Camground	East Wumuqin Banner of Xilin Gol League, Inner Mongolia Autonomous Region	1022 Kilometers	1	Hotel stay for 1 night + self-drive	-2

Source: Baidu net

As can be seen from the above table, the distance between the destination and the first campsite in the eastern grassland of Inner Mongolia is far, which increases the frequency of hotel injection and increases the cost of the whole camping trip.

3.3 Theme development of outdoor camping ground

Through the Internet and field inspection, I obtained the theme of outdoor camping sites and camp activities in the Beijing-Hulunbuir camping trip route to Hulunbuir.

Table 10. Environmental theme and activity theme information of outdoor camping ground in eastern Inner Mongolia

Camp name	location	Camp Environment Theme	Camp Activity Theme (Summer)	Camp facilities
The Greater Hinggan Mountains RV outdoor camping base	Hulunbuir Menggenhe City, Inner Mongolia Autonomous Region	Forest, lake	Rafting, golf, and water events	RV parking space, tent camp space, log cabin villa, water, electricity, toilet, dining room
Hulun Lake Self-drive Camp	Inner Mongolia Autonomous Region Hulunbuir League Chen Bar hu Banner	Prairie, lake	Grassland sightseeing	RV parking space, tent camp space, water, electricity, toilet
The Luming Lake Campground, Arshan National Forest Park	shan City, Hinggan League, Inner Mongolia Autonomous Region	Lakes, forests	Forest sightseeing, water projects	RV parking space, tent camp space, water, electricity, toilet
Xilin Gol League Uragai Reservoir RV Camground	East Wumuqin Banner of Xilin Gol League, Inner Mongolia Autonomous Region	Lakes, grasslands	Grassland sightseeing	RV parking space, water, electricity, toilet

Source: Baidu net

As can be seen in the table, there are mainly grassland, forest and lake, which are relatively simple for a camping trip of nearly 2,000 kilometers. There are 5 kinds of themes, the content is not rich. The basic functions of each outdoor camping ground are more comprehensive.

CONCLUSION

In the outdoor camping site route of the eastern grassland of Inner Mongolia, the distance between the destination and the first camping site is far, which increases the frequency of hotel injection, and increases the cost of the whole camping trip. Therefore, the value of the outdoor camping experience is reduced a lot.

The theme of the camping site and the activity theme are relatively simple, which greatly reduces the interest of outdoor camping experience.

SUGGESTIONS

According to the current situation of outdoor camping ground in eastern Inner Mongolia, hypothetical thinking from the perspective of experience value. Additional campsite locations are added every 300-400 km from Beijing, eliminating the need for hotel occupancy for camping trips from Beijing to Hulunbuir. This has 2 benefits, reducing the cost of camping travel experience and increasing the frequency of camping sites. This will effectively improve the value of outdoor camping experience in eastern Inner Mongolia.

While increasing the number of camping sites, the theme concept of outdoor camping sites is innovated to enhance the needs and experience value of outdoor camping participants. It can effectively integrate to form the thematic outdoor camping site directory according to the grassland geographical environment along the camping route, the rich folk culture and the needs of camping participants.

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THE DEVELOPMENT MANAGEMENT OF THE NEW FISHING COMMUNITY AGAINST A BACKGROUND OF THE RURAL TOURISM

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ABSTRACT

The theories and practice of modern social development have confirmed that the development of the new Fishing Country communities is conducive to protect the ecological environment, create a good appearance of the village and promote the national identity and national autonomy. Therefore, this research took the development of the new Fishing Country communities as the research object. The main content revolves around two questions: first, exploring the elements of the development of the new Fishing Country communities; second, the analysis of the interaction between the rural tourism and the new Fishing Country communities in Zhou Shan island areas. This research mainly uses interviews to explore the main body and the construction mode of the new Fishing Country communities, as well as the relationship between rural tourism and the construction of fishing and rural communities in Zhou Shan island areas. This study fully draws on the theoretical research results on the construction of new-type communities at home and abroad. Based on it, through field inspections, visits, etc., and the inductive analysis of the restrictive factors such as community infrastructure construction, it is believed that there is an inevitable connection between the new community construction in the new fishing Country communities and the development of rural tourism, the two cooperate with each other and develop together. The construction of the new fishing Country communities will inevitably lead to the rise of island rural tourism, and the development of rural tourism will also create conditions for the construction of the new fishing Country communities.

Keywords: New Fishing Country communities，Development management，Rural tourism

INTRODUCTION

1.1 Background of the Study

1.1.1 The central government continues to pay attention to the “Three rural” issues

The development of new rural communities has become a hot issue of the Times. From 2004 to 2020, the Central Government issued the “Three rural issues “on Central Document No. 1 for 17 years.” Farmers, agriculture, rural” has become an important issue in China in the new era of rapid economic development (Bo Qin, 2021）. In April 2007, the strategic plan of the Ministry of Civil Affairs indicated that a pilot project for the construction of new rural communities would be launched nationwide. Under the background of these policies, the theory and practice of rural community construction and development have achieved rich results（Min Deng, 2020）. The construction of new rural communities can be called the “Second revolution” of rural development after the Household-responsibility system.

1.2 Research Gap

At present, the experience and the relevant research of new rural community construction at home and abroad, have made considerable achievements, the content mainly focuses on the open and flat areas such as Jiangsu, Zhejiang, Shanghai, Shandong, Henan, etc. , with more developed regional economy. There are few articles about the new Fishing Country communities, which points out the direction of this study（Deming Lv,2022）.

1.3 Problem statement

The issue of “Agriculture, countryside and farmers” has always been the core concern of the whole country， and the construction of new rural communities is bound to become the focus of the whole country (Guoxing Yan,2022). In the documents issued by various ministries and departments of the state, it is clear that the main body of the construction of new rural communities should be diversified, not only that the state and local governments should care about and help the construction of new rural communities, but also introduce many powerful main body, help and lead the new rural construction，what is more important (Wenkai Yang,2022). Due to the different situations faced by different regions, the main body of construction varies from place to place. Practice has shown that the government has played a leading role in promoting the development of public management and public service activities in the local communities represented by the Fuchuan Yao Autonomous County village of Chashan in Guangxi. The construction of a new type of rural community, represented by the Riverside village in Lianzhou, Guangdong Province, is mainly planned by community-based collective enterprises, with the government playing a supplementary role. In some open and mobile regions, represented by Red Rock Village Museum, the Gongcheng Yao Autonomous County of Guangxi, where rural tourism is developed earlier and better, and the tourism market is more mature, the main position of market and social forces in rural construction is gradually prominent（Min Deng ,2020）.

At the same time, the model of new rural community construction in different regions is also different. In those villages where residents have strong autonomy and can play a leading role in the process of community construction, they often take the organizational mode to develop community public services. Under this model, different residents will join different social grass-roots organizations and participate in community construction and management through organizations. In the areas with low level of community self-management, the self-management model of community with the Party organization as the core is often adopted. Under this mode, the main way to realize the community self-government is the self-government of the relevant administrative departments or the purchase of services, which can strengthen the construction of the community by promoting the concentration of the community and the transformation of the agricultural production mode(Degui Wen,2021).

However, in the actual construction process, there are serious problems in some areas, such as excessive government intervention. In order to pursue immediate performance, relevant local departments often take coercive measures and blindly carry out development and construction, such as some economically backward areas, which with improper industrial structure adjustment, etc. This will inevitably lead to local residents' lack of awareness of the relevant construction plans of community construction, and their participation and enthusiasm in the process of community construction are not strong, even resist psychology. In addition, due to the excessive pursuit of political achievements by local relevant departments, they often only focus on external construction, ignore the internal problems in community construction, and do not understand the real needs of residents. Interests of local residents. However, due to the characteristics of the terrain, the construction of the new Fishing Country communities has its own frontiers and limitations, and it is difficult to replicate the construction and development model of rural communities in the plains. This is also a major reform of the traditional fishery economic model.

The core task of the construction of the new Fishing Country is to create community-life, strengthen the cohesion of community residents, and enhance the residents' sense of belonging to the community group. The key to accomplish this task is to raise the awareness of community residents. However, in the current process of rural community construction, some rural communities are constructed for the purpose of economic growth. Although the initiative and centripetal force of villagers to participate in community construction have been improved, there are hidden dangers in development management; Developed communities are developed for the purpose of strengthening community cultural construction. The core of their concern is how to make local cultural and recreational activities more colourful and create a cultural circle with local characteristics. It can enrich the spiritual life of community residents in a short period of time, but it is difficult to maintain due to insufficient motivation in the later period.

1.4 Research Questions

Therefore, this research will discuss the construction and development of new-type village communities in fishing and rural areas from the following two aspects, aiming to answer the following questions in the process of development and management of fishing and rural communities in island areas:

1. What are the constraints to the construction of new communities in fishing and rural areas?

2. How does rural tourism in island areas contribute to the development of new communities in fishing and rural areas?

1.5 Research Objectives

The focus of this research is on the development and construction of the new Fishing Country communities. It mainly uses interviews to explore the main body and the construction mode of the new Fishing Country communities, as well as the relationship between rural tourism and the construction of fishing and rural communities in Zhou Shan island areas. The purpose of the research is：

1. To explore the elements of the development of the new Fishing Country communities;

2. To qualitative analysis the interaction between the rural tourism and the new Fishing Country communities in Zhou Shan island areas.

1.6 Scope of the study

Zhou Shan island, Zhejiang, is located on the southeast coast of China. According to the seventh census conducted at 00:00 on November 1, 2020, the city's resident population is 1,157,817. It has two districts under its jurisdiction - Dinghai District and Putuo District, Two counties---Daishan County and Shengsi County. The new Fishing Country communities are a local community management model and a new local organization form what Zhou Shan City has launched as early as 2005. Its core content is to separate the social and public service functions from the village-level organization, and move some service functions at the township level to the community, so that the masses can enjoy public services more fully. This research will take the construction of the new Fishing Country communities as the research object, and conduct Investigation and Research on the residents of the islands and tourists visiting the villages.

1.7 Significance of the study

Practical experience has proved that the construction of the new Fishing Country Communities is an inevitable trend of urban and rural development integration, and it is also the fundamental way to solve the "three rural" problems in Fishing Country（Bo Qin,2021）.As one of the most market-oriented industries in our country, tourism has gradually become a pillar industry of the national economy. As a branch of tourism, rural tourism not only integrates the three industries, but also closely links agricultural production, agricultural product processing industry, and rural service industry. It plays an important role in tackling fortified areas and provides favorable conditions for the construction of the new Fishing Country Communities

1.7.1 Theoretical Significance

Theoretically, this research systematically studies the development of the new Fishing Country Communities from the perspective of community participation and collaborative development, discusses the elements, conditions, and goals of rural tourism development and the new Fishing Country Communities, explores the consistency and differences between the development indicators of rural tourism and the development of the new Fishing Country Communities, and researches the coordinated development model of rural tourism and the new Fishing Country Communities. In order to effectively develop tourism resources in fishing villages, solve the "three rural" problems in island areas, and promote the construction and development of the new Fishing Country Communities, and then provide new theoretical support systems and methods, the writer conducts demonstration research.

1.7.2 Practical Significance

In practice, this study takes the new Fishing Country Communities in the Zhou Shan island of Zhejiang as a research sample, and conducts research on the economic, social, political, cultural and other aspects of the construction of the new Fishing Country Communities from the role of rural tourism in the construction and development of the new Fishing Country Communities. It will help to promote the development of rural tourism in the island area, drive related industries, accelerate the adjustment of the industrial structure of fishing villages, expand the employment of surplus fishery personnel, and equalize public services in rural areas. It provides a new way to build a harmonious island community and solve the "three rural" problems in the island area.

1.8 Definitions of Key Constructs and Terms

New-type rural communities, also known as "central villages", refer to a new peasant production and living community ， what is formed scientific planning, rational layout, extensive participation and steady progress，through the merger and intensive development of villages， in order to integrate social resources, promote comprehensive rural development under the background of coordinating urban and rural development and promoting urban-rural integration（Fang Han，2017）。

Rural tourism in islands refers to the sum of all tourism activities, what takes place in the Fishing Country, taking the fishing village as the activity area, and the ecology, production and living resources of the island area as the basis. It carry out by tourists who are attract to fishing villages by the tourism resources with local and characteristic fishing and rural scenery, production forms, lifestyles, fishing village customs, fishing village culture, etc.

LITERATURE REVIEW

2.1 Foreign scholars' research on the development of new rural communities

After World War II, in order to promote the better development of rural areas, governments of various countries began to carry out large-scale planning for rural areas. Since the 20th century, the construction of rural communities in our country has also become the research object of foreign scholars.

Their research methods on our country's rural society are usually by visiting our country's rural areas to conduct field research or even living in our country's rural areas for a long time, in order to obtain more diversified and comprehensive research results in multiple disciplines such as design economy, society, politics, and human beings. (Zhengqing Fei, 2000). An American scholar divided China into two different societies: urban and rural; Japanese scholars believed that villages and peasants are the main body of Chinese society after field investigation, and the premise of conquering China must first conquer the peasants(Zhengqing Fei,2000).From the perspective of the market, American scholar set the time node of the study from the beginning of the last century to the 1960s. During this period, the development and change of our country's tertiary markets (rural fairs, townships, and central cities) were analyzed. The modernization process has been studied (Jianya Shi, 1998). Another American scholar believed that China's rural market economy is highly competitive, and the market economy developed in this process is relied on by many market towns, villages and farmers（Ruomeng Ma，1999）.American scholar studied China's rural structure and social relations from the perspective of economics, using the methods of classical economics and focusing on rural economic relations.（Zongzhi Huang，2000）.From the perspective of power relations, American scholar putted forward the theory of "cultural network of power" and "involution of state power" on the basis of summarizing previous studies, has a significant impact on research（Zanqi Du，2003）.

2.2 Domestic scholars' research on the development of new rural communities

On the basis of summarizing the successful experience of new rural communities abroad developed, Domestic scholar proposed that the experience of our country's new rural construction can be learned from the "different but equivalent" way of thinking, that is, construction and development according to the resource endowment of the countryside; accurate positioning Farmers are the main body of the construction of new rural communities. While focusing on the construction and improvement of infrastructure, we should really solve the problems of farmers' income increase and prosperity, speed up the construction of laws and regulations related to the construction of new rural communities, and increase financial investment and agricultural financing and so on (Yongqi Guo,2013). Other domestic scholars drew on the experience of rural construction in Japan, and proposed that the mining, protection and utilization of five types of resources, namely "people", "text", "production", "land" and "scenery", should be the core of beautiful rural construction (Guoen Wang, 2016).

Through the organizational method of "village-led, government cooperation, and social support", a community building model with villagers as the main body were established, and the enthusiasm and wisdom of local residents for construction were gathered to enhance the rural industry, culture, landscape ecology and so on. Though power fundamentally，it promoted the realization of the vision of charming rural construction. Domestic scholar took Wushiying Community, Sheqi County, Henan Province as an example, to discuss the development model of community industry based on agricultural resources, and put forward safeguard measures in terms of land, funds and policies for community industry development (Yan Lu, 2013). Sainan Wang believed that strengthening the coordinated supply and supervision mechanism of the government, the market, social organizations, and community farmers will help to realize the transition from a new type of rural community public goods supply to a balanced pattern (Sainan Wang, 2018).

Jianping Wang putted forward optimization strategies for new rural community management from the perspectives of the value concept, the multiple subjects of management, the incentive system of management, the channels for the expression of community management needs, and the performance evaluation system of village community management of rural community management, Promoting the development of new rural communities (Jianping Wang,2019).

RESEARCH METHODOLOGY

The purpose of this chapter is to provide the overview of the research methodology. There are four sections in this chapter. Research design is introduced in the first section. Secondly, the Respondents and Sampling Procedures are described. Next, data collection/gathering procedure of the study. Last, the study will illustrate the Questionnaire analyze of research.

3.1 Research design

This study fully draws on the theoretical research results on the construction of new-type communities at home and abroad. Based on it, through field inspections, visits, etc., and the inductive analysis of the restrictive factors such as community infrastructure construction, it is believed that there is an inevitable connection between the new community construction in the new fishing Country communities and the development of rural tourism, the two cooperate with each other and develop together. The construction of the new fishing Country communities will inevitably lead to the rise of island rural tourism, and the development of rural tourism will also create conditions for the construction of the new fishing Country communities.

3.1.1. Literature research

The literature research method is the most commonly used scientific research method in the research process for many scholars.

By collecting a large number of domestic and foreign academic literatures, Writer sorted out the relevant literature, understood the achievements and shortcomings of this research field, and these guided the direction for further research.

In order to ensure the authenticity and scientificity of the data, the literatures referenced by this research come from authoritative databases and authoritative journals in related fields at home and abroad. There are mainly including:

①statistical bulletins and various statistical yearbooks regularly published by authoritative departments ,such as the Ministry of Culture and Tourism, the National Ethnic Affairs Commission, and the National Bureau of Statistics.

②Newspapers, magazines, TV, Internet and other mass media related to rural tourism and the construction and development of new rural communities at home and abroad.

③The official website of Zhoushan , Zhejiang Province, the Tourism Bureau, the Cultural Bureau, the Ethnic and Religious Affairs Bureau, the Statistics Bureau and other relevant departments have valuable documents and archives.

④Academic papers and investigation reports published by local colleges and universities, research institutions, scientific research units, etc.

These data constitute a valuable literature basis for this study. Through literature search, we learned that on July 30, 2004, at the West Wharf of Gangan (Shilan) Town, Dinghai District, the first pilot of a new Fishing Country Communities - West Wharf Community of Zhou Shan was established. After 2007, when the "National Rural Community Construction Pilot Counties (Cities, Districts)" were still in the pilot stage Zhou Shan has taken the lead in completing 84 new Fishing Country Communities demonstration sites, and the construction entered into "system innovation" and guarantees of the community management and service system functioning normally. There are three main modes of the new Fishing Country Communities in Zhou Shan, namely, single-village construction of a community—"one community, one village, one economic cooperative"; Dismantling and merging villages to build communities—"one village, one community, multi-economic cooperatives" model; connecting village construction areas—"multi-village, one community, multi-economic cooperation" model. A total of 182 new Fishing Country Communities have been established in the city, including 34 single village construction areas, 59 merged village construction areas, and 89 joint village construction areas.

3.1.2 Fieldwork

The fieldwork method is the most basic way to obtain research materials. For example, by living together with the respondents. They can gain a deep understanding of the atmosphere and culture of their environment. This is the most important research method of fieldwork. We can call it participatory observation. In order to understand the overall picture and development process of the research area and survey objects, writer has been paid attention to the construction and development of the new Fishing Country Communities in Zhou Shan since 2021. In order to expand the depth and breadth of this research, this research selected some of the new Fishing Country Communities as representative, and participated in their life, labor and collective activities in person many times. It aimed to interact extensively with community residents, win the trust and Support of the villagers, and establish a good research cooperation relationship. At the same time, through long-term in-depth observation of social and economic exchange activities and tourism activities in the research area, the general situation of the research area has been basically clarified, and the deep cultural factors, such as some values and lifestyles of the residents of the new Fishing Country Communities in Zhou Shan have more deeply understood.

A total of three new Fishing Country Communities as representative were selected for this study, as follows:

First, Daishan Nizhi Community. In April 2005, four fishing villages, including the original Nizhi, were merged into Nizhi Village, and the economic cooperative was also merged. In June of that year, Nizhi Community was established on the basis of Nizhi Village, forming a pattern of one village, one community and a cooperative, which is typical of single-village construction areas.

Secondly, the Longtan Community in Ganlan Town, Dinghai District is a typical example of a village-built community. Before the merger of Longtan Village, there were five administrative villages. The economic cooperatives of four administrative villages were merged into one firstly. Due to the difference in the level of wealth and poverty with the economic cooperatives of the fifth administrative village, two economic cooperatives were retained, forming one village, one economic cooperative. The governance pattern of the two economic cooperatives in the community.

Third, the seaside community of Xiaosha Town, Dinghai District, has 2 village committees and 2 economic cooperatives. When it comes to the construction of public facilities, public utilities and public services in the joint village community, the "two committees" meetings of the joint village are usually held at the community level to consult, apportion funds, and implement division of labor

3.1.3 Qualitative research

Qualitative research occurs often in the social sciences usually, and as a basic research paradigm, it is a common method for conducting scientific research. Based on the literature review of the research issues and the field investigation and collection of materials, writer qualitatively analyzes the historical continuation and existing problems of the development of the new Fishing Country Communities in Zhou Shan.

3.2 Respondents and Sampling Procedure

3.2.1 Target Population

The target population of this research comprised of two areas of interest as follows:

1. The target population are both male and female people who are aged 20 years old and above.
2. The target population must be a resident of the community or a rural tourist.

3.2.2 Sample Size

Non-probability sampling decided the sample size of the research. Non-probability sampling relies on the personal judgment of the researcher rather than the chance to select sample elements. The researcher can arbitrarily or consciously decide what elements to include in the sample (Malhotra, 2004). Due to this, for tourists， writer chose convenience sampling. Convenience sampling is regarded as a non-probability sampling technique that attempts to obtain a sample of convenient elements. It’s arbitrary (nonrandom) and subjective, and the respondents are selected because they happen to be in the right place at the right time (Malhotra, 2004). And it is stipulated that each family will only issue one questionnaire, and each team will only issue questionnaires to 1/3 of the tourists to ensure the coverage of investigation. For residents, this study adopts household interviews, and the number of questionnaires for each household does not exceed two.

3.3 data collection

Based on that, writer visited three new Fishing Country Communities， a total of 100 sets of questionnaires were distributed in the selected areas， and 100 been return ， apart from unfinished 6, there are effective returned papers 94 in all.Among them, there are 34 valid questionnaires from community residents and 59 valid questionnaires from tourists.The effective returned ratio is 94%.

The content of the formal questionnaire is divided into 7 parts. The first part is respondents' perception of various indicators of community infrastructure; the second part is respondents' perception of community ecological environment construction; the third part is respondents' perception of community infrastructure construction. and the construction of community public service facilities; the fourth part is the respondents' perception of the protection and inheritance of national culture; the fifth part is the respondents' perception of the community's economic development; the sixth part is the respondents' perception of community governance; the seventh part is the basic information of the respondents and suggestions for community construction in rural tourism.

The questionnaire was assessed using the Likert scale, and each question in the questionnaire was rated as "strongly agree", "agree", "somewhat agree", "relatively agree", "generally agree", "relatively disagree", "slightly disagree"", “Disagree”, and “Very disagree” are nine construction importance options, which are recorded as 9, 8, 7, 6, 5, 4, 3, 2, and 1 respectively. Among these nine scores, the higher the score, the higher the evaluation of the evaluation factor indicators by tourists or residents, so the questionnaire must be based on the real feelings of tourists and residents.

3.4 Questionnaire analysis

After questionnaire analysis, it was found that the local residents' satisfaction with community construction was significantly higher than that of tourists. The highest score of residents' satisfaction with community construction was 8 points, reaching 28%, and the scores were mainly concentrated in 6-9 points; while tourists' satisfaction accounted for the highest ratio is 6 and 7 points, respectively 24.61%. The scores were mainly concentrated in 5-8 points, of which tourists who score 8 points only account for 19.73%. In addition, residents believed that the key factor for the coordinated development of the rural tourism and the new fishing country communities was the community ecological environment, followed by community infrastructure construction, community governance, community economic development, local cultural protection and inheritance, and community public services. Residents' recognition of public facilities construction was low, especially community mutual assistance and maintenance institutions and health service institutions, which cannot meet the needs of residents. The high scores of simple folk customs and harmonious relationship with tourists indicated that local residents have better cognition of their own quality and relationship with tourists, which was suitable for the development of rural tourism. Tourists' cognitive scores for the rural tourism and the new fishing country communities construction were generally lower than those of community residents. Tourists believed that community infrastructure construction was the most important, followed by community ecological environment, community economic development, community governance, and cultural protection and inheritance, and community public service facilities. Tourists and community residents generally believed that the community's public service facilities are relatively poor, and there was a lot of room for improvement.

RESULTS AND FINDINGS

4.1 Community infrastructure needs to be strengthened

On the whole, community residents and tourists were relatively satisfying with the infrastructure construction of the new fishing country communities, but they agreed that the construction of "convenient transportation" was not in place, which affected the development of community infrastructure. At present, except for the new fishing country communities located on the island of Zhou Shan, the transportation is mainly by ferry, ranging from 40 minutes to three hours. The only transportation on the island is public transportation or taxis, but the accessibility and operating hours of public transportation is limited, and taxis are expensive.

4.2 Community ecological environment needs to be improved

Overall, the ecological environment of the new Fishing Country community is good. However, in the process of developing rural tourism, a series of environmental problems have also emerged. The seawater is seriously polluted, and white garbage can be seen everywhere in some communities.

4.3 Community public service facilities are not perfect

The recognition of community residents and tourists is generally low, indicating that the reasonable needs of community residents have not been met. During the interviews with residents, it can be seen that the residents have a high demand for vocational skills training after fishermen to change jobs, such as tourism service reception skills, kitchen production skills, etc., have not yet been met. Correspondingly, tourists have a low evaluation of the service level of community tourism, and believed that the community's participation in island and rural tourism is insufficient; they did not play its due role.

4.4 The protection and inheritance of island culture needs to be improved

In the process of developing rural tourism, the local community is lacking in the excavation, protection, application and innovation of island culture. Rural tourists hoped to see customs and culture with local characteristics and island characteristics, but in reality, there are not many rural tourism activities with island culture characteristics, or the characteristics are not clear.

4.5 Community-specific economic products and services need to be improved

At present, there are two main sources of income for the residents of the new Fishing Country communities, one is the traditional fishing and agricultural income, that is, fishing, processing and selling seafood, and the other is the tourism reception income, which is the main income of some fishermen in the new Fishing Country communities after switching to other industries. In the process of developing rural tourism in the new Fishing Country communities, community residents have increased their income by providing tourism reception to tourists and selling tourism commodities. However, the tourism commodities currently on sale are more commercialized and have a single type. Comparing with other coastal city tourism products, there existed serious homogenization, lack of locality and regional characteristics, and have a large gap ,such as basically in the situation of resources but no products, products but no commodities, commodities but no features, features but no packaging.

4.6 Community governance needs to be strengthened

Judging from the situation of residents and tourists in terms of community governance, although the overall situation is relatively optimistic. But due to the limitations of the knowledge and skills of the community leaders, it is difficult for college student village officials to play a substantial role, and the development of the community is seriously hindered.

CONCLUSION

5.1 Conclusion and Discussion

1. The elements of the development of the new Fishing Country communities include community infrastructure construction, ecological environment, public services, regional cultural protection and inheritance, community-specific economic products, and community governance capabilities.

2. There exist the interaction between the rural tourism and the new Fishing

Country communities in Zhou Shan island areas, the rural tourism in the island area matches the conditions for the coordinated development of new Fishing Country communities and can coexist and prosper

5.2 Contribution

The coordinated development of rural tourism and new Fishing Country communities in island areas is still in the exploratory stage, and its measurement and quantitative research is still relatively abstract and difficult. There are still many blank spots and basic work which should be filled and improved in further this research hopes to provide certain help to the qualitative research on the coordinated development of rural tourism and new Fishing Country communities in our country's island areas. In the follow-up research direction, writer is willing to work with scholars who are committed to research in related fields-- step-by-step exploration.

5.3 Limitation

Due to the limitations of the researcher's own level and the fact that this issue is an exploratory study, there are many unresolved issues. At the same time, due to the limitation of the availability of sample data, the depth and breadth of the research is affected, and it is hoped that it can be gradually improved in future research.

5.4 Future direction

Selecting more scientific sampling methods, expanding the scope of sample collection, and increasing the number of samples are needed. At the same time, more factors are included in the analysis framework of the development of the new Fishing Country communities, and these factors may affect the generalizability of this study. Therefore, possible influencing variables should be added to the follow-up research to further verify the influence of these factors, and to propose more complete research results on this basis.

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INNOVATION MANAGEMENT OF HAIER PERFORMANCE

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ABSTRACT

Today's society is the society of knowledge economy, and the competition of enterprises is the competition of talents.The purpose of performance management is to explore and deal with the role of factors on employee performance, and to tap the potential of employees, improve their performance, and can also bring a qualitative leap to the performance of the organization.The improvement of employee performance management level has laid a solid foundation for the improvement of organizational performance management level.Therefore, building a scientific, reasonable and complete performance management system suitable for their own development is the primary task of today's enterprises.Through the study of performance management theory, and then it runs through with the actual situation of Haier enterprises, and carefully clarify the recent situation of performance appraisal of all employees in Haier enterprises, found the problems of enterprise performance appraisal system and give suggested strategic policies for rectification.At the same time, according to the nature of the work of all employees, the implementation of Haier enterprise performance management system suggestions.Because the effectiveness of employee performance management directly affects whether the organization's strategic goals can be achieved.Gamification employee performance management using work organization based on voluntary competition, based on target incentive performance plan, transparent and timely quantitative performance feedback and fair multiple performance evaluation and other key mechanism, in stimulating employees internal motivation, play employee initiative, help workers to improve work strategy and promote the development of employee ability more advantages, will become the mainstream employee performance management mode.

Keywords: Performance management, innovation management, human resources, gamification points management

INTRODUCTION

With the continuous deepening of the global economic integration, the environment around the enterprises is unpredictable, and the enterprises face great challenges.For an enterprise, internal problems occupy a very important position, the core is the enterprise goals and employee goals remain consistent.Whether an enterprise can survive and develop depends on whether there are talents in the enterprise. The progress of employee knowledge and the development of the enterprise determine innovation, with knowledge, culture as the foundation, and innovation as the power to build the competitiveness of contemporary enterprises.The reserve of human resources is the source of vitality of an enterprise. If it wants to develop in the long time, it must establish a scientific and complete performance management system.Whether the organization's performance management of employees is effective or not directly affects whether the organization's strategic goals can be realized.With the rise of gamified human resource management in the domestic and foreign business community in recent years, many innovative enterprises have introduced the gamified mechanism into their employee performance management practices, so as to create stronger internal work motivation and benign external pressure for employees to improve their work performance, and to improve their organizational performance and creativity.This paper selects the representative haier company, as an example, on the basis of insufficient analysis of the traditional employee performance management mode, based on the basic characteristics of the game gamification performance management based on voluntary competition work organization, based on target incentive performance plan, transparent and timely quantitative performance feedback, fair and diversified performance evaluation and other main characteristics.

1.1 Research background

In the early days, Haier company was based on the general refrigerator factory. At that time, it was already a small factory going bankrupt. By introducing advanced foreign production technology, Haier company developed again and gradually became a well-known multinational company.After years of continuous innovation and concept reform, Haier company has made great development from the initial single strategy to the current globalization development strategy (Li Xiumin, 2022).Haier keeps up with the development of the Internet era and creates its own innovation system to expand the market.In order to adapt to the changes and development of The Times, the company timely carries out strategic innovation, changes the management mode, and constantly implements the strategy of branding, diversification, internationalization and globalization in the process of development.In addition, the company's management style is constantly changing with the changing strategy.Performance management is inseparable from the selected strategy and organizational structure, and the performance management system needs to be adjusted as the strategy changes。

1.2 Study significance

1.2.1 Haier Performance Management Purpose.

♦ This system aims to strengthen the guidance, supervision and management of the performance management of all departments of the company, and to implement the employee performance management procedures in a unified and standardized way, and to ensure and promote the smooth progress of the performance management of all departments of the company (Zhang Ruijie & Yin Xiyue, 2021).

♦ establishes a performance management system with performance evaluation as the main body. The performance assessment indicators designed according to the characteristics of each post can fully reflect the daily performance of employees. By linking the performance evaluation results with the performance bonus, it can reflect the value contribution of employees to the maximum extent.By strengthening the evaluation of working ability and working attitude, and designing the promotion, training and career development plan according to the characteristics of the employees in each position, we will promote the scientific, fair and democratization of human resource management, and gradually promote the improvement of the overall performance level of the company.

♦ performance management is a dynamic evaluation way to scientifically and dynamically measure the working status and effect of employees within a certain period. Through the formulation of effective and objective evaluation standards, it aims to further stimulate the work enthusiasm and creativity of employees, and improve their work efficiency and basic quality.

♦ performance management enables managers at all levels to clearly understand the working conditions of subordinates. Through the work performance evaluation of subordinates, managers can fully understand the human resources status of the department, which is conducive to improving the work efficiency of the department management.

1.2.2 Use of Haier performance evaluation.

♦ understands employee contributions to Haier's performance.

♦ provides the basis for employee compensation decisions.

♦ improves employees 'satisfaction with Haier's management system.

♦ understands the needs of employees and departments for the training work.

♦ guides Haier to allocate human resources reasonably.

♦ provides the basis for the promotion, demotion, transfer and resignation of employees.

♦ provides basic information for HR planning.

1.3 Problem Statement

Limitations and problems of Haier Company.

1.3.1 Neglecting the impact on other interested parties.

In terms of performance management, Haier company mainly pays attention to shareholders, customers and employees, and does not pay attention to suppliers, the government, investors and other relevant parties.For example in the impact on customer price satisfaction and product qualified rate on the two indicators, haier company attributed to the company's own production and operation costs and production efficiency (Chen Rong, 2019), no upstream and downstream supply system within the scope of factors, should be associated with the upstream channels to provide material quality, which leads to the assessment data and the company's real situation.The company continues to improve the control rate of production cost and production efficiency, which will hit the enthusiasm of employees, and make the company been stagnant.In addition, Haier did not consider the support to the company.The degree of support from the relevant government departments plays a great role in the development of the company.

1.3.2 The index weight method adopted is not comprehensive.

The current performance appraisal index of Haier company is to form an orderly level by level according to the leading management, determine the importance of each element compared with each level standard according to the proportion of judgment, and clarify the overall goal of the importance of the company's decision-making factors (Guo Meng, 2021).Between the two nonadjacent levels, both elements have no control relationship.Such a structure is only restricted by the superior and the subordinate. In this way, Haier company cannot carry out equal performance index assessment in the same grade, and finally deviates from the goal.

1.3.3 Ignoring the impact of information technology on performance management.

Informatization is very important to performance management. Under the original performance management mode indicators, most of the content is only the performance evaluation of employees' work results and work objectives completed results, while ignoring the actual needs of employees in the whole process of work (Li Cuixia, 2019).The most important thing for performance management information is to pay attention to whether employees have sufficient right to participate and decision-making.Combined with modern information technology, the scope of performance management is evaluated from both performance and ability aspects, so that every employee can fully participate in the comprehensive evaluation.With the advent of the Internet era, information performance appraisal applied information technology in performance appraisal, make the management and each department, each employee can more easily collect relevant information, realize information sharing and information effective application, make the management and employees can quickly find and improve problems, improve the effectiveness of management (Huang Yuhan, 2017).

1.3.4 Non-quantification of communication.

Internal and external communication of the company is very important.Haier company is a household electrical appliance company, the whole operation process from the production to the sales of the company must pay attention to not quantitative problems, so the company needs to conduct internal and external timely information communication.In the company, the timely communication between the layers can be realized, but the company and the dealers can not effectively communicate, and the education level and habits of the employees in the distribution points are different, resulting in a small number of indicators that cannot be specifically quantified.

1.4 Research questions

1.4.1 What are the lack of daily performance guidance and feedback?

Managers of Haier enterprises usually evaluate the work attitude and work efficiency of their subordinates by success or failure.Therefore, in the daily work, the manager's style will be closely related to the process of completing the subordinate tasks, and the managers will guide the process according to their own preferences.Some managers should manage everything and participate in everything when they like it. As a result, the subordinate employees are too much dependent on their leaders, have no space for their own development, and lack of innovation.Some managers think that everything depends on the results and don't pay attention to how you finish your work.Lower-level employees will think that the managers say less is "don't value me, don't care about me, don't care about me", say more is "verbose".

1.4.2 How to link employee returns to performance?

At present, Haier enterprise employee performance bonus is not closely linked with individual performance.Since there is no scientific performance evaluation as a reference, Haier enterprises all follow the "feeling" in the employee use strategy."Feeling" also has errors, and the error can be very large.After the number of employees in Haier enterprises exceeds the limit, the general manager will not know about all the employees at all. If he only listens to the performance level reported by the managers unilaterally, it will lead to information distortion, just as no manager will say that his subordinate employees will surpass him.

1.4.3 How to strengthen the informationization of performance management?

Through the study of the performance management system of Haier enterprises, it shows that in the stage of performance appraisal, the determination of the performance appraisal link determines the integrity of the performance appraisal, which mainly consists of four parts: performance plan, performance execution, performance appraisal and performance feedback.In the actual operation of Haier enterprise, the enterprise only pays attention to the careful investigation of the employees, and does not communicate with the feedback of the plan and performance.Performance management aims to continuously improve the performance of enterprises and employees.Because of the influence of the cruel competition, social talent prefer post responsibility light, don't like the job pressure big responsibility field, these areas to increase the obstruction of performance management, employees do not understand the performance management, lack of understanding of the current business, it is difficult to achieve a complete performance management process, so the difficulty of promoting performance management will increase.

1.5 Research Objectives

The performance management system is a comprehensive and systematic system.If only one part of it is used, it will not achieve the desired effect.By analyzing the balanced scorecard, the most core evaluation indicators are found from all aspects and the whole process, which requires that in the design performance stage, the management should discuss the work that the employees need to do in the following stage, and the impact that the results will have on the company.Only through comprehensive consideration can we see the company's performance results more accurately and intuitively, and make a correct decision (Li Lu, 2020).

1.5.1 To find the daily performance guidance and feedback efficiently.

In the previous performance management system, the company only simply implemented the performance appraisal, and did not consider the long-term development, so to optimize the performance management process and improve the index weight, to do the following points.First, focus on the company's long-term strategic goals, and guide the performance management to develop in the right direction.Second, understand the performance management process and results are equally important.Third, the company's strategic goals are gradually divided to each department, and then divided to each employee of each department.Therefore, the company should be put under comprehensive performance management according to the current strategy.

1.5.2 To link employee returns to performance.

The company should timely communicate with core employees and encourage them to understand and participate in the whole process to improve the enthusiasm of core employees.In addition, we should strengthen incentives to core employees in performance management, and timely feedback performance results to core employees and give rewards.The company should take the performance results as an important basis for the reward and job promotion, enhance their attention to the performance, and make important contributions to the company.

1.5.3 To strengthen the informationization of performance management.

The information management model requires company employees to become core participants and play a role in the management (Hu Feng, 2019).In addition, each team of the company can use information sharing to obtain knowledge, and the company can improve the information sharing center to help employees obtain first-hand information, so that employees can more clearly understand the company's strategic goals of the company, play their enthusiasm and improve efficiency, and promote the long-term development of the company.

1.6 Scope of the study

China and Thailand Haier Companies.

1.7 Operation Definition

Performance is the result of the organization's expectation, and it is the effective output of the organization displayed at different levels to achieve its goals. It includes both personal performance and organizational performance.

Performance management refers to the continuous cycle process of performance plan formulation, performance guidance and communication, performance evaluation, performance result application, and performance goal improvement that is jointly participated by managers and employees at all levels in order to achieve organizational goals. The purpose of performance management is to continuously improve the performance of individuals, departments and organizations.

The framework of performance management system mainly includes four main parts: performance management system design, performance management organization and responsibility system, performance target system, and performance management process.

1st, P**erformance management system design** is the basis of performance management work, through the establishment of a unified and complete performance management system, guide, standardize the enterprise performance management work, traction and constraint managers and employees, to ensure that the enterprise performance management objectively and fairly, make the evaluation of employees more fair and rationality, to ensure that the department and enterprise goals.

2nd, **Performance management organization and responsibility system**.With the system, clarifying the procedures for promoting performance management and the responsibilities of relevant personnel, the next step is to establish an organizational guarantee system.Without a strong organizational guarantee system, performance management can only be floating on the surface, and it is difficult to effectively implement.

3rd, **The performance target system.**Managers give the basis for subordinates to set work goals, which come from department goals, department goals come from enterprise goals, and enterprise goals come from their strategies.Only in this way can the established target system ensure that every position is working hard in accordance with the direction required of the enterprise.

4th, **Performance management process.** It can also be called the performance management system, the performance management dynamic cycle, and in this paper refers to the employee performance management system.It includes four links: performance planning, performance counseling, performance appraisal, result use and feedback improvement.At present, many important tools of performance management applied in China mainly include:

(1) Management by objectives is to transform the work purpose and task of the enterprise from top to bottom into the clear goal of all employees, and to assess it accordingly.It also requires managers to change from controlling subordinates to setting objective goals together with subordinates, so that employees can rely on their own enthusiasm to complete them.

(2) Key performance indicators not only retain the index decomposition process from top to bottom of management by objectives, but also combine the ideas of tangible financial indicators and intangible indicators, but focus more on the guidance and communication in the process.Each employee's KPI selection criteria are generally content that have a significant impact on work performance or occupy a lot of work time.

(3) The purpose of the 360-degree scores and the 360-degree scores is to assess employee performance from multiple dimensions (Zhu Weihong. 2022).It includes the scoring of employees themselves, superiors and subordinates, colleagues and end customers, but if the content of the score is not targeted, such as many enterprises score the abstract concept of "performance".The cost of 360 degrees of time and manpower did not play a positive role, so the most important thing is to clearly define the content of the scoring, so that it can truly reflect the value-added points of the position to customers, and make the scoring more targeted.

The balanced scorecard disintegrates the overall strategy, from company, department to employee, from finance, customer, process, and learning and growth dimensions (Li Lu, 2020).It emphasizes not only vertical consistency, but also horizontal, cross-sectoral coordination.Performance management process: 1st, performance diagnosis evaluation is management diagnosis, performance research.The first work of consulting is to diagnose the current and systematic status of enterprise management, and find out the level of enterprise management, so as to design a scientific and reasonable performance assessment system for enterprises.

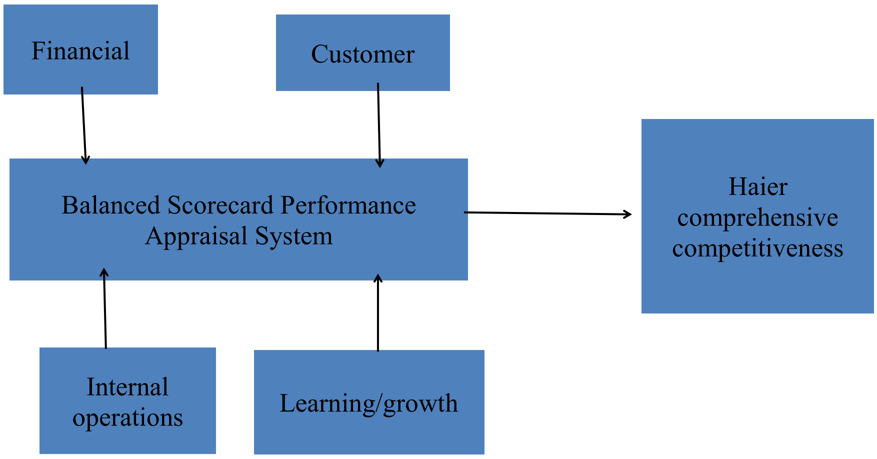
2nd, performance target determination is business plan, work plan.All enterprise management systems are designed for the realization of enterprise strategic goals.Therefore, clarifying the enterprise goal orientation will help to achieve the goal and gather employees to experience the achievement of the goal.

LITERATURE REVIEW

2.1 Support theory.

Balanced scorecard theory: The framework system of BSC includes four parts, achieving both process management and management by objectives through financial indicators and non-financial indicators, taking into account both short-term and long-term goals, and maintaining the balance between the two.Therefore, performance management is not only to improve the work quality and efficiency of organizational employees, but also to develop the potential of teams and individuals. It is a management method to continuously strengthen and optimize the corporate culture.

Table 2.1 Model of Balanced Scorecard Performance Appraisal System in Haier



Source: the researchers make

2.2 Review of related foreign studies.

In terms of the classification and definition of performance, In 1987, Katz and Kahn proposed the 3 D classification (Meyer et al., 2010), they believe that performance includes three aspects: joining and staying in the organization, meeting or exceeding the performance standards set by the organization for employees, and spontaneously conducting activities other than the organization for employees.Campbell et al. have proposed a performance model based on three parameters (Adams et al., 1990): declarative knowledge, procedural knowledge and skills, and motivation.They further proposed that there are eight performance components derived from these three aspects, which are job-specific task performance, job-specific non-specific task performance, written and verbal communication, effort, discipline, facilitation of the team and colleagues, supervision and leadership, and management.Waldmann et al., (1995) et al. conceived a causal model based on the impact of evaluators, evalutees, evalutees' characteristics, and colleagues.Berenardin believes that employee performance management should include three processes (Codding et al., 2008): planning, improvement, and examination.In terms of the problems existing in performance management, Parment (2000) pointed out that the purpose of traditional performance appraisal should be shifted to improving employee efficiency.The traditional performance appraisal has serious deficiencies. Due to the subjectivity of the assessment, the assessment has not been well implemented. Many managers should highly of employees, but they want to fire them privately.Pay too much attention to the process and form of assessment, do not pay attention to the value of assessment, the organization and employees and so on.Fandray (2001) indicates that performance management systems should be replaced by annual performance appraisal.The abolition of assessment is just the beginning of performance management.Therefore, we can know that performance appraisal is an important part of performance management, but performance management is not equal to performance appraisal.Pamenter noted that the purpose of traditional performance evaluation should shift to employee development (Price et al., 2006).

2.3 Review of relevant domestic studies.

In terms of enterprise performance management, Hu Yang and Yang Xinrong (2009) pointed out that the setting of assessment indicators is not scientific and reasonable enough, mainly manifested in: too many soft indicators, bad assessment. There is no comparability between different types of work and departments. There is too much work outside the indicators, which is also very important and difficult to assess. Some indicators have little to do with the target, and the design is unreasonable. The assessed people haggle, deliberately lower the performance indicators, etc. Liu Zhiyong (2009) pointed out that although the existing enterprise performance evaluation system has a clear definition of the basic indicators, correction indicators and evaluation indicators, and stipulates the scoring methods and weights of the corresponding indicators, but it still has obvious defects.In addition, the current performance appraisal set up various indicators, such as safety indicators, quality indicators, production indicators, equipment indicators, even including work attitude, ideological consciousness political indicators, etc., is also the object of performance appraisal, but liu, yao (2010) think that the enterprise in a series of assessment indicators but ignored whether it has a sound scientific basis, making performance appraisal difficult to implement, and a series of indicators also become on paper, difficult to play its due role in practical work.Wu Yingze and Chen Xiyan (2007) pointed out that the role of the incentive mechanism in the organization is obvious, which can not only fully mobilize the enthusiasm and creativity of employees. Improving organizational performance, and is conducive to the establishment of an organizational culture, the formation of the whole enterprise respect for knowledge, respect for talent atmosphere and strive for progress atmosphere.Because the assessment index is separated from the job responsibilities and work tasks, it is difficult for performance management to become an effective measurement standard, so as to motivate employees.Therefore, it is difficult for performance management to play its due role in determining employees' work objectives, clarifying employee training requirements, helping employees to better complete their work, improving their work enthusiasm, determining job promotion, appointment and removal, and making compensation and welfare plans.Chen Yun (2010) mentioned in the "Discussion on the Performance Management of State-owned Enterprises": due to the influence of Confucian culture, "the rule of man thought" is fundamentally rooted in the thought of enterprise managers.Therefore, the Chinese cultural characteristics of inequality in social status and personality status are finally formed, which makes it the social contractual relationship between people who is different from the western style in cultural attributes and characteristics.Therefore, in the process of imitating and learning the western performance management mode, it is inevitable that conflicts are caused by the differences in cultural attributes and characteristics.Enterprise strategy refers to the plan designed by the enterprise to interact with the surrounding environment in all aspects to achieve certain goals.And when state-owned enterprises are making performance appraisal plans.Zhou Xianli (2007) pointed out that not from the strategic height of the way to understand, design assessment index system, makes the assessment index and the company strategy between no effective undertaking and more consideration is the employee personal evaluation, the purpose is to make employees to complete their work, and ignore the employee goals and department goals and enterprise strategic goals as a whole.That is to say, enterprise performance appraisal is a bottom-up declaration, rather than a top-down decomposition.In this way, performance management and strategic goals are disconnected, so that the enterprise management

2.4 Performance management Overview and analysis.

2.4.1 Current situation of performance management of Haier Company.

The gradual change of Haier's organizational structure and strategic goals constitute the current performance management system, which mainly includes several processes of planning, guidance, evaluation and incentive.The first step is to design and implement it, define the overall direction according to the company's strategic development goals, and develop the reviewed performance indicators.The second step, the need to send a relatively large index tasks to the next level of each department, each department to further formulate the countermeasures corresponding to the target performance and formulate more detailed goals and tasks with the department staff, and finally sign the personal career commitment letter (PBC).When setting performance assessment objectives and tasks, PBC assessment is mainly used, and PBC assessment is applied to every responsible department of Haier company from top to bottom, and then to every responsible employee.Throughout the whole Haier company, all levels and departments should sign a letter of commitment from top to bottom, and apply the strategic objectives to every employee.Company performance consists of employees' own performance, which must be organically combined to align the development of the company and employees.Haier company generally adopts two quantitative and qualitative index modes in the investigation of performance.For the quantitative indicators of performance investigation, the performance indicators are divided into different target values of A, B, C, D and E respectively.For the qualitative indicators of the performance appraisal, the actual performance is compared with the expected performance at that time to see whether there is a gap, so as to determine the results of the performance appraisal.Combined with the two different ways of qualitative indicators and quantitative indicators, fully improve the monthly target, semi-annual target and the whole year target, and timely adjust the plan and modify the plan target and corresponding indicators according to the actual situation to further stimulate the work efficiency and enthusiasm of employees.In terms of performance evaluation, the company specifically subdivides the time of employee performance evaluation into monthly, medium-term, quarterly and annual four periods for comprehensive performance evaluation.In addition, the performance incentive method is implemented according to the objective results of the performance evaluation, and gives different salaries according to the level of the employees, thus positively encouraging the employees to work actively.Open up the channels, so that employees are no longer in a negative attitude, but have a goal.For people with excellent professional skills, Haier company provides more training and promotion opportunities to constantly improve their professional level and technology.According to the results of the performance evaluation, improve the previously established performance objectives, conduct a deeper analysis of the reasons for no quantitative analysis, and improve the current performance objectives.

2.4.2 Specific contents of Haier's balanced scorecard.

It can be seen from the performance management of Haier company that the company has its own division of labor from the series of process of performance planning, implementation, evaluation and final feedback, and the internal business process of each department improves the efficiency under the division of labor.Use a balanced scorecard to allow the company to balance the indicators.

(1)Financial level.① increased the sales volume of high-tech products, and the gross profit margin was higher than other competitors.② expands the market sales scope of products, meets consumer needs through diversification, and builds a brand advantage in the market.

(2)Customer level.The ① adopts a differentiation strategy.② creates a good consumer experience for consumers, focusing on consumer information feedback to optimize services.③ creates good cooperation with the major dealers.

(3)Internal process level.① timely adapts to market changes and launches new products in time to ensure the efficient operation of transportation channels.② uses the advantage of cost to ensure delivery time.③ provides excellent service and products to its customers.

(4) Learning and growth level.① improves the professional quality of employees, improves them through on-the-job training, and helps employees build a competitive advantage.② actively guides employees to better stimulate their enthusiasm for work and innovation.③ establishes a complete information system to enable the company to understand the internal financial and non-financial information more quickly, in order to identify the existing problems in time (Bu Junyi, 2021).First of all, Haier company has refined the performance appraisal indicators. The performance appraisal standards of different position employees are different, so that they have different performance appraisal indicators and clear responsibilities, so that employees can complete the work more efficiently.Secondly, in terms of the incentive mechanism, if an employee makes a partial contribution while doing his own work well, the incentive effect will be rewarded; but if the employee's behavior does not meet the requirements of the company, it will be restrained through partial punishment.Thirdly, in personnel management, add more professional training to expand their working ability, so that they can adapt to the higher and higher requirements.Haier's overseas turnover accounts for 40% of the total business volume. The current competitive environment is still competitive with the middle market. The strength of Haier and its main competitors is equal. Therefore, it needs to promote the stronger development of the company through the optimization of performance management system.

RESEARCH METHOD

3.1 The object of this paper is Haier enterprises in China and Haier enterprises in Thailand.

Haier has company's enterprise internal report and annual summary analysis and summarized the problems and put forward to solve various problems in management, so as to realize the performance management of the organization.

3.2 Countermeasures of Haier's Enterprise Performance management system.

3.2.1 Focus on the role of performance feedback.

To create a more complete performance management communication system, it is necessary to establish a good communication and feedback process for performance management.Managers should play a role of feedback in teaching, ask staff about open questions, and encourage employees to express their feelings and ideas, identify the authenticity of workers' voice from listening, and guide and stimulate them in order to develop performance improvement plans and performance goals when appropriate.Some department leaders in the enterprise do not pay attention to communicating with employees and providing employees with opportunities to improve their own potential, and lack of management skills. Therefore, enterprises should enhance the training of management skills of management personnel at all levels of management skills and the development of management potential.

3.2.2 Performance management should be closely linked to employees' returns.

Performance management should be closely linked with the incentive mechanism such as compensation to realize its value. If not linked together, it will have no motivation for employees and get no high attention.According to the performance appraisal results of employees, a clear and reasonable incentive is to ensure the performance appraisal.The main means and core issues of incentives.Usually, employees with excellent performance performance can be rewarded in the following two aspects: first, external rewards, including salary increase, bonuses for performance and other related rewards.The second is the internal rewards, including their own personal rewards, benefits, honorary titles, challenging responsibilities, important and important work, and their influence in the process of setting goals and strategies for employees.

3.2.3 Establish a good communication system.

In order to mobilize people's enthusiasm and implement performance management effectively, the best way is to establish a good communication system and communicate with employees on the basis of full investigation.Performance communication requires that in the process of performance management, both sides need to reach an agreement on the problems encountered in view of them, explore the direction of dealing with the problems, and then adjust the work methods and methods of employees to obtain satisfactory work performance.To establish an effective performance management communication system, it is very important to penetrate the performance management concept and eliminate resistance.Let both sides realize the implementation of performance management is through the evaluation of performance plan, performance goals and the supervision of organizational performance results, is to improve the enterprise and employees' work performance, enhance the close relationship between managers and employees, in order to more effectively mining and deal with problems, rather than blindly criticized employees.Although the investment in performance management requires a lot of communication time and energy, it can nip enterprises in the bud.

RESULTS AND FINDINGS

4.1 Work organization based on voluntary competition.

Performance management of employees logically begins with the arrangement of their work.In traditional bureaucratic enterprises, the work roles and tasks of employees are often assigned rather than by their voluntary choice.The assigned job roles and tasks do not necessarily fit the employees' interests, nor are they necessarily good at them, so it is often difficult to motivate the employees to work hard and achieve excellent performance.In the process of performing work roles and tasks, employees are often unable to make some key decisions independently, but need to follow or follow their boss in accordance with relevant regulations.This lack of autonomy of the work organization model makes employees can not make the most appropriate.

Decision-making is not conducive to employees to improve their work effectiveness and to improve their own ability.The primary feature of the game is voluntary participation: whether the player participates in the game, what role to play in the game, what tasks to perform, and how to perform it are independently determined (Sun Min, 2016).Excellent game is often competitive: through extensive setting players and themselves, other players or system of competition and make fair and clear competition rules, the game inspired players to play their role and do related tasks, in order to achieve high results and get passionate game experience (liu, 2021).Drawing on the voluntary competitiveness of games, gamified performance management attaches great importance to voluntary autonomy and rule-based fair competition in the organization and arrangement of employees' work.In recent years, in recent years, is the transformation of the Internet haier group in its new employee internal entrepreneurial system, encourage employees to apply for highly autonomous independent management: head of independent management and team members through the "single" mechanism through competitive voluntary competition (Luan Xueying, 2020).After its establishment, the independent business body is granted the right of full decision-making, human rights and profit rights. The team leaders and their members independently make various decisions and take actions freely completely based on the market needs and the competitive pattern, and simultaneously bear the relevant consequences according to the rules.This voluntary and competitive employee performance incentive mechanism makes Haier shift from controlled organizational system to autonomous organism, which can constantly adapt flexibly with the market and achieve excellent employee and organizational performance.

4.2 Performance plan based on target incentive.

Encouraging employees to make excellent performance in their work is the focus of performance management.Many enterprises equate performance management with performance appraisal, and fail to realize the important incentive role of performance goals in performance management.In these companies, employees are often told to perform specific tasks, without not knowing what specific goals to achieve, let alone what meaningful organizational goals to achieve.This often makes employees work at a loss, it is difficult to actively and independently into the work.

Excellent games often allow the player to feel that their personal actions in the game are associated with the great mission (Sun Min, 2020), and encourage the player to set himself with both meaningful and challenging personal goals based on the mission.Clear goals always guide the player's actions in the game, constantly attracting their attention, and constantly adjusting their engagement, so that they are always doing their best.Drawing on the game's goal-oriented incentive mechanism, gamified performance management attaches great importance to motivating employees to achieve ideal performance through clear and meaningful goals.Google, for example, in its world-famous OKR (objectives and key results) performance management system, encourage all members of the company around the company's mission and strategy independent set and open their own work goals, at the same time emphasize each person set work goals must be specific, simple measurable and can challenge their own limits (Cao Jianfeng & Feng Yukai, 2022).Under this goal-oriented performance incentive system, Google employees closely focus on the company's mission of "integrating global information so that everyone can access and benefit from it", actively explore independently, constantly innovate and discover a large number of new profit opportunities for the company.

4.3 Transparent and timely quantitative performance feedback.

Quantitative and timely performance feedback is indispensable for employees to achieve ideal work performance, but few enterprises can truly quantify and timely performance feedback to employees.Many enterprises confuse performance feedback with performance evaluation, and feedback the performance evaluation results to employees in the form of quarterly, half-year or one-year-cycle stage summary.Such a long cycle makes employees cannot get timely feedback in their daily work, and the lag feedback obtained is often generally vague and not specifically quantified enough, so that it is difficult to provide useful information and effective motivation for their improvement work.Good games always allow players to dynamically understand the results of their efforts through instant and quantitative feedback.Common game feedback forms such as points, scores, progress bars, levels, and leaderboards give players a clear and timely understanding of their action results, and how far away and strengthen their confidence in achieving them.These real-time quantitative feedback is often open and transparent in the game, and all players can always understand their own progress and achievements with others, thus helping players to compete and cooperate with each other, and further enhance the common game experience and effect.Based on the powerful incentive function reflected in quantitative timely feedback in the game, more and more enterprises introduce gamified performance feedback technology, and provide employees with transparent and timely quantitative performance feedback for enterprises by connecting the internal network, social media, and cloud computing based application platform with mobile terminals such as mobile phones and tablet computers.For example, Haier provides independent strategic income statement, daily clearing statement and individual pay statement for its more than 2,000 independent operators and its members. From these forms, employees can see their input and output, income and cost, rewards and punishments, work plans and budget implementation progress and other information feedback daily.This makes each independent management body and its members can be based on the quantitative timely feedback for dynamic independent plan and budget, assess whether the resources used to bring the corresponding value, and constantly reflect on adjust their own goals and solutions, to effectively activate the employee's creativity and enthusiasm, promote the rational allocation and use of resources.

4.4 Fair and diversified performance evaluation.

Most enterprises' performance evaluation of employees is mainly evaluated by their direct boss, which is not systematic and comprehensive enough.Because the evaluation criteria are often too generalized and vague, the evaluators usually rely on the subjective impression, which leads to the arbitrary lack of rigor, and also leads to the lack of comparability of different managers' evaluation of subordinates, which affects the fairness of the evaluation results.Many enterprises will performance appraisal results as the main basis of employee salary and position adjustment, but often too much emphasis on the single appraisal results of quantitative sorting, which often leads to excessive struggle with small numerical differences and cause each other and their dissatisfaction with the whole evaluation system, but also easy to lead to vicious competition between employees.The game's feedback system can make real-time reviews.

CONCLUSIONS

5.1 Conclusion.

Performance management is one of the important links to assess human resources, so it is paid more and more attention by enterprises. In the implementation process, the competitiveness of enterprises can be improved through reasonable methods.With the continuous development of Haier enterprises, the performance management has been preliminarily improved.When setting enterprise strategic goals, the expression has more humanized characteristics, pay more attention to the individual potential of employees, find the shortcomings of employees and timely give opinions, change the assessment methods and priorities, so that managers do not simply pay attention to the assessment results, the enterprises pay more attention to the quality of employees and the improvement of corporate culture.In terms of management technology, it shows information diversification.In the implementation process of Haier company and modern network, in order to make the data more accurate, through the establishment and implementation of performance management system, the realization of enterprise strategic goals.The performance management of Haier enterprises will pay more attention to scientific management, innovation and performance management. Only in this way can we continuously maintain a strong competitiveness and innovation on the future development road

Make force. The combination of big data and human resource management in state-owned enterprises is the trend of the development of The Times. The reform of human resource management in the era of big data effectively improves the efficiency of human resource management and provides a strong guarantee for state-owned enterprises to carry out higher work.Therefore, state-owned enterprises should realize the advantages of big data, and make the combination of big data and human resource management closely, under the guidance of big data, the innovation of human resource management innovation, constantly improve the professional quality of management personnel, and realize the level of human resource management of state-owned enterprises.

5.2 Suggestions

In the rapidly changing network era, the gamified performance management mechanism focusing on stimulating the individual vitality and efficiency of employees is very helpful to shift the organizational system of traditional enterprises from controlling type to enabling type, and promotes enterprises to constantly adapt flexibly with the market and achieve excellent organizational performance.As Google executive Chairman Schmidt said, "All future activities on the Internet will be like a role-playing game." Gameplay performance management will become the mainstream performance management mode adopted by more and more enterprises in the Internet era, which is very worthy of deeper exploration by management practitioners and researchers.

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THE IMPACT OF ENTERPRISE INNOVATION MANAGEMENT REFORM ON ENTERPRISE DEVELOPMENT -- A CASE STUDY OF SAMSUNG

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ABSTRACT

Innovation is the foundation of enterprise development, the source of enterprises to obtain economic growth, the sharp tool for enterprises to seek competitive advantages, and the way for enterprises to get rid of the economic development crisis. This article is after reading "management innovation", "Financial Performance Impact" and other related documents, combined with the case —— Samsung Group innovation management, this article takes Samsung Group as the research object, through the theory and case parallel research, further analysis and analysis of innovation management.Samsung's successful experience also gives enterprise managers more development space and hope, and gives them deeper thinking and innovative concept transformation challenges.

Keywords: innovation; enterprise development; management change; financial impact; Samsung company

INTRODUCTION

1. Overview of the background and innovative countermeasures of Samsung Group

1.1 Background Overview of Samsung Group

Lee initially founded Samsung, mainly exporting food, and then producing flour and candy, which were produced and sold by itself, and then began to further invest in developing —— Samsung C & T. Lee's move marks Samsung's global world trade path.

In 1969, Samsung Electronics was established, and after reviewing an interview with Lee, Lee believed that the development of electronics was more in line with the national conditions of South Korea at that era. Since then, Samsung's success in the world semiconductor field has confirmed this point, and it is this point that has helped Samsung to invest in and develop more more high-end research and development in the electronics field, and its long-term development.

During the 1970s, Samsung made massive investments in the heavy industry, chemical and petrochemical industries, laying a solid foundation for Samsung's future development strategy. In this development basis, Samsung Group has also taken corresponding steps to enhance Samsung's competitiveness in the world market and consolidate its economic position and development.

In the 1990s, Samsung Group's business began to cross the boundaries between countries and countries, and between companies and companies. In 1993, in order to adapt to the development of high and new technology, in order to firmly grasp the development opportunities of Samsung proposed a "new business" plan, the overall structure of a large leap forward innovation and reform of the company.

After that, Samsung Group involves the expansion and development of more fields, the overall business scope is becoming more and more extensive, and the scale of the company group is becoming more and more grand. The original management mode is no longer fully adapted to the rapidly developing Samsung. Under such a development background, the innovation and reform policies adopted in different periods follow. In 2000, Samsung made a new shift in its management to become the leader in the digital revolution sweeping the world.

1.2 Innovation and management changes of Samsung in different periods

1.2.1, "New management"

At the end of the 20th century, Lee Kun-hee visited the United States in Los Angeles, the mall staff carefully wiped them and sold them at a high price. After a long time, the dusty Samsung appliance was found in the corner, even at a low price.

—— is also an electrical appliance. Why is Samsung appliances so different from Japanese appliances?

At present, Lee Kun-hee has bought Japanese electrical products to study. He found that with the same functions of electrical appliances, they produce large parts; while those manufactured in Japan are not only small in size and light in weight, but also small parts, and the sales price is low, which is naturally more attractive to consumers and favored by the market.

1.2.2 "Digital Fusion"

Samsung's digital integration revolution aims to break through the traditional physical prototype, using digital methods to design products, verify products, simulate product operation, etc. With this virtual operation operation to design products to production experiments and greatly improve the work efficiency and production qualified rate through qualified listing.

Through such a virtual environment and automation system operation, the relevant professional staff can intuitively see the parts used, also can see the assembly of moderate, at the same time reduce the influence of human factors for product design and production process, improve production efficiency and production qualified rate, in such digital automation operation had 10 days to develop the legend of mobile phone model.

After the full coverage of digital automation, Samsung Electronics 'development is like a duck, while on the world economic stage, showing Samsung's unique economic strength and influence. With the advent of the digital age, Samsung follows the "trend" and keeps pace with The Times. Such changes brings unprecedented opportunities and challenges to Samsung. In order to meet the needs of the information age, Samsung dares to invest in different levels of update and accelerates the progress of improving its management system.

1.2.3 Main development trends

According to the media reports about samsung group and samsung electronics, media interviews with samsung executives, samsung executives speech information, samsung website information, and academic articles about samsung research discussion, analysis that samsung group sector profit is mainly composed of core upstream components, its economic profits far more than the downstream product manufacturing economic profits. The analysis shows that Samsung's core components not only support the company, but also external sales, drive the sales of similar products, such an external expansion has a greater expansion trend.

According to Samsung's development policy in recent years, it is not difficult to find that Samsung has gradually abandoned its low-profitability terminal products and focused more on technology upgrading, In addition, according to South Korean media reports, Samsung Group will invest a lot of money in NAND Flash and foundry wafers in 2021. Since the end of 2020, Samsung Electronics has continuously announced its investment plans through the media, which shows that the current Samsung leader Lee Jae-yong has not shaken the dominance of the technology market in the global economy in the face of the COVID-19 pandemic. Generally, Samsung Group has the world's first mobile phone business, memory business and TV business. In the 5G era, it provides a good development market for Samsung's leapfrog development.

THE IMPACT OF SAMSUNG GROUP'S INNOVATIVE MANAGEMENT REFORM ON CORPORATE FINANCE

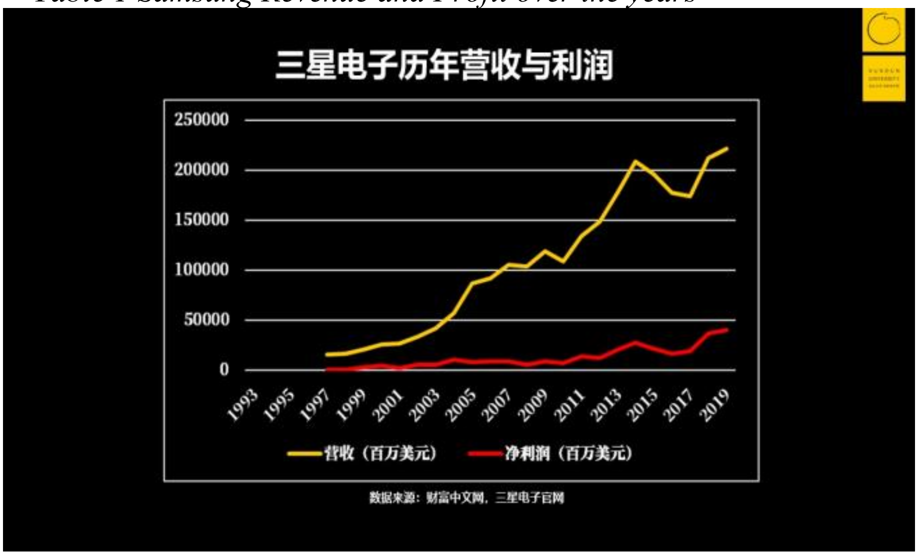
2.1 The impact of innovation and management reform on enterprise assets

Operating profit for the whole year as of 2020 was 35.99,99 trillion won (about 210 billion yuan), up 29.62% year on year. Sales were 23.680.7 billion won, up 2.78 percent year on year. This is another operating profit of Samsung Electronics exceeding 35 trillion won after 2013,2017 and 2018. Such an achievement is made under the background of the outbreak, which shows that Samsung has laid a solid internal foundation in several large-scale innovative management changes.

Despite the impact of the COVID-19 pandemic, Samsung hit new heights in 2020 as major economies were unsealed and consumer demand expanded again. For Samsung, which has continuously shut down its factories during the outbreak, its revenue performance in the first quarter was much better than expected, and its overall performance was relatively stable.Moreover, Samsung was one of the first to be technology companies to report earnings after the outbreak, and the results added confidence in the semiconductor industry.With the relatively stable internal control and management after the previous major reform, as well as the lessons learned from the world economic crisis, Samsung has still resisted the pressure of the epidemic and stabilized itself in the economic crisis caused by the epidemic.

In 2021, Samsung expects to slowly restore overall global demand to its previous boom, but there is still uncertainty about the possibility of a COVID-19 comeback, so it is also a challenge and opportunity for Samsung Group.

Table 1 Samsung Revenue and Profit over the years



Source: Fortune Chinese website, Samsung official website

2.2 Samsung balance sheet analysis Sheet after innovation and management reform

Table 1 Related Asset Information Table of Samsung Company

a particular year	The Fourth quarter of 2020	The First quarter of 2020	Fourth quarter of 2019
floating capital	107338.13	95292.92	93153.69
non-current assets	13139.22	12877.41	15762.07

Source: Zhongcai Network

From the perspective of asset projects, working capital and non-working capital have increased, the increase of current assets is relatively large, which also shows that Samsung assets liquidity has increased, the increase of non-current assets is small, and the increase in fixed assets, the growth of fixed assets projects indicates the expansion of Samsung's production capacity and production process, and also shows that Samsung expects to have new profit highs.

Table 2 Samsung

a particular year	The Fourth quarter of 2020	The First quarter of 2020	Fourth quarter of 2019
owner's equity	74597.80	65289.09	63322.87
be in debt	29830.82	30003.83	32740.33

Source: Zhongcai Network

From the perspective of equity projects, the total liabilities decreased and the owners' equity increased, indicating that the source of the asset increase is obtained through the growth of their own funds. Not only that, the current operation and management of corporate activities also reduce the debt burden of financial risks.

The debt capital ratio is well below its own capital ratio. In debt capital, the ratio of short-term debt capital and long-term debt capital has declined to varying degrees. The main reason for the increase of the total amount of self-owned capital increases with the increase of the actual amount of the capital received, the total amount of the surplus accumulation fund and undistributed profits and the proportion also increase, which is the main reason for the increase of the total amount of self-owned capital. This shows that the company's private capital strength is very strong, and the protection of capital debt is relatively large.

From the perspective of debt structure, the current debt ratio at the end of the year is greater than the non-current debt ratio, indicating that the company relies more on short-term funds, reducing debt costs, increases debt repayment pressure and assumes greater responsibility.financial risk. From the perspective of the ownership structure, the paid-up capital accounts for a relatively large proportion, and the excess reserves and undistributed profits are increasing, indicating that the distribution of enterprises is still reasonable and the capital structure is good.

While Samsung's business revenue will not fluctuate too much in the short term, it will face even more pressure in the next few quarters of 2020 if the new global crown pandemic continues.

PROBLEMS EXISTING IN SAMSUNG GROUP'S INNOVATION AND REFORM

3.1 The "Explosion Gate" incident

During the change period, Samsung Group has appeared a serious public opinion problem —— "explosion door" incident, The main reason is that Samsung's unclear and inactive attitude in dealing with the crisis and public opinion, In the face of public opinion and doubts, not timely public relations, Lead to the public's gradual loss of trust in it; after that, Samsung is under pressure from public opinion, An excuses to avoid responsibility, Increased distrust and doubt at all levels of society; After encountering widespread questioning and criticism, Samsung still goes its own way, Samsung's actions have directly led to import restrictions in cooperation with other countries, Direct directly to its financial links.

On the other hand, Samsung's crisis and public relations attitude in the Chinese market is very different from its performance in other markets such as the United States. Samsung has announced a global recall of its sold phones and suspended sales of its NOTE7 phones in many countries and regions, but did not take recall measures in China. In the face of public questions, Samsung did not give the first mediation, which also made Samsung lose trust in the hearts of Chinese consumers.

If Samsung wants to continue to release new models, it should take recall compensation measures to ease the negative public sentiment and achieve a good image. Although this matter will affect the degree of trust to some extent, but it will not cause public panic.

3.2 Ignoring customer service and maintenance

Samsung once focused too much on its core technology, instead ignoring customer service and maintenance.

The customer is the real head of the organization. If the organization loses its customers, it will lose its basis for survival. Therefore, to provide customers with high-quality and thoughtful service is an important strategy for organizational development, enterprises should pay attention to customer service. In the popular "explosion gate" incident, Samsung once insisted that the product did not take any research, but the product explosion was only much, thus damaging the trust of consumers, lost potential customers, resulting in a long period of business downturn.

Only clear target customer base and provide high quality products and services, they can power the survival and development of the organization, and establish a real relationship with customers, and samsung only pay attention to customer consumption service, ignoring the maintenance of customer groups and operations, many times a business through large advertising sales is usually just one-time business, establish clear and stable relationship with customers is the one-time transactions into regular behavior. But, just like Samsung, Samsung will only focus on services and reduce retention, which will lead to excessive customer demand and many unreasonable demands, which will evolve into destroying normal customer relationships.

3.3 First market failure

In the early years, with the rise of other brands, many market research companies have no longer separately listed Samsung Electronics' sales and market share in the Chinese market, and Samsung has failed in the largest smartphone market; in India (the second most important smartphone market), Samsung has also faced fierce competition from Chinese brands including Xiaomi, vivo and realme. It said it would fire more than 1,000 employees for falling revenue and profits. Although

Samsung

Later, rumors of layoffs were denied, but thanks to its reasonably priced smartphones, it was still difficult to surpass Xiaomi in the Indian market, so Samsung is not particularly prosperous in China.

At the same time, because of Samsung's attitude towards Chinese consumers, Samsung's development in the Chinese market is increasingly depressed. Even if it has changed later, the sales of Samsung products in the Chinese market are not as hot as it used to be before. South Korean media have reported that Samsung Electronics could shut down its TV plant in Tianjin, China, in November, and only after many news outlets suggested that the move was mainly to improve the efficiency of global production lines. But Samsung's move once sparked an online discussion about the "Samsung's withdrawal from the Chinese market", and even a "foreign capital withdrawal from China" controversy. In fact, Samsung had previously closed its earliest notebook production factory in Suzhou, which had already caused negative interpretation and doubts on the Internet.

The negative comments from Samsung executives have also hindered the further development of Samsung's market, and the official response to these questions is also disappointing. In addition, the trade friction between China and the United States, Japan and South Korea, and the impact of global macroeconomic uncertainties on Samsung, can not be underestimated. A series of market turbulence makes Samsung go without the first market advantage in the international market.

SAMSUNG GROUP INNOVATION AND CHANGE

4.1 Public relations preparation to deal with public opinion

When Samsung Group saw the increasingly hot negative topics and even the political topics, it held an emergency internal meeting for discussion, and finally really faced the media and the public, indicating his attitude and the corresponding solution.

To solve the product problems, Samsung is committed to testing and repair, actively checking the causes and providing solutions according to the user system feedback; adjusting the product strategy from the initial double flagship to one flagship a year, and replacing the battery manufacturer; organizing legal resources to deal with class action lawsuits.

At the same time, the top management members also went to local branches to hold meetings, during which sufficient resources were used to investigate the performance of Samsung products in the local market, and to explore the depth of the potential of the local market. By learning the advanced management philosophy of European and American countries and regions, Samsung philosophy is made systematically transformed, which has more advanced development concepts and lays an ideological system foundation for the face of public opinion problems.

4.2 Establish a new service concept

Samsung group management, to draw lessons from the successful experience of other big enterprises, learn high quality corporate culture and thought —— learning HP production management, learning SONY's technology development, learning p & g sales management, learning federal inventory management, etc., which is a more important is by observing the successful enterprises in pre-sale and after-sales service launched a complete set of samsung service system and service concept. By learning from the successful experience of others, integrating their own development ideas.

After learning and induction, Samsung has launched a new service concept, that is, to maintain the closest relationship with the customers, in order to meet the customers and make every effort, so that the customers can enjoy the most perfect after-sales service. Carry out a full-range of after-sales service activities for the products produced by the domestic Samsung joint-venture factory and the products imported from South Korea, collect the market quality information, provide product safety specifications, conduct on-site testing, and provide technical support. In addition, Samsung also strengthen the network service system, expand the scope and scale of network service, its service network throughout the construction of 24-hour call center, throughout the year to ensure that customers can help customers, call center will sales consulting, use consulting, troubleshooting, maintenance center connected together, to provide users with full after-sales service enjoyment.

4.3 Always maintain a sense of crisis and maintain a stable market position

After losing the advantage of the first market, Samsung Group has held a conference on product comparison on the best-selling products of various brands, and compared the products produced by Samsung with the popular products on the market, so that everyone can intuitively see the gap between themselves and a higher level. The impact of this intuitive impact can not be underestimated. With the increase of the organization scale, the cost of the enterprise will rise accordingly. See the experience from others and learn the methods from the benchmark. Only by constantly improving the per capita output value and improving personal efficiency can Samsung Group achieve the synchronous improvement of the enterprise scale.

This crisis consciousness is not only reflected in the product comparison, but also reflected in the product production link, samsung group made a production regulation, any samsung products found in the assembly line production process any bug or failure, need to stop, check the cause of the bug, check pipeline process operation have deviation and errors, and then for these problems to report and analysis, on the basis of summarizing the experience, in the further development to avoid repeat.

CONCLUSION

The lessons of history tell us that stagnation will be eliminated and development will be long.

Samsung's several innovative changes are the industry legend level of reform, even if now there are also many small and medium-sized enterprises to refer to and learn from his excellence.

The management thinking of an enterprise often depends on the personal hobbies and characteristics of the enterprise leader, among which, the main components of the corporate culture and development thinking will also be reflected in the personal values, world outlook and outlook on life of the enterprise leader. Therefore, in order to want enterprises from the fundamental innovation of management reform, we must start from the leader's management thinking of innovation, which is also one of the main ways to realize the benign development of the enterprise.

Changing ideas is the premise of implementing effective management. Samsung's main leaders, inspired by the sales of Japan and South Korea in the sales of electrical appliances in the United States. Some companies, by contrast, refuse to "go with the crowd," leading to bankruptcy or takeover.

Management innovation is to give creative breakthroughs and changes to the management system, experience and process of the organization or the enterprise itself, and then so that the enterprise can adapt to different competitive environments.

The first is the innovation of the enterprise internal mechanism, pay attention to the culture. In order to achieve management innovation, companies need to rely on culture and create a healthy, progressive and endless corporate culture. We must attach importance to emotional management, namely understanding, respecting and caring for others, and maximize people's initiative and enthusiasm by building good interpersonal relationships. Strengthen the incentive mechanism, reward excellent employees, combine material and spiritual means, stimulate people's enthusiasm and creativity; value talent training, and improve staff knowledge and skills to adapt to the new development environment, adapt to talent, consider talent ability and job adaptability, reasonable arrangement for employees, provide employees with more choices of development opportunities and innovation stage, so that personal talent can be fully displayed. Build a soft environment for enterprise management innovation and form a good atmosphere for innovation.

At the same time, we should build and cultivate good and correct enterprise innovation values, form and promote excellent and advanced innovation culture, and be deeply rooted in people's hearts, and in the future development, we should also absorb other excellent cultural concepts, and constantly update and form a unique cultural atmosphere.

Innovation and reform of technology and method is the core of enterprise management reform. Samsung's successful innovation experience also shows that in order to achieve lasting growth and development, enterprises should put enhancing their advantages and competitiveness in the first place. Such experience is a very valuable reference experience for common enterprises, especially high-tech enterprises.

Strengthening the internal data management of the organization is the main guarantee to implement the real and effective management. The company performed well, with the focus on enhancing data management. Data management is very important, and it is the basis of information resources and decision-making in an organization. To create a digital enterprise, data management must be integrated into the enterprise management funnel.

In this world of more and more global economic integration, how to have a certain development prospects in the international market economy has a great significance and influence for the development of the domestic economy. Under such conditions of development, we should firmly believe in the decisions and decisions of the Party and the country, closely follow the international pace, take the essence, discard the dross, learn from the experience and lessons of more pilot experiments and observation, and achieve the ultimate goal.

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THE CORE COMPETENCE CONSTRUCTION OF COLLEGE EMPLOYMENT MANAGEMENT MODEL BASED ON SYSTEMS ENGINEERING

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ABSTRACT

This paper uses the viewpoints and methods of system theory to take the employment management of college students as a system. The college employment management model constructed from the perspective of systems engineering analyzes the core competitiveness in the management model, and uses modern management tools to analyze the core competitiveness characteristics of the college employment management model(Zhang Ke et al.,2013;Lv Liang,2022). Combined with the characteristics of each competitiveness element(Wang Zeli et al.,2013), a targeted solution to the employment management of colleges and universities is put forward, hoping to provide a clearer idea for the employment management of colleges and universities(Li Nan,2013, Jiang Rui,2021).

Keywords: system, employment management, core capacity building, management mode

INTRODUCTION

The innovative structural model of employment management in colleges and universities regards the employment management of college students as a system, constructs the three inner layers of employment management departments(Wei Wei et al., 2016;Tong Dandan et al.,2021). Students and employers as an inner employment system, and integrates the three inner layers of society, family and employment environment. The outer subsystems are built into an employment environment system, and each unit, subsystem, and elements are aggregated into a whole, which acts as a "binder" and a "multiplier". University employment management model(Shi Mingxiang,2013;Wang Shaoli,2016).

With China's emphasis on employment stability, especially the support for the employment of college graduates, the number of college students has increased year by year, and college students have moved from elites to the public. According to public data from the Ministry of Education: 8.34 million college graduates in 2019, There are 8.74 million graduates and 9.09 million college graduates in 2021. The number of college graduates in 2022 is expected to be 10.76 million. In recent years, the year-on-year growth rate of the number of college graduates in my country has been more than 4%. The supply and demand relationship of college students' employment has a profound impact on market value and social stability (The Ministry of Education and the Ministry of Human Resources,2021).

Combinatorial optimization problem is a class of optimization theory. In the optimization problem, the optimization problem in which the decision maker has a discrete decision space is considered to be a combinatorial optimization problem. Combinatorial optimization problems involve sorting, classification, screening and other problems. (Liu Jia et al.,2020; Zhang Kejian, Huiyang et al.,2013) This paper analyzes the core competencies involved in the construction of employment management mode, and based on the concept of systems engineering, conducts research on organizational management, demand analysis management, task decomposition management, and business process management mode, and evaluates the research results(Huang Xiaofang,2020).

The characteristics of core competence in the construction of employment management model

System (System of Systems, SoS), is developed from the concept of system. At present, there is no unified definition of the system, and different definitions are proposed in different application backgrounds.

Regarding the development planning and construction in the field of employment management, some scholars believe that the system is not a simple system integration, but refers to the task-oriented task-oriented integration of a series of large-scale, wide-space discrete distribution, independent Multiple systems that operate and manage independently are integrated in the form of a network, and the systems cooperate with each other to realize an organic whole of higher-level functions that a single system does not have(Zhuge Yan,2021;Yang Wei,2017).

It should have the following characteristics. One is independence. The systems that make up the system operate independently and have different functions; the second is distribution.(Zhang Yanli et al.,2020) The systems that make up the system have a wide range of spatial distribution; the third is emergence. The systems that make up the system can highlight new behaviors or functions that the system does not possess by interacting with each other; the fourth is adaptability. The system continues to develop and improve with the changes in the external environment and needs(Xu Mingyu,2022).

The main purpose of building an employment management system in colleges and universities is to build an employment management system that can adapt to or respond to the rapidly developing, changing and complex social environment in China's new era(Wu Xuan et al.,2022). Its core capabilities such as employment guidance ability, employment service ability, and mechanism guarantee ability can be widely distributed in different fields for independent construction, keep pace with the times, and always maintain an advanced nature. Therefore, it is also a typical system engineering, which needs to be constructed with the concept of systems engineering.

1 The Background Significance Of The Construction Of The Employment Management System In Colleges And Universities

1.1 In 2019, my country's higher education officially entered a new stage of popularization.

The gross enrollment rate of higher education exceeded 50%, and the number of students in higher education exceeded 40 million. There are 8.74 million college graduates in 2020 and 9.09 million in 2021. During the "14th Five-Year Plan" period, the number of college graduates in my country will exceed 10 million. In the face of the continuous expansion of the number of graduates, coupled with the impact of the epidemic and the pressure of my country's economic restructuring, the employment situation for graduates is very severe and complicated. At the same time, there have been a number of public opinion incidents in recent years that are detrimental to the interests of students, which have damaged the fairness and justice of society and education, and also exposed loopholes in student management. It is necessary to continuously improve the management system and establish Long-term mechanism to improve the level of student employment management.

1.2 The innovation and construction of the employment management system in colleges and universities is an inevitable choice for social development. From the perspective of social development, the employment management system should change from a single to a pluralistic, from traditional to informatization. Employment management requires the cohesion of all staff within the university, and also requires in-depth cooperation and in-depth docking with industry departments and employers. This is an important measure to promote long-term social stability, promote the construction of a high-quality education system, and further promote higher-quality and fuller employment of college graduates.

2 From The Perspective Of Systems Engineering, Analyze The Role Of The Core Capabilities Of "mechanism Guarantee Capabilities" In The Construction Of Employment Management Systems In Colleges And Universities.

2.1 The process of college employment management includes the following links:

school positioning and enrollment plan, talent training, employment guidance services, guidance and coordination, and evaluation feedback. These links are a gradual process. Based on the employment system composed of three inner subsystems of the college employment management department, students, and employers, and three outer subsystems of society, family, and employment environment, we propose a college employment management system from the perspective of the college employment management process. Structural model. As shown in Figure 1

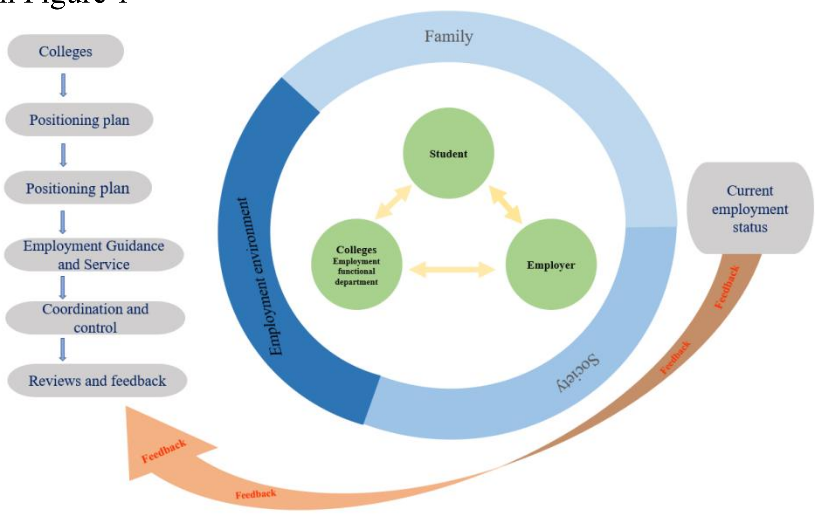

Figure 1 Structural model of college employment management system

2.2 The core of the employment management model is the three internal subsystems of the employment management department, the employer, and the student.

The three constitute a whole, which is the most critical component of the employment management system in colleges and universities and one of the important core competencies of the employment management model. Organizational management skills. However, the employment management model is also affected by the social, family and employment environment. The outer subsystems include family subsystem, social subsystem and employment environment subsystem. The employment environment subsystem includes economic environment, policy environment, social environment, human environment and natural environment.

2.3 In the structural model, the school positioning and enrollment plan are managed and guided by the government, and at the same time have a certain degree of autonomy.

Enrollment, training and employment are the three steps of talent cultivation in colleges and universities, and the three are closely linked and mutually influenced. The quality of enrollment affects the quality of personnel training. The quality of personnel training affects the quality of employment of students, and the quality of employment in turn affects the enrollment and development of colleges and universities. From this perspective, the organization and management ability of the employment management model integrating the employment management department, the employer and the students is an important factor affecting the development of the university.

The above picture （Figure 1） is a college employment management model constructed from the perspective of systems engineering. The core college employment management departments, employers, and students in the model form a whole, which constitutes one of the important core competencies of the employment management model. Organizational management capabilities.

3 Suggestions For Improving The Management Capacity Of The Organization:

3.1 Optimize the organizational structure and build an organizational platform empowerment system.

The premise of organizational capacity building is to optimize the organizational structure, clearly define the organizational power and responsibility system, and further stimulate the organizational innovation vitality. Based on the core employment management department team, accelerate the cultivation of professional employment guidance talents and comprehensive functional talent teams, make every effort to build an organizational platform empowerment system, and build a talent resource pool for employment guidance services in colleges and universities.

3.2 Continuously improve the organizational coordination mechanism and build an integrated and efficient operation system.

The organizational coordination mechanism centers on the successful employment of high-efficiency students as the performance goal, vertically coordinates government policies, employers and service agencies, etc., and horizontally coordinates with each secondary college as a business unit and each functional unit within the school as a support unit, oriented toward integration The goal of the operation system is to establish an internal operation coordination mechanism to achieve a win-win integration of the value chain.

3.3 Build a "point-to-point" process system.

The three major points of college employment management department, employers, and students are centered on student satisfaction and employment. Through process construction, each point decomposes strategic goals into a strategic process implementation system, and continues with the progress of the goals. Optimize business processes.

3.4 Give full play to the advantages of organizational management and establish a sharing platform for knowledge and experience.

Continue to optimize the employment guidance service talent selection and retention system, stimulate talent innovation vitality, and integrate resource sharing platforms that are conducive to student employment, such as student employment guidance, employment policies, employment services, recruitment information, and skill training. Relevant knowledge and experience in units and organizational processes are structured and systematized.

4 The Role Of The Core Competence Of "employment Guidance And Service" In The Construction Of College Employment Management System Based On Swot Analysis.

The Employment management model system is a systematic project, involving many factors and complex relationships. It not only needs to connect with the planning of social development and national policies, and conform to the system-efficiency construction model, but also consider the development environment and the current situation of development and construction at home and abroad. In order to realize the positive emergence of system capabilities and the overall optimization of system functions, it is necessary to select appropriate demand analysis management tools, and finally build a college employment management system with the characteristics of systematic technological innovation, reasonable system structure, and excellent overall functions.

SWOT analysis method, also known as situation analysis method, is to comprehensively analyze the research object from the aspects of advantages, disadvantages, opportunities and risks, and then clarify the development needs and directions(Lin LU et al.,2014). Carrying out the core capability building of a new generation of large-scale and complex military information systems is not only a requirement to respond to changes in the external environment, but also a requirement to achieve its own sustainable development. It is suitable to use the SWOT analysis method to carry out demand analysis and management. Therefore, as shown in Figure 2, in the process of conducting demand analysis and management research, scientifically use the SWOT analysis method to conduct comprehensive research and judgment on external development opportunities and internal construction needs.

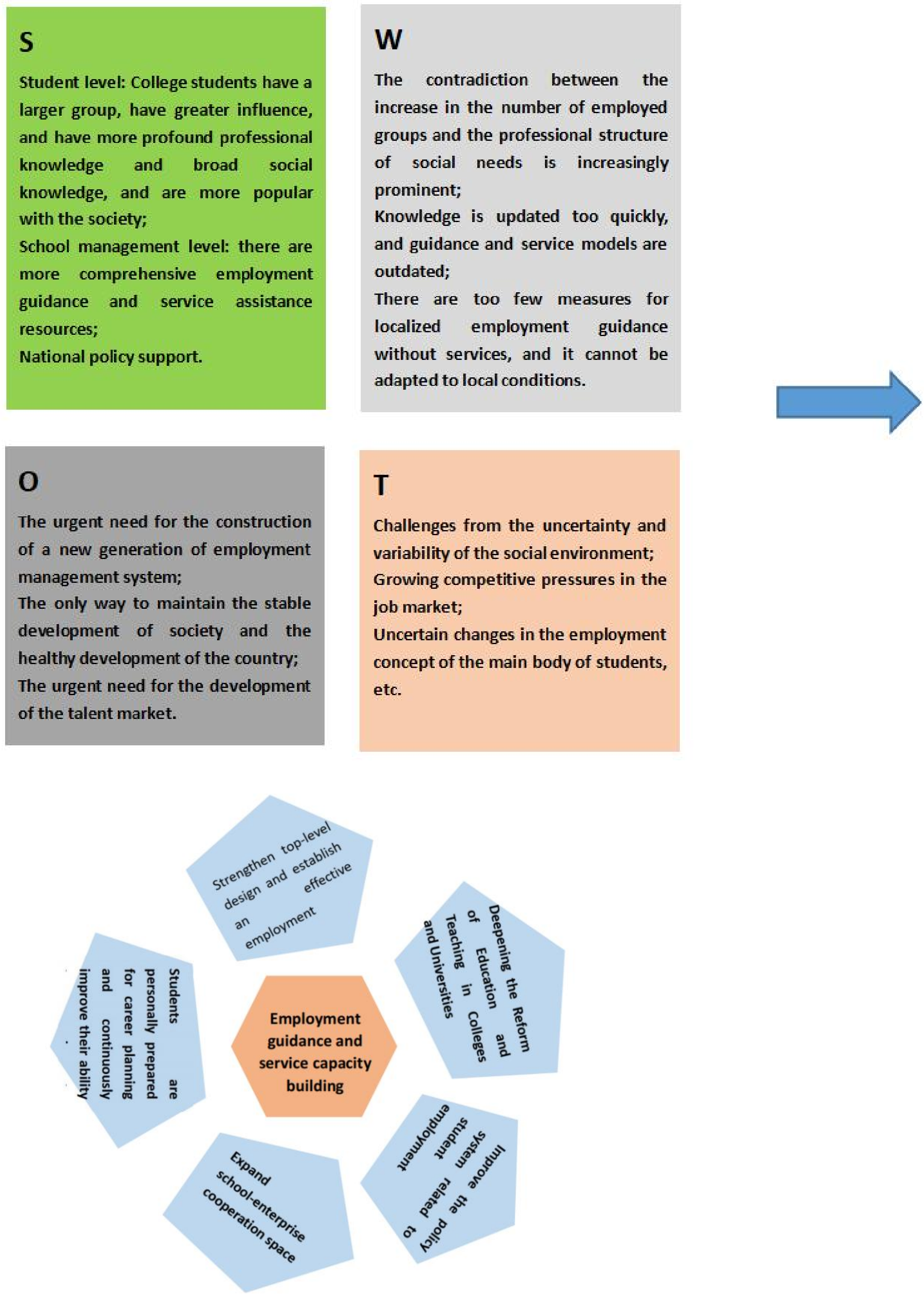

Figure 2 Research on the guidance and service ability of employment management model based on SWOT analysis

5 Suggestions For Improving The Core Competence Of Employment Management Model Guidance And Service:

1. Colleges and universities play a leading role in strengthening top-level design and planning employment guidance and service capabilities, and establishing an effective employment guidance service operation mechanism

1.1 Colleges and universities should proceed from the requirements of social harmony, stability and harmonious employment, based on the goal of training high-quality skilled personnel, and combine the characteristics of regional economic development to build a unique employment guidance service operation mechanism, and strengthen the construction of employment work system and team construction. , establish an employment incentive and assessment mechanism based on the combination of responsibilities, powers and effects, establish a full-time employment team, and form a situation of common attention and joint management.

2. Continue to deepen the reform of education and teaching in colleges and universities, and improve the level of employment guidance and service capabilities

2.1 Accelerate the adjustment of discipline and professional structure. The strategic adjustment of the disciplinary structure of higher education is essentially to strengthen the training of talents in colleges and universities, carry out in-depth reform of higher education, and establish a scientific education system and mechanism according to the needs of national and local economic and social development. Colleges and universities should adjust the structure of disciplines and majors in a timely manner in accordance with local social needs, reduce or cancel unpopular majors, add emerging majors in a timely manner, attach importance to the development of interdisciplinary majors, and develop advantageous disciplines and majors to meet the needs of local economic and social development. structural contradictions.

2.2 Strengthen the construction of employment institutions. Improve the institutions, personnel, venues, funds, etc. of the employment guidance service center in colleges and universities, and basically guarantee the employment guidance service work of college students; attach importance to the staffing of full-time teachers in employment guidance services, and strictly select employees who must master the corresponding professional knowledge, such as economics, pedagogy, Professional knowledge such as psychology and human resource management, as well as related work experience and social practice ability, to ensure the quality of college employment instructors; establish a system of off-campus employment instructors, invite successful social entrepreneurs, well-known alumni, domestic Foreign entrepreneurs and other outstanding personnel serve as off-campus employment instructors.

2.3 Strengthen the guidance of students' employment education. Colleges and universities should continue to strengthen employment guidance and career planning education, provide guidance services to graduates according to the employment directions of different majors opened by the school, and carry out employment training, such as practical development training for various employment skills and skills, and various competitions. Wait.

2.4 Carry out targeted social practice activities. Social practice activities are the basic conditions for improving college students' innovation, entrepreneurship and employability. Colleges and universities should determine the content and methods of students' participation in social practice activities according to their own school-running characteristics and school-running concepts.

3. Improve the policy system related to student employment and establish a sound employment environment

3.1 Increase the publicity of the employment policy of college students. Government departments should vigorously publicize the employment policy of college students and create a good employment atmosphere. The publicity of the entrepreneurship and employment policy through various channels such as the

Internet or TV will enable society and parents to support and encourage college students to start their own businesses and form a good entrepreneurial and employment environment. Through the Internet information platform, vigorously publicize the typical experience of innovation and entrepreneurship education in colleges and universities and the typical entrepreneurial employment of college students, establish a model, adhere to the correct orientation of public opinion, and create a good atmosphere for promoting college students' entrepreneurship and employment work.

3.2 Accelerate the upgrading of the industrial structure of enterprises. The rapid development of the local economy provides the basic conditions for college students to innovate, start a business and get full employment. Under the new normal of the economy, local governments should promote the adjustment and upgrading of the industrial structure of enterprises, guide the adjustment of the industrial structure of enterprises, transfer outdated industries, and develop emerging industries. Through the supply-side reform of the enterprise industry, it can increase the enterprise's demand for high-skilled talents, create more jobs, and attract more college students to start their own businesses.

4. Efforts should be made to expand the cooperation space between schools and enterprises, and strengthen the social responsibility awareness of employers.

4.1 Strengthen school-enterprise collaborative innovation. Strengthening innovation cooperation between enterprises and universities is an important measure for the reform of education and teaching in colleges and universities, which is conducive to the cultivation of talents in colleges and universities, promotes the development of enterprises, and provides human resources for enterprises to cultivate talents. Both schools and enterprises provide students with opportunities for internships in enterprises, so that college students can improve their ability and knowledge in practical work, and at the same time, they can increase their practical work experience. Through the synergy mechanism, the deep integration of innovation elements can be promoted, a group of outstanding innovation teams can be formed, a group of top-notch innovative talents can be cultivated, and a batch of iconic innovation results can be produced for enterprises.

4.2 Enterprises undertake social responsibility. At present, some employers are unwilling to provide internship opportunities for college students in the internship process. Most employers believe that too many interns will affect their normal work order, or worry about the leakage of business secrets, or think that students' theoretical level, although is relatively high, the actual experience is really lacking, and it can't help much. It will increase the cost of work during the internship and refuse to accept interns. At this point, employers should take providing some internship positions to college students as their social responsibility, and actively cultivate and reserve talents for society, so as to enhance the practical experience of college students and improve their practical work ability.

4.3 Eliminate bias in unit selection. Strengthen the supervision of the recruitment behavior of employers, and further standardize the recruitment behavior of employers. Open recruitment information, standardize recruitment procedures, eliminate procedures such as gray recruitment, and publicize employment results, establish a correct employment value orientation for graduates, create a fair, just, safe and harmonious environment for entrepreneurship and employment, and build a guarantee mechanism for college students' entrepreneurship and employment.

5. Students are personally prepared for career planning and continuously improve their ability to innovate, entrepreneurship and employability(Xuan Xin et

al.,2022)

5.1 Make a good career plan.

College students should make career plans in advance, analyze the factors that affect their career goals and ability needs, and preliminarily clarify their future development goals, and constantly compare and revise the plans according to their personal development and interests during their university studies. Personal goals and requirements, re-examine yourself, combined with the current economic and social situation, to determine a more reasonable and realistic entrepreneurship and employment position for yourself. This is conducive to the realization of future entrepreneurship and employment goals.

5.2 Change the concept of entrepreneurship and employment.

Graduates should make it clear that higher education is no longer the elite education of the past. They should face reality and deal with reality with a correct attitude. When encountering difficulties and setbacks in the process of entrepreneurship and employment, they should not shrink back and have a correct understanding of ideals and reality. In order to understand society objectively and fairly, adjust the goals of entrepreneurship and employment in a timely and appropriate manner, have an accurate estimate of the employment expectations, be confident, actively seek opportunities, and realize the willingness of entrepreneurship and employment. In the field of entrepreneurship and employment, we should not limit the scope of entrepreneurship and employment to a few industries, but broaden the scope of entrepreneurship and employment, adhere to the concept of diversified entrepreneurship and employment, and actively meet the fierce market competition.

5.3 Improve the ability of innovation and entrepreneurship.

In the current situation that graduates are having difficulty starting a business and finding employment, employers have higher and higher requirements for recruiting college students. Graduates should also improve their ability level accordingly to meet the needs of employers, cultivate and shape their own comprehensive quality, constantly improve their knowledge structure, participate in professional practice and skills training, improve their knowledge structure, and promote innovation and entrepreneurship. Thinking, cultivate their own entrepreneurial employment competitiveness.

CONCLUSION

Based on the concept of systems engineering, this paper uses the SWOT management analysis tool to analyze the characteristics of the core capacity building of the employment management system in colleges and universities, which effectively promotes the transformation and upgrading of the core capacity building of the employment management system in colleges and universities.

The innovation of the core competence system construction management model proposed in this paper is that the system engineering thought is applied throughout the links of organization management, employment guidance and service, and the system efficiency core combining systems engineering thought and modern management methods is explored and verified. Ability to systematically build a management model.

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SERVICE INNOVATION OF HANTING ECONOMY HOTEL CHAIN

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ABSTRACT

As an important part of the hotel industry, economy hotel chain is playing a pivotal role. Whether customers are traveling, business visits, or visiting relatives and friends, economy chain hotels are an important choice for accommodation. The success of the hotel operation is attributed to the success of the hardware and software level. At present, there is not a very significant gap between the various economy hotel chains in terms of hardware level. If a hotel wants to stand out in the high competition, it is particularly important to strengthen the service level. Therefore, the service quality of economy chain hotels is a very important factor for consumers' choice. Through the literature research method, this paper proves that service innovation is very important to the development of economy chain hotels through the research on service innovation of economy chain hotels, and hopes to draw some beneficial countermeasures for the development of economy chain hotels in China, so as to enhance the competitiveness of hotels.

Keywords: economy hotel chain, service innovation, Hanting

INTRODUCTION

1.1. Background of the study

In the past two decades, with the rapid development of China's economy and tourism, China's hotel industry has maintained a high rate of development (Zhang, 2020). In the early stage of development, high-end hotels in China developed to meet the needs of tourists from British and American countries (Zhang, 2018). The proportion of high-grade and mid-grade hotels in China is relatively high, and there is a surplus, while there is a serious shortage of low-cost hotels that meet the needs of Chinese tourists (Bao, 2018).Most people's consuming demands for hotels are mainly ones with comfortable infrastructure, fast service and economical prices (Zhang, 2019). At present, most star-rated hotels cannot meet this demand in terms of price. In addition, a large number of guesthouses in China have poor sanitary conditions, service quality and safety conditions. The hotel accommodation service in the whole market has an imbalance of supply and demand structure, and the situation of excessive competition and insufficient competition coexist (Zhang, 2019). In this context, the market demand for comfortable, convenient and clean hotels is stronger, which provides a great opportunity for the development of economy chain hotels (Chen, 2018).

In 1997, China's first economy hotel chain, Jinjiang Inn, was located in Shanghai, and its business model and standard are completely different from other star-rated hotels. It is mainly based on accommodation, while ensuring a high-level hotel environment and service quality. Since the birth of Jinjiang Inn, a new hotel model was quickly recognized by the market (Fan, 2020).As an important part of the hotel industry, economy hotel chains are playing a pivotal role (Zhu, 2018). Whether customers are traveling, business visits, or visiting relatives and friends, economy chain hotels are an important choice for accommodation (Xie, 2020). At present, there is not a significant gap between the various economy hotel chains. If the hotel would like to stand out in the fierce competition, it is necessary to enhance the service level. The service quality of economy chain hotels is a very important factor for the choice of consumers. Starting from the service innovation of economy chain hotels in Beijing, China, this paper tries to find a method to enhance the core competitiveness of economy chain hotels.

1.2 Research purpose

1)To study the existing problems in Beijing Hanting hotel chain

2)To provide relevant solutions to problems of Beijing Hanting hotel chain and provide reference for the development of economy hotel chain in China

1.3 Research significance

This paper takes Hanting as an example of the economic chain hotel as the research object, and researches its service innovation, which has certain theoretical and practical significance.

Economy hotel chains are currently developing rapidly and have great potential. It is of great significance to study the service innovation of economy chain hotels, and at the same time perfect the theory of service innovation in China.

In the market competition, the market forces hotels to adapt to the fierce market competition through innovation, and seek survival and development. At the beginning of its establishment, economic hotels have great potential for development, but with the changes in the market environment and consumer demand structure, the potential of economic hotels will inevitably have a gradual weakening process, which requires economic hotels to innovate to enhance their core competitiveness. The core content of economic hotel innovation is the innovation of services. Service is the foundation of enterprises' survival, and innovation is the soul of enterprises' development. Service and innovation are the focus of enterprises' development, and the two are interdependent and inseparable.

LITERATURE REVIEW

Giousmpasoglou and Hua (2020) pointed out in the research that evaluating the effect of service innovation was the verification of whether the implementation of service innovation was effective or not. Therefore, the evaluation indicators should include the improvement of corporate financial indicators, the improvement of service quality, the optimization of corporate resource allocation, and the improvement of competitiveness. Employees are the implementer of service innovation, and to a certain extent, employees also affect the overall performance of the hotel. Hameed et al. (2021) believed that the change of customer satisfaction was the most direct response to the effect of service innovation. The improvement of customer satisfaction is conducive to the cultivation of customer loyalty and can effectively reduce marketing costs. Therefore, customer satisfaction should also be included in service innovation performance indicators. From the perspective of product innovation, Han (2019) believed that in hotel service innovation, tangible products directly affected customer value innovation. The classification of hotel service innovation is conducive to improving the effectiveness of innovation. Jin (2021) believed that service innovation should include four aspects: product innovation, process innovation, knowledge innovation and management innovation. Due to their own differences, different types of hotels, especially hotels of different grades, standards and scales, often have different content and focus of service innovation. Kim and Han (2022) pointed out through empirical research that hotel service innovation included two aspects, namely new service development and employee service innovation. Rajiv Bhatia (2001) believed that in Europe, customers had great demand for economy hotels, which was a good opportunity for its development. Liu (2019) analyzed the success factors of the British hotel industry through a questionnaire survey. Sarmah and Rahman (2018) made a realistic prospect for the future development of European economy hotels, and take into account branding and customer factors.

Sharma and Srivastava (2018) introduced the research difficulties and research groups of service innovation, analyzed the connotation of the concept of service innovation, and expounded the characteristics of service innovation. On the basis of reviewing the research history of service innovation, Sun (2018) expounded the classification of existing research methods of service innovation, so as to reveal the research trajectory of service innovation. Wang et al. (2018) expounded the importance of corporate service innovation. He pointed out that in the face of increasingly fierce market competition, in order to achieve its business goals, enterprises must provide consumers with good services and create their own unique core competitiveness to form a strong competitive advantage. Enterprises must try their best to explore the methods and ways of service innovation. Service innovation has become an inevitable way for the development of modern enterprises. Wu (2021) studied the main obstacles to the innovation of knowledge-intensive service industry in China based on a questionnaire survey of knowledge-intensive service enterprises. He also discussed the barriers that companies with high-level and low-level innovation face when making service innovation decisions and sustaining innovation. Wu et al. (2018) pointed out that, as a new force in the hotel industry, economy hotels had attracted a large number of customers with their low prices and fast services. However, in the face of more personalized and diversified service requirements of customers, economy hotels must retain existing customers and expand their market share through service innovation.

PROBLEMS IN BEIJING HANTING HOTEL CHAIN

At present, the global economic environment is still in a period of turbulence, and the economic hotel industry is in a very difficult situation. Facing this unfavorable situation, although Hanting Hotel actively improves in service innovation, it also faces many difficulties. The main problems are as follows.

3.1 The decline in operating performance of hotel

At present, the overall economic environment is declining, and the economy hotel industry is no exception. At present, the basic pattern of economy hotels in first-tier and second-tier cities has been formed. The competition in the entire industry is fierce, and various hotels have cut prices one after another to compress profit margins of hotels. The rise in operating costs such as property rents has made matters worse. In the absence of financial support, it is extremely difficult for hotels to make breakthroughs in service innovation.

3.2 Lack of identifiablity in the appearance of hotels

At present, in addition to some high-end star-rated hotels, many economy chain hotels lack features in their appearance. Compared with Home Inns and 7 Days Inns, Hanting Hotel has no features. The appearance of a hotel is like the appearance of a person. If a person has no distinctive appearance, it is difficult for him to impress others, and he is likely to lose the opportunity to further demonstrate his inner strength. The appearance of an economy hotel does not need to be luxurious as long as it has its own characteristics. And Hanting has a big problem in this regard.

3.3 Lack of management talents

Economical hotels are inferior to star-rated hotels in terms of their own strength, and the salary and treatment of staff cannot be compared with that of high-end hotels, which is destined to be unable to attract more high-quality management talents. At present, although China's service industry is developing rapidly and the number of relevant management personnel is increasing year by year, there are still very few high-level service management personnel, and even fewer talents can eventually come to economy hotels. How to attract professional talents with strong service awareness, or excavate and train their own talents from the inside of the hotel, is an important problem faced by Hanting and even the entire economy chain hotel in China in the future. Since the reform and opening up, China's economy has developed rapidly, but it is still too immature compared with the development of developed countries in the past century, and many advanced management methods and technologies have not yet been used in China. The research on innovative services has a history of nearly a hundred years in the United Kingdom and the United States, but only a few decades in China, and there are fewer innovative services that are actually used in economy hotels. The backwardness of service innovation management mode is one of the important aspects restricting the Hanting hotel chain.

3.4 The franchise policy leads to passive management

Since 2012, Hanting has increased the development of franchise stores. However, the management of franchised stores is more difficult than that of directly-operated stores. In many cases, it is prone to a mixed situation, which directly affects the management level and innovative service quality of the entire Hanting Hotel. At the same time, franchise hotels have also led to a decline in the profit margins of economy hotels. Adhering to the principle of quality over quantity is one of the important problems to be solved by Hanting hotel chains in the future.

SOLUTIONS TO PROBLEMS IN BEIJING HANTING HOTEL CHAIN

Combining the above description of the problems of economy chain hotels, it can be seen that in the face of the demand of economy chain hotels and fierce market competition, if economy chain hotels want to achieve sustainable development and growth, they must insist on innovation to improve service level and quality.

4.1 Innovation of service concept

New service concepts require an accurate grasp of innovative features. The role of this dimension is to enable hotels to improve existing services and develop new services according to competitors' behavior and customer requirements and market changes. The development of any industry market should always be given top priority, and the hotel industry is no exception. The new service concept can make the economy hotel chain know how to provide more personalized, more convenient and efficient hotel services to win the market. At the same time, the new service concept can help us better understand what kind of service customers want from the hotel, and what kind of measures competitors have taken in this regard. Hotels that provide services must compete not only with competitors in the same industry, but also with their own customers. Hotels need to demonstrate that they can bring new experiences to their customers by providing appropriate services.

4.2 Innovation of customer service interface

The second dimension of service innovation of economy chain hotels is the innovation of customer service interface, including the service mode of hotel and customer communication. Customers are an indispensable part of hotel services, and the exchanges and cooperation between hotels and customers will produce many innovative services. Customer-oriented products and services are becoming more and more abundant, and customers are more willing to participate in service delivery. Therefore, the innovation of customer service interface is very important.

The innovation of the relational interface between the economy chain hotel and the customer needs to be implemented by adopting new technical means in order to promote the customer to participate more in the service process. The best way for hotels to gain a head start in the battle against their competitors is to constantly innovate on the interface with their customers. There are many innovative methods. The most effective method is to apply new information technology means in the service process, use modern information management methods to collect market information of existing users and potential users, and strengthen the collection of user feedback on the hotel service system. Only by constantly innovating the service interface between hotel and customer relationship can we take the lead in customer competition.

4.3 New Technology Applications

In the contemporary information society, every industry sector needs new technologies to enrich and expand. As an emerging hotel model, the economy chain hotel industry pays more attention to the application and promotion of new technologies. It can be said that the dimension of “new technology selection and application” plays an increasingly important role in hotel service innovation. Hotels can use certain high-tech means to make all aspects of work more efficient.

The application of new technology provides an intellectual guarantee for the improvement of the service level of the economic chain hotel. The application of new technology provides the possibility for the innovation of hotel service concept, and also promotes the innovation of service concept. The innovation of the relationship interface between the hotel and the customer also needs the support of new technologies to provide technical support for the creation of a new relationship interface. The service delivery system needs more technical support. Without the application of new technologies, service delivery cannot be completed smoothly. Therefore, the premise of promoting the improvement of service level and quality of economy chain hotels is to increase the development of new technologies.

4.4. Strategic selection and coordination

Among the various elements of service innovation in economical chain hotels, strategic choice and coordination are at the core, and hotel service innovation under strategic management is more conscious and organized. China’s economy chain hotel industry has developed rapidly in recent years, but the competition that comes with it has become increasingly fierce. Economic chain hotels can only adjust their internal strategic choices in a timely manner according to their own actual conditions and changes in the external environment. It can be said that the decision-making innovation of strategic timing directly affects the survival and development of the hotel. Only under the guidance of scientific strategic choices, can the service innovation be more vital by giving full play to the innovation ability, and this kind of innovation will be more meaningful to the growth of the hotel.

To sum up, the service innovation of economy chain hotels is the key to the future development of hotels. Incorporate service innovation into the overall development strategy of the hotel, and make the hotel more innovative through the innovative application of new technologies.

CONCLUSION

Beijing Hanting economy hotel chain conforms to the law of market development and has developed rapidly in recent years. Therefore, the research on service innovation of economy chain hotels has strong practical significance. The main conclusions of this study are as follows:

1) This paper describes the service status of economy chain hotels, taking Hanting hotel chain as an example, and proposes problems in service innovation to lay a foundation for further discussion of solutions.

2) This paper proposes a practical and effective solution to the problems existing in Hanting chain economy hotels by reading a large number of documents.

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DEVELOPMENT TREND OF MEDICAL MANAGEMENT IN THE CONTEXT OF BIG DATA

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ABSTRACT

In the era of big data, many information that was difficult to quantify in the past has been transformed into data for storage and processing, affecting people's values, knowledge systems and lifestyles. On the contrary, there are still many parts that do not adapt to the development of the times in the current medical higher management education. Such as unreasonable curriculum, closed teaching methods, single teacher-student relationship, and limited assessment system. In the era of big data, higher medical education should make full use of new resources, integrate curriculum design, adjust the role of teachers, optimize management methods, improve teaching management and personalized talent training. By using data mining, analysis and other technologies, and by exploring the correlation between educational variables, we can build an innovative "personal customized" mode of higher medical education, which provides solid theoretical and technical support for improving the informatization of higher medical education in China and realizing individualized teaching.

Keywords: Big data; Medical management education; Information management and information system.

INTRODUCTION

With the rapid development of the Internet, information that was difficult to quantify in the past has been transformed into data, and the data related to human behavior in the Internet has increased exponentially. According to the statistics of International Data Corporation (IDC), the total amount of data created and copied in the world in 2011 was 1.8 ZB (Bu Qingfeng, Xiao Yueming, 2021). In the big data white paper big data for development: challenges & Opportunities released by the United Nations in 2012, it is pointed out that the era of big data has arrived, and the emergence of big data will have a profound impact on all fields of society. Therefore, we have unconsciously entered the era of big data. As an emerging thing, big data has attracted close attention from all walks of life and produced many research results, but there are few studies combined with higher medical management education. This paper aims to explore how to effectively apply big data to higher medical management education in the context of the era of big data, so as to provide a theoretical basis for truly teaching students in accordance with their aptitude. With the acceleration of the internationalization of higher education in China, promoting the reform of higher medical education in the era of big data and cultivating high-level medical talents in line with the future international development has become a key issue for education management departments and education managers to think about, which has important theoretical and practical significance. This paper obtains the management data of several key medical colleges in Beijing through questionnaire survey, analyzes the problems existing in the current medical management education, discusses and puts forward the medical management methods suitable for the current situation of big data era, and promotes the development of Chinese medical cause.

LITERATURE REVIEW

2.1 Current situation of medical management education in the era of big data

2.1.1 Insufficient resources for higher medical education

At present, the knowledge structure of medical students has been unable to meet the needs of social development. With the advent of the big data era, the traditional medical training objectives cannot adapt to future development. Students need to master the ability to acquire more new knowledge and find new problems, rather than just recite and memorize the existing knowledge content. The content changes too fast, and there are more and more new discoveries. According to statistics, medical information resources account for more than 30% of Internet information resources, and more than 2 million papers are published in global medical journals every year, increasing at a rate of 7% every year. Medical and life science knowledge is changing every day. Medical students must use the information network to keep abreast of the latest breakthroughs and discoveries before they can keep up with the pace of development. At the same time, the research of life science is gradually going deep and micro, and the medical diagnosis and treatment methods and technical methods also need to be more refined, systematic and humanized. A good clinician not only needs to have the means of diagnosis and treatment of common diseases and difficult and miscellaneous diseases, but also needs to have systematic thinking and grasp the knowledge of evidence-based medicine, and be able to explore the root causes of diseases and develop new treatment methods from a large number of common clinical cases and difficult and miscellaneous diseases.

2.1.2 Problems in the content of higher medical education

Higher medical education should have timeliness, practicality and intersection. First of all, the content of higher medical education should be combined with the latest medical research progress in order to better solve clinical difficulties and medical science problems. With the advent of the era of big data, disease prevention, precision treatment and personalized medicine have become the general trend; This means that medical talents engaged in clinical work must also undergo corresponding changes. In addition to mastering professional basic knowledge, they also need to understand and master the forward-looking frontier knowledge of life science. However, at present, the contents of higher medical education in China are relatively old and slow to update, and some contents are even out of line with clinical practice, lacking effectiveness. When different subjects discuss the same problem, there are often inconsistent data. Even in different chapters of the same textbook, the expression of the same problem is inconsistent, or even far from each other. Secondly, the connection between the contents of different disciplines is not enough, and each course is mainly taught in isolation. As academician fan Daiming said, "the teaching materials are very thick. They speak their own words and are not related to each other. If you want to find a connection, you can't find it." In recent years, higher medical management education in China has optimized the form of higher medical management education to a certain extent, but the above problems still exist, relying on information-based means, such as flipped classrooms and the opening of large-scale open online courses.

2.1.3 The traditional education model faces severe challenges

Most of the courses in medical colleges and universities in China are taught face-to-face by teachers in our school. Teachers play a controlling and guiding role in the whole classroom, and students' learning in the classroom is mostly passive acceptance. Due to the progress of information technology, the ability of human beings to collect, store, analyze and use data has achieved a huge leap. In 2008, Mu class was born in the air, and quickly swept the world with its openness and large-scale. It has become a new force to reform the traditional education model, and the face-to-face classroom teaching method has been greatly challenged. The current development of information technology has not fundamentally changed teachers' educational content, teaching ideas and methods. The traditional classroom teaching mode not only takes up a lot of time for teachers to prepare lessons, but also restricts the standardized implementation of the established teaching plan to give full play to the flexibility of teachers in the classroom. Students sit in the classroom and accept the unified knowledge content, which seriously curbs the development of students' free thinking and the ability to acquire new knowledge.

2.1.4 Limitations of the quality evaluation system of higher medical education

The quality evaluation of higher medical education is an important guarantee to realize scientific management, and it is also a necessary guarantee to improve the quality of higher medical education. The quality evaluation of higher medical education mainly includes five parts: teaching content, teaching method, teaching means, teaching attitude and teaching effect. At present, the quality evaluation methods of higher medical education mainly include: expert evaluation method, operations research and other mathematical methods, new evaluation methods, combined evaluation methods, etc. Although there are many evaluation methods, there are still many problems: first, overemphasize the selection function of evaluation and ignore the guiding function of evaluation; Secondly, the evaluation index standards are lack of flexibility and development, and lack of scientific demonstration; Thirdly, the subject of evaluation is single and lacks universality, so the evaluation results are not comprehensive enough; At the same time, the feedback of teaching quality information is lack of timeliness; Finally, the lack of teaching quality information database, the dynamic supervision and timely regulation of the teaching process is weak, mostly random and summary evaluation. For example, most of the evaluation of the quality of higher medical education is still based on the examination results of students. And the test results are limited to a theoretical test with great subjective factors. To put it simply, the examination results largely depend on the difficulty of the examiners in extracting the examination questions. This single examination system can not fully reflect the students' understanding and mastery of the course content; At the same time, whether the test questions have practical and clinical significance is often ignored.

2.2 Influence of big data on higher medical management education

Through big data analysis of data from different medical colleges, we can realize the integration of educational resources of the survival of the fittest. Not only that, we also need to update and integrate teaching data in time, simplify outdated disciplines, and avoid duplication and conflict of content. With the gradual deepening of life science research, medical diagnosis and treatment methods also need to be more refined, systematic and humanized. In the future, a good clinician should not only diagnose and treat common diseases according to the guidelines, but also start from a large number of common clinical cases and difficult and miscellaneous diseases, and explore the cause of disease to basic disciplines through evidence-based medicine knowledge and systematic thinking, so as to develop new treatment methods. Therefore, we should adjust the curriculum structure to make the courses of bridge medicine, clinical medicine and basic medicine unified and coordinated; In addition, according to incomplete statistics, medical information resources account for more than 30% of Internet information resources. More than 2 million papers are published in global medical journals every year, increasing at a rate of 7% every year. If medical students lack medical information technology, they will not be able to be forward-looking and timely in the era of big data. In the future, we should highlight the teaching proportion of the disciplines of analyzing information, screening information and applying information in the curriculum, such as medical literature retrieval, medical informatics, etc., improve the information retrieval and processing ability of medical students on big data, and also pay attention to strengthening the construction of information platforms in medical colleges and universities, building classic courses and difficult diseases. China has always attached importance to the professional education of high-level talent training, resulting in the lack of humanistic quality of medical students. In the future, medicine is changing from biomedical model to psychological and social model. In the information age, patients can know relevant medical and legal information at any time through the computer Internet. In such an environment, it is more necessary to strengthen the cultivation of humanistic quality and make the spirit of medical science full of humanistic care by setting up humanistic and social medicine courses, such as humanistic medicine and medical psychology.

2.3 Strategies for transforming medical management in the era of big data

2.3.1 Promote the reform of higher medical management education with a more open concept

The advent of the era of big data has brought new development opportunities for higher medical education in China. The educational model of "turning a deaf ear to the outside of the window and reading only the books of the sages" is far from being able to meet the needs of social development. To promote the reform of higher medical education in China, we must stand at a higher starting point, with the vision and mentality of looking at the world and integrating into the world, and learn from the useful experience and successful practices of the flexible academic system, curriculum setting, teaching mode, practical training, and evaluation system of the world-class universities, so as to help cultivate high-quality medical talents.

2.3.2 Curriculum design, from "material acquisition" to "digging deeper"

In the era of big data, the means of obtaining data have changed: from hearsay, to consulting paper reference books, to electronic journal searches, to Baidu, to mobile terminals, to the not far era of universal computing——— "no computer, no calculation everywhere." From the development of book dissemination to global webcasting, the acquisition cycle of general knowledge has been reduced to 0. 01 seconds. Data analysis methods have changed: from traditional sampling surveys to "whole data" in the era of big data, directly analyze all data related to research objects, rather than only analyzing a small number of data samples; From complex statistical analysis to the intuitive "sample = population". As health care and biomedical data grow and diversify, big data should be applied to biomedical and health informatics education curricula. Under the guidance of the teacher's organization, learn how to learn and improve "information literacy". In terms of curriculum, the disciplines of independent acquisition of information, analysis of information, screening of information, and application of information should be further highlighted, such as "medical literature retrieval" and "medical informatics". Not only that, but it is also necessary to update and integrate teaching data in a timely manner, streamline outdated subjects, and avoid duplication and conflict of content. There are often inconsistent data in different subjects in medical textbooks when discussing the same issue; Even in different chapters of the same textbook, the formulation of the same issue is inconsistent, even far apart. As Academician Fan Daiming said, the teaching materials are very thick, self-talking, not related to each other, if you want to find contact, you can't turn it over. This kind of education model, which is like an elephant for blind people in every profession, is bound to be replaced by "integrated medical textbooks." Not only that, in the era of big data, it is called for the "integration" of important medical information of "ancient and modern China, foreign and future".

2.3.3 Create a scientific and reasonable curriculum system for medical students

The curriculum system and teaching content are the main battlefield for the cultivation of innovative talents in colleges and universities, the most direct, most specific and important link in the innovative education system, and one of the key links in the reform of modern medical education. Today's world is in an era of knowledge explosion, the development of life science technology is changing with each passing day, medical students as the reserve force of high-level clinicians and scientific and technological talents in the future, the design of its curriculum system, in addition to including basic and traditional teaching content, must also keep pace with the development of science and technology, especially the development of life science technology, especially must master the genome, proteome, metabolomics and other new knowledge and new technologies involving the core content of life science, in order to ensure that the quality of training does not lag behind.

2.3.4 Strengthen the humanistic quality education of medical students

China has always attached importance to the "professional" education of cultivating high-level talents, resulting in the loss of the humanistic quality of medical students, and the humanistic spirit is the core of medicine, and the mission of medicine is to care for and cherish the whole process of people from birth to death. Current medical activities are shifting from a biomedical model to a bio-psycho-social model, and patients can also keep abreast of relevant medical and legal information through the computer Internet. Under such an environment and premise, it is not only necessary to cultivate medical students and strive to become "high-level professionals", but also to strengthen the cultivation of humanistic spirit, so that the spirit of medical science is full of humanistic care, so as to better treat the physical and mental pain of patients.

2.3.5 Encourage the cultivation of personalized talents

The definition of personalized training is "to provide students with learning management strategies and knowledge management techniques in accordance with individualized goals and methods, and to integrate effective educational resources to help students break through restrictions and achieve self-growth, self-realization and self-transcendence." In the age of big data, ubiquitous computing is all the rage, sensors and microprocessors are ubiquitous, and all mechanical or electronic devices can leave traces of data that faithfully record the state of learning and life. Such as course selection, online learning, interaction and feedback, online social behavior, library lending behavior, campus card use, etc., these data after integrated analysis, can reveal in detail 76 Lanzhou Institute of Education Journal Volume 32 show students' behavior patterns, due to the remarkable individual characteristics, some people call it "behavioral fingerprints". For example, the "Early Warning System for Students with Family Economic Difficulties" developed by East China Normal University through campus card records is an attempt and practice of applying big data thinking to personalized education.

CONCLUSION

With the application of medical big data more and more extensive, the demand for medical data management personnel is also increasing, medical colleges and universities information management and information system majors as the corresponding employment major, we must grasp the opportunity, highlight the characteristics, avoid singleness, homogenization, grasp the needs of society, multi-party, continuous innovation, cultivate professionals suitable for the new era, new technologies, new systems, and promote the development of employment and medical service industry.

In the information age, the education revolution should liberate students' innate learning ability and talent. The most serious problem is that conformist teachers are still "working diligently" in the backward model. Sugat asked, "Will what you teach still work 20 years from now?" Sugat believed that reading, searching, and discerning authenticity were three things that could be used and had to be learned in the age of big data. Therefore, in the era of big data, more emphasis is placed on independent thinking and attention to enlightenment, rather than indoctrination; In the era of big data, the problem is not that you can't buy fish, but how to catch fish, so more attention is paid to teaching fishing, rather than teaching fish; In the era of big data, the problem is not to catch fish, but how to catch the most suitable fish, so more attention is paid to the screening and extraction of information. In the era of big data, there are many fish in the pond, and the problem is how to cultivate better fish, so more attention is paid to cultivating students' innovation ability. This requires the design of more personalized electives, more interest groups, and more micro-forums.

Medical education in the era of big data has put forward new and higher requirements for teachers. As Victor Myer Schönberg, author of The Age of Big Data, puts it: "The information storm brought about by big data is transforming our lives, work, and thinking, and big data has ushered in a major era transformation." As with the important transition period in history, at this critical moment, if medical higher education can follow the trend and innovate, it is possible to achieve leapfrog development of higher medical education in China.

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BUILDING, DEVELOPMENT AND MANAGEMENT OF THE SYSTEM OF MARINE TOURISM POLICY —TAKING THE CITY OF ZHOUSHAN FOR INSTANCE

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ABSTRACT

Since the 20th century, China has successively promulgated a series of policies on marine tourism, and the marine tourism policy system has taken shape. However, there are still problems, e.g. the system structure is not yet sound, the macro policy is the mainstay, the operability is not strong, the policy level is not well continued, and the system is mainly emergency management oriented rather than sustainably constructed. This article takes the construction of the "Zhoushan Islands Tourism Comprehensive Reform Pilot Zone" as an opportunity, taking Zhoushan as an example, proposes a framework for the construction of a marine tourism policy system, and suggests approaches to build up a local marine tourism policy system: on the one hand, the local stakeholders need to adapt to local conditions and work hard by themselves; on the other hand; the national and provincial levels are supposed to offer policy help, and issue policies and take measures from the aspects of optimizing the tourism development environment, enhancing the vitality of the tourism market, improving the tourism management system, and making the comprehensive marine protection strict.

Keywords: marine tourism(MT), policy system construction(PSC), Zhou shan city(ZSC)

INTRODUCTION

Zhoushan City was approved and listed as a pilot city for comprehensive reform of national tourism by China National Tourism Administration in its official reply issued in December 2011. In 2018, the Implementation Scheme for Building a National All-for-one Tourism Demonstration Area in Zhoushan (2018) was formulated according to the requirements proposed in Circular of China National Tourism Administration on Building National All-for-one Tourism Demonstration Areas (2018), combining with the practical conditions of Zhoushan. Also in that year, Zhoushan released two plans, namely the All-for-one Tourism Development Plan(2017-2025) for Zhoushan (2018) and the Strategic Master Plan for Building Zhoushan into An International Tourism Island (2018). Considering a historic opportunity that Zhoushan remains as a State-level New Area of China, China Pilot Free Trade Zone Area and National Tourism Demonstration Area, Zhoushan formulated the two above-mentioned plans that work out the scientific scheme for building Zhoushan into an international tourism island, make clear about the practical conditions of its tourism development, and conform to the requirements of tourism industry transformation and upgrading in Zhoushan, as well as the requirements of building Zhoushan into an international garden city on the sea. The two plans and one scheme mentioned above serve as a firm policy to safeguard the marine tourism development of Zhoushan.

The main research gap of this paper is that, though a series of marine tourism policies have been launched, China still lacks a systematic policy management system due to the lack of a sophisticated architecture and all-round macro policies. Besides, those policies are hard to put into practice because of lack of vision and emphasis on emergency management and lack of development and construction, etc. This paper studies two problems: The first is how to establish a sound marine tourism policy system and the second is how to better bring policies into practice and make the policies farsighted. The research objective of this paper is to establish an innovative framework of marine tourism policy system and put forward policy suggestions for the construction of marine tourism system.

This research focuses on Zhoushan City of Zhejiang Province, which includes Dinghai District, Putuo District, Daishan County, and Shengsi County. The significance of this paper lies in its way to build up a local marine tourism policy system. On the one hand, local governments shall rely on its own efforts and adopt differentiated measures in line with local conditions. On the other hand, national and provincial policy supports are required to formulate policy suggestions and measures in terms of optimizing the development environment for tourism industry, unleashing tourism market vitality, improving the tourism management system, and implementing more strict comprehensive conservation of the ocean.

LITERATURE REVIEW

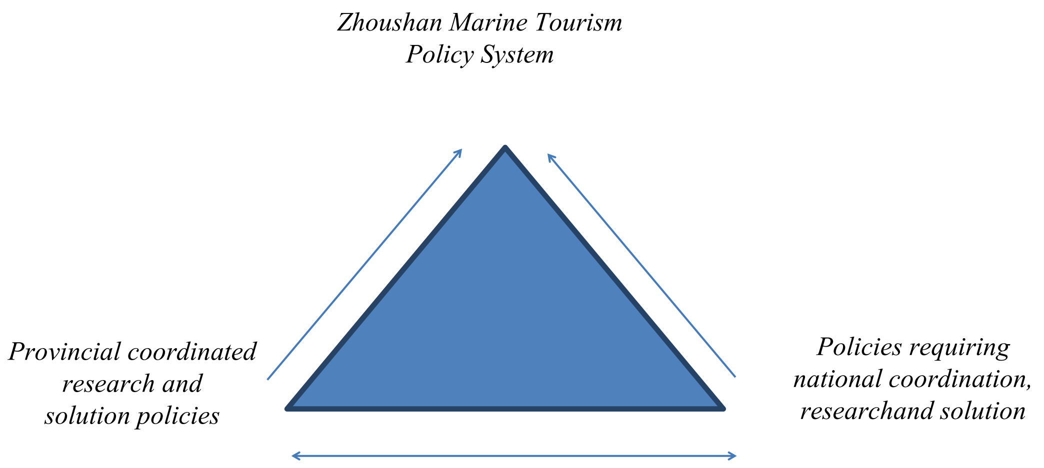
The study of this paper is mainly based on the following two theories: (1) the system theory proposed in the monograph entitled *General System Theory: Foundations, Development, Applications* (Bertalanffy, 1968), in which the core idea is that every system is an organic whole rather than simply combined parts. The overall function of the system is the property that no single isolated element possesses. (2) Chinese scholar Professor Lin Fuyong proposed and developed a new system theory - the general system structure theory, which mainly applies the general system structure theory to the study of complex organization management, and he initiated a research on organization management based on the general system structure theory - Total Relationship Flow Management Theory(Yongfu Lin, 2001; 2002; 2007).

Foreign studies have shown that a number of countries, including Spain, the United States and New Zealand, have promulgated laws and policies to regulate the development of marine tourism. For example, the Law on the Seashore of Spain (Spain, 1994); Tourism Strategy 2015 (New Zealand, 2014); Tourism Plan for the Maltese Islands (Malta, 2013); Advancement Strategy of Tourism Industry (South Korea, 2014); Travel Promotion Act (U.S., 2012); Strategic Plan for Tourism 2021 (Greece, 2020).

Laws and regulations are significantly important in the Chinese policy system. At present, though relevant state departments have issued over 40 laws and regulations relating to various types of tourism, and a number of provinces have released 28 provincial regulations on tourism (management) (Peng Wu, 2012), few of which are specifically intended for regulating marine tourism, and relevant concerning legal provisions are scattered in laws of other fields. Therefore, it can be seen that the construction of legal system regarding marine tourism is just at the starting stage. The same problem also exists in the policy system. From 2005 to 2019, a total of 16 items of policies related to marine tourism were released in Zhejiang Province :(1) Guidance on the Development of Zhejiang Yacht Club Project (Zhejiang, 2006); (2) General Plan for Marine Tourism Industry Development in Zhoushan (2007-2021) (Zhoushan, 2007); (3) Zhejiang Plan for Marine Economy Development Demonstration Zone (Zhejiang, 2011); (4) Zhejiang Plan for the Development of Industrial Agglomeration Areas (2011-2020) (Zhejiang, 2012); (5) Ningbo Plan for Marine Tourism Development (2011-2020) (Ningbo, 2012); (6) Several Opinions on Strengthening Regional Planning in Zhejiang Province (Zhejiang, 2012); (7) Tourism Industry Development Plan of Zhejiang Province (2014-2017) (Zhejiang, 2015); (8) Tourism Industry Development Plan of Zhoushan New Area of Zhejiang Province (2015-2020) (Zhejiang, 2015); (9) Implementation Opinions on Accelerating the Construction of Island Leisure Tourism Destinations (Zhoushan, 2015); (10) Zhejiang "4th Five-year Plan" for Service Industry Development (Zhejiang, 2021); (11) Zhejiang "14th Five-year Plan" for Maritime Port Development (Zhejiang, 2021); (12) Zhejiang "14th Five-year Plan" for Tourism Development (Zhejiang, 2021); (13) Comprehensive Tourism Development Plan of Zhoushan City (2017-2025) (Zhoushan, 2017); (14) Strategic Master Plan for Zhoushan International Tourism Island (Zhoushan, 2017); (15) Zhejiang All-for-one Tourism Development Plan (2018-2022) (Zhoushan, 2018); (16) Plan for Constructing Island Garden of Zhejiang Province (2019-2025) (Zhejiang, 2019). Among the 16 policies mentioned above, 10 are provincial policies which indicate a relatively optimal policy system at provincial level; 6 are prefecture-level policies, including 5 launched by Zhoushan City, which indicates that Zhoushan has preliminarily established the marine tourism policy system. Judging from the content of the regulations, a total of 8 policies are directly related to marine tourism (policy title includes “marine”), and 10 plans regarding marine tourism. Most of the plans are macro guidance policies that are far from mutual coordinating and cohesion, which shows the marine tourism industry policies are not systematic enough. For policies, the "Implementation" is the purpose of "Formulation". Unsatisfactory operative nature of policies would weaken the significance of policy formulation (Ye Li, Zhen Su & Mingyi Luo, 2011). Of the 16 policies, 13 are plans, 3 are guiding opinions, and only the “all-for-one tourism” has corresponding provincial and prefecture-level policies, suggesting that overall the marine tourism policies are rather difficult to put into practice, because most of them are only general guidance rather than some practical and detailed rules for implementation, and also policies from different administrative levels May fail to coordinate with each other. In China, marine tourism policies tend to be formulated to deal with certain emergency cases and some of them are obviously temporary and for emergency use, focusing on management while ignoring industry development. These laws and regulations, resulting from those rigid provisions on marine tourism, cannot meet the practical needs of rapid yet sustainable development of marine tourism in China.

The research framework of this paper is mainly about the establishment of Zhoushan Marine Tourism Policy System. According to the type and mechanism of the problem, the provincial and national levels of marine tourism policies have great impact on it, so it needs co-planning and unified solving.

Figure: research framework of Zhoushan Marine Tourism Policy System



METHODOLOGY

Zhoushan has a permanent population of 1.1 million. This is a qualitative research, which mainly adopts the interview method. The interviewees are from departments related to marine tourism management in Zhoushan, including: (1) Marine Administration Department; (2) Land Administration Department; (3) Environment Administration Department; (4) Tourism Administration Department; (5) Traffic Administration Department; (6) Cultural Administration Department; (7) Financial Management Department; (8) Human Resource Management Department; (9) Financial and Tax Administration Department. The questions in the interview can be mainly divided into three aspects: First, what are the marine tourism policies involved in the department, and is the system perfect? Second, are the marine tourism policies of operative nature and vision? are there any problems?

RESULTS AND FINDINGS

4.1 Ways to Construct a Marine Tourism Policy System

During its exploration of building the comprehensive reform pilot zone of marine tourism, unified planning from both the provincial and national perspective is needed. Provincial departments need to solve the following three problems in the construction of the pilot zone for comprehensive reform of marine tourism: First, giving priority to ensure the land use for tourism construction; second, delegating power over marine area administration; third, managing vessels involving marine tourism. Meanwhile, the reform of the comprehensive pilot zone of marine tourism also requires relevant state-level departments to solve the following problems: first, allowing visa exemption and the establishment of duty-free shops; second, opening international navigation routes; third, relaxing financial restrictions.

4.2 Construction of a Marine Tourism Policy System

Industrial policy system is a systematic policy deployment and system design conceived by the government aiming to protect, support, encourage and adjust some industries to achieve specific economic, social and environmental goals, so as to promote the sustainable, stable and coordinated development of these industries. However, there still lacks a set of systematic, complete, and normative policy system for marine tourism industry in China. On the basis of systematically summarizing and sorting out the meaning and function of the policy system, and comparing domestic and foreign experience, the marine tourism policy system can be planned and formulated from four aspects: tourism development environment, tourism market operation, tourism management system, and comprehensive marine conservation. Please see Figure 1.

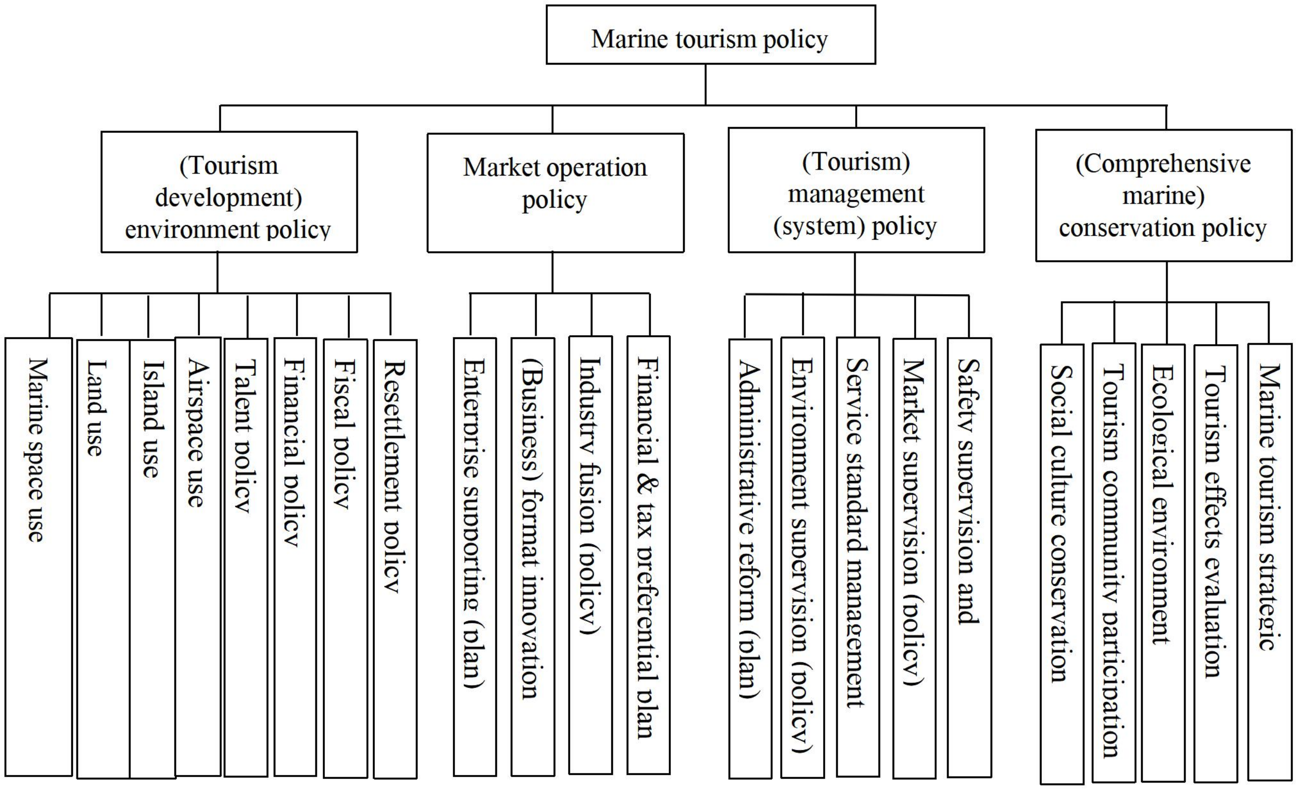


Figure 1 Innovative Framework of a Marine Tourism Policy System

CONCLUSION AND DISCUSSION

5.1 Policy suggestions and measures to optimize the environment for marine tourism development. ①Policy for marine space use. In terms of the marine space use, the government shall make unified planning. It is suggested that we shall firstly satisfy the demands of marine tourism projects, and further delegate powers for managing marine space and examination-and-approval privilege, and relax restrictions on wind-force and distance-to-shelter of marine tourism vessels, such as sea fishing boat. ② Policy for island use. The government should actively formulate policies to encourage and support the use of barren mountains, barren beaches, remote islands and other resources to develop tourism projects. ③ Policy for land use. We shall expand the scope for inland areas to share the benefits of marine economic development and improve the capacity of marine resources development (The State Council, 2017). The government should guarantee the land for marine tourism development, give priority to the land for tourism projects built on barren beaches and remote islands, further safeguard the land used for tourism poverty alleviation, and make full use of the tourism and fishing supporting policies, for the sake of developing marine tourism projects and supporting rural fishing population to get rid of poverty (Jinfeng Liu, 2019). ④ Policy for air space use. We should formulate classification standards for low-altitude airspace and management standards for low-altitude areas, open up inter-island general aviation of helicopters and low-altitude seaplanes, and establish the low-altitude flight service and support system. ⑤ Policy for talents. First of all, we shall formulate policies for talent introduction and cultivation, and attract high-end talents in marine tourism field by favorable salary, housing, insurance, research and development funds and other preferential policies. Besides, we shall also address issues like children education and treatment after talents settling down. All the above measures are expected to create a good entrepreneurship environment and establish a mechanism for talents introduction with marine characteristics. ⑥ Financial policy. We shall introduce flexible financing policies, broaden the financing channels for marine tourism enterprises, improve the financial support policy, increase the credit loan support of financial institutions for eligible marine tourism enterprises, and expand limits of subsidised loans provided to marine tourism enterprises, low-interest loans, and government guarantee, thus helping marine tourism enterprises to survive and then gain development amid COVID - 19 outbreak. For example, a series of social financing projects have been kicked off, such as “special fund for marine tourism industry development”, “marine tourism development lottery”, “special marine tourism development bond” in order to notably support the development of marine tourism industry. ⑦ Fiscal policy. We shall enhance the fund support for the development of new forms of tourism and the transformation and upgrading of industrial structure, expand the fiscal transfer payment in key and demonstrative marine tourism areas, formulate government incentive standards, and give full play to the fiscal levers over marine tourism industry. ⑧ Resettlement policy. We shall formulate a series of policies to ensure reemployment and resettlement of fisherman and peasants who have lost their original jobs. We shall make efforts to reemploy them in tourism industry and give them necessary business guidance. Meanwhile, the industrial access threshold shall be standardized and relative supporting system set up.

5.2 Policy suggestions and measures to unleash tourism market vitality. ①Formulate supportive policies for tourism enterprises: in terms of policies, the government may take the lead to coordinate with market supervision, tax administration, financial and other departments to jointly formulate preferential and supportive policies to facilitate and give preferential treatment to enterprises in financing, management fees, tax interest rates, so as to reduce the burden of enterprises and boost their development. ② Launch supportive policies to encourage industrial innovation: the government should regulate industrial development, encourage the development of emerging industries, and launch policies to encourage innovation of marine tourism business formats, especially the development of emerging marine tourism products and business formats. ③Drive the integrated development of tourism and other industries: we shall encourage the integration of tourism with marine culture, sports, agriculture, industry, education and other industries, and formulate policies to guide and encourage the diversified and integrated development of marine tourism. ④Formulate positive and favorable fiscal and tax preferential policies: according to the Opinions on Land Use Policies to

Support the Tourism Development (Bureau of Land and Resources, 2015), we shall give preferential policies on land expropriation fees, allow free-of-charge use before the approval of range determination and profit earning. After making profits, we shall also positively implement the preferential policies of reducing or exempting marine space use fees released by the state. In the context of COVID-19, more supportive fiscal and tax policies should be formulated to help marine tourism enterprises to survive and flourish.

5.3 Policy suggestions for improving the tourism management system. ① Efforts to delegate administrative power: the government shall make efforts to delegate administrative power according to the state's call of "streamlining administration and delegating power". For example, the administrative examination and approval power over seven aspects closely related to marine tourism industry development, including land management and marine space use, thus granting greater independent development right to the comprehensive reform of marine tourism. ② Improve consumption environment management: we shall formulate policies to optimize the marine tourism consumption environment, regulate illegal tourism operations, expose the list of enterprises breaking the law, and establish a tourist destination evaluation mechanism based on tourists' reviews (China National Tourism Administration, 2009). ③ Promote service standard management: we shall establish the standardization policy system within the scope of marine tourism related industries, and organize and supervise the implementation of standards, so to provide technical support for the development of industrial services, improve the quality of marine tourism products and standardize industrial development. ④Deepen market supervision and management: we shall carry out joint law enforcement operations and special rectification for fake free/subsidized group trips, fake advertising, forced or disguised forced consumption and other fraudulent acts, purify the market environment of Zhoushan cultural tourism, and advocate a law-based consumption environment. ⑤ Strengthen safety supervision and management: the government shall strengthen safety supervision over the marine tourism industry, establish an early warning mechanism for industry safety and emergency management network, lay out a detailed public emergency response plan, and establish monitoring, forecast and early warning systems for meteorological, geological and hydrological disasters in key marine tourism areas.

5.4 Policy suggestions and measures for comprehensive marine conservation. ①Strengthen the conservation of marine culture: we shall remind residents and tourists of due respect to traditional culture through multiple channels of public media, and of a necessary duty to preserve and carry forward the traditional culture. Especially, we shall rationally and scientifically develop and utilize the marine culture, fisherman culture, and fishery culture to guarantee its inheritance and development. ② Establish the mechanism for community participation: we shall make sure the dominant position of community residents in marine tourism development and formulate measures and policies to ensure the reasonable and effective participation of local residents in marine tourism. We shall pay full attention to the interests of local residents in tourism planning, providing them with business and employment opportunities, so to ensure that residents can reasonably enjoy the economic benefits brought by tourism development, and achieve inclusive growth by taking the interests of all parties into account (Kun Su, Suo Hao, 2019). Meanwhile, we shall establish the economic compensation system and policy for land transfer during the process of marine tourism development; for residents involved in tourism development, we shall guarantee residents originally engaged in various industries could benefit from tourism rationally in forms of collective fund compensation and secondary allocation, thus guaranteeing the interests of the community masses. ③Strict ecological and environmental protection system: we shall bring the concepts of respecting ecological civilization and constructing beautiful sea into standard system (Qingzhi Huai, Yiwen Chen, 2019), formulate powerful guarantee measures from the marine tourism administration system, formulate ecological environment protection system for marine tourism development. We shall encourage ecological projects and design ecological tourism products during the marine tourism development, advocate ecological consumption, maximize the protection to marine resources and environment during development, and improve the efficiency of energy and resources while reducing discharging of pollutants. ④Deepen the evaluation of marine tourism benefits: we shall reform the tourism statistics system, establish a special statistical system for marine tourism, and thoroughly and comprehensively assess the comprehensive benefits of tourism development on islands and marine areas. ⑤ Lift the strategic position of marine tourism: as a matter of fact, marine tourism is a comprehensive industry with high correlation and strong driving force, involving all aspects of industry, agriculture and service industry. We shall take the development of marine tourism as an important means for achieving overall social and economic development of islands and coastal areas, so as to guarantee the strategic leading position of marine tourism in these areas.

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THE INFLUENCE OF FACTORS ON THE ORGANIZATIONALPERFORMANCE OF THE COMMUNIST PARTY OF CHINA IN UNIVERSITIES

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ABSTRACT

PURPOSE: This study analyzes the current situation of the evaluation of Party organizations in colleges and universities in the Guangxi Zhuang Autonomous Region, specifically analyzes the factors that restrict the evaluation of Party organizations in colleges and universities and makes an empirical analysis. On this basis, the paper puts forward the countermeasures and suggestions to further strengthen the evaluation of Party organizations in Colleges and universities, which provides a reference for the party building work in Colleges and universities and is conducive to improving the quality of grassroots party organization construction in Colleges and universities, to better carry out the performance evaluation of Party organizations.

METHOD: A quantitative research method is used in this study, a non-probability sampling design with a focus on a convenient sampling frame is deployed in this study. Data were collected by a self-administered questionnaire, and data were analyzed by Amos and SPSS software.

RESULTS: The results show that assessment experts have a significant positive impact on the performance appraisal of Party organizations. In addition, the study found that the evaluation index, the evaluation method, and the organizational guarantees also have significant positive effects on the performance appraisal of Party organizations. Now, the party organizations in colleges and universities must comprehensively consider the above four factors when organizing the performance appraisal work, and constantly stimulate the vitality of the grassroots party organizations.

Keywords: influence; factors; organizational performance

INTRODUCTION

1.1 Background of the study

As of June 2021, the Communist Party of China (hereinafter referred to as "CPC") has more than 95 million Party members, more than 4.8 million grass-roots party organizations, more than 15 million teachers, and more than 3 million students(CPC, 2021). The 19th CPC National Congress put forward the important decision-making and deployment of comprehensively and strictly administering the party(Guang, 2020), which not only reflects the comprehensiveness but also highlights the strategic focus. universities are not only the place where many talents are gathered(Baizhou et al., 2022)but also the cradle of cultivating and building socialist modernization talents. Under the new situation(Jiajia & Dongdong, 2021), doing a good job of Party Construction in universities is the key to adhering to building morality and cultivating people, and running Chinese universities well(Yueling, 2020). At present, universities are actively exploring the construction of a scientific, fine, and comprehensive assessment and evaluation index system for the level of Party organization construction(LiuYu, 2021), focusing on building and strengthening the party's grass-roots organizations and promoting the development of various undertakings with Party Construction(Yanfang, 2020).

The assessment and evaluation system of grass-roots party organizations and Party members in Colleges and universities is mainly reflected in the establishment of assessment and evaluation subjects(Yiyang & Dingwen, 2020), the formulation of assessment and evaluation indicators(Dan & Yi, 2021), the selection of assessment and evaluation methods(Jiajia & Dongdong, 2021; Yuhong, 2020) and the organizational guarantees(Xunjie, 2020). It is of great practical significance and practical value to continuously promote the scientific and institutionalized construction of grassroots party organizations in colleges(Zhiyong, 2021).

1.2 Problem statement

There are still some assessment and evaluation systems that are not scientific enough, pay too much attention to the assessment process and the formulation of assessment indicators, cannot highlight the key work of the party, and cannot truly reflect the construction level of the grass-roots party(Weisheng, 2021)， not pay attention to the reasonable distribution of evaluation weights(Ming, 2021)， evaluation methods need to be innovated the construction of the evaluation mechanism is not perfect(Chenggang & Zhongcheng, 2021). Therefore, to comprehensively improve the quality of grass-roots party construction in universities(Ming, 2021), it is necessary to analyze the influencing factors that affect the assessment of Party organizations, to accurately establish a scientific and reasonable evaluation index system of Party organization construction suitable for ordinary colleges and universities (Hailong, 2022).

1.3 Research Question

This study focuses on addressing the following four problems:

• What is the impact of the assessment experts on the performance appraisal of Party Organizations?

• Does the evaluation index of Party organization affect the performance appraisal of Party Organizations?

• What is the impact of the evaluation method of the party organization on the performance appraisal of Party Organizations?

• Do the organizational guarantees affect the performance appraisal of Party organizations?

1.4 Research Objectives

• To examine the impact of the assessment experts on the performance appraisal of Party Organizations.
• To study the relationship between the evaluation index of Party organizations and the performance appraisal of Party Organizations.
• To measure the impact of the evaluation method of the party organization on the performance appraisal of Party Organizations.
• To examine the organizational guarantees on the performance appraisal of Party Organizations.

LITERATURE REVIEW

2.1 Management by objectives (MBO)

American Management master Peter Drucker first put forward the concept of "management by objectives" in his famous work "management practice" in 1954(MengYing, 2019).MBO target management method is mainly aimed at some work results and work behaviors that are difficult to quantify. It is more appropriate to use this method. It was first initiated by Drucker, a Master of Management, and is a common performance appraisal method. The performance objectives in MBO objective management are easy to measure and decompose, and the openness of assessment is relatively good. At the same time, it promotes interpersonal communication within the company.

The performance appraisal management of Party organizations should adhere to the goal management theory as the guidance, and comprehensively promote the construction of grass-roots party organizations. Further, strengthen the work of Party organization construction, constantly strengthen the inspection and assessment of Party organization work, scientifically evaluate the effectiveness of Party construction work, and solidly promote the institutionalization, standardization, and own initiative of Party organization work.

2.2 Key performance indicators (KPI)

An objective quantitative management index to measure process performance is a tool to decompose the enterprise's strategic objectives into operable work objectives. It is the basis of enterprise performance management(David, 2015).

KPI refers to key performance indicators, which have a key impact on performance. KPI indicators are the result of the decomposition, own initiative, and internalization of enterprise strategic objectives. There are three main methods to determine KPI, namely the bench marking method, success critical analysis method, and strategic goal decomposition method.

Through screening and formulating representative and universal key assessment indicators, the performance of Party organization work is assessed, so that the assessment of Party construction work can be realized from complexity to simplicity, from emptiness to reality.

2.3 Explanation of variables

2.3.1 Assessment experts

The assessment experts mean that the composition of the members of the assessment expert evaluation committee(Yiyang & Dingwen, 2020): Generally, organization, publicity, United Front work, mass organizations, and other work shall be considered. The leader in charge shall be responsible, and the Organization Department of the Party committee shall take the lead to form an assessment team composed of the heads of grass-roots party organizations and relevant functional departments.

2.3.2 Assessment indicators

According to the key tasks of the construction of grass-roots party organizations and the actual work of the unit, as well as the work results achieved, set up assessment and evaluation indicators with strong comprehensive indicator content (Dan & Yi, 2021; Qi, 2022).

2.3.3 Assessment method

Assessment and evaluation procedures of grass-roots party organizations in Colleges and Universities(Hailong, 2022; Jiajia & Dongdong, 2021; Qingfeng, 2020).

2.3.4 Organizational guarantees

The objective and fair evaluation of the assessed objects adheres to the principles of openness, fairness, and impartiality, which is an important prerequisite for building the evaluation system of grass-roots party organizations(Lin et al., 2020; Xunjie, 2020).

2.3.5 Performance appraisal of Party Organizations

The formulation of assessment and evaluation indicators (Dan & Yi, 2021; Qi, 2022; Yuxiao, 2019), the assessment and evaluation methods and the principle of objective (Qiaozi, 2022); (Yuxiao, 2019)and evaluation object(Lin et al., 2020; Wei, 2020; Xunjie, 2020).

2.4 The current situation of assessment and evaluation

In the "The assessment and evaluation system of Party Construction of secondary party organizations in Colleges and universities" and the "Analysis on the assessment and evaluation system of Party organizations in Colleges and universities performing the main responsibility of comprehensively and strictly administering the party", Cui Chenggang and Wang Zhongcheng (2021) pointed out the main prominent problems existing in the assessment and evaluation system, such as the setting of assessment indicators is not scientific enough, the reasonable distribution of assessment weight is not paid attention to The construction of evaluation mechanism is not perfect and the evaluation methods need to be innovated (Zhang, 2019). Therefore, it is necessary to analyze the influencing factors of the evaluation of Party organizations to organize and carry out the performance evaluation of Party organizations in colleges and universities more efficiently (Ming, 2021).

2.5 Exploring and constructing effective ways of assessment and evaluation

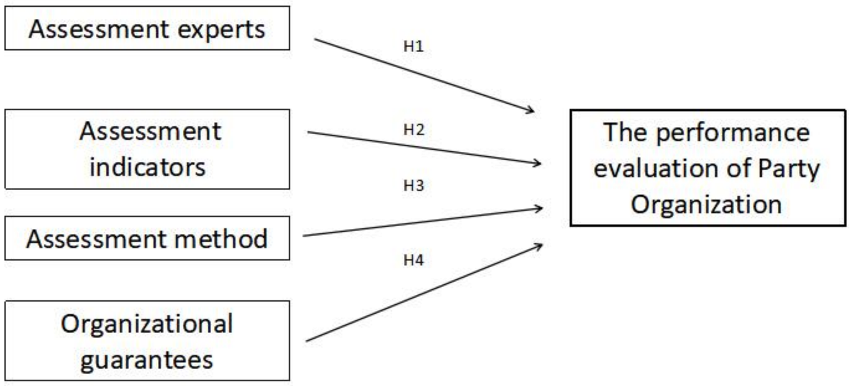
In the article "problems and Countermeasures of the evaluation index system of Party Construction of grass-roots party organizations in Colleges and universities", this paper puts forward some countermeasures to improve the evaluation of Party construction, such as reducing soft indexes and strengthening hard indexes; Both quantitative and qualitative; Bold innovation and keeping pace with the times(Yiyang & Dingwen, 2020). The article "Research on the assessment and evaluation system of the construction of grass-roots party organizations in Colleges and universities from the perspective of comprehensively and strictly administering the party", focuses on exploring the effective ways to construct the assessment and evaluation system(Wei, 2020), it is proposed that the construction of a scientific and reasonable assessment and evaluation index system of Party construction should adhere to the principle of science and rationality, advocate and encourage innovative working ideas and explore innovative working methods in the setting of specific assessment and evaluation index system, To do a good job in this research, the research ideas are pointed out (Weisheng, 2021).

2.6 Application system of assessment and evaluation results

In the article "Research on the establishment and improvement of the assessment and evaluation system of grass-roots party organizations in local colleges and universities"(Dan & Yi, 2021), this paper considers and studies the idea of improving and optimizing the assessment and evaluation system of grass-roots party organizations in local colleges and universities(Yuxiao, 2019), and focuses on the reasonable transformation and utilization of the assessment and evaluation results is the key to give play to the role of performance assessment and improve the standardization(Qi, 2022), institutionalization and scientific level of grass-roots party organizations in Colleges and Universities(Lihua, 2021).

2.7 Theoretical Framework and Hypotheses Development

Figure 1. Explain the relationship between variables



H1: The assessment experts have a positive impact on the performance appraisal of Party organizations.

H2: The assessment index has a positive impact on the performance appraisal of Party organizations.

H3: The assessment method has a positive impact on the performance appraisal of Party organizations.

H4: The organizational guarantees have a positive impact on the performance appraisal of Party organizations.

RESEARCH METHODOLOGY

This study adopts quantitative research methods and a non-probabilistic sampling design, focusing on a convenient sampling framework. Data were collected by a self-administered questionnaire, and data were analyzed by Amos and SPSS software.

3.1 Sample

This study is based on Guangxi Colleges and universities, this study discusses the analysis of assessment and evaluation factors of grass-roots party organizations in Guangxi Colleges and universities, to scientifically carry out the assessment of Party organizations, to achieve the purpose of providing a reference for the work of Party Construction in Colleges and universities.

There are 85 colleges and universities in Guangxi, including 38 undergraduate colleges and 47 junior colleges, which are concentrated in Nanning and Guilin. The sample of this study invited 79 Party member representatives of teachers and students in 85 colleges and universities in Guangxi. A total of 79 questionnaires were distributed, of which 74 were answered positively, with an answer rate of 93.67%.

3.2 Instrument

The questionnaire consists of 13 items. The 2 items of the composition of the members of the assessment expert evaluation committee come from the research of Yu Hong, Han, and Yan Fang, Wang (2020). The assessment and evaluation index measurement scale comes from the research of Wei Sheng, and Wu (2021), and contains 4 items. The assessment and evaluation method is measured by 4 items adopted in the study of Lucio, and (Yuxiao, 2019). The organizational guarantees are measured by 3 items in the study of Zheng Wei(2022), and Hai Long, Yu (2022).

RESULTS

In SPSS12.0, the function of analyzing → describe → frequencies is used for sample statistics.

4.1 Inspection description

Through Cronbach's α tests the reliability of the questionnaire, α the value is generally between 0 and 1. Generally, if $\alpha > 0.7$, then the reliability of the questionnaire is valid. According to the above survey results, analyze → scale → reliability analysis in SPSS12.0 is applied, taking model as an example α， analyze each element to obtain α as follows:

Table1. KMO measure and Bartlett's Test

Factors	Number of elements	KMO	Bartlett's Test
Assessment experts	2	0.786	0.000
Assessment indicators	4	0.745	0.000
Assessment method	4	0.735	0.000
Organizational guarantees	3	0.779	0.000

4.2 Exploratory factor analysis of relevant survey items

According to the statistical content, four levels are extracted, which are the assessment experts, assessment indicators, assessment method, and the organizational guarantees, to explain 100% of the total variables, as shown in Table 2.

Table2. Results of exploratory factor analysis on building a scientific evaluation system for Party Organizations

Factors	Items	Loadings	Explanatory variables (%)	Cumulative (%)
Assessment experts （A）	A1. If the composition of assessment experts is scientific, it will help to realize the scientific assessment and evaluation of Party organizations.	0.832	6.476	6.476
	A2. If the assessment experts perform their duties carefully, it will help to realize the scientific assessment and evaluation of the party organization.	0.796	6.623	13.099
Assessment indicators （B）	B1. If the content of assessment indicators is updated in time, it will help to realize the scientific assessment of Party organizations.	0.684	13.101	26.2
	B2. If the weight of assessment indicators is set scientifically, it will help to realize the scientific assessment and evaluation of Party organizations.	0.761	6.145	32.345
	B3. If the assessment indicators are comprehensive, it will help to realize the scientific assessment and evaluation of Party organizations.	0.872	9.120	41.465
	B4. If the evaluation index is highly operational, it will help to realize the scientific evaluation of the party organization.	0.764	10.154	51.619
Assessment method （C）	C1. If we strengthen the power guarantee of party affairs work, it will help to realize the scientific assessment and evaluation of Party organizations.	0.685	6.319	57.938
	C2. If we strengthen the training of assessment items, it will help to realize the scientific assessment and evaluation of Party organizations.	0.533	6.253	64.191
	C3. If we strengthen the innovation of Party construction, it will help to realize the scientific assessment and evaluation of Party organizations.	0.673	6.614	70.805
	C4. If a scientific evaluation procedure is determined, it will help to realize the scientific evaluation of the party organization.	0.726	8.706	79.511

Organizational guarantees (D)	D1. If the assessment is linked to personal performance and promotion, it will help to realize the scientific assessment and evaluation of Party organizations.	0.742	7.281	86.792
	D2. If we strengthen supervision, it will help to realize the scientific assessment and evaluation of Party organizations.	0.621	6.638	93.43
	D3. If we improve the professional level of Party cadres, it will help to realize the scientific assessment and evaluation of Party organizations.	0.754	7.125	100

4.3 Validity analysis

Validity is the effectiveness of data analysis. According to the results in Table 2, the total variation of explanatory variables is greater than 90%, exceeding the interpretation level of 50%. At the same time, the factor load is between 0.523-0.861, which is greater than the acceptability of 0.5, indicating that it has good structural validity.

4.4 Reliability analysis

As mentioned above, this paper adopts Cronbach's α to carry out a reliability test, according to the experience of academia, if Cronbach's α is greater than 0.6, it indicates that the reliability of the survey data is good, as shown in Table 3.

Table3. Reliability test table

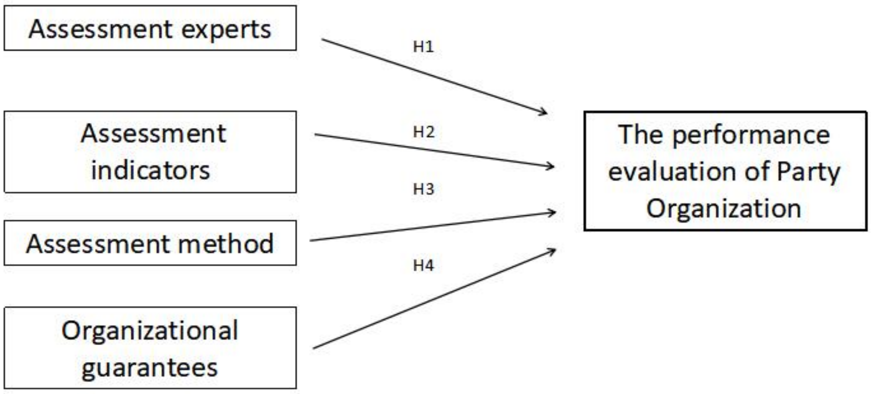
Factors	Number of questions	Cronbach's α
Assessment experts	2	0.764
Assessment indicators	4	0.635
Assessment method	4	0.852
Organizational guarantees	3	0.731

4.5 Model validation

(1) The structural equation modeling was carried out through Amos21.0, and the model was tested with the mean value of each factor as the input value. The following results were obtained: the goodness of fit was chi square=367.91, P=0.152, x2/df=1.78, GFI=0.915,AGFI=0.935,NFI=0.946,RFI=0.976,IFI=0.914,CFI=0.961, RMSEA=0.043, which met the statistical requirements.

(2) Hypothesis testing. the hypothesis verification is shown in Figure 2 below:

Figure 2. Correlations between the variables under study



The hypotheses test is carried out using linear regression, all the hypotheses are acceptable based on their significance value. The hypotheses are given below in Table 4.

Table4. Hypotheses Testing Based on Regression Weights

Variables	Estimates	St. Error	Critical Ratio	P-value	Results
Assessment experts →Performance evaluation of Party Organization	0.363	0.038	1.937	0.000	Accepted
Assessment indicators→Performance evaluation of Party Organization	0.628	0.057	3.587	0.000	Accepted
Assessment method →Performance evaluation of Party Organization	0.475	0.068	9.435	0.000	Accepted
Organizational guarantees→Performance evaluation of Party Organization	0.542	0.65	11.608	0.000	Accepted

DISCUSSION AND CONCLUSION

Through empirical analysis, we can conclude that factors such as the assessment experts, assessment indicators, assessment methods, and organizational guarantees have a positive correlation with the performance evaluation of the Party Organization.

The establishment of the assessment and evaluation system of Party organizations in colleges and universities should be problem-oriented. The assessment should focus on achievements, improve the enthusiasm of grass-roots work, and at the same time, we should see the gap and constantly improve the work quality of grass-roots party organizations. Promote the follow-up application of the assessment results and take the assessment results as an effective basis for the selection, appointment, reward, and punishment of leading cadres.

The above four factors are important factors affecting e, which has great reference significance for us to build a scientific system of Party organization assessment and evaluation and strengthen the Party organization assessment from the source.

LIMITATION & FUTURE RESEARCH

The main limitation of the study is that the focus of this study is relatively narrow due to the short research time; On the other hand, the variables of this study are limited, and the factors that affect the assessment and evaluation system of grass-roots party organizations in colleges and universities are not comprehensive. At the same time, the data collected are self-reported, representing the normative opinions of the respondents and their personal experiences in their organization.

Future research should improve the integrity of the content of the assessment index system and combine the research results with the increasing demand of colleges and universities for the assessment research of grassroots party organizations.

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SERVICE INNOVATION OF A PUBLIC HOSPITAL IN CHINA

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ABSTRACT

Hospital service means that hospitals take patients and social groups as the main service objects, and use medical technology as the carrier to provide medical, preventive, and health care services that can meet people's needs. With the continuous deepening of the socialist market economy and the reform of the medical and health care system, coupled with the continuous growth of China's national economy and the continuous improvement of residents' living standards, people's requirements for health are also constantly improving, which brings opportunities and challenges to the development of medical and health services. Hospitals are an indispensable service department in the whole society and have extensive and profound connections with all social strata. In recent years, people have complained more and more about the problem of consulting a doctor, and the relationship between doctors and patients has become increasingly tense, which greatly reduces the patients' perception of service quality. Therefore, the quality of medical services has become the focus of attention and the key for hospitals to stand and develop in the fierce medical market competition.

This paper takes the medical patient as the center and realizes the maximization of the value of medical patients. This is the inherent requirement of the hospital's development, and it is also the inevitable trend of the hospital's development. This paper puts forward service innovation strategies around the important factors that affect the value of medical customers, which not only helps guide hospitals to carry out service innovation based on customer and market needs, but also improves hospital service levels and services. To a certain extent, it also enriches the theoretical system of service innovation, plays a role in promoting the research on hospital service innovation, and provides a benchmark for other hospitals to learn from.

Keywords: hospital management, hospital service, service innovation

INTRODUCTION

1.1. Research background

In recent years, with the continuous deepening of the socialist market economy and the reform of the medical and health system, coupled with the continuous growth of China's national economy and the continuous improvement of residents' living standards, people's demand for health has gradually increased. Hospitals are an indispensable service department in the whole society and have extensive and profound connections with all social strata. Hospital service is a crucial link in the social service chain, which is related to life safety (Wang and Yang, 2021). Hospitals are not only affected by social ethos, but also change with the overall level of social morality, and even are manifested with lack of appropriate care and some drawbacks because of their professional characteristics and the characteristics of Chinese medical management (Xia, 2020). People have more complaints about the problem of consulting doctors for help and the relationship between doctors and patients has become increasingly tense, which greatly reduces patients' perceptions of service quality (Wu and Rong, 2021).

At present, the development of hospitals is in an era of fierce competition. In today's era of highly developed and integrated medical technology, it is unlikely that hospitals try to seize the medical market with clinical technology as their core competitiveness (Wang et al., 2019). If hospitals would to survive and develop in this fiercely competitive medical market, they should change from the hospital-centered concept into patient-centered concept according to the changes in medical service demand under the new situation (Kong, 2019). Hospitals should improve the people's experience of consulting doctors, focus on the problems reflected by the people when they consult doctors, and elevate patients to medical customers (Li et al., 2018). In addition, the hospital should continue to innovate in service quality, and provide better hospital services for medical patients in order to maximize the value of medical patients (Huang, 2018).

1.2 Research purpose

This paper puts forward service innovation strategies around the important factors that affect patients' medical treatment, which not only helps to guide hospitals to carry out service innovation based on the needs of patients and the market, but also enriches the theoretical system of service innovation to a certain extent.

1.3 Research significance

(1) Theoretical significance

Applying the service innovation theory and its research methods to hospitals can not only enrich and verify the basic theory of service innovation, but also explore the research on hospital service innovation.

(2) Practical significance

Carrying out research on hospital service innovation, through the analysis and research on the influencing factors of service innovation, will help guide hospitals to carry out targeted service innovation activities based on customer and market demand, and improve hospital service level and service quality. On the other hand, the analysis and research on the influencing factors of service innovation is also conducive to establishing a harmonious medical environment and promoting the realization of the goal of building a harmonious society in an all-round way.

LITERATURE REVIEW

Heinonen and Strandvik (2020) believed that service innovation was mainly to use new technologies and new management tools to carry out a series of changes to the past service processes of enterprises, in order to improve service quality and profitability of enterprises, and bring new experience and value to patients. Leo and Tello-Gamarra (2020) pointed out that the process of service innovation mainly included creating new services, expanding new services on the basis of existing services, and obtaining newer and better services by improving existing services. Lochab (2021) believed that service innovation was to generate a new service concept or make a major change to the existing service concept. Atiq and Mehmood (2019) believed that the key to the success of service innovation was how to effectively link the components of services to achieve the best results. In the innovation of service products, enterprises can provide patients with new ideas in service by keeping close contact with patients. Huraerah (2019) pointed out that the interaction in the process of service innovation was quite rich, and it was always oriented according to market demand and customer value. Patients participate in the whole process as co-producers, and they bring new ideas to the service innovation of enterprises, which not only promotes the emergence of innovation, but also has an important impact on the results of innovation.

Vetterli and Scherrer (2019) studied service innovation from the perspectives of organizational structure and how to obtain market competitive advantages, and pointed out that service innovation must be based on market benefits and customer value orientation to establish new principles and this principle Innovation must revolve around customer-centric value. Jeong (2018) believed that service innovation referred to all innovative behaviors and activities related to or aimed at services. In a narrow sense, they believed that innovative behaviors and activities in the service industry were service innovations. Hoholm et al. (2018) proposed that the hospital's service organization management covered three aspects. First, it is the operation management of hospital services. Second, it is the management of elements of hospital services. Third, it is the performance management of hospital services. These three aspects are mutually complementary and inseparable. Dunleavy et al. (2021) believed that there were factors that affected the service in the whole service process of the hospital. Hospitals should establish a service continuous improvement system, regularly inspect, analyze, and study the hospital's service processes, and improve and optimize unreasonable areas. At the same time, the relevant person in charge should supplement and improve the hospital service rules, focusing on the impact of the improvement on the improvement of hospital service quality and service level.

PROBLEMS IN A PUBLIC HOSPITAL

The total cost of a patient's medical treatment includes time cost, monetary cost, physical cost and mental cost. Specifically, it refers to the time spent by the patient, the expenses paid, the physical strength and the mental pressure suffered by the patient in the process of seeking medical treatment. Judging from the problems existing in the A public hospital, the main problems involving the total cost of medical patients are as follows.

3.1 Problems in logistics service

There are many logistical service problems in the hospital.

The perception of signs among medical customers is low and the time of standing in line for medical treatment is long, which is related to the logistics management. The management of logistics work is generalized with many surface work and insufficient management of details and there are loopholes in many processes, which lead to the lack of logistics work. Some logistical support work is not well done, and some work is unclear due to the unclear division of labor and the lack of specific division of responsibilities, which leads to mutual shirk between staff, causing inconvenience to medical patients and increasing the mental cost of medical patients. The construction of the hospital information system is lagging behind, and appointment registration, query reports, etc. can only be obtained at the window, which increases the time cost and physical cost of medical patients. In addition, transportation costs are incurred on the way back to the hospital, which in turn increases the monetary cost of the medical customer. The construction of the talent echelon in the hospital is not strong enough, and the young doctors are not fully able to exert their personal value, which leads to the fact that patients who seek medical treatment are generally willing to spend time waiting for experts with certain seniority to seek medical treatment. Some experts receive a large number of medical patients every day, so they really spend very little time in the consultation, treatment, and communication with medical patients, which increases time and mental costs for medical patients.

3.2 Service problems of medical staff

A public hospital is the only Class A tertiary hospital in the city, with a large number of medical patients, and the workload of medical staff in the hospital is very heavy. In the long run, the work pressure and psychological pressure of medical staff will increase, and they will not have more time to take care of the feelings of medical patients, which will inevitably lead to some medical disputes and service complaints. In addition, medical staff may also have psychological emotions, so it is particularly important to introduce third-party service organizations. Some patients come to the hospital just to consult some health issues or do some preliminary examinations. However, the hospital's health consultation mechanism is not perfect at present, and many patients who seek medical treatment can only go to other specialized hospitals for examinations. Medical patients can only obtain medical services through the medical treatment process, which not only increases the time cost, monetary cost, but also increases the physical cost. For medical patients who do a health check-up, they hope to have a comprehensive understanding of their physical condition through the check-up. However, the current health checkup in the hospital is only a simple physical examination. It does not make a comprehensive physical assessment for the medical patients, nor does it have some health care suggestions. The medical patients can only pay more attention to health problems based on the information results presented in the report. Therefore, the medical customer pays for the health check, but does not receive the expected service value.

3.3 Medical environment problems

The medical environment includes not only the physical environment, but also the spiritual environment. The poor personal mood of medical staff makes medical patients feel indifferent. Before coming to the hospital, the patients who seek medical treatment have high expectations for the hospital's services. If the service attitude of the medical staff is not good, it will make the patients who seek medical treatment disappointed. Due to the large number of hospital patients at present, medical staff pay more attention to physiological treatment, while ignoring the psychological treatment of medical patients. In addition, hospital services lack humanization. As for the doctor's consultation, it requires the medical patients to go to the corresponding department to find a doctor for examination, which does not take the position of the medical patients into consideration at all.

3.4 Communication problems between doctors and patients

In terms of doctor-patient communication, medical staff lacks a sense of sympathy and service awareness. Today's medical patients have higher requirements for hospital services, and some medical patients lack understanding of medical staff. Communication is a process that requires mutual understanding and support between medical staff and medical patients.

STRATEGIES FOR SERVICE INNOVATION IN A PUBLIC HOSPITAL

4.1. Logistics service innovation

To implement refined management of hospital logistics, it is necessary to stand in the position of medical patients (Lin, 2021). In addition, hospitals should innovate the concept of logistics management, pursue perfection in every detail, and continuously improve the quality of tangible products and intangible services in hospitals (Hu and Yi, 2014). Hospitals should strengthen organizational leadership (Du, 2019). Hospital leaders in charge of logistics should fully recognize their dual identities, that is, they are both leaders and executors (Xia and Xiao, 2019). Hospital leaders should take the lead in carrying out work in accordance with the refined management system, and take the lead in integrating the habit of refined management into their daily work.

4.2. Innovation in medical care services

The hospital should establish a medical social work service department. In order to promote the improvement of hospital medical services and hospital management, the hospital established a medical social work service department based on the actual situation, recruited and trained medical social work professionals, extended the hospital medical service, and widened the coverage. In their work, medical staff should carry out humanistic care throughout hospital services.

4.3. Innovation in medical service environment

First, it is to create a healthy medical environment. A healthy medical environment should include physical and spiritual environments, and specifically cover functional, hygienic, spatial, interpersonal, and social environments (Chen, 2019). A hospital is a very special public environment, and this special group has more direct and special needs for the hospital environment. Hospital environment construction should grasp the needs of special groups, use relevant medical professional knowledge, and strive to create a more humane and friendly healthy environment, so that medical patients can feel the warmth of home. In this way, patients who seek medical treatment can accept their disease with a positive attitude, and face the medical treatment process bravely, so that the entire medical treatment process is relaxed and peaceful.

Second, it is to create a team knowledge sharing atmosphere. Service innovation must be based on knowledge, and knowledge sharing refers to the exchange and discussion of relevant knowledge by people within the organization through various channels. The purpose of knowledge sharing is to promote the generation of new knowledge through the exchange of knowledge, thereby increasing the use value of knowledge and forming the use effect of knowledge. The motivation of knowledge sharing is an important factor leading to the sharing behavior. Therefore, the hospital should improve the knowledge sharing behavior of employees. First, hospitals should also strengthen the management of knowledge sharing motivation, create a strong team knowledge sharing atmosphere, design reasonable incentive mechanisms and countermeasures, stimulate employees' knowledge sharing motivation in a targeted manner, and fully mobilize employees' enthusiasm for knowledge sharing. Second, it should promote the hospital culture of teamwork to make the staff deeply understand the purpose of hospital service, make the staff take pride in the culture of teamwork, and form a strong sense of responsibility and mission, so as to implement knowledge sharing behavior. Hospital management should lead by example, guide all staff to actively carry out knowledge sharing. Finally, it should make full use of knowledge sharing to improve the service innovation awareness of all staff in the hospital, actively seek new service skills, service ideas and service methods, and strive to create a good innovation atmosphere (Usharani, 2020).

4.4. Innovation in doctor-patient communication service

First, it is innovative communication skills. With good communication as the foundation, the hospital will gain the understanding of the medical patients, so communication is very important to improve the relationship between the hospital and the medical patients. Medical staff should improve their verbal and body language expression skills, and fully demonstrate their understanding of the opinions of medical patients. Hospital medical staff should cultivate and improve their empathy ability, and express their own feelings subtly while fighting for the opportunity to think for themselves.

Second, it is to establish and improve the service recovery mechanism. Service recovery is a management process that is achieved through a series of steps and procedures. Medical patients have different expectations for the services provided by the hospital. When the service perception they receive is lower than this expectation, they will be dissatisfied and complained. This requires the hospital to adhere to the concept of customer-centricity, and to respond quickly to the dissatisfaction and complaints of medical patients and carry out service recovery in a timely manner to avoid the spread or escalation of some adverse effects.

CONCLUSION

Based on the research of A public hospital, this paper studies the innovation of hospital service, and proposes the innovation strategy of hospital service. The main research results of this paper are as follows.

First, with the deepening of the reform of the medical and health system, the development of hospitals will face huge competitive pressures. Therefore, how to grasp the core competitiveness of the hospital to increase the value of medical patients and improve the satisfaction of medical patients has become an important strategic goal of the hospital. As far as the current situation is concerned, the quality of medical services has become the lifeline of the hospital's development and is closely related to the survival and development of the hospital. The importance of service is getting more and more attention, so it is very important to innovate in service. Under the background of market economy, customer value has important guiding significance and crucial influence on service innovation of hospitals.

Second, in the current development of the hospital, there are still practical problems such as weak service awareness, lack of characteristic services, and low comprehensive quality of service personnel. These problems seriously restrict the development of the hospital. In order to enable the hospital to develop scientifically and sustainably, at the same time, it can better meet the needs of different medical patients at different levels and enhance the value of medical patients. Hospitals must also use the service innovation theory to carry out service innovation.

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ARTIFICIAL INTELLIGENCE INNOVATION IN ACCOUNTING IN ALI CLOUD RPA

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ABSTRACT

With the continuous promotion of emerging technologies, various cutting-edge technologies such as cloud computing, big data and artificial intelligence are gradually integrated into the daily operation of enterprises, and the processing of data becomes simpler. The original repetitive and basic work is gradually replaced by computers. Artificial intelligence can select appropriate algorithms and models to process and optimize business data and obtain the optimal solution, which undoubtedly has a great impact on the development of enterprise accounting. The article first discusses the relevant connotation of the cloud era, AI technology and the advantages of Alibaba cloud RPA by combing the existing research results, and then further analyzes the application scenarios of Alibaba cloud RPA in combination with some accounting work, and evaluates the introduction of new technologies.

Keywords: artificial intelligence; Alibaba cloud RPA; Accounting; Innovation

INTRODUCTION

In recent years, the development of cloud computing, big data, artificial intelligence and other emerging technologies has brought qualitative changes to people's lives. China began to implement the new concept of intelligent manufacturing industry and "Internet +" in 2015, and the State Council officially included AI technology and new industrial technology in the government work report in 2017. As a new thing, artificial intelligence accounting has a tendency to completely replace the old accounting operation mode. Under this background, it will inevitably lead to the replacement of the functions of some accounting personnel(Zhang Zi xin, 2016)

In the accounting industry, the development and progress of artificial intelligence has also brought a huge impact on accounting work. In 2016, Deloitte took the lead in introducing artificial intelligence technology. It took only one year to develop a robot capable of intelligent analysis from the original batch processing of data with software.(Liu Ying, 2019) Kingdee launched Kingdee financial robot in 2017, and KPMG also signed a strategic cooperation agreement with Alibaba cloud in September 2018. These AI achievements provide enterprises with multi scenario and all-round intelligent financial services, and provide new solutions to the problems of cumbersome and repetitive accounting processes, nonstandard operation of accounting staff, and low efficiency. In the new era, the social economy is in the stage of rapid development. High tech Internet information technologies such as artificial intelligence and big data statistics have had a great impact on society. They have brought opportunities and challenges to people in all walks of life In the accounting industry, artificial intelligence has greatly improved the calculation efficiency and accuracy of data in the accounting industry(Zhou Baolian, 2022)

Cloud age

Cloud era is the abbreviation of the era of "great wisdom moving to the cloud" proposed at the China Internet Conference in August 2013. With the continuous development of science and technology, more and more technologies have been developed and promoted, and the interaction and correlation of cloud computing, artificial intelligence, big data and mobile Internet have become closer and closer.(*China management information*, 2018 (13): 53-55) The combination of mobile Internet and Internet of things enables big data to be collected and used effectively, and the mobile Internet must be supported by the cloud computing platform to realize data transmission. The mining and in-depth analysis of a large amount of data on the Internet of things further promote the development of mobile Internet, so as to achieve an intelligent working level between systems. These technologies not only change people's lives, It is also expected to set off a new round of industrial reform. Based on this situation, the new era is defined as the era of "great wisdom moving to the cloud"(Cui Baoguo, 2016)

artificial intelligence

Artificial intelligence is one of the most concerned technologies in recent years. It covers the knowledge and technology of computer science, biology, psychology, mathematics, philosophy and other disciplines.(Wang Haihong&Xiao Yangyang, 2018) Through the use of various models and algorithms, computers can simulate some human thinking processes and intelligent behaviors. AI technology has a great impact on accounting. First, AI can efficiently process a large amount of data and liberate basic business people.(Chen Qunfang, 2017)
Member; Secondly, artificial intelligence is safer and more reliable in information maintenance, and the operation of financial system is more standardized; Finally, AI can also provide effective decision-making information, improve the final accounting ability of enterprises and reduce the crisis caused by capital market turbulence.

RPA

RPA, which means "robot process automation" in Chinese, refers to the simulation and learning of human daily work through automation software to help people complete the processes that need to be repeated in daily work. (Cheng Ping&Wang Shuang, 2018)RPA technology can be regarded as a macro file in Excel. Writing requirements into macros can achieve the desired purpose, and RPA is more flexible and convenient in dealing with repetitive information. RPA's application scenarios mainly have two characteristics: a large number of repetition and clear rules.

As long as these two points are met, RPA can be applied to any industry and any scenario. For example, RPA is applied to the financial field, RPA is a financial robot, but applied to the tax field, RPA is a tax robot(Chen Qunfang, 2017).

LITERATURE REVIEW

2.1 The impact of Alibaba cloud RPA on Accounting

Alibaba cloud RPA was born in 2011 to solve the problems of complex computer operation processes and low efficiency caused by the rapid development of Alibaba Group's businesses. Since its birth, Alibaba cloud RPA has been widely used in business departments within the group, such as Taobao, tmall, ant financial, Alibaba cloud, flying pig, group management platform and so on. With its powerful functions and stable performance, the number of users of Alibaba cloud RPA is growing. More and more enterprises begin to pay attention to Alibaba cloud RPA, hoping to improve their own processes and efficiency through it(Han Xiangdong & Yu Hongyan, 2018).

2.2 Advantages of Alibaba cloud RPA

At present, Alibaba cloud RPA uses Python development engine, which has powerful control recording function, rich SDK capability and more private data security measures. In addition, it has the following four advantages: first, it can link multiple businesses and automatically execute them. Alibaba cloud RPA can complete the tedious work process of previous accountants without interruption, without errors and with high efficiency through the business process steps prepared in advance, As long as the established process mode is given, the tasks can be automatically executed step by step according to the process, and the given tasks can be completed with quality and quantity like a robot employee(Zhang Zixin & Xin Meng, 2016). Second, it is compatible with the original financial system. Unlike the traditional IT systems such as ERP and OA, Alibaba cloud RPA technology operates at a higher level of software. Therefore, it has good compatibility and will not affect the existing software systems within the company. This can not only improve the work efficiency of the enterprise, but also maintain the stable and reliable operation of the enterprise's IT system. The third is to balance the efficiency and cost of enterprises. Enterprises usually increase their efficiency by adding labor or changing processes(Xiong Chengyu & Kong Shaohua, 2018). However, Alibaba cloud RPA technology brings a third choice to enterprises. This technology can complete a given task in the shortest time, which not only improves efficiency but also saves costs for enterprises. Fourth, cross system coordination. Alibaba cloud RPA system is similar to WPS, OA and other office systems. It can work together, connect multiple business processes, and automatically complete complex processes. Through cross system and cross software platform collaborative work, data transmission can be carried out in real time, so that the enterprise can achieve the purpose of collaborative office and greatly improve the work efficiency of the whole team(Wang Lian & Wu Longting, 2018).

2.3 The impact of Alibaba cloud RPA on some accounting businesses

As mentioned above, Alibaba cloud RPA can significantly improve the efficiency of repeated basic work(Wang Ruiping, 2021). Taking some businesses of accounting work as an example, in terms of tax generation, the traditional tax generation requires that the same data of the enterprise be made into different reports. There are a lot of formula operations in the process, and the data obtained from the operation also needs to be copied into various excel. The whole process has a lot of data, which is error prone, time-consuming and labor-consuming. By using Alibaba cloud RPA, you can export and view the output report only by setting operation parameters, such as source data, template type, parameters, etc (Chang wenbing, 2021). In the process of value-added tax declaration, the traditional manual declaration of value-added tax needs to log in to the website of the tax bureau first, fill in the value-added tax declaration forms I, II, III and IV, and fill in the details of value-added tax reduction and exemption declaration, the details of tax burden analysis and calculation of replacing business tax with value-added tax, and the value-added tax declaration form "use by general taxpayers"(Xiong Chengyu & Kong Shaohua, 2018). Alibaba cloud rap only needs to set up the corresponding rules and interfaces to run the import with one click, In the later stage, it does not require much maintenance work. Compared with the time-consuming labor, Alibaba cloud RPA efficiency can be improved by more than 800%. In the fund management business, traditional fund management requires opening the corresponding bank website, entering and logging in the password, setting query conditions for each bank account and downloading the balance, and then starting to repeat the above work for the next bank account. RPA only needs to preset the bank information, and then it can download the fund balance of all bank accounts with one click. In the business of sorting out financial statements, you first need to open the website that can obtain the information of financial statements, and then download it according to the company's directory(Dai Jianjun, 2016).

According to the PDF version of the financial report, select the valid data in the financial report, fill it in the excel template according to the corresponding relationship, and repeat this operation until each data is filled in, the business activity is completed. Using Alibaba cloud RPA, you only need to match the imported data with the template (Zhang Yaozhong, 2020).

2.4 The significance of implementing Alibaba cloud RPA

In practical work, there will be more repetitive operations such as the above businesses, such as expense voucher entry, preparation of balance sheet and income statement, preparation of quarterly schedule, etc. the use of RPA technology can make these cumbersome work convenient(Shi Yuxi& Li Weixuan, 2020). In addition, there will be some low-level errors such as data omission, errors and serialization when filling in the data manually, but running Alibaba cloud RPA can easily paste the corresponding data and output it to users as quickly as possible, improving the overall work efficiency of the enterprise and saving a lot of time and cost, so that enterprises and staff can complete more core businesses(Di Guoqin &Liu Qing 2018).

FINDINGS

3.1 Challenge of artificial intelligence to accounting

Artificial intelligence accounting is the behavior that enables intelligent machines (Financial robots) to imitate the thinking mode of accounting personnel and ultimately replace accounting personnel to calculate, think, analyze, judge, predict, evaluate and make decisions on accounting matters.(Zhang Yaozhong 2020) In the new era, the social economy is in the stage of rapid development. High tech Internet information technologies such as artificial intelligence and big data statistics have had a great impact on society. They have brought opportunities and challenges to people in all walks of life In the accounting industry, artificial intelligence has greatly improved the calculation efficiency and accuracy of data in the accounting industry, which seems to help accountants complete their work, but it may be replaced by artificial intelligence This paper analyzes the current situation of accounting personnel training, the influence of artificial intelligence on accounting personnel and the measures that accounting personnel should take to promote the sustainable development of social accounting industry

3.2 accounting posts will be replaced

Artificial intelligence can complete repetitive tasks quickly and efficiently, and can work 24 hours without interruption without any errors. With the application of these technologies, some traditional accounting posts are bound to be affected. Enterprises will no longer invest a large amount of cost to hire basic staff, but will invest funds in the business fields of other companies.(Chen Shu&Yao Li, 2022)

3.3 Business unit forced to transform

The continuous development of artificial intelligence will achieve real intelligent computing in the future and help enterprises to make various financial analysis and decisions. At this time, the accounting department may not need too many personnel to work, and only a few computers can complete daily tasks. (*Di Guoqin&Liu Qing, 2018*)This will also have an impact on the production, operation, sales and other functional departments of the enterprise. Artificial intelligence technology can intelligently analyze the optimal production and sales ratio, so that the enterprise can save costs and increase profits. Therefore, the upgrading and application of artificial intelligence in the future may force various business departments to face the situation of forced transformation(Jiang Qiankun&Shu Xinge 2019).

3.4 Work content changes

Artificial intelligence technology has been able to participate in a lot of work that requires a lot of repeated operations. In the future, it is likely to involve some intermediate and high-level accounting processes, such as financial prediction, financial risk assessment, financial analysis, etc. As far as the current situation is concerned, artificial intelligence technology still lacks the necessary conditions such as human emotion and creativity. In the future, the work content may be biased towards creative management decisions(Wang Ruiping, 2021)

CONCLUSION

In order to cope with the future technological innovation, practitioners should actively accept AI technology, learn more relevant academic knowledge, turn AI technology into their own weapons rather than replace their own tools, actively improve their professional quality, deal with the innovation of new technology with a positive attitude, see the development of the times, and better adapt to the trend of the times. AI is far more efficient than people, but communication cannot reach the same level as people, and can only be carried out according to the set process and plan. In the daily operation of enterprises, there is no lack of human communication, and the negotiation of various problems by various departments cannot be solved by the existing artificial intelligence technology. In addition, in the coordination of external relations, they communicate with banks, industrial and commercial administration, tax bureau, Finance Bureau and other departments. Therefore, accounting staff should make full use of their own advantages in communication and coordination.

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INTERNET MARKETING INNOVATION OF CHAOZHOU EMVROIDERY BASED ON "INTERNET +"

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ABSTRACT

Chaozhou embroidery belongs to Guangdong embroidery, one of the four famous embroidery in China, and is a traditional folk embroidery in Chaoshan area. Chao embroidery originated in the Tang and Song Dynasties and flourished in the Ming and Qing dynasties; in the 1960s and 1970s, the development of Chao embroidery reached its peak. At that time, almost “every family had an embroidery frame, and every household had an embroiderer”; in 2006, Chao embroidery was even selected as one of the The first batch of national-level intangible cultural heritage protection projects have been recognized for their intangible cultural heritage value. In the 1990s, with factors such as mechanized production, rising labor costs, and the acceleration of social rhythm, Chaozhou embroidery was extremely lacking in labor, and the price of pure hand-made embroidery was high. Therefore, hand-made tide embroidery gradually faded out of people's vision, and its development was in jeopardy.

With the continuous deepening of the concept of "Internet +", various new Internet technologies and new things continue to emerge, which profoundly affects the marketing of enterprises. In order to adapt to the new market environment under the background of "Internet +", various enterprises have used the Internet to change their marketing strategies. For the traditional handicraft industry, it is particularly critical to realize the "Internet +" upgrade of marketing and enhance its own market competitiveness. The purpose of this paper is to sort out the new mode of Internet marketing of traditional handicraft products Chaozhou embroidery under the environment of "Internet +", and analyze and think about how to integrate into the environment of "Internet +". Through a large number of factual analysis and on-the-spot investigation, we will systematically sort out the development of Chaoshan embroidery industry. On the basis of theory and practice, we will construct the development prospect of Chaoshan embroidery industry under the "Internet +" environment from a rational and objective perspective.

Keywords:traditional handicraft; Chaozhou embroidery, "Internet+"; Internet marketing

INTRODUCTION

In recent years, the Internet, big data, artificial intelligence and other technologies have developed rapidly, and the innovative economy driven by the Internet has grown rapidly. For example, the sharing economy represented by shared bicycles and shared charging treasures, the unmanned economy represented by unmanned restaurants and Jingdong unmanned supermarkets, and the industrial Internet economy represented by GE and Cisco in the United States. "Internet +"

emphasizes user-oriented and data-driven. In 2012, "Internet +" was first proposed in the industry. After traditional industries such as traditional manufacturing, traditional catering, traditional service, and traditional retail are integrated with Internet-related technologies, operating costs can be reduced and the efficiency of production and operation can be improved. In 2015, the State Council issued the "Guiding Opinions on Actively Promoting the "Internet +" Action, which formally proposed "Internet +" and other related concepts and definitions in government documents, and encouraged the integration of "Internet +" related technologies into traditional industries. , optimize the internal and external resources and production factors of the enterprise, reconstruct the business model of the enterprise, so as to enhance the innovation ability and competitiveness of the enterprise.

DEVELOPMENT STATUS OF CHAOZHOU EMBROIDERY INDUSTRY

Chaozhou embroidery has strong local colors, full and balanced composition, and many changes in stitching. Inlaid with gold and silver threads, the color is rich and strong, and the decoration is very strong, especially the three-dimensional embroidery embroidery with rich relief effect is unparalleled in other embroidery methods. Chaozhou embroidery, with its bright colors and embossed embroidery method, makes up for the lack of three-dimensionality and monotonous colors in the dress, making it an artistic effect that both elegant and popular can appreciate. Embroiderers in Chaoshan area of Guangdong use their unique creativity and imagination to apply Chaozhou embroidery technology to wedding dresses, theatrical costumes or temple decorations, giving them a solemn and luxurious atmosphere, which is practical and relatively High artistic aesthetic value.

Chaozhou embroidery used to be the pillar industry of the Chaoshan region's economy. By the 1960s and 1970s, Chaozhou embroidery had reached its peak. At that time, almost every family had an embroidery frame, and every household had an embroidery girl. The embroidery products were exported to Thailand, Southeast Asian countries such as Singapore and Malaysia are well-known all over the world. In 2006, Chaozhou embroidery was selected as the first batch of national intangible cultural heritage protection projects, and its intangible cultural heritage value was affirmed. In the 1990s, with factors such as mechanized production, rising labor costs, and the acceleration of social rhythm, Chaozhou embroidery was extremely lacking in labor, and the price of pure hand-made embroidery was high. Therefore, manual Chaozhou embroidery gradually faded out of people's vision, and its development was in jeopardy. . The fundamental reason for the crisis of non-genetic inheritance is the loss of suitable soil for its survival in modern society. Therefore, taking the initiative to change and innovate and integrate into modern social life is the fundamental way for the inheritance of intangible cultural heritage.

At present, there are three types of production enterprises in Chaozhou embroidery products. There are three types of modern enterprise companies, studios named by individuals, and embroidery workshops that undertake processing with incoming materials. At present, Chaozhou embroidery family embroiderers are mainly middle-aged and older women. Mainly, the product form is still relatively traditional. Except for a few used in high-end clothing and decorative furnishings, most of them are used in the decoration of temples, Buddhist temples, festival sacrifices and drama costumes, etc., and the customer group is small. In the face of a shrinking market, Chaozhou embroidery inheritance based on the perspective of productive protection needs to use the Internet to explore a new path for living inheritance.

DEVELOPMENT OF "INTERNET +"

After the 21st century, the popularity of the Internet has become wider and wider. From the initial communication to today's education, medical care, entertainment and other fields, the Internet has been deeply integrated into all aspects of the national economy. The development of the Internet is getting faster and faster, there are more and more platforms, and the cost of surfing the Internet in China has become lower and lower. On February 25, 2022, the China Internet Network Information Center (CNNIC) released the 49th "Statistical Report on the Development of China's Internet Network" (hereinafter referred to as the "Report") in Beijing. The "Report" shows that as of December 2021, the number of Chinese netizens reached 1.032 billion, an increase of 42.96 million compared with December 2020; the Internet penetration rate reached 73.0%. In 2021, the overall scale of Chinese netizens will continue to grow. The "Report" shows that the gap between urban and rural Internet access continues to narrow. China's existing administrative villages have fully realized "broadband access to every village". The number of rural netizens in China has reached 284 million, and the Internet penetration rate in rural areas is 57.6%, an increase of 1.7 percentage points from December 2020. The elderly are accelerating their integration into the online society. As of December 2021, the number of elderly netizens aged 60 and above in China reached 119 million, and the Internet penetration rate reached 43.2%. In terms of the scale of Internet application users, the "Report" shows that applications such as instant messaging have basically achieved popularization. As of December 2021, among netizens, the utilization rates of instant messaging, online video, and short video users were 97.5%, 94.5%, and 90.5%, respectively, and the number of users reached 1.007 billion, 975 million, and 934 million, respectively. Applications such as online office and online medical care maintained rapid growth. As of December 2021, the scale of online office and online medical users reached 469 million and 298 million respectively, up 35.7% and 38.7% year-on-year, respectively, becoming the two types of applications with the fastest growing user scale. In today's market and social context, neither large enterprises nor small companies can survive completely without the Internet.

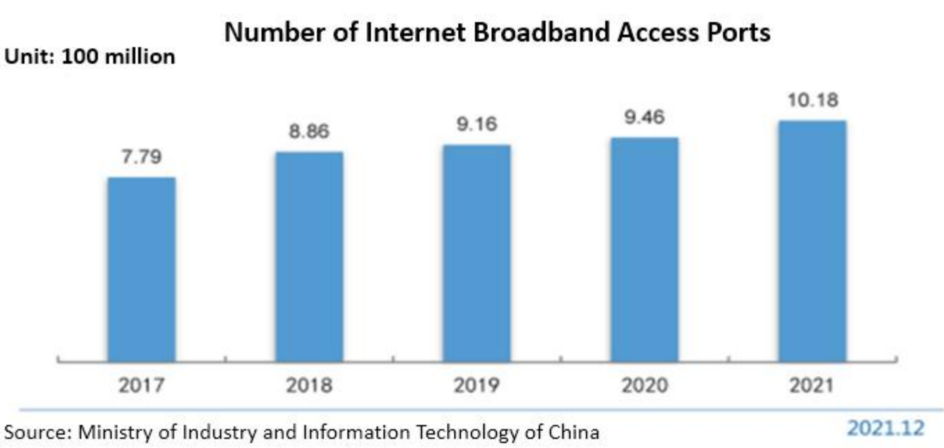

Figure 3-1 Number of Internet Broadband Access Ports

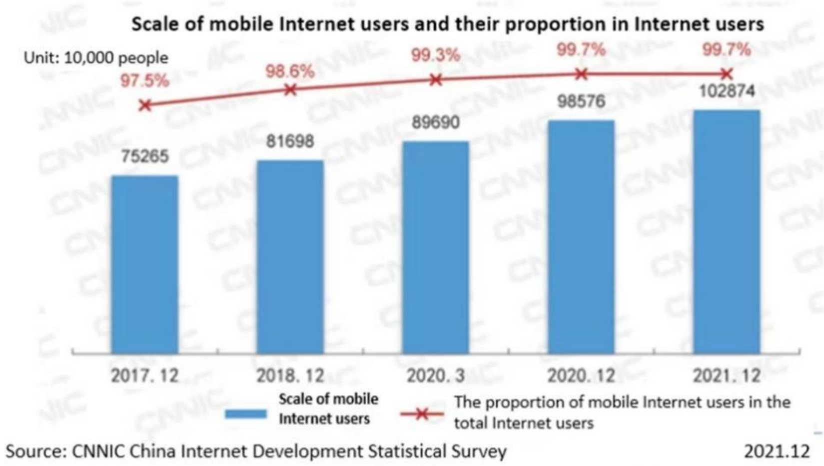

Figure 3-2 Scale of mobile Internet users and their proportion in the total Internet users

In industrial enterprises, the application of the Internet has realized the comprehensive interconnection of people, machines and things, and opened up a new mode of production, supply and consumption. At the same time, 5G mobile network, blockchain, artificial intelligence and other technologies are leading the rise of Internet revolution, which will definitely bring profound changes and influence to the global industrial production chain. General Secretary Xi Jinping has made important instructions on the application of the Internet in industrial enterprises for many years. In November 2020, the Ministry of Industry and Information Technology held the first "China 5G + Industrial Internet Conference". It is a key link to accelerate the process of China's new industrialization, and it is also a powerful driving force to promote the high-quality development of traditional handicrafts.

PROBLEMS EXISTING IN THE DEVELOPMENT OF CHAOZHOU EMBROIDERY INDUSTRY

4.1 Small-scale production and operation enterprises

At present, there are three types of production enterprises of Chaozhou embroidery products, which are the company system of modern enterprises, the studio named after the individual, and the embroidery workshop that undertakes the processing of incoming materials. Most Chaozhou embroidery production and operation enterprises are small in scale. At present, Chaozhou embroidery technicians are mainly middle-aged women, and there are only a few to a dozen workers in manual workshops. The enterprise itself has no ability and does not pay attention to product design and research and development, and its profit model is to earn manual fees only by the skills handed down from the ancestors through the processing of supplied materials. Due to the small size of the enterprise, the introduction and application of advanced equipment and management organization methods are restricted, which hinders the further improvement of production efficiency.

4.2 Enterprises have no premium chips

The threshold for the local Chaozhou embroidery industry in Chaoshan is high, the price of products produced by pure handicraft is high, and the profit margin of Chaozhou embroidery products in the international market is also very large. Most operators are content with the status quo and do not seek innovation. However, due to the inability of product design to keep up, many enterprises can only process samples, and a large number of small enterprises only produce similar products, and enterprises have no premium bargaining chip, and the development level of the entire industry is restricted.

4.3 Single sales channel and low market share

At present, the product form of Chaozhou embroidery is still relatively traditional. Except for Chaozhou embroidered wedding dresses and decorative handicrafts, most of them are used for temples, Buddhist temple decoration, festival sacrifices and drama costumes, etc. The audience is small, and its scope needs to be expanded. . And more than 80% of Chaozhou embroidered wedding dresses are exported to more than 20 countries and regions such as the United States, Spain, Russia, Finland, Southeast Asia and the Middle East. There is a lot of room for profit, but in China, even in Chaozhou, a national high-end wedding evening dress production base, it is difficult to buy a Chaozhou embroidered wedding evening dress. Many Chaozhou embroidery companies only do some simple processing. , the sales channels are established in foreign countries, obviously ignoring the local market.

4.4 Insufficient brand influence.

"The regional brand is strong, but the corporate brand is weak". Due to the small scale of enterprises, most of them are complacent with the halo of Chaozhou embroidery in this regional cluster and lack the shaping of their own brands. At present, only a few companies such as Mingrui and Weibiao wedding dresses have created their own corporate brands. Many Chaozhou embroidery enterprises that have the ability to create their own brands still choose the OEM model, with low product added value, low profits and unstable orders. Most people only know that Chaozhou embroidery is an integral part of the four major embroidery types in China, Cantonese embroidery. Most people don't know the corporate brands and product brands related to Chaozhou embroidery. Chaozhou embroidery lacks strong corporate branding.

4.5 The marketing methods are backward and outdated.

At present, Chaozhou embroidery is basically limited to relationship marketing and store management. New marketing methods are rarely tried, and market expansion is insufficient.

4.6 The software and hardware environment for attracting investment is relatively backward, and the ability of enterprises to attract investment is restricted.

Chaoshan is a famous hometown of overseas Chinese and has many foreign investment resources. However, due to the backward construction of the soft and hard environment for attracting investment, there is a lack of a good atmosphere for investment and entrepreneurship. The foreign capital attracted by Chaozhou is extremely limited, and it has failed to have a good driving effect on the technological progress, management progress and export of Chaozhou embroidery production. At the same time, enterprises rely only on their own development and do as many things as they have, and lack the capital basis for strategic investment and entrepreneurship.

The current situation of Chaozhou embroidery industry fully exposes the problems of our marketing strategy, but also contains huge opportunities. The development of Chaozhou embroidery industry is in urgent need of reforming marketing, and it thrives in the great development of traditional handicraft industry. The purpose of launching the "Internet +" plan is to rely on the advantages of the Internet platform, deeply integrate traditional business and Internet technology, and take the opportunity to upgrade the industry to improve social productivity and increase social wealth. "Internet +" means adding the Internet to the traditional industry. This "+" is not simply superimposed, but refers to improving the level of information technology. By virtue of the Internet carrier, the traditional industry and Internet technology are deeply integrated to make A new development model emerges as the times require.

OVERVIEW OF INTERNET MARKETING

5.1 The connotation of network marketing

The connotation of network marketing refers to the process of carrying out marketing activities based on the Internet platform and information technology means, using the characteristics and advantages of the network. Compared with traditional marketing, network marketing with information technology as the core can realize the dynamic, timely and digital management of the marketing process. Through the big data analysis of online marketing, we can accurately grasp the overall consumption habits of online consumption, the positioning of consumer groups and the changes in consumer psychology, etc., which is more conducive to businesses to adopt corresponding marketing strategies and improve marketing effects.

5.2 Characteristics of Internet Marketing

5.2.1 Low cost

Based on the characteristics and advantages of the Internet, the use of network technology and platforms to implement marketing activities can greatly reduce the cost of corporate marketing and expand the scope of marketing. This is also one of the most prominent features of network marketing compared to traditional marketing. In the past, traditional marketing often needed to rely on physical stores, while building a physical store required a very large cost investment, while online marketing mainly relied on marketing websites, and the opening of online stores cost almost zero, which greatly reduced corporate marketing. cost input. At the same time, network marketing relies on a third-party e-commerce platform, and does not need to invest a lot of advertising and labor costs in the selection and implementation of marketing strategies, including promotions and channels, as in traditional marketing, which greatly reduces the cost of network marketing.

5.2.2 Interactivity

Network marketing relies on the network to realize marketing activities. The process of network marketing is the process of transaction interaction between consumers and merchants through a specific network platform. Under the support of network technology, the interaction between consumers and merchants is more in-depth, which not only enables consumers to evaluate merchants, but also allows merchants to choose consumers, thereby improving the quality and efficiency of commodity marketing.

5.2.3 Personality

Due to the particularity of network information interaction, in the process of network marketing, consumers do not need to conduct face-to-face transactions as in traditional marketing in the process of information exchange between consumers and merchants. Therefore, the network marketing model can better protect the personal privacy of both parties and is obviously private. Therefore, many customers prefer to consume through online channels, which makes it easier to express their consumption needs, and it is easier to express accurately the needs of some commodities involving personal privacy, thereby promoting consumption.

5.2.4 Selection Diversity

In network marketing, under the e-commerce platform, merchants can realize the diversification of products sold, and are not limited by the actual size of the store.

However, in traditional marketing, due to the limitation of physical store size or space, only some products can be sold. From this point of view, online marketing has obvious advantages in product selection. On the contrary, consumers can choose more diverse types of goods through online channels.

RESEARCH METHODS

6.1 Literature research method

Check the books and literature in the library to understand the basic theory of marketing. At the same time, data collection is carried out by CNKI, Wanfang.com, and the library's foreign language database. Through the collection and arrangement of the relevant research results, business models, marketing strategies, "Internet +", traditional handicrafts and corporate marketing of Chaozhou embroidery industry and related research status, the latest research trends in the field are explored.

6.2 Case analysis method

Take the case of Yuhong Embroidery Co., Ltd., systematically analyze the marketing environment faced by Chaozhou embroidery enterprises under the background of "Internet +", and analyze the marketing situation of the enterprise, so as to summarize Yuhong Embroidery Co., Ltd. in marketing problems exist.

6.3 On-the-spot research method

The object of the research is the marketing personnel, professional technicians, agents and distributors of Yuhong Embroidery Co., Ltd. and other channel members, and the real situation about the marketing strategy of Yuhong Embroidery Co.，Ltd.

6.4 Questionnaire survey method

Through the design of questionnaires, the Chaozhou embroidery consumers are investigated, and questions are specially designed for the marketing strategy part of the Chaozhou embroidery industry. Data analysis is carried out on the survey results, so as to further understand the factors that affect consumers' purchase of Chaozhou embroidery products, and at the same time summarize the existing problems in marketing to provide data support for the optimization of marketing strategies.

RESEARCH DATA AND CONCLUSIONS

7.1 Survey of online users of traditional Chaozhou embroidery products

Studying user composition is the first step in studying online consumption behavior. Only by strengthening the analysis of consumer composition can we further understand their specific needs for product experience. The target group of network marketing comes from the vast number of netizens. In order to better understand the online consumer groups of traditional handicrafts, and to ensure the rationality and scientificity of the data, the author conducts a random questionnaire survey on characteristic handicraft consumers and potential consumers by distributing questionnaires online and offline. As of May 2022, the Questionnaire Star service platform has collected 56 valid questionnaires, and Tencent has collected 64 questionnaires, totaling 120. The 120 questionnaires were divided into 76 youth group, 30 middle-aged group and 14 elderly group according to age. The specific age distribution is shown in the figure below (Figure 7-1). Through the analysis of each group of cases, one user is used to summarize a user group, clearly revealing user goals, effectively grasping key requirements and key processes, clarifying the target group of network marketing, and understanding the user's Consumer demand, consumption habits and consumption ability.

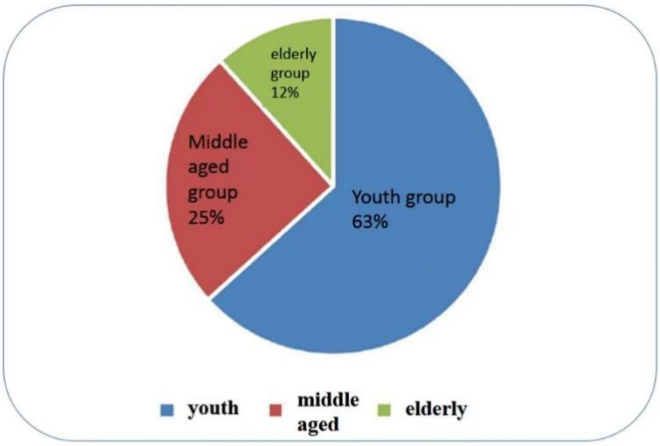

Figure 7-1 Age classification of consumers

Through the analysis of the survey report, we learned that the offline transaction mode of traditional Chaozhou embroidery handicrafts is dominated by the market, and the customers are generally middle-aged and elderly handicraft collectors. However, online sales have attracted the attention of another group of consumers. These handicraft buyers are generally dominated by "post-80s", followed by "post-90s", and buyers over the age of 50 or 60 are rare; online shopping platforms have tapped more young customers for traditional handicraft industries, allowing more young Buyers recognize and pay attention to traditional handicrafts, and promote the trend of younger consumer groups.

In terms of the intention to buy handicrafts, according to the results of the questionnaire, most users accounted for 52.5% as personal hobby collections, 26.7% for gifts, 13.3% for home decoration, and 7.5% for others. (Figure 7-2)

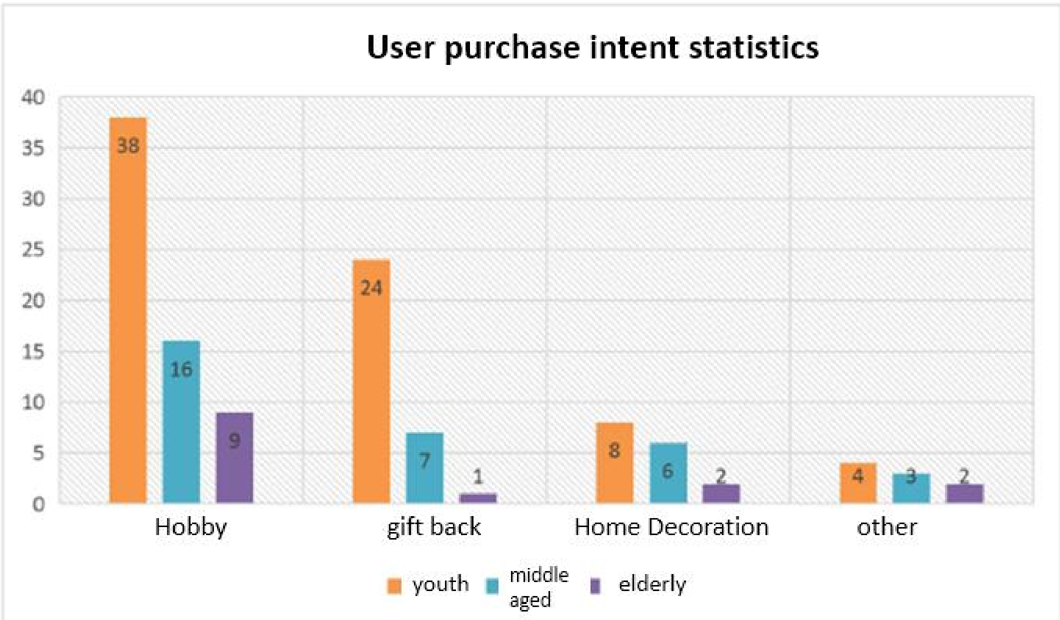

Figure 7-2 Statistics of user purchase intent

This questionnaire also investigates whether users are willing to participate in the design and manufacture of handicrafts (as shown in figure 7-3), the user's spending power, and the user's educational background. The user groups of traditional handicrafts are concentrated in that they have a certain educational background and artistic appreciation ability, and have a certain purchasing ability. However, due to the influence of some objective factors, they only purchase through the handicraft direct-operated stores and online flagship stores in the scenic area. After purchasing, they only collect or give away to others, and do not have a deeper understanding and exploration of the cultural information contained in traditional handicraft products.

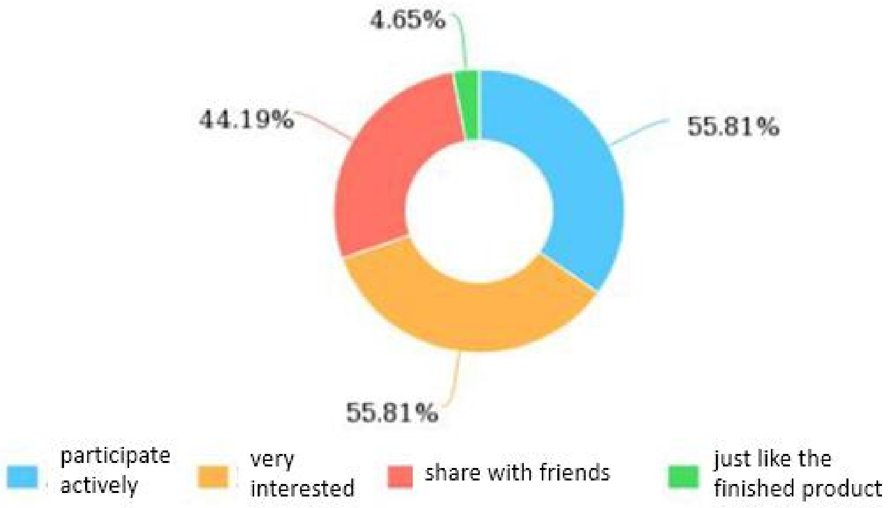

Figure 7-3 Possibility of User Participation in Design and Production

7.2 Analysis of Internet Users of Chaozhou Embroidery Products

Combining with the consumption habits, consumption psychology and consumption behavior of the target groups of Chaozhou embroidery handicrafts and the statistical results of questionnaires, the consumption behavior and psychology of traditional handicrafts generally show the following characteristics:

7.2.1 Development Trend of Consumer Demand Personalization

In the environment of Internet shopping platforms, consumers can inquire about the relevant information of the products they need without leaving home, and select products that meet their needs through the screening and comparison function provided by the platform. Compared with the limited categories of products to choose from under the traditional consumption model, the Internet shopping platform provides consumers with the service function of conveying their own needs and information feedback, so that the personalized needs of consumers can also be met to a certain extent.

7.2.2 Rationalization of consumption

Driven by the industrialization of traditional craftsmanship, more and more handcrafted products have entered the market, and online consumers are also full of various uncertainties when choosing the products they need in the virtual space. Consumers will take the initiative to understand Store level, credibility, product sales, product details, user evaluations, etc., and compare them in various aspects, and only place an order after multiple considerations. All of these fully reflect the rationalization of online consumers' purchasing motivation.

7.2.3 Diversified Demands of Consumption

The traditional handicraft online sales face a huge customer group. The customer group has different age distribution, different cultural education, and uneven consumption ability. Therefore, the consumer demand shown when choosing products is also very different. At this time, merchants should adopt corresponding marketing strategies according to market trends to provide consumers with better services, and to the greatest extent possible.

7.2.4 Price-led Consumption

In the traditional handicraft online platform, price is still one of the important factors affecting consumers in the process of purchasing goods. In the online platform, there are a wide variety of commodities. Consumers browse the commodity details provided by the merchant on the electronic terminal, in addition to the authenticity of the product There are differences in the degree of product information, and everyone has different degrees of receiving product information. At this time, price has become a decisive factor for many consumers to choose products.

7.3 Online Marketing Strategy of Chaozhou Embroidery

7.3.1 The establishment of network marketing chain

Establish an online network marketing service system and offline production to form a systematic marketing chain. The main functions of the network marketing chain include: product online platform promotion, marketing, service, and communication. While the network marketing chain serves consumers, it also collects some suggestions from users about products for enterprises. By refining such information, timely updating product information or adjusting price channels improves the timeliness of product information release and users. information feedback. The enterprise's network marketing platform can also establish an independent consumer database by providing consumer questionnaires, registration materials, etc., from which consumers can obtain consumption levels, occupations, preferences, etc. Analyze the market and consumers based on this information, push marketing information to release product advertisements for different consumer groups, regions or age groups, and bring more possibilities for product promotion.

7.3.2 Choice of network marketing methods

There are many ways of network marketing. Based on the characteristics and value of Chaozhou embroidery handicrafts, database marketing, new media promotion marketing and experiential marketing are relatively suitable for the operation mode of Chaozhou embroidery craft network marketing system.

7.3.2.1 Database Marketing

Database marketing means that enterprises use the advantages of large databases to collect, organize, and analyze information to provide reference information for enterprise marketing decisions. The industrialization development of Chaozhou embroidery At this stage, the accumulation of resources and data analysis of customers is far from enough. With the continuous increase of attention to Chaozhou embroidery, the importance of big data collation is particularly prominent. Through data analysis software, information can be quickly and accurately queried for enterprises. It brings efficient information extraction and at the same time provides users with more suitable services.

7.3.2.2 New media promotion and marketing

New media promotion is the most convenient and affordable promotion tool, but there must be a strategy and planning, a full understanding of the characteristics and audiences of each medium, and a selective delivery of corresponding content to suit local conditions. Using marketing media to implement content marketing is currently the most effective means to grab users' attention. Adhere to content as the king, establish a controllable platform for direct communication with consumers, and then improve the effectiveness of publicity through opinion leaders, and through reasonable use of "potential" ", re-planning the content of online marketing promotion, grabbing the user's attention and grabbing the traffic. At present, the new media platforms that Chaozhou Embroidery can maintain include Tik Tok, Little Red Book, Headline APP, WeChat video account, Bilibili, etc. From the perspective of content marketing, it is necessary to master the traffic algorithm of each platform to continuously grab attention. Based on the characteristics of new media, the forms of content that can be realized include short videos and graphics. Short videos can be placed on Tik Tok, Little Red Book, WeChat video accounts and other platforms, and graphic content can be placed on Little Red Book, Headline APP, and WeChat public platforms. Embroidery techniques teaching videos can be put on the Bilibili video website. In the promotion of new media, the content, delivery time, delivery form, copy content and other aspects must be targeted.

7.3.2.3 Experiential Marketing

Experiential marketing is a popular marketing method in recent years. Businesses adopt targeted service methods according to the characteristics of products, pay attention to the emotional experience of customers, and meet the individual needs of customers. Chaozhou embroidery craftsmanship can rely on Chaoshan culture to carry out experiential marketing, so that customers can have a deep impression on the products and services, so as to achieve the purpose of customers paying the bill subtly.

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ECONOMIC POLICY UNCERTAINTY, MANAGERIAL ABILITY AND ENTERPRISE R&D INVESTMENT-EMPIRICAL EVIDENCE FROM CHINA'S HIGH-TECH INDUSTRY

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ABSTRACT

This paper takes the sample of listed companies in the Shanghai and Shenzhen A-share high-tech industry in 2008-2020 to empirically test the impact of economic policy uncertainty on enterprise R&D investment and the moderating effect of managerial ability. In addition, the different effects of the three relations under the regional grouping are further explored. The study found that: economic policy uncertainty promotes enterprise R&D investment, and the promotion role in the eastern region grouping is more obvious; managerial ability strengthens the promoting effect of economic policy uncertainty on enterprise R&D investment, but its strengthening effect only exists in the eastern region. The research in this paper not only expands the related research of economic policy uncertainty and enterprise R&D investment, but also has reference value for the government to guide the economy, and has reference significance for enterprises to deal with the economic policy uncertainty.

Keywords: Economic Policy Uncertainty; Enterprise R&D Investment; Managerial Ability

INTRODUCTION

As a strategic leading industry for the development of the national economy, the high-tech industry is gradually becoming the main position for my country to implement innovation-driven development because of its knowledge and technology-intensive features and remarkable innovation capabilities. As an important subject of innovation-driven development, the improvement of innovation ability of high-tech enterprises is closely related to R&D investment. However, compared with general investment, R&D investment has high risks, high returns and high sensitivity to relevant economic policies (Meng Qingbin and Shi Qian, 2017). Since the global financial crisis in 2008, the government has successively issued a series of economic policies in order to reverse the problem of the rapid decline of my country's economic growth. However, due to the frequent introduction or changes of economic policies,

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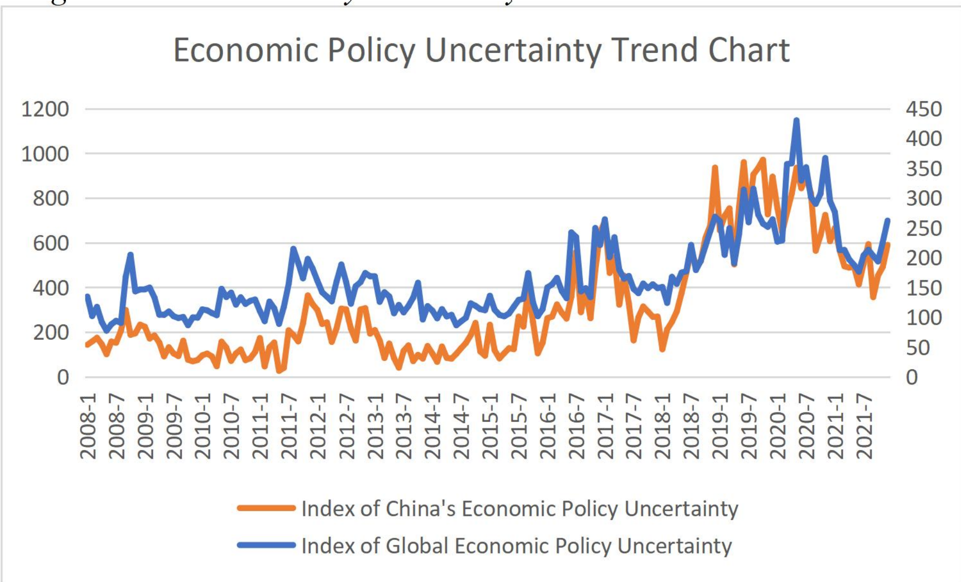
the uncertainty of my country's economic policies has also increased. In recent years, in the face of Sino-US trade friction, the new crown pneumonia epidemic and the need to accelerate the construction of a new development pattern, various economic policies have been launched frequently. According to the data released by the official website of the Economic Policy Uncertainty Index, the global economic policy uncertainty index has reached a historic peak by 2020. As the second largest economy in the world, my country's economic policy uncertainty index has remained high in recent years(see picture 1). Unpredictable policy trends make the external living environment of enterprises continue to deteriorate, and corporate R&D investment, as an important measure for the survival and development of high-tech enterprises, is also greatly affected.

Existing scholars have paid attention to the impact of macroeconomic policy uncertainty on corporate R&D investment, but have not yet reached a unified conclusion. Some experts believe that the uncertainty of economic policy has promoted the R&D investment of enterprises (Meng Qingbin and Shi Qian, 2017; Gu Qun et al., 2020; Xiong Kaijun, 2021), but some experts believe that the uncertainty of economic policy has reduced the R&D investment of enterprises Input (Hao Weiya et al., 2016; Zhang Qianxiao and Feng Lei, 2018; Xu Zhaoxia, 2020). Previous studies on the relationship between economic policy uncertainty and corporate R&D investment have mostly focused on financing costs (Guo Tianyong and Sun Guangyu, 2021), institutional investor shareholding (Gu Qun et al., 2020) and financing constraints (Zhao Meng et al., 2020), they did not pay attention to the impact of managerial ability on the relationship between the two. Considering that although the innovation output of an enterprise is largely affected by exogenous factors, the innovation input of an enterprise is more determined by the management of the enterprise. The stronger the ability of enterprise managers, the smaller the corporate financing constraints, the greater the risk-taking ability, the more emphasis on corporate innovation, and the more inclined to invest in R&D. Therefore, it is worthy of further discussion on the impact of economic policy uncertainty on corporate R&D investment and whether managerial ability has an impact on the relationship between economic policy uncertainty and corporate R&D investment.

This paper selects 2008-2020 Shanghai and Shenzhen A-share listed companies in the high-tech industry as research samples, and tests the impact of economic policy uncertainty on corporate R&D investment, as well as the moderating effect of managerial ability to economic policy uncertainty and corporate R&D investment. Since there are significant differences in product market competition and financial development level between the eastern region and the central and western regions, this paper further tests whether the above relationship is significantly different in the eastern region and the central and western regions. The study found that: the uncertainty of economic policy promotes the R&D investment of enterprises, and its promoting effect is more obvious in the eastern region grouping; Managerial ability strengthens the promotion effect of economic policy uncertainty on enterprise R&D investment, but its strengthening effect only exists in the eastern region. The main contributions of this paper are reflected in the following two aspects. One is to use empirical data in the high-tech industry to verify the impact of economic policy uncertainty on corporate R&D investment, and to further explore the impact of managerial ability on economic policy uncertainty and corporate R&D investment. The effect has enriched the breadth and depth of existing research; secondly, it is conducive to the government to better guide the innovation of enterprises, and it also has a good reference significance for enterprises to cope with economic policy uncertainty.

The follow-up structure of this paper is as follows: the first section is theoretical analysis and research assumptions; the second section is research design, including sample selection, data sources, variable definitions and model setting; the third section is empirical analysis; the fourth section is robustness test; the last is the research conclusion of this paper.

Figure 1 Economic Policy Uncertainty Index



Note: The data comes from http://www.policyuncertainty.com

THEORETICAL ANALYSIS AND RESEARCH ASSUMPTIONS

1.1 Economic Policy Uncertainty and Enterprise R&D Investment

The so-called economic policy uncertainty refers to the fact that economic entities cannot accurately predict whether, when and how the government will change the current economic policy and implement new economic policies to regulate the operation of the macro economy (Gulen & Ion, 2015). According to the theory of delay options, on the one hand, the uncertainty of economic policy will lead to an increase in the investment cost of enterprises. Facing the systemic risk of economic policy uncertainty, banks will choose to shrink the scale of credit (He Fumei et al., 2019), increase the cost of credit, or propose more stringent credit conditions (Han & Qiu, 2006), the cost of raising funds for R&D activities by enterprises will rise sharply, which is not conducive to the development of enterprise R&D activities. On the other hand, the uncertainty of economic policy increases the value of delay options and increases the value of companies waiting for information, making it easy for companies to adopt a wait-and-see attitude when facing irreversible investments, which leads to the delay of R&D investment. According to the growth option theory, the uncertainty of economic policy will indeed have a negative impact on the R&D investment of enterprises due to the irreversibility of investment, but when the value of the growth option is greater than the value of the waiting option, the increase of economic policy uncertainty will promote enterprises invest in research and development. In the face of increasingly fierce product market competition, when companies choose to wait, it may make competitors take the lead in completing the research and development of similar products, thereby losing market opportunities and reducing the waiting value or even zero (He et al., 2020). Therefore, under the background of my country's economic structure transformation and industrial structure upgrading, actively improving the innovation ability of enterprises and expanding the intrinsic value of enterprises is the key to participating in market competition and achieving success. Based on the above analysis, hypothesis is proposed:

H1: Under the condition that other conditions remain unchanged, economic policy uncertainty promotes corporate R&D investment.

1.2 Economic Policy Uncertainty, Managerial Ability and Enterprise R&D Investment

Enterprise managers often face various uncertain environments in their daily operations. In this environment, managers must use comprehensive information to make various complex decisions, and the decision results are largely determined by their management skills. When managers have higher ability, they have stronger control ability in the face of economic policy uncertainty and risks generated by R&D investment. Economic policy uncertainty makes it difficult for companies to grasp the future shape, and therefore may reduce investment in high-risk projects such as R&D investment. According to management theory, when faced with risks, managers with strong abilities can not only deal with risks calmly and control risks better, but also recognize opportunities and profit possibilities hidden in uncertainty, so they are more willing to R&D investment in an environment of economic policy uncertainty. When the managerial ability is high, it can effectively alleviate the financing constraints of the enterprise (Gong Minhuan and Wang Lili, 2017), and then provide stable funds for the R&D investment of the enterprise. Economic policy uncertainty, as a part of market risk, affects banks' credit scale and credit cost to a large extent. On the one hand, managers with higher abilities tend to release high-quality financial reports to the market, so that the outside world can have a deep understanding of the business status of the company, thereby reducing the degree of information asymmetry (Li Bingcheng and Zheng Shanshan, 2019), improving the availability of bank credit; on the other hand, highly capable managers can often effectively improve the financial performance of the company, reduce the business risk of the company, and reduce the debt default risk of the company (Han Qinglan and Zhang Yue, 2020), and then reduce the cost of obtaining bank credit. When managers have high ability, they have a more forward-looking strategic vision (Yan Xinwen and Kong Aiguo, 2021). Therefore, under the background of my country efforts to build an innovative country, high-ability managers may be more pay attention to the R&D investment of the enterprise, so as to increase the added value of the enterprise and enhance the market position of the enterprise. Based on the above analysis, hypothesis is proposed:

H2: Under the condition that other conditions remain unchanged, managerial ability strengthens the promotion effect of economic policy uncertainty on enterprise R&D investment.

RESEARCH DESIGN

2.1 Sample Selection and Data Sources

This paper selects the 2008-2020 Shanghai and Shenzhen A-share listed companies in the high-tech industry as the research sample, and draws on the "Strategic Emerging Industry Classification Catalog", "Strategic Emerging Industry Classification (2012) (Trial)" and the Organization for Economic Cooperation and

Development (OECD) related documents, and determine the industry code of listed companies in the high-tech industry according to the "Guidelines for Industry Classification of Listed Companies (Revised in 2012)". All samples involve three categories and 19 categories1. Excluding ST, ST* companies and listed companies with serious missing values, 15,818 observations were finally obtained. In view of the fact that extreme values will influence the rationality and scientificity of the research results, all continuous variables are winsorized by 1% up and down. China's Economic Policy Uncertainty Index (EPU) comes from the official website of the Economic Policy Uncertainty Index2,the website discloses the macroeconomic policy uncertainty index of different countries on a monthly basis, which has good continuity and stability. The rest of the data were derived from the CSMAR database, and Stata.16 was used for data processing and analysis.

2.2 Variable Definitions

2.2.1 Explained Variable

Corporate research and development investment (RD). Regarding the R&D investment of enterprises, the existing literature often uses the ratio of R&D investment to operating income (Zhu Ran et al., 2016; Liu Xin and Xue Youzhi, 2015) and the ratio of R&D investment to total assets (Zhai Guangyu and Wang Yao, 2022 ; Zhao Shifang et al., 2020) two indicators to measure. Since operating income is more likely to be manipulated by earnings than total assets, this paper uses the ratio of R&D investment to total assets to measure a company's R&D investment.

2.2.2 Explanatory Variable

Economic Policy Uncertainty (EPU). Referring to the research of Baker et al. (2016), according to the South China Morning Post in Hong Kong, China, related articles containing the four keywords of "China", "economy", "policy" and "uncertainty" accounted for the total number of articles of the month. The proportion of quantity to construct a monthly China's economic policy uncertainty index. According to the method of Shen Yu et al. (2020), the logarithm of the monthly arithmetic average economic policy uncertainty index is used to measure the annual economic policy uncertainty. The larger the value, the higher the economic policy uncertainty.

2.2.3 Moderating Variable

Managerial Ability (MA_Score). Drawing on the research of Naheed et al. (2021) and Demerjian et al. (2013), a two-stage model combining data envelopment analysis and Tobit model is used to measure the competence of enterprise managers. The specific calculation process is as follows: In the first step, the net fixed assets, net intangible assets, goodwill, R&D expenditures, operating costs, and sales and administrative expenses are used as input variables in the DEA analysis, and operating income is used as the only output variable. The enterprise efficiency value is calculated by data envelopment analysis. In the second step, the enterprise efficiency value calculated by data envelopment analysis is affected by both the enterprise and the manager. Therefore, the Tobit model is further used to separate the effects at the two levels. The obtained residual is the management ability. Among them, the

[1]The three categories are manufacturing (C), information transmission, software and information technology services (I), scientific research and technical services (M); 19 categories include C25, C26, C27, C28, C29, C31, C32, C34, C35, C36, C37, C38, C39, C40, C41, I63, I64, I65 and M73.

[2]Official website of the Economic Policy Uncertainty Index: http://www.policyuncertainty.com.

enterprise-level factors controlled in the Tobit model include enterprise size, market share, free cash flow, years of establishment, degree of internationalization and degree of diversification.

2.2.4 Control Variables

Drawing on the research of scholars such as Li Xiuping et al. (2022) and Feng Rongfang et al. (2022), this paper selects enterprise age (AGE), profitability (ROE), asset-liability ratio (LEV), operating income growth rate (GROWTH), ownership concentration (TOP1), proportion of independent directors (INDEP), nature of ownership (STATE), industry (INDUSTRY) and year (YEAR) as control variables. For a detailed description of the variables, see Table 1.

Table 1 Detailed description of variables

Variable Type	Variable Name	Variable Symbol	Variable Definition
Explained Variable	Enterprise R&D Investment	RD	(R&D investment/Total assets) *100
Explanatory Variable	Economic Policy Uncertainty	EPU	For the economic policy uncertainty index proposed by Baker et al. (2016), monthly arithmetical average was firstly carried out, followed by logarithm. This is then used as an annual index of economic policy uncertainty.
Moderating Variable	Managerial Ability	MA_Score	According to the research of Naheed et al. (2021) and Demerjian et al. (2013), the DEA-Tobit two-stage model was used to measure the competence of managers.
Control Variables	Enterprise Age	AGE	Current year - Year of incorporation +1
	Profitability	ROE	Return on equity
	Asset-Liability Ratio	LEV	Total liabilities / total assets
	Operating Income Growth Rate	GROWTH	Difference between current year and previous year's operating income/previous year's operating income
	Ownership Concentration	TOP1	Shareholding ratio of the largest shareholder
	Proportion of Independent Directors	INDEP	Number of independent directors/total number of directors
	Nature of Ownership	STATE	If it is a state-owned enterprise, the value is 1; otherwise, the value is 0.
	Industry	INDUSTRY	Dummy variables are set according to industry categories of Listed Companies listed by CSRC (2012 Revision).
	Year	YEAR	Time dummy variable

2.3 Model Setting

To test Hypothesis 1, establish a benchmark regression model of economic policy uncertainty and corporate R&D investment:

$$RD_{it} = \alpha_0 + \alpha_1 EPU_{it} + \alpha_2 AGE_{it} + \alpha_3 ROE_{it} + \alpha_4 LEV_{it} + \alpha_5 GROWTH_{it} + \alpha_6 TOP1_{it} + \alpha_7 INDEP_{it} + \alpha_8 STATE_{it} + \sum INDUSTRY + \sum YEAR + \varepsilon \quad (1)$$

To test Hypothesis 2, a moderating effect test model was established to study the moderating effect of managerial ability on economic policy uncertainty and corporate R&D investment:

$$RD_{it} = \beta_0 + \beta_1 EPU_{it} + \beta_2 MA\_Score_{it} + \beta_3 EPU_{it} * MA\_Score_{it} + \beta_4 AGE_{it} + \beta_5 ROE_{it} + \beta_6 LEV_{it} + \beta_7 GROWTH_{it} + \beta_8 TOP1_{it} + \beta_9 INDEP_{it} + \beta_{10} STATE_{it} + \sum INDUSTRY + \sum YEAR + \upsilon \quad (2)$$

EMPIRICAL ANALYSIS

3.1 Descriptive Statistics

This paper finally obtains 15,818 observations of listed companies in the high-tech industry of Shanghai and Shenzhen A-shares, and conducts descriptive statistics on the main variables. The results are shown in Table 2.

Table 2 Descriptive Statistics

Variable	Total Number of Samples	Mean	Standard Deviation	Minimum	Maximum	Median	East of the Mean	Midwestern Mean	Mean T Test
RD	15818	3.3806	2.7815	0.0472	16.1067	2.7164	3.681	2.592	-1.088***
EPU	15818	5.7712	0.6953	4.5940	6.6744	5.8968	5.793	5.713	-0.080***
MA_Score	15818	-0.0314	0.1427	-0.3000	0.3827	-0.0544	-0.025	-0.047	-0.021***
AGE	15818	18.3923	5.4841	8	35	18	18.353	18.496	0.144
ROE	15818	0.0183	0.0296	-0.0620	0.1381	0.0139	0.020	0.015	-0.005***
LEV	15818	0.3584	0.2007	0.0364	0.8705	0.3384	0.342	0.400	0.058***
GROWTH	15818	0.1504	0.4529	-0.6244	2.6159	0.0336	0.148	0.157	0.009
TOP1	15818	33.0431	13.9672	8.57	70.42	30.695	33.020	33.104	0.084
INDEP	15818	0.3750	0.0519	0.3333	0.5714	0.3333	0.376	0.372	-0.004***
STATE	15818	0.2640	0.4408	0	1	0	0.197	0.440	0.243***

In Table 2, the minimum value of enterprise R&D investment (RD) is 0.0472, the maximum value is 16.1067, and the mean value is 3.3806, indicating that the differences in R&D activity investment among sample enterprises are relatively obvious. The minimum value of economic policy uncertainty (EPU) is 4.5940, the maximum value is 6.6744, the mean value is 5.7712, and the standard deviation is 0.6953, indicating that during the period from 2008 to 2020, my country's macroeconomic policy uncertainty fluctuated greatly. The mean value of the managerial ability (MA_Score) is -0.0314, the minimum value is -0.3000, and the maximum value is 0.3827, indicating that the selected sample enterprise managers' ability is generally low, and the gap between the managerial ability levels of different companies is obvious. It is consistent with the research of Han Qinglan and Zhang Yue (2020). From the control variables, the average age of the enterprise (AGE) is 18.3923, the minimum value is 8, and the maximum value is 35, indicating that the sample company is relatively young as a whole, and the minimum age of the company is 8 years, and the maximum age is 35 years. The difference is large. The average value of return on equity (ROE) is 0.0183 and the median is 0.0139, indicating that more than half of the listed companies have lower profitability than their average value. The average value of the asset-liability ratio (LEV) is 0.3584, which is less than 0.5, and the minimum value is 0.0364 and the maximum value is 0.8705, indicating that the selected sample companies have strong anti-risk ability, but the difference between the maximum value and the minimum value is large, showing that different enterprises use financial leverage differently. The average value of the growth rate of operating income (GROWTH) is 0.1504, the minimum value is -0.6244, and the maximum value is 2.6159, indicating that the operating income of the sample companies as a whole is growing, and the company's market prospects are good, but the gap between the values is obvious. The average value of equity concentration (TOP1) is 33.0431, the minimum value is 8.57, and the maximum value is 70.42, which indicates that the phenomenon of “one share is dominant” in the selected sample listed companies is relatively common, and the gap between the maximum value and the minimum value is obvious. The average value of the proportion of independent directors (INDEP) is 0.3750, indicating that the sample companies generally meet the requirements of the CSRC on the number of independent directors. The mean value of the nature of equity (STATE) is 0.2640, indicating that Chinese companies account for about 26.40% of the sample companies. In addition, through the mean difference T test of all indicators in the eastern region and the central and western regions, it is found that except for the age of enterprises, the growth rate of operating income and equity concentration, the other indicators have passed the test, indicating that there are indeed significant differences between the eastern region and the central and western regions.

3.2 Correlation Analysis

In this paper, the Pearson correlation analysis method is used to carry out the collinearity analysis of the involved variables and the preliminary test of the above hypothesis. The results are shown in Table 3. The absolute values of the correlation coefficients between the variables are all less than 0.6, indicating that the possibility of multicollinearity is small. Further, by testing the variance inflation factor of each variable, this paper finds that the VIF value of each variable is less than 5, and the overlap between variables is low. Therefore, it can be judged that there is no serious multicollinearity problem among the variables. In addition, the coefficient of economic policy uncertainty is 0.1090, and it is positively correlated at the 1% level, which preliminarily validates Hypothesis 1.

Table 3 Correlation Analysis Table

Variable	RD	EPU	MA_Score	AGE	ROE	LEV	GROWTH	TOP1	INDEP	STATE
RD	1.0000									
EPU	0.1090***	1.0000								
MA_Score	0.1606***	0.0545***	1.0000							
AGE	-0.1041***	0.3589***	-0.0353***	1.0000						
ROE	0.1494***	-0.0226***	0.1999***	-0.1259***	1.0000					
LEV	-0.2339***	-0.0139*	-0.0737***	0.1656***	-0.1629***	1.0000				
GROWTH	0.0276***	-0.0818***	0.0629***	-0.0417***	0.1223***	0.0385***	1.0000			
TOP1	-0.0734***	-0.1164***	0.0647***	-0.1060***	0.1053***	0.0339***	-0.0098	1.0000		
INDEP	0.0394***	0.0497***	-0.0090	-0.0456***	-0.0259***	-0.0398***	-0.0022	0.0269***	1.0000	
STATE	-0.1661***	-0.1029***	-0.0270***	0.1574***	-0.1266***	0.3597***	-0.0328***	0.1570***	-0.0853***	1.0000

*Note: ***, **, and * indicate that the regression results are significant at the 1%, 5%, and 10% levels, respectively.*

3.3 Multiple Regression Analysis

3.3.1 Economic Policy Uncertainty and Enterprise R&D Investment

Table 4 reports the regression results of economic policy uncertainty and corporate R&D investment. As can be seen from the regression results of the whole sample, the coefficient of economic policy uncertainty is 1.8866, and it is significantly positive at the statistical level of 1%, indicating that the economic policy uncertainty is significantly and positively correlated with the enterprise R&D investment, that is, the uncertainty of macroeconomic policy promotes the R&D investment of enterprises. Hypothesis 1 is verified. This shows that when listed companies in the high-tech industry are faced with economic policy uncertainty, they are more likely to consider future growth options rather than delay options, so they will take more active measures to deal with economic policy uncertainty. That is to say, by increasing investment in research and development, enterprises can improve their innovation ability and innovation level, thereby improving their intrinsic value and expanding their future market share. Then they can achieve rapid development in the fierce market competition. Further grouping by region, in the eastern region grouping, the coefficient of economic policy uncertainty is 2.0173, which is significant at the 1% statistical level, indicating that economic policy uncertainty in the eastern region is significantly and positively correlated with corporate R&D investment. In the central and western regions, the coefficient of economic policy uncertainty is 1.5464, which is significant at the 1% statistical level, indicating that the economic policy uncertainty in the central and western regions is also significantly and positively correlated with corporate R&D investment. Hypothesis 1 is verified again. In addition, according to the research of Lian Yujun and Liao Junping (2017), a seemingly uncorrelated model was used to test the difference of coefficients between groups, the obtained P value was 0.0537, and the null hypothesis was rejected at the 10% level. The results show that compared with the central and western regions, economic policy uncertainty is more conducive to promoting the R&D investment of enterprises in the eastern region. The possible reason is that the product market competition in the eastern region is more intense, and the value brought by the growth option is much higher than the value brought by the waiting option, which makes enterprises take a more positive attitude in the face of economic policy uncertainty. Therefore, the promotion of R&D investment of enterprises is more obvious in the eastern region.

Table 4 Model 1 Regression Results

Independent Variable	All Samples		Eastern Region		Midwestern Region	
	Estimated Coefficient	T Value	Estimated Coefficient	T Value	Estimated Coefficient	T Value
EPU	1.8866***	14.14	2.0173***	11.72	1.5464***	8.09
AGE	-0.0568***	-13.67	-0.0537***	-10.70	-0.0615***	-8.59
ROE	14.2066***	19.59	15.2953***	17.00	10.6508***	9.40
LEV	-1.8354***	-16.78	-1.8633***	-13.53	-1.7304***	-10.53
GROWTH	0.0936**	2.05	0.1391**	2.38	0.0440	0.67
TOP1	-0.0056***	-3.77	-0.0099***	-5.38	0.0012	0.54
INDEP	0.4011	1.04	0.4857	1.01	-0.0063	-0.01
STATE	-0.2454***	-4.85	-0.2152***	-3.15	0.0638	0.89
CONSTANT	-7.1575***	-8.18	-7.8053***	-6.88	-5.5272***	-4.48
INDUSTRY	YES		YES		YES	

YEAR	YES	YES	YES
Adj_R^2	0.1901	0.1840	0.1482
F	177.79	123.98	38.95
N	15818	11456	4362

*Note: ***, **, and * indicate that the regression results are significant at the 1%, 5%, and 10% levels, respectively.*

3.3.2 The Moderating Effect of Managerial Ability

The moderating effect of managerial ability on economic policy uncertainty and enterprise R&D investment, the regression results are shown in Table 5. Under the full sample, the coefficient of the interaction term between economic policy uncertainty and managerial ability is 1.2490, which is significant at the 1% statistical level, indicating that managerial ability strengthens the promoting effect of economic policy uncertainty on enterprise R&D investment, thus verifying the hypothesis 2. This result shows that managers with higher ability can not only reasonably control the operation and management risks caused by economic policy uncertainty, but also seize opportunities in the uncertain environment and promote the development of R&D activities in the environment of economic policy uncertainty. After further grouping by region, in the eastern region grouping, the coefficient of the interaction term between economic policy uncertainty and managerial ability is 1.5518, and it is significant at the 1% statistical level, indicating that management ability positively adjusts economic policy uncertainty and enterprise R&D investment. In the central and western regions, the coefficient of the interaction term between economic policy uncertainty and managerial ability is 0.3541, which fails the significance test, indicating that managerial ability does not play a positive moderating role in the central and western regions. The possible reason is that, on the one hand, the eastern region has a higher level of financial development, which is more conducive to managers to play their own role in order to alleviate the financing constraints caused by economic policy uncertainty, thereby providing stable funds for enterprise R&D investment; on the other hand, the control market in the eastern region is more active, and survival of the fittest makes managers more likely to be replaced, so supervising managers make more efforts to improve the long-term value of enterprises (Huang Zhihong et al., 2021). In addition, the managerial ability of the eastern region is generally higher than that of the central and western regions, which enables enterprises in the eastern region to better control various risks arising from R&D activities and is more conducive to R&D. Therefore, the strengthening effect of managerial ability on economic policy uncertainty and corporate R&D investment is only reflected in the eastern region.

Table 5 Model 2 Regression Results

Independent Variable	All Samples		Eastern Region		Midwestern Region	
	Estimated Coefficient	T Value	Estimated Coefficient	T Value	Estimated Coefficient	T Value
EPU	1.8033***	13.49	1.8966***	11.00	1.5416***	8.05
MA_Score	0.6916***	4.61	0.8020***	4.30	0.0015	0.01
EPU*MA_Score	1.2490***	6.19	1.5518***	6.26	0.3541	1.10
AGE	-0.0552***	-13.29	-0.0519***	-10.35	-0.0612***	-8.54
ROE	13.1652***	17.74	13.9315***	15.07	10.5941***	9.20
LEV	-1.8248***	-16.71	-1.8411***	-13.40	-1.7280***	-10.51
GROWTH	0.0804*	1.76	0.1225**	2.10	0.0437	0.67
TOP1	-0.0062***	-4.16	-0.0106***	-5.75	0.0013	0.54
INDEP	0.4170	1.08	0.5089	1.06	-0.0164	-0.03

STATE	-0.2539***	-5.02	-0.2132***	-3.13	0.0622	0.87
CONSTANT	-6.6167***	-7.55	-7.0392***	-6.19	-5.4961***	-4.45
INDUSTRY	YES		YES		YES	
YEAR	YES		YES		YES	
Adj_R^2	0.1931		0.1881		0.1481	
F	165.61		116.41		35.45	
N	15818		11456		4362	

Note: ***, **, and * indicate that the regression results are significant at the 1%, 5%, and 10% levels, respectively.

ROBUSTNESS TEST

4.1 Substitution Variable

In order to verify the reliability of the empirical results, this paper refers to the study of Li Zengfu et al. (2022), considers the influence of time distribution, and then uses the weighted average method of monthly data with the month as the weight, so as to construct the annual data of economic policy uncertainty and repeat the above experiment. The robustness test results are shown in Table 6. Economic policy uncertainty is significantly positively correlated with corporate R&D investment, and managerial ability strengthens the promotion of economic policy uncertainty on corporate R&D investment. In addition, this paper refers to the research of Xie Qiaoxin and Zhang Yu (2022), and uses the geometric mean of monthly data to replace economic policy uncertainty again. The main research conclusions are still valid, and the empirical conclusions are robust.

Table 6 Robustness Test Results

Independent Variable	Model 1		Model 2	
	Estimated Coefficient	T Value	Estimated Coefficient	T Value
EPUQ	0.5068***	14.14	0.4836***	13.47
MA_Score			0.6887***	4.60
EPUQ*MA_Score			0.3715***	6.91
AGE	-0.0568***	-13.67	-0.0551***	-13.26
ROE	14.2066***	19.59	13.1619***	17.75
LEV	-1.8354***	-16.78	-1.8225***	-16.69
GROWTH	0.0936**	2.05	0.0791*	1.74
TOP1	-0.0056***	-3.77	-0.0062***	-4.17
INDEP	0.4011	1.04	0.4110	1.06
STATE	-0.2454***	-4.85	-0.2546***	-5.04
CONSTANT	1.6415***	5.48	1.7970***	5.99
INDUSTRY	YES		YES	
YEAR	YES		YES	
Adj_R^2	0.1901		0.1936	
F	177.79		166.12	
N	15818		15818	

*Note: ***, **, and * indicate that the regression results are significant at the 1%, 5%, and 10% levels, respectively.*

4.2 Endogenous Test

Economic policy uncertainty is macro-level data, and it is almost impossible for the micro-level corporate R&D investment behavior to have an impact on macroeconomic policy uncertainty, that is, the endogenous problem caused by the two-way causality problem does not exist. However, in order to enhance the persuasiveness of the conclusion and solve the endogeneity problem caused by omitted variables and sample selection, this paper adopts the instrumental variable method to test the endogeneity. Referring to the research of Wang et al. (2014), the US economic policy uncertainty (USA_EPU) is used as an instrumental variable. The fluctuation of China's economic policy is closely related to the introduction and changes of relevant US policies. The uncertainty of China's economic policy will increase with the increase of the uncertainty of the US economic policy, which satisfies the correlation condition of instrumental variables. In addition, the uncertainty of US economic policy will not directly affect the R&D investment behavior of Chinese enterprises, which satisfies the exogenous condition of instrumental variables. Therefore, this paper selects the logarithm of the arithmetic mean of the monthly data on economic policy uncertainty in the United States as an instrumental variable, and uses the two-stage least squares method to perform an endogeneity test. The results are shown in Table 7. The coefficient of economic policy uncertainty is 0.6432, which is significant at the 1% level, indicating that economic policy uncertainty promotes corporate R&D investment. The coefficient of the interaction term between economic policy uncertainty and managerial capability is 2.0224, and it is significant at the 1% level, indicating that managerial ability strengthens the promotion of economic policy uncertainty on corporate R&D investment. Consistent with the previous conclusion.

Table 7 Endogenous Test Results

Independent Variable	Model 1		Model 2	
	Estimated Coefficient	Z Value	Estimated Coefficient	Z Value
EPU	0.6432***	14.10	0.5607***	12.34
MA_Score			2.2851***	15.20
EPU*MA_Score			2.0224***	7.19
AGE	-0.0595***	-13.14	-0.0544***	-12.11
ROE	10.1982***	13.83	7.8195***	10.53
LEV	-2.4679***	-21.63	-2.3679***	-20.94
GROWTH	0.1692***	3.59	0.1274***	2.72
TOP1	-0.0132***	-8.51	-0.0143***	-9.29
INDEP	1.0796***	2.64	1.1079***	2.74
STATE	-0.2544***	-4.75	-0.2806***	-5.30
CONSTANT	1.5340***	5.37	2.0243***	7.12
R^2	0.0974		0.1160	
Wald chi2	1643.24		1984.28	
Prob>chi2	0.0000		0.0000	
N	15818		15818	

*Note: ***, **, and * indicate that the regression results are significant at the 1%, 5%, and 10% levels, respectively.*

CONCLUSION

In this paper, the listed companies in Shanghai-Shenzhen A-share high-tech industry are selected as a sample to study the relationship between the economic policy uncertainty, managerial ability and enterprise R&D investment. The results show that: economic policy uncertainty promotes enterprise R&D investment; managerial ability strengthens the promotion effect of economic policy uncertainty on enterprise R&D investment. Further analysis found that the promotion effect of economic policy uncertainty on corporate R&D investment is more obvious in the eastern region; the strengthening effect of managerial ability on economic policy uncertainty and corporate R&D investment only exists in the eastern region. Based on this, this paper puts forward the following suggestions: (1) From the perspective of the government, the government should fully consider the positive and negative effects of macroeconomic policy changes on micro-subjects when formulating policies. Appropriate policy fluctuations can increase the enthusiasm of enterprises to innovate, thereby increasing their R&D investment, but at the same time, the pros and cons should also be weighed to avoid the loss of micro-enterprises caused by the policy's adjustment. (2) From the enterprise level, enterprises should improve their enthusiasm for innovation. My country's current international and domestic situation is becoming increasingly severe, with Sino-US trade frictions outside, and the new crown pneumonia epidemic inside. At the same time, it is faced with the requirement to accelerate the construction of a new development pattern and continuously deepen the supply-side structural reform. Various macroeconomic policies were introduced accordingly. Only by increasing investment in R&D and improving innovation, can enterprises expand their market share in the fierce product market competition. At the same time, enterprises should pay more attention to the ability of managers. On the one hand, the existing management personnel should be assessed and evaluated regularly, and the survival of the fittest system should be implemented. On the other hand, they should strictly enforce the appointment system of managers and select excellent managers. In this way, it ensures that the managerial ability of the enterprise is at a high level, which helps the enterprise to cope with various risks caused by the uncertainty of economic policies, and also helps the enterprise to seize the opportunity in the uncertain environment.

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AN EXAMINATION OF THE FUNCTIONS OF CHILD CARETAKERS FOR UNDERPRIVILEGED YOUNG CHILDREN IN A DISTANT REGION: A CASE STUDY OF THAILAND

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ABSTRACT

Inequalities touch Thailand's education system in educational offerings at various levels of the nation. This study aims to receive an understanding of child caregivers' perceptions of knowledge, understanding, which related to their performance, as well as the factors and barriers that impact their education and care providing for underprivileged young learners in the distant region, Thailand. Twenty-three child caregivers were interviewed, and four were observed in order to collect data using a qualitative method. The results show that the caregivers perceived themselves as performing several roles not only delivered education to underprivileged young learners; protector, facilitator, caregiver, investigator, volunteer, and good model alongside their primary responsibilities while being simultaneously challenged by issues including regional deprivation and underfunding for learning resources.

Keywords: child caregiver, underprivileged young children, distant region

INTRODUCTION

This study explored the roles of child caregivers related to their providing education and activities to develop young children. It was arranged in remote Child Care Centres in Thailand, specifically child caregivers who work with underprivileged young students from hill tribes living in remote areas in the North of Thailand. In rural areas, educational institutions are accountable for providing education to students from the poorest families. The phrase "poor families" refers to an individual's economic or financial status, which is often tied to low salaries, casualization of the workforce, and an area's resources such as access to services, transportation, and recreational facilities. (Glass, Bynner and Chapman, 2020).

Nonetheless, education in distant areas suffers numerous obstacles, including a systemic lack of adequate administration, instruction, and monetary support (Buaraphan, 2013; Iruka et al., 2019). The study location in Thailand's northern region is rich in diverse groups of hill tribes who live primarily in highland settings. These tribes have a variety of languages and traditions (OECD/UNESCO, 2016), and this study focus on delivering education to tribal young children.

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This study investigated the key factors that affect child caregivers' performance to receive their perceptions, specifically in Thailand's remote Child Care Centres. Given the significant amount of time young learners spend with child caregivers and the quantifiable, variable social impacts on children's learning and development related to various stages of education provided to deprived areas in Thailand. Unsurprisingly, there is a consistent, ongoing focus on these communities in the country, purposely concerning instructor and attendant roles (Burchinal et al., 2018). Parents and communities rely and expect teachers to care for and educate their children. As a result, teachers must deliver knowledge, comprehending skills, and suitable behavioral norms to preschoolers, preparing them for passage onto states of appropriately socialized adulthood as specified by Thai society.

The main focus of this study is on the performance of child caregivers, particularly in rural Child Care Centres in which child education appears to be disadvantaged by practical measurements. As a result, the study aims to investigate the perception and actual responsibilities of child caregivers in rural Child Care Centres relying on their demonstrable knowledge, general activities, and discernible aptitude for developing children appropriately.

LITERATURE REVIEW

The issue of underprivileged early childhood education in Thailand

The Thai government's strategy on pre-school education has been to provide clear routes with the goal of extending and strengthening pre-school education provision in rural regions. The primary goals of the National Education Act of B.E. 2542 (1999) were to provide an education for any and all Thais in order to gradually develop various dimensions of personality, as well as those relating to well-being, intelligence, wisdom, morality, integrity, and the ambition of a desirable lifestyle regarding maintaining social living (Israsena, 2007). The policy unites all political parties supporting high-quality early childhood care and development (Office of the National Education Commission of Thailand (ONEC), 2004). Although United Nations Children's Fund (UNICEF) (2021) notes that worldwide, including in the Northern region of Thailand, there has been a growing acknowledgement of the importance of education for children, the nation has experienced an increase in the number of children living in rural locations with limited educational and learning options. Additionally, budgets allocated by central government have been reduced, while expenditures have been progressively passed to community people (OECD, 2018).

In response to these issues, the Thai Ministry of Education (2012) noted in the National Strategic Plan for Early Childhood Development (Newborn to Pre-First Graders) prepared in line with Government Policy 2012-2016 that early childhood rearing clearly suffers from a 'lack of data for effective planning and management of early childhood development, especially a lack of categorized data reflecting the situation of disadvantaged groups; consequently, it has been difficult to plan specific projects in support of these groups' (MOE, 2012: 46). As a preliminary response, the government contemplated improving and expanding educational possibilities for young children by creating Child Care Centres under the Department of Local Administration (DLA) and the Ministry of the Interior (MOI) in 1999 (MOE, 2015; MOI, 2016).

There are currently Child Care Centres in every sub-district, with certain sub-districts possibly having two or three Child Care Centres. Despite these advancements, disparity in educational investment has remained among Thai households (DLA, 2015; UNICEF, 2021). According to the National Statistical Officer (1999), as reported in Pattaravanich et al. (2005: 563), ‘children in urban areas continue to be advantaged over their rural counterparts in terms of educational attainment, and rural families continue to report economic constraints as among the most serious barriers to school continuation for their children’.

In Thailand, poor educational access continues to be a severe challenge, particularly for children living in remote rural regions. Parents often struggle to pay for additional school costs, such as transportation and uniforms. (Lakin and Gasprini, 2003; MOE, 2015). Rural educational institutions often lack learning resources, which is worsened by a teacher shortage. Furthermore, the government struggles to appropriately fund these groups.

Due to the fact that advantaged young children have a higher number of chances to acquire and interact with educational materials related to their development and learning, they display stronger improvement results. In contrast, children residing in remote rural areas continue to endure disproportionate economic and resource disadvantages, resulting in a lack of various educational possibilities. (Kantabutra and Tang, 2006; Prasartpornsirichoke and Takahashi, 2013; Villa and Knutas, 2020) and diminished consequences. Early childhood learner attendance at CDCs has expanded substantially in recent years, owing to an increase in the number of working moms. (Ministry of Public Health (MOPH), 2011). Conversely, UNICEF (2006: 7) states that “the quality of Thailand’s education that is provided to all children equally is a major concern due to discrepancies in the provision of education quality between urban and rural areas”.

The Northern region was mainly occupied by hill tribes, a minority ethnic group; in the mountainous regions where they dwell, tribe members had restricted access to essential amenities like education and health. Several of them lack a feeling of national identification due to their isolation in remote places (UNICEF, 2021); complicating matters is a lack of access to public services. For the purpose of this research, these underprivileged children lack access to adequate care and education due to two distinct factors. Firstly, as Dowding (2015) and UNESCO (2016), children in their early years are initially cared for by senior family members. Many working-age people of tribal ancestry migrate to the city in search of a basic income through labour or other menial work in order to avoid poverty in rural hill areas and the available very low-wage work. This research demonstrates that those responsible for young children do not speak standard Thai at an acceptable level and lack the necessary knowledge and understanding to nurture them.

The remoteness of hill settlements and the lack of appropriate roads make it more challenging to offer good education services and recruit suitably educated instructors to teach rural young children (UNESCO, 2016). The Child Care Centres is the only educational institution in these rural communities that provides education and skill development activities for three to five-year-old children. Education is maintained inside the Centres by reliance on local administrations, which are supervised by the Department of Local Administration, Ministry of Interior (Gongphet, 2018). Despite this, local government officials are uninterested in issues involving service determination and growth control (Pattaravanich et al., 2005; Taecharungroj, 2014; Pesses, 2018).

Interestingly, child caregivers who provide learning experiences for young children must understand strategies to understand child educational management and be able to construct all their curriculum-derived knowledge in order to develop instructional principles, learning opportunities, and activities directed at enhancing child development, while also evaluating children's development and learning. When dealing with underprivileged young children, using locally sourced materials and resources should provide them with opportunity to participate entirely and reach their full potential. It is critical that child caregivers have the necessary qualifications to do their jobs properly and to prevent having a negative influence on young children (Bruce, 2011).

This study aims to shed light on rural Child Care Centres operations by examining practitioners' daily behaviours related to the creation and supply of opportunities for disadvantaged young children living in rural areas. Thus, it aims to better understand childcare providers' views in relation to the primary concerns and obstacles they experience in carrying out their duties, allowing for the formulation of policy insights.

METHODOLOGY

This study used a qualitative method and contained a description of the processes utilized to collect data; this included interviews and observations. Qualitative research approaches are the best revealing source of data gathering (Richards, 2003; Jackson, 2013). This study aimed to gather and analyze data from interviews and observations using these qualitative approaches. Besides that, the data analysis approach, as well as transcription, interpretation, and resolving of validity problems (Creswell, 2014).

3.1 Sample

Twelve Child Care Centres were identified by purposeful sampling out of a total of 163 Centres in the stated area. Purposive sampling was employed to choose a representative sample of the case study participants that would enable the author to respond to the research questions (Ritchie et al., 2013). Therefore, the child caregivers were impulsively participated in this study by the selected Child Care Centres which were 23 child caregivers in total. The author intended to analyze child caregivers' viewpoints and day-to-day activities in order to determine the usefulness of their practice in fostering the growth and learning of poor children in rural Child Care Centres in Thailand.

3.2 Instrument

The author acquired data for this study using interviews and observations since this was determined to be the most successful technique for reaching out to and comprehending participants in terms of their specific thoughts and behaviours (Silverman, 2013). The data were collected directly from child caregivers in terms of their perceptions of knowledge and understanding of early childhood development and learning; there own specific role working in remote Child Care Centres and the barriers they face and how they self-describe their achievement. To guarantee reliability and validity, two research methodologies were utilized to investigate phenomena in-depth, namely interviews and observations, with the purpose of amassing rich data and acquiring a better understanding of childcare providers' performance in relation to employment in rural Child Care Centres. In this case, triangulation of data collection approaches aided the author in accurately analyzing the phenomena under inquiry (Cohen, Manion and Morrison, 2007; Silverman, 2010).

3.3 Data analysis

The author copied verbatim all interview material from the audio recording and then did a theme analysis (Cohen et al., 2011). The author reviewed and re-read transcribed interviews numerous times using an inductive approach to data processing. As Marshall and Rossman (2006: 158) suggest, ‘reading, rereading and rereading through the data once more forces the researcher to become intimately familiar with the data’. The author reviewed and re-read the transcripts and field notes to familiarize herself with the complete rich data set before proceeding with their coding organization. The interview data were examined by concentrating on meaning, this included coding and interpretation of meaning (Kvale, 2007: 104).

In terms of observation, data from field notes were analysed to corroborate the information gathered during the interviews. Meanwhile, the author presented the observation data objectively, in accordance with Ki's (2013: 197) recommendation that research observations should be presented in a way that enables them to 'speak for themselves. After that, the author employed a thematic analysis technique to analyse the primary data from interviews and observations. Additionally, data analysis was performed in accordance with the study's aims and research questions. The research questions guided the development of a matrix of themes.

FINDINGS

Rural locations’ distinct features provide issues for the Child Care Centres. The interview questions primarily sought to receive a broad understanding of the child caregivers’ perception of their general routines and the problems facing directly related to their instructions. The observation assisted to gather data which apparently confirmed the interview data as well as that were more impacts on their practices. The findings were organised around three major matters: (1) child caregivers' perspectives of their duties and contributions; (2) the efficacy of child caregivers' routines; and (3) the barriers to their performances.

Firstly, the investigation found that child caregivers' perceptions of their position included an acknowledgement of many responsibilities toward young learners. Disadvantaged young learners were assessed to have less possibilities for proper parental care and limited access to learning materials in their home setting. Therefore, practitioners were not only there to teach the young learners, but also to execute a variety of functions associated with preparing them for higher education and adopting future work-social-family circumstances and obligations. Additionally, they defined their responsibilities that comprise their broader area of practice centred on promoting the growth and learning of poor young learners. They perceived themselves as being protector, facilitator, caregiver, investigator, volunteer and also good model for the young learner alongside their daily routine see Table 1.

Table 1 *The number of child caregiver’ perception according to their daily performance (N=23)*

	Protector	Facilitator	Caregiver	Investigator	Volunteer	Good model

Child Caregivers	20	17	16	7	11	5

One of the most interesting research results from this ethnographic study is that practitioners initially did not perceive themselves as instructors; rather, their self-reflective practice assumed multiple roles as mentioned for the young learners that extended beyond what was describable (for them) as solely educational provision. Table 2 shows the child caregivers' further quotations from the interviews, which accord with their perception.

Table 2 *The further quotations from child caregivers related to their perception*

Roles	Further explanations
Protector	"I am really concerned about the safety of my students which is a top priority for me, and hence consider myself to be a protector."
Facilitator	"I would describe myself as a facilitator since I am responsible for preparing a variety of learning materials throughout my teaching time."
Caregiver	"I feel that these disadvantage young children need suitable care and development according to their age."
Volunteer	"Being responsible for educating young children who live in areas with limited educational options is my voluntary responsibility, and I am committed to providing them with a variety of learning chances."
Investigator	"This student lives with his grandparent, his father has a new family, and his mother abandoned him when he was quite little. He was quite misbehaving and required my attention."
Good model	"I offer them excellent care and seek to be a good role model for them in order to prepare them for future education and good behavior."

These tasks of child caregivers in the Child Care Centres are to make a significant difference for these remote young learners, which they saw as a major duty in order to improve the learning opportunities and proper care to these underprivileged young children

In addition, practitioners recognized that their effectiveness was dependent on two factors. External help in the form of parental and community partnership and a foundation of parental trust are both required. According to their own accounts, child caregivers received more support from parents and communities than was normally available from local government. Second, caretakers emphasized internal support via the educational system, which included strategies for training sessions. The training courses, they claimed, updated their expertise and gave them with useful techniques to employ in their classrooms. They acknowledged that engaging approaches, both those shown during training and those created from their own experience and creativity, clearly influenced learner engagement. As a consequence, child caregivers developed their own methods for imparting knowledge. By examining the terminology used in their reactions and conceptual formulations, it is reasonable to conclude that caregivers did not discuss the young learners' objectives in terms of formal education;

even so, practitioners classified practice efficiency in terms of how they dealt with challenges that affect their preliminary practice and the educational achievements of early childhood.

Finally, child caregivers' performance was recognized as being impacted by workload and language limitations. In terms of workload, practitioners indicated that in addition to their standard tasks of delivering teaching and service to young learners and administering the Child Care Centres' fundamental operations, they had been assigned additional duties by the local government. Another obstacle to their approaches was a language issue, since many young leaners resided in distant areas where their ethnic languages were preserved. On the other hand, their families acquire competence in standard Thai in terms of facilitating their children's future academic and professional chances. Despite this, parents spoke with their children in their original languages, and learners' only choice for acquiring Thai was to attend Child Care Centres. Consequently, practitioners are expected to include both languages into their classroom training to facilitate language acquisition while also developing wider abilities.

DISCUSSION

This study aimed to address a gap in the current empirical literature on Thailand's early childhood education program in relation to rural Child Care Centres in terms of child caretakers' daily behaviours. A true grasp of the causes and obstacles described in the study results that affect child caregivers' performance would offer a significant opportunity for local governments to pay closer attention to the needs and concerns of rural child caregivers. As Henly and Adams (2018), policymakers have placed a greater emphasis on the critical role of high-quality early childhood education and care in promoting the holistic development of low-income children. Early care and education of the highest quality may occur in various settings, including child care facilities, early childhood programs, and other home-based care options.

In addition, this study attempted to aid rural practitioners who have received little attention from policymakers or academic researchers to far. As a result, child caregivers need to have their working circumstances emphasized and explained, and it is critical for local governments to address this in order to acquire a true knowledge of practitioners' situations. This is necessary because practitioners working in rural educational institutions face a shortage of learning resources while being expected to provide the same level of education and care to underprivileged young learners as practitioners working in urban areas in fully resourced centers with adequate budgets and materials. This finding was consistent with Hannaway et. al. (2018), who asserted that rural schools were suffering from a severe shortage of resources, including instructional aids, learning materials, books, educational toys, stationery, classroom equipment, and outdoor equipment.

5.1 Contribution of the study

This study expands our knowledge of hill tribe young children's education in connection to the performance of child caregivers working in rural centres. The practitioners pledge to work in these regions to improve the life prospects of those learners, based on the view that those learners should have access to high-quality education and care. Nonetheless, their teaching and care were delivered in the face of numerous obstacles, including a lack of educational materials, language issues, mixed-age children, and workload pressure during the day, all of which interfered with the instructors' ability to deliver core and discretionary activities necessary for the development of early years students' essential skills. Likewise, this study contributes to our understanding of high-quality education and care for hill tribe young children by examining the creation of accessible cultural identity into learning activities in order to provide opportunities for early childhood students to learn from their own special and unique culture.

Particularly, child caregivers realized that their responsibilities as educators in rural Child Care Centres with disadvantaged learners extended beyond educational offering. Additionally, child caregivers mentioned their duties not only provided education and care but also highlighted diverse types of duties such as being protector, facilitator, dedicator, investigator, and good model throughout their performances to suit the demands of the young learners. Bishop (2021) reports that rural children often lack resources and services, such as high quality of care and education. Therefore, the educator must deliberately invest in children regardless of where they reside in our state. Quality early childhood care and education are crucial for the continued viability of towns like Scottsbluff. They offer secure learning settings for children while their parents are at work and teach them the required like skills necessary. Additionally, the practitioners shifted parents' perspectives to emphasize the importance of early childhood education, as the parents were members of isolated and impoverished hill tribe communities, the majority of whom were dedicated to finding work and frequently lacked a cohesive sense of national identity. As a result, these parents were usually frightened of accepting essential government services and were unaware of the benefits of the education system for their children.

The child caregivers undertake to work in these regions to improve the life prospects of those learners, based on the view that those learners should have access to high-quality education and care. Nonetheless, their instruction and care were delivered in the face of numerous obstacles, including a lack of learning materials, language barriers, mixed-age children, and work overload during the day, all of which interfered with the instructors' ability to deliver core and discretionary activities necessary for the development of early years students' crucial skills. Furthermore, this investigation contributes to our understanding of quality education and care for hill tribe young children by investigating the incorporation of accessible cultural identity into learning activities to increase access for early years students to discover their own special and unique culture.

5.2 Practical contribution

This study also improves knowledge of best practices in early childhood education by measuring the efficacy of child caregivers' daily performances. They emphasized the procedures involved in providing early childhood education and care and how these practices influenced young students' learning results. One of the most important variables influencing child caregivers' practices was the collaboration of local communities and learners' parents. The practitioners made an effort to develop positive relationships with local communities and parents, and as a consequence, often gained more support than the local government. As per Glass, Bynner and Chapman (2020) report, rural schools have been revealed to have greater generational connections than urban schools, by way of parents and teachers who grew up together and community cohesiveness outside of school that enables parents and teachers to engage informally.

The analysis additionally shows that when faced with inadequate learning supplies and inadequate funding from local governments, practitioners did not abandon their responsibilities but instead sought external assistance to satisfy obligations for providing education and care for early years students. As per Bishop and Gore (2021) suggest, to satisfy the needs of rural children and families, government must overcome the lack of early care and educational resources.

In terms of teaching and learning sessions, practitioners improvised activities while making proper preparations and adaptations, such as introducing indigenous items into classrooms and bringing learners visiting communities for educational objectives. Child caregivers acted constructively each day, based on the context and materials available to them. As previously stated, child caregivers performed their tasks in rural educational institutions situated in remote areas, and these institutions usually lacked a variety of learning tools. These factors had a constant impact on the child caregivers' daily performance in the area of early childhood education and care. The results from interviews and observations of their roles and behaviors indicated that they provided excellent assistance for young learners.

RECOMMENDATIONS AND FUTURE STUDIES

This section makes many suggestions in light of the gaps observed by the author in this study that need more examination. This study aimed to shed light on child caregivers' contributions to the growth and education of poor young learners. The study, therefore, gathered data from the child caregivers. In addition, the future study is needed to uncover the parents' perceptions on their children's growth and learning after their attendance at the local child care centres.

Although the study collected data from both child caregivers and educational officers, the study appeared to focus exclusively on the dimensions of practitioners' performance as a result of the factors and challenges associated with delivering education and caring for underprivileged young learners. Data collection and analysis may be completer and more insightful in a future study if parents can be included as a participant group; such research might poll their perspectives. Parents' impressions might be studied similarly to practitioners' performances, providing a holistic picture of the issues experienced from several viewpoints.

CONCLUSION

The primary objective of this research was to examine child caregivers' daily behaviors, knowledge, and understanding of disadvantaged young children's growth and learning in rural Child Care Centres in Northern Thailand. The young learners in issue were from hill tribal settlements located in Thailand's remote and mountainous Mae Hong Son Provinces. The consequences of educational resource shortages were examined and the primary elements and obstacles affecting child caregivers' performance.

Poor early childhood educational achievement has been directly connected to the structural economic disadvantages encountered by parents (Arnold and Doctoroff, 2003; Ready, 2010). Due to financial precarity and dispossession, parents prioritized finding work above sending their young children to school; young children, on the other hand, were likely to need sufficient care and education to compensate for their spatial, economic, and cultural capital disadvantages. This research demonstrated that child caregivers wanted to carry out their responsibilities cautiously, using their knowledge, understanding, and abilities to ensure that disadvantaged young learners had a sufficient education and care.

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PROMOTING THE EMOTIONAL AND SOCIAL INTELLIGENCE OF EARLY CHILDHOOD BY IMPROVING STUDENT-TEACHER PERFORMANCE THROUGH THE COLLABORATIVE LEARNING PROCESS

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ABSTRACT

This research aims to study the performance of students, teachers in collaborating on the design of activities promoting emotional and social intelligence of early childhood, to compare cooperative learning management performance in the collaboration of teacher students. In designing activities promoting emotional and social intelligence of early childhood and to study student satisfaction in cooperative learning management in the collaboration of teacher students. In design, the activity promotes the emotional and social intelligence of early childhood. The samples used in this research were 30 early childhood education students, a selection of purposive samplings based on the researchers' own decisions, since the researchers were the professors responsible for the subject and taught first-year students in the second year, the tools used in the research, namely the learning management plan, course names the organizing emotional and social intelligence skills for early childhood. The assessment of student learning performance and satisfaction questionnaires on the use of collaborative teaching processes. The statistics used to analyze this data include frequency, percentage, average, and standard deviation. The results showed that 1) students achieved higher academic achievement than before class by organizing collaborative learning activities, with 33.56 percent increase in scores, and when individually considering students' pre-school and post-study scores, they were found to have higher academic achievement after participating in all cooperative learning activities. In designing activities promoting the emotional and social intelligence of early childhood as a whole, at the highest level ($\bar{x}$ = 3.88, S.D. = 0.18) 3). Students had the highest level of satisfaction with the use of the cooperative teaching process of early childhood teacher students ($\bar{x}$ = 3.68, S.D. = 0.39).

Keywords: Promoting, Emotional and social intelligence, Performance, Collaborative learning processes

PRINCIPLES AND REASONS

Early childhood needs to be developed holistically in terms of intelligence skills, especially emotional and social intelligence, which improves the quality of life for children to be able to live with others in a successful and happy society. Early childhood must be able to understand the feelings of others, control their feelings, as well as their expressive behaviors, in order to be able to live well with friends and other people. Children need to learn to learn together with others. (Goodman, Joshi, Nasim and Tyler, 2015), psychologists and educators have made it a priority during the first year of humanity to develop growth throughout their lives. For humans to be complete in terms of emotional and social development must be trained in terms of emotional fundamentalism from a young age with the attention and support of adults. Basic practice in the basics of emotions. Support for emotional control and reinforcement are all behaviors that early childhood children should be trained in (Garbenis, Geleziniene and Siauciulyte, 2020).

Early childhood education management in Thailand focuses on children learning and growing to their full potential, focusing on developing children in various skills, including emotional expression. Feelings, including improving step-learning skills and building good relationships with those around you. Early childhood development in the aforementioned direction early childhood teachers are important figures who will determine the direction. In developing children properly with an understanding of the science of early childhood education. Primary school teachers must have appropriate knowledge and strategies in order to organize teaching and learning activities that help develop. Emotional and social intelligence skills for early childhood in the right direction (Padadopoulou et al., 2014). Cultivation of proper character traits according to the rules of society. Children will be able to adapt better to others and learn their roles. The fact that children behave socially inappropriately, such as being aggressive, irresponsible, self-centered, etc., will make it difficult for them to adapt to others and may cause further violence in the future. On the other hand, if a child is trained to cultivate appropriate behavior in accordance with the rules of society, it will result in the child being able to adapt to others and learn the role of Self to be a good member of society. Social development for children of this age must train children to trust others when coexisting, working and playing with others, having a responsibility to work with others, to understand the agreement. Rules to train children to be patient are waiting for their own chance to learn to listen to others and admire Others (Dhani and Sharma, 2016; Gershon and Pellitteri, 2018).)

Developing young teachers to be knowledge-ready is essential skills in organizing teaching activities which are the main obligation of the Faculty of Education in order to cast teacher students to be ready to go out and face situations in the future of quality work. Teacher performance is essential to performing the work in the teacher profession to achieve efficiency and birth. Effectiveness for learners Preparing teacher students to adhere to the values and ideals of true teacherhood will help them go out and perform their duties with dignity, along with the state establishing a 20-year national strategy focused on recruiting quality, talented and good people, having competitiveness and innovation (Ministry of Education, 2017). Improving student-teacher performance will rely solely on lectures, let alone classrooms, not enough to encourage these teacher students to acquire skills. Knowledge, capabilities and performance in key areas continuously and efficiently. The cooperative learning process is a common learning method, a method of teaching that focuses on students to perform tasks in small groups. By members of a diverse group. Work together to strengthen each person's learning abilities. There is a mutual and mutual help to achieve the goals set out (Basta, 2011), combining the learning of the content of the subject, combined with the development of teamwork skills by developing knowledge-based skills in theory, along with jointly designing activities that are consistent with the principles of conduct to benefit the learner, which gives students the skills, thought processes and decisions to choose the right and diverse information. Learning (Kanchana, Chatupun, 2017) And be able to transfer this collaborative work skills process to their learners in the future.

Early childhood needs to be developed holistically in terms of intelligence skills, especially emotional and social intelligence, which improves the quality of life for children to be able to live with others. A successful and happy society. Early childhood must be able to understand the feelings of others. Control your feelings and your behavior in order to be able to live well with friends and other people. Children need to learn to learn together with others. Follow the rules and show your intention to do your activities (Ozwe, Hamarta and Deniz, 2016; Rodrigues and Machado, 2019). The education management course in Thailand focuses on children learning and growing to their full potential. The focus is on developing children in various skills, including emotional expression. Feelings, including developing primary learning skills and building good relationships with those around you. Early childhood development in the aforementioned direction Early childhood teachers are important individuals who will determine the direction in which children develop properly and appropriately with an understanding of the science of early childhood education. Primary school teachers must have the right knowledge and strategies in order to organize teaching activities that help improve emotional and social intelligence skills for early childhood in the right direction. (Padadopoulou et al.,2014). Therefore, the author is interested in researching the promotion of emotional and social intelligence of early childhood by developing the performance of teachers through a collaborative learning process to improve the performance of teachers to be ready to go out as complete teachers in the future and guide the development of teacher performance in other areas.

Research Objectives

1. To study the performance of students, teachers, in collaborating on the design of promotional activities. Emotional and social intelligence of early childhood
2. To compare collaborative learning management performance in the collaboration of students, teachers in designing activities promoting emotional and social intelligence of early childhood.
3. To study student satisfaction in collaborative learning management. Student Teacher In design, the activity promotes the emotional and social intelligence of early childhood.

Research Framework

The researchers had the following conceptual framework:

Promoting the emotional and social intelligence of early childhood	⇨	Student-teacher performance through collaborative learning process

HOW TO CONDUCT RESEARCH

1. Target audience

The target group used in this research is 60 students in Early Childhood Education, Faculty of Education, Suan Sunandha Rajabhat University, who are studying in year 1, semester 2, academic year 2019, 60 students enrolled in ECC1306, organizing emotional and social intelligence skills activities for early childhood. This research stereotype is semi-experimental research. Quasi experimental research is a selection of purposive samplings, which is a selection of samples based on the decisions made by the researchers themselves, since the researchers are the professors in charge of the subject and teach the first-year students in the second class.

2. Research tools

1. The tools used to collect data in this research study are divided into three categories: 1. Learning Management Plan, Course ECC1306 provides emotional and social intelligence skills for early childhood using a collaborative approach for 10 weeks. 4 times, 2. Student-Teachers' Learning Performance Assessment And 3. Satisfaction Questionnaire on the Use of Collaborative Teaching Process by authors to create and test the quality of research instruments by qualified people. 3 persons who are experts in teaching educational research and specializing in measuring and evaluating studies. Check content integrity, then take it to the IOC value and improve the tool to make it more efficient.

3. Data collection

In this research, the researchers conducted in the second semester of the 2020 academic year with the following sequences:

1) The researchers assessed the learning management performance of teacher students using an assessment form created by the researchers and checked the quality before experimenting on their own because they were instructors in the course.

2) The researcher conducted an experiment on the learning management process in cooperation with the student teachers according to the plan. learn created In the second semester of the academic year 2019 for 10 weeks

3) After the researcher completed the 10-week experiment, the researcher assessed the learning management competency of the student teachers after the experiment by using the same assessment form as before.

4) The researcher used the satisfaction questionnaire on using the collaborative teaching and learning process for students to evaluate.

5) The scores obtained from the assessment of the student-teacher's learning management competency and the satisfaction questionnaire on the use of the collaborative learning process were analyzed by statistical data.

FINDINGS

Promoting the emotional and social intelligence of early childhood by improving student-teacher performance through a collaborative learning process. The authors analyzed three points:

Point 1: Comparing knowledge about promoting emotional and social intelligence of early childhood children who have been organizing school activities through a collaborative learning process

Table 1 percent difference in pre-school and post-school achievement scores by promoting emotional and social intelligence of early childhood children who have been organizing school activities through a collaborative learning process.

Student	achievement		difference in achievement	Percentage of score difference before and after school
	Pre-school grades (30 score)	after school grades (30 score)		
1	12	22	10	33.33
2	15	23	8	26.67
3	14	25	11	36.67
4	16	26	10	33.33
5	10	27	17	56.67
6	12	26	14	46.67
7	11	28	17	56.67
8	9	20	11	36.67
9	20	26	6	20.00
10	16	25	9	30.00
11	17	22	5	16.67

Table 1 Percent Difference in Pre-School and Post-School Achievement Scores by Promoting Emotional and Social Intelligence of Early Childhood Children Who Have Organized School Activities Through a Collaborative Learning Process (continued)

Student	achievement		difference in achievement	Percentage of score difference before and after school
	Pre-school grades (30 score)	after school grades (30 score)		
12	12	24	12	40.00
13	10	20	10	33.33
14	11	19	8	26.67
15	14	20	6	20.00
16	13	25	12	40.00
17	13	22	9	30.00
18	11	21	10	33.33
19	13	23	10	33.33
20	11	25	14	46.67
21	10	27	17	56.67
22	10	20	10	3.33
23	11	20	9	30.00
24	10	19	9	30.00
25	13	19	6	23.33
26	14	21	7	43.33
27	11	24	13	43.33
28	15	23	8	26.67
29	12	21	9	30.00
30	15	26	11	36.67
average	12.70	22.97	10.27	33.56
S.D.	2.52	2.75	-	-

From Table 1, students had an average pre-school score of 12.70 and an average score after class of 22.97 when considering the percentage of pre-school and post-study score differences. It was found that students achieved higher academic achievement than before classes by organizing cooperative learning activities, with a 33.56 percent increase in scores, and when individually considering their pre- and post-study scores, they found higher academic achievement after participating in collaborative learning activities.

Point 2: Analysis of learning management performance of early childhood teacher students

Table 2 Averages and standard deviations of learning management performance of early childhood teacher students through cooperative learning activities

List of students' learning abilities	$\overline{X}$	S.D.	interpretation
1. Have a knowledge of principles, concepts, theories.There's a subject matter of course	3.85	0.20	the most
2. Have courage and expression in the way take care of a matter	3.94	0.16	the most
3. A group process was used to correct the problem. Problem like that Creative	3.93	0.14	the most
4. There is a process of thinking, analyzing facts. Before you bring in the data. Present	3.79	0.23	the most
5. Recognize and understand other people's feeling Here.	3.85	0.20	the most
6. Be positive and mature. Emotions and Society That's right.	3.90	0.11	the most
7. Teamwork with others and know recognize one's duty when work as a team work.	3.94	0.16	the most
8. have a good relationship with one's classmates School	3.79	0.23	the most
9. be responsible for one's duties	3.95	0.18	the most
10. Expressing skill. Cooperate.	3.87	0.17	the most
Total	**3.88**	**0.18**	the most

Table 2 presents the most overall learning management performance of early childhood students (X = 3.88 and S.D. = 0.18). Second, students have the courage and expression of problem management, and 7 students work as a team with others and know their duties when working as a team.

Point 3: Analysis of satisfaction levels on the use of collaborative learning processes of early childhood teacher students

Table 3 Standard Averages and Deviations of Satisfaction Levels towards The Use of Learning Activities through a Collaborative Learning Process

list	$\overline{X}$	S.D.	satisfaction level
Teaching Operations			
1. Guidelines for teaching and learning in cooperation with student	3.74	0.44	the most
2. There is a notification of the purpose. Like the subject area and activities learning	3.78	0.41	the most
3. Documents for lectures are submitted in advance.	3.57	0.50	the most
4. Lecture documents consistent with the objectives and lesson plans	3.91	0.28	the most
5. There is an introduction to learning resources that students can go to research more	3.91	0.28	the most
6. There is a clarification of the measurement and evaluation criteria.	3.91	0.28	the most
7. The teacher has a strong sense of being able to explain the content of the course comprehensively	3.70	0.47	the most
8. Teachers have a step-by-step teaching process. and easy to understand	3.65	0.48	the most
9. Teachers use a variety of learning support materials.	3.91	0.28	the most
10. Teachers assess learners' learning during the course organize teaching activities	3.55	0.34	the most
11. The teacher clarified the shortcomings. and can give advice on how to study appropriately	3.51	0.34	the most
12. Teachers have a teaching method that encourages learners to want to learn.	3.58	0.33	the most
In terms of teaching and learning management that focuses on learners as important			
13. Teachers provide flexible and responsive teaching student needs	3.63	0.48	the most
14. Instructors organize teaching and learning that allows learners to participate effectively create	3.55	0.53	the most

Table 3 Averages and Standard Deviations, Satisfaction Levels towards The Use of Learning Activities through a Collaborative Learning Process (continued)

list	$\overline{X}$	S.D.	satisfaction level
15. Teachers provide opportunities for learners to exchange knowledge with each other and each other in the knowledge gained, such as organizing group activities and discussions together in class	3.53	0.51	the most
16. When there is a group activity The teacher introduces the roles and duties of Each member of the group clearly	3.61	0.41	the most
Total	**3.68**	**0.39**	**the most**

Table 3 presents students' satisfaction levels towards the use of collaborative learning processes, with data analysis showing that students have the highest level of satisfaction (X=3.68, S.D.=0.39). Article 5: There is an introduction of learning resources where students can go to further research. Article 6: Measurement and

evaluation guidelines are provided, and article 9: Instructors use diverse learning supports. The satisfaction score is at its highest level.

DISCUSSION THE RESULTS

From the analysis of the results of the study on promoting emotional and social intelligence of early childhood children by developing student teachers through an umbrella learning process. The authors discussed the results as follows:

1.Students have higher postsecondary scores than before classes by organizing cooperative learning activities, with students achieving higher academic achievements. This is due to the fact that students have been collaborating with their peers. Who are their own classmates who are already intimate. Cooperative learning management is an event in which the instructor emphasizes that the learner is responsible for the assignment. Promote group work skills Learn about their roles and roles.Trained in interpersonal relationship skills, practiced critical thinking skills, and communicated with group friends and classmates in presentations, in line with research by Soraj Saenkham (2017:1506), who conducted research on the development of cooperative literacy with LT techniques that achieved the achievement of science subjects of 6th graders, finding that students who studied with the LT cooperative learning activity series had significantly higher learning achievements than before classes.

2.Students have the highest level of learning performance through cooperative learning activities. The author, as a course instructor, has given students a division of work. And when students come in for consultation, the author is allocated time and consultation at every turn, and students learn the processes and methods for solving problems that arise on their own. There is a clear expression of teamwork skills. In line with Panpilai Sriaporn et al. (2015: 91), researched cooperative literacy results on skills and perception of female teaching performance after the birth of nursing students. Year 4 showed that the performance scores of primary students were held higher in cooperative learning activities than before they were held.

3.Students are most satisfied with the use of the collaborative teaching process because they have taken action on their own activities. Learning is exchanged between classmates, with the author as an instructor only designing activities, consulting and facilitating them. The authors observed the behavior of students through cooperative learning arrangements. Found that students enjoy organizing group activities with their friends. Happy to learn, dare to comment. Friendly language communication with friends in the group, including when it's time to present. Students are not shy in any way. Students, on the other hand, share topics in presentations, and classmates listen and discuss when the authors open up opportunities, which makes the atmosphere of teaching fun and students satisfied at the highest level, with the findings consistent with Patcharaporn Inrirai and Thawalrat Samrit (2016: 694). Research has been conducted on the study of academic achievement and student satisfaction from collaborative learning by grouping academic achievement in measurement and measuring instruments in industrial applications. The results showed that the learners were most satisfied. On the issue of exchanging ideas with friends in the group during activities. Students feel free thinking.

RECOMMENDS FOR FUTURE RESEARCH

1. Students should study other aspects of their performance using this approach to education to develop students and enhance the collaborative learning skills that underpin social living.

2. Students should be able to reflect on their learning from participating in collaborative learning activities so that the authors can be informed of the student's opinions and can be applied in other subjects.

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