



THE IMPACT OF STRATEGIC HUMAN RESOURCE
MANAGEMENT ON THE PERFORMANCE OF TECHNOLOGY
ENTERPRISES

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Dissertation submitted as partial requirement for the conferral of
MSc. in Business Administration

Supervisor:
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November, 2022

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Abstract

With the changes of the times, the progress of science and technology, and the intensification of competition, human resources have become an important part of the core competitiveness of enterprises. Strategic human resource management has also become a very important part of business management, especially in technology companies. There are also many empirical tests on the positive impact of strategic human resources on firm performance. This article will obtain information and data through field research and questionnaire survey, and use SPSS for data analysis. This thesis will analyze and examine the impact of a mix of strategic human resource management practices on firm performance and will compare the strategic human resource management of technology and non-tech companies. Proper innovative human resource management can have a positive impact on business performance, while conservative bureaucratic human resource management can have a negative impact on business performance. Finally, based on the research results, this paper will make relevant recommendations on how to formulate and implement human resource strategies and how to improve corporate performance.

KEY WORDS: Strategic human resource management, Technology company, SPSS

JEL CLASSIFICATION: M12

Resumo

Com as mudanças dos tempos, o progresso da ciência e da tecnologia e a intensificação da concorrência, os recursos humanos tornaram-se uma parte importante do núcleo de competitividade das empresas. A gestão estratégica de recursos humanos também se tornou uma parte muito importante da gestão empresarial, especialmente em empresas de tecnologia. Há também muitos testes empíricos sobre o impacto positivo dos recursos humanos estratégicos no desempenho da empresa. Este artigo obterá informações e dados por meio de pesquisa de campo e levantamento por questionário, e utilizará o SPSS para análise de dados. Esta tese analisará e examinará o impacto de uma combinação de práticas de gestão estratégica de recursos humanos no desempenho da empresa e comparará a gestão estratégica de recursos humanos de empresas de tecnologia e não tecnológicas. Uma gestão adequada e inovadora de recursos humanos pode ter um impacto positivo no desempenho do negócio, enquanto uma gestão conservadora e burocrática de recursos humanos pode ter um impacto negativo no desempenho do negócio. Finalmente, com base nos resultados da pesquisa, este artigo fará recomendações relevantes sobre como formular e implementar estratégias de recursos humanos e como melhorar o desempenho corporativo.

PALAVRAS-CHAVE: Gestão estratégica de recursos humanos, Empresa de tecnologia, SPSS

CLASSIFICAÇÃO JEL: M12

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1.Introduction

1.1Background

Strategic human resource management is a human resource management model formulated by an enterprise according to its strategy(Devanna, Fombrum&Tichy, 1981). There are many human resource management experts around the world who have studied various aspects of the strategic human resource management field. Strategic human resource management has advanced from the study of individual employees to the study of the entire enterprise. With the progress of the times, human resource management is becoming more and more important in enterprises, and entrepreneurs and scholars are also paying more and more attention to the management and research of human resources. Strategic human resources have been developed in this context and are now gradually approaching maturity.

Strategic human resource management can be adjusted according to the company's overall strategy and internal conditions, can be closer to the company's strategic goals, and ultimately make greater contributions to the company's strategic goals(Wright&Mcmanhan,1992). The fundamental purpose of enterprise management is to improve enterprise performance, so enterprises should formulate a strategic human resource management mechanism according to the strategic goals of the enterprise, and apply strategic human resource management to every level of the company. If a company wants to formulate a strategic human resource management system suitable for the company's development, it must first understand the impact of strategic human resource management on corporate performance.

Enterprise performance mainly means the operating efficiency of the enterprise. This benefit is used as a calculated standard for a certain period, including more

content, mainly producing efficiency, asset operating level, amount of profitability, and subsequent development capacity(Compell, 1997). The objects studied in this article refer only to corporate performance. This indicator is critical to the development of the company, maintaining high-performance levels can improve the competitiveness of enterprises. The establishment of a sound corporate system, it is possible to enhance the performance of the company's performance, and these measures depend on the field of human resource management(Dyer&Reeves, 1995).

The core of the company's development is the company's organizational strategy. If human resource management can better fit the company's strategic goals, and thus improve the performance of the enterprise, then the status of human resource management in the enterprise will be improved. Since the advent of the strategic human resource management theory, many human resource experts have carried out research on the relationship between human resource management and enterprise performance. The research shows that the company formulating a suitable strategic human resource system according to its strategy can better improve the work efficiency and work potential of employees, and help the company gradually achieve its strategic goals. Therefore, many companies have adopted the strategic human resource management mechanism to improve the enterprise's performance.

Now we have entered the era of the knowledge economy. The role of talent in the development of enterprises cannot be underestimated, especially knowledge-based employees such as technology. At present, the social competition is fierce, and technology-based enterprises must improve their core competitiveness. To achieve sustainable development, it is necessary to attach importance to the elements of talent, strengthen human resource management, and build a strategic human resource management system through development strategies and organizational plans. Elevate human resource management to the level of corporate strategy, participate in the

formulation and implementation of corporate development strategies, improve the overall business level of the workforce with scientific and reasonable human resource management strategies, and gain competitive advantages for the company.

In the era of the knowledge economy, enterprises need highly educated, knowledgeable, and high-quality talents. Especially in technology-based enterprises, the demand and competition for such talents are even fiercer. However, compared with other enterprises, many technology-based enterprises There are still have many deficiencies in the concept and system of human resource management(Feng, Xie&Tan, 2014).

1.2 Objective

This paper mainly studies the impact of strategic human resource management on the enterprise performance of technology-based enterprises, which is conducive to strengthening the macro-coordination ability of technology-based enterprises. Make the development direction of strategic human resource management clearer, and put forward suggestions and reference basis for the formulation of strategic human resource strategy of technology-based companies.

1.3 Research scheme

1. Collect information by questionnaire, field research and network.
2. Literature review method. By sorting, consulting and analyzing the literature, this paper deeply understands the research status of the relationship between strategic human resource management and enterprise performance, and constitutes a systematic literature review. Referring to the existing research methods, this paper constructs specific research ideas.
3. Expert interview method. Go deep into specific companies, interview

managers and employees at all levels, collect a large number of data on the successful implementation of strategic human resource management to promote enterprise performance, and bring some enlightenment to other enterprises on the premise of detailed analysis.

4. Qualitative analysis. This paper qualitatively expounds on the theory of strategic human resource management, and the theory of enterprise performance and studies the relationship between them.

2. Literature Review

In the face of increasing competition, enterprises need to constantly tap the various resources they own and use these resources to create higher value. Almost all enterprises regard employees as the most valuable resource. However, in the practice of many enterprises, the human resource management department is regarded as a department that deals with trivial matters and does not create additional value for the enterprise. In this context, the human resource management department of the enterprise urgently needs to prove its importance. It needs to be proved in both theoretical and empirical areas that human resource management can have a positive impact on enterprise performance. Therefore, the contribution of human resource management to enterprise performance has always been a core issue in the field of human resource management.

In the past few decades, the American management academia has conducted in-depth research on the strategic management of organizations and proposed a variety of strategic management models (Miles & Snow, 1978; Porter, 1980). Under this trend, the field of human resource management has also begun to think about how it can be integrated into enterprise strategic management. Since the 1980s, the research direction of human resource management has undergone a great change, from the original micro-oriented (such as the impact of employee behavior and attitude) to Macro-oriented, that is, strategic orientation. This corporate strategy orientation is often referred to as "strategic human resource management".

In the 1980s, strategic human resources management had been defined as a human resource management activity that closely integrates corporate strategy and human resources (Devanna et al., 1981). This theory believes that by closely integrating human resource management with corporate strategy, human resources can better improve the core competitiveness of enterprises. Although the theory of strategic human resource management has been continuously improved since entering the era of knowledge economy, the relationship between strategic human resource management and enterprise performance has not been conclusive.

2.1 Theoretical Research

Wright & McMahan published a study in 1992 and declared that the future strategic human resource management must solve two primary problems. The first is to distinguish the difference between strategic human resource management and traditional human resource management. The role in the management, such as what kind of management activities to participate in the enterprise management.

Schuler (1992) defined strategic human resource management as the use of integration and adaptation to ensure that human resource management is in line with the organization's business strategy and strategic needs. And make human resource policies consistent with organizational policies. In addition, The work of human resource management should be adjusted and revised, so that employees and managers of the organization can participate in it. Schuler also believes that strategic human resource management has five connotations (5P), namely HR Philosophy, HR Policy, HR Plan, HR Practice, and HR Process.

Wright & McMahan(1992) believe that there are four ways to think about whether human resource management can create a competitive advantage for an organization. First, to create a lasting competitive advantage for an enterprise, human resources must provide value for the enterprise, and the enterprise needs a heterogeneous labor supply Second, if the abilities of individuals are normally distributed, then high-quality talents must be scarce. If enterprises want to hire good talents and retain these talents, they need an attractive human resource management system. In addition, Wright & McMahan believes that if we want to maintain a competitive advantage, human resources must be non-transferable, and the competitive advantages created by human resources cannot be easily imitated. Finally, if it is to be called a source of competitive advantage, the resources must be irreplaceable. Technology is likely to be replaced, and human resources are the source of lasting competitive advantage.

In 1995, Dyer and Reeves conducted a study on the existing relationship between human resource management practices and performance, proposing the use of

employee output, organizational output, financial/accounting output, and marketing output to measure firm performance. They believe that human resource management practices will first affect employee output, then employee output will affect organizational output, organizational output will affect financial output, and finally market output and overall company performance. Based on this theory, they put forward the human resource value chain model.

In 1998, Becker and Huselid perfected the HR value chain model based on the research of Dyer and Reeves. Becker and Huselid believe that the design of human resource management system is the booster of enterprise development. The human resource management system can also affect the work performance of employees from the aspects of employee motivation, skills, work content and work methods, which in turn have a positive impact on the efficiency and interests of the enterprise.

Later, Ferris and others further improved the human resource management model of Becker and Huselid. They added factors such as culture and corporate climate into the new model to further analyze the positive impact of SHRM on enterprise performance. But as more variables are added to the new model, the relationship between strategic human resource management and firm performance becomes more ambiguous.

In 1997, Paauwe and Richardson improved the original model again. After this, the research on strategic human resource management has become more refined. They believe that strategic human resource management behaviors such as recruitment, training, and incentives will trigger HRM effects such as employee enthusiasm and employee loyalty, which will have a deeper impact on enterprise performance. At the same time, enterprise performance will also have a positive impact on human resource management. For instance, the improvement of enterprise performance will promote the renewal and improvement of human resource management mechanisms.

In 2001, Wright and Snel published a paper to verify that through strategic human resource management, companies can influence employees' perceptions, guide employees' behavior, and improve corporate performance.

In 2007, Zhao Shuming's research believes that strategic human resource management can enhance the core competitiveness of the organization by cultivating the abilities and values of employees who meet the company's requirements and thus improve enterprise performance. In the same year, Yang Hong's research showed that strategic human resource management will change the characteristics of an enterprise's labor force and shape the enterprise's innovation culture, enhance the enterprise's knowledge creativity, improve enterprise performance.

Purcell & Hutchinson (2007) pointed out that the key to the impact of human resource management on enterprise performance lies in how human resource management practices affect employees' attitudes and behaviors, improve employee performance, and ultimately benefit the enterprise. The response of employees to strategic human resource management is particularly important, which can clearly reflect the transformation mechanism between strategic human resource management and enterprise performance. Therefore, some researchers advocate that the impact of strategic human resource management on employee performance should be more explored (Wright & Boswell, 2002; Purcell & Hutchinson, 2007).

In 2008, Wei Liqun and others believed that strategic human resource management can form a development-oriented corporate culture within the enterprise by adapting and coordinating with the overall strategy of the enterprise, thereby improving enterprise performance.

In 2009, Song Dian and others believed that strategic human resource management needs to create a good innovation atmosphere within the enterprise, encourage employees to innovate on products and services, and actively promote the strategic goals of the enterprise.

In 2011, Li Xuefeng and Jiang Chunyan, based on institutional theory research, believed that under different competitive and policy environments, the role of strategic human resource management on corporate performance would have different effects. They also added the practice analysis of employee participation management based on the original research and perfected the influence mechanism of strategic human resource management on enterprise performance again.

2.2 Empirical Research

Early empirical research on strategic human resource management is basically the study of the relationship between a certain human resource management policy or practice such as compensation and firm performance. Since the mid-1990s, more and more scholars in the field of human resources have begun to study the relationship between human resource management systems and corporate performance from an empirical direction.

Arthur's (1994) study of 30 U.S. steel companies shows that "control" HRM has higher productivity, lower turnover, and scrap rates than "commitment" HRM.

Huselid and Backer in 1996 explored the impact of employee selection, employee training and development, and performance management on firm performance. After controlling for the industry, enterprise scale, sales growth, etc., this study concludes that the strategic human resource management practice system can bring a great improvement to the enterprise performance, and each employee can bring the enterprise an average of an additional value of \$4,000 brings an additional value of \$18,000 to the market. In 1994, Huselid surveyed 968 U.S. trading companies and compiled the data to obtain the average standard deviation of growth. Each employee can generate \$2,700 worth of corporate sales growth and \$18,641 in added value to the market.

In 1990, Earhart and Milkovich surveyed 200 companies and concluded that the return on corporate assets is positively related to performance bonuses; performance-based pay affects individual and corporate performance more than base pay. If a company's compensation and performance correlation ratio are high, then the company's performance is better.

MacDuffie's (1995) study of 62 auto assembly plants in 16 countries shows that

the adoption of "innovative human resource management practices" can improve assembly efficiency and quality. (1997) conducted a study on 36 production lines of the same process in 17 steel companies in the United States and found that "innovative human resource management systems" were associated with higher labor productivity. In conclusion, multiple empirical studies from different industries demonstrate that effective human resource management can have a positive impact on enterprise performance.

In 1993, Terpstra and Rozell explored the relationship between employee recruitment sources, selection of test validity, cognitive ability tests, structured selection process, and weighted application forms and selection activities, and their relationship with corporate performance. There is an obvious positive correlation between the completeness of selection activities and profitability, profit growth rate and corporate performance.

In 1996, Delaney and Huselid published research that the impact of strategic human resource management on enterprise performance is mainly reflected in: First, the knowledge and skills of employees. Through training, employees can acquire knowledge and skills that match the position of the enterprise. Second, the incentive mechanism. Enterprises must have appropriate incentive mechanisms to ensure employees' work enthusiasm and work efficiency. The third point is the enterprise system. A reasonable enterprise system can regulate employees' work style, improve work efficiency, and finally have a positive impact on enterprise performance.

Although numerous studies have shown that an effective human resource management system is positively related to business performance. But there has been a lack of a widely accepted theoretical framework between the two. In recent years, the focus of strategic human resource management research has turned to the operation mechanism of the human resource management system, that is, how human

resource management can improve enterprise performance. From the perspective of empirical research, this is a process of finding and confirming mediating variables.

A study by Wright et al. (2003) on 50 independent business units within the same food enterprise group showed that human resource management can affect employees' commitment to the organization and there is a positive correlation between organizational commitment and corporate performance. Yongdt & Snell (2004) took intellectual capital (including human capital, organizational capital and social capital) as the mediating variable between human resource management system and enterprise performance, and the results confirmed the mediating effect of intellectual capital. Collins & Smith's (2006) research on high-tech enterprises shows that commitment-based human resource management practices can cultivate a social atmosphere of mutual trust and cooperation within the enterprise. This atmosphere promotes the improvement of enterprise knowledge exchange and integration capabilities, thereby increasing the enterprise sales growth and profits from new product development.

Even though the theory of strategic human resource management has been developing continuously, the core question of this theory has always been how strategic human resource management affect the performance of enterprises. Scholars have been analyzing the relationship between the two from different perspectives and levels, and through empirical research to test the positive impact of strategic human resource management on corporate performance. Although the relationship between strategic human resource management and corporate performance has been verified many times, the "black box" role between the two remains to be further explored (Becker & Huselid, 2006; Wright & Mc Mahan, 2011; Kou Yue and Jia Zhiyong, 2013). From an observational point of view, sometimes there is no obvious causal relationship between human resource management activities and business results. If

human resource management does have an impact on enterprise performance, then, through what mechanism does the impact occur? What are the results of the effect? How do these results change under different backgrounds or environmental factors? The answer to these questions is to try to Clarify the relationship between human resource management and business performance. These theoretical foundations are just different perspectives on this relationship. In future research, on the one hand, how to further design empirical research based on these theoretical foundations to verify it will be a direction worth working hard; Theoretical analysis and empirical testing are the keys to integrating these theoretical foundations.

So far, there is still a lack of specialized human resource management research for technology-based enterprises. Wu Min (2021) believes that there are a large number of knowledge-based employees in technology-based enterprises, and they are more concerned about their own development. Enterprises should integrate employees' personal development vision into corporate development strategies, build a strategic human resources management system, and provide employees with a good development platform, so as to stimulate the development potential of employees and achieve a win-win situation between enterprises and employees. In the human resource management of scientific and technological enterprises, there are problems such as backward human resource management concepts, unscientific personnel recruitment and selection mechanism, unreasonable salary distribution, and lack of effective incentive mechanisms. It is necessary to establish a strategic human resource management framework for scientific and technological enterprises and establish a perfect human resource management system.

During the discussion, this paper will analyze the impact of strategic human resource management on enterprise performance from a theoretical level, and conduct empirical research through questionnaires. This paper will compare the differences

between technology companies and non-technology companies, and thown out suggestions about strategic human resource management to companies, especially to technology companies.

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3. Theoretical Analysis

The purpose of strategic human resource management is to play a positive role in business performance and business development. In past research on strategic human resources using various theories, it is generally believed that strategic human resources can affect company performance. The main affected part is the company's financial performance and strategic objectives. This paper will make rational use of the existing research results for theoretical analysis, and deeply analyze the mechanism of strategic human resource management on enterprise performance.

3.1 The main factors affecting the performance of enterprises

When a corporate evaluates its performance, there are usually many factors that affect its performance.(Latham & Wexly, 1981) By collating existing research and findings, we have sorted out the following major factors that affect corporate performance:

1. Human resource cost

Human resource costs are the funds used to acquire, use and maintain human resources. Human resource costs include three elements: First, the acquisition cost. This part of the cost includes the cost of recruiting the required employees and the opportunity cost of being discarded because of recruitment; the second is the use cost. Include employee salaries and benefits; the third cost is turnover cost. Turnover costs include the cost of rehiring employees and the cost of laying off employees as they leave. The higher the cost of human resources for a company, the more the corporate overall cost becomes. If the cost of human resources is reduced, the overall cost of the enterprise will be saved, and the income of the enterprise will increase.

2. Market orientation

The market positioning of an enterprise includes many aspects such as customers, competition and internal collaboration. In today's business environment, competition among businesses is becoming increasingly fierce. If an enterprise wants to gain a firm foothold in the current business environment, it must establish its own core strategy and improve internal collaboration. Collect the latest market information as much as possible, understand customer needs, be market-oriented, and develop products that are popular in the market to lead the market. Therefore, enterprises need to constantly adjust their business strategies and marketing methods according to the needs of customers, so as to avoid the loss of customers. This is a business model that is strategically adjusted according to customer needs. Moreover, by mastering the market environment, enterprises can also be the first to enter profitable market segments, seize market opportunities and avoid peer competition. In general, market orientation affects all aspects of firm performance.

3. Independent innovation capability of enterprises

With the development of science and technology and the continuous advancement of the information age, the importance of knowledge-based employees in enterprises is constantly increasing. The competition between enterprises has gradually evolved into the competition of knowledge-based and high-quality talents. Therefore, an excellent human resource management system has become more important. In an era of rapid technological development, it has become extremely important to create an independent innovative enterprise that can constantly adapt to the new environment. To create an innovative organization, it is necessary to cultivate the self-learning ability of the organization and all members. The improvement of the self-learning ability of the enterprise and its members can obtain the following advantages: (1) The employees of the enterprise can continuously learn new skills and

knowledge, so that Improve work efficiency; (2) By mastering the latest information and technology, the company can better complete independent innovation, update and iterate products, adapt to market requirements, and improve core competitiveness; (3) Obtain the latest market information to meet market demand; (4) Through technology and service innovation, customer satisfaction can be improved. Establish a better brand image; (5) Form a good corporate atmosphere, so that employees are willing to contribute to the goals of the company. So as to promote the rapid development of enterprises.

4. Business Process

The business activities that an enterprise conducts in an orderly manner according to the design in order to achieve the set goals are called business processes. Business processes have great significance for the overall operation of an enterprise. The optimization of enterprise process can reduce the operating cost of the enterprise, strengthen the enterprise's adaptation to the market, improve the enterprise performance, and finally achieve the enterprise's strategic goal.

3.2 The role of SHRM on enterprise performance

Based on the above analysis and the human resource value chain model(Paauwe and Richardsonz, 1997), we can summarize the analysis model of the role of strategic human resource management on enterprise performance, as shown in Figure 3-1.Strategic human resource management is the decision-making based on corporate strategy. The five most important policies of strategic human resource management are: selecting, employing, cultivating, motivating and retaining. Strategic human resource management can improve the quality, knowledge and skills of employees; strategic human resources can also improve the organizational atmosphere, the

company's cultural system and so on. Whether it is the impact on the individual or the impact on the organization, it will affect the productivity of employees. The efficiency of employees mainly includes task performance and situational performance. Character performance refers to the efficiency and service quality of production activities carried out by employees under enterprise requirements. Contextual performance refers to employee behavior and satisfaction, as well as customer loyalty. Corporate performance mainly includes financial indicators and non-financial indicators.

The solid line in the figure represents a conduction mechanism, while the dashed line represents a coordinating mechanism.

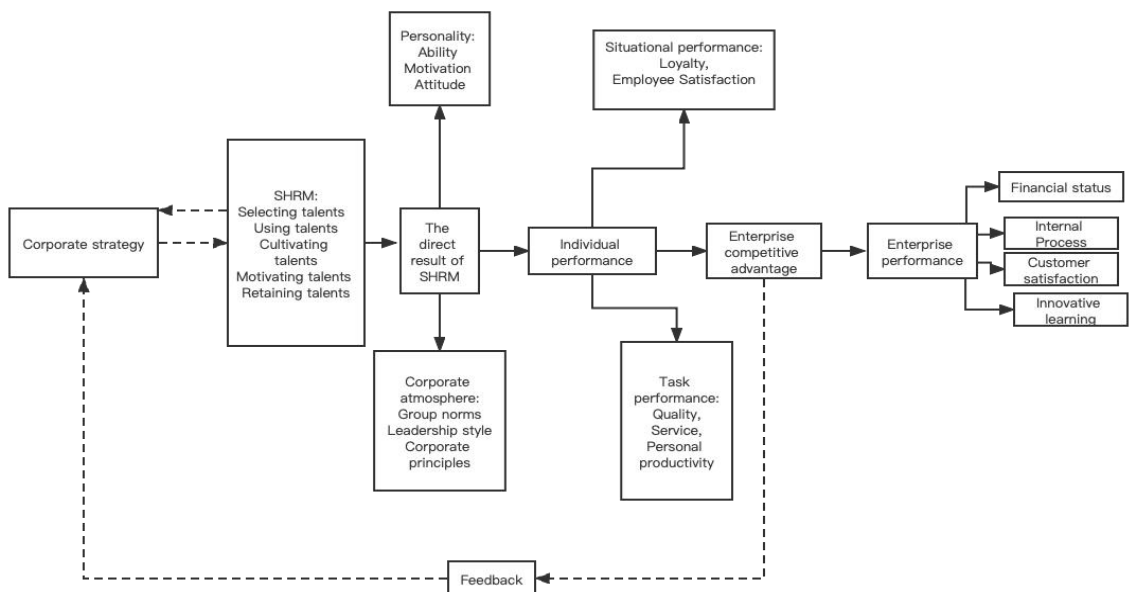


Figure 3-1

Enterprises must make full and rational use of important resources to establish and maintain core advantages. Human resource is also an important resource of an enterprise, and human resource management is also in line with the characteristics of an enterprise's own use of important resources. Enterprises should plan the human

resource management system from the strategic level, so as to gain competitiveness in the market and create higher performance. Managers should understand the abilities of employees and formulate human resource management policies that can improve the efficiency of employees, and ultimately improve the efficiency of the enterprise.

To sum up, the core competitiveness of the enterprise in the market can be improved by formulating a strategic human resource management mechanism that conforms to the characteristics of the enterprise, and thus has a positive impact on the enterprise performance.

3.2.1 The Conductivity of SHRM

SHRM is a management approach that achieves the purpose of improving business performance by managing employees and organizations. Figure 3-2 shows the transmission of SHRM to enterprise performance.

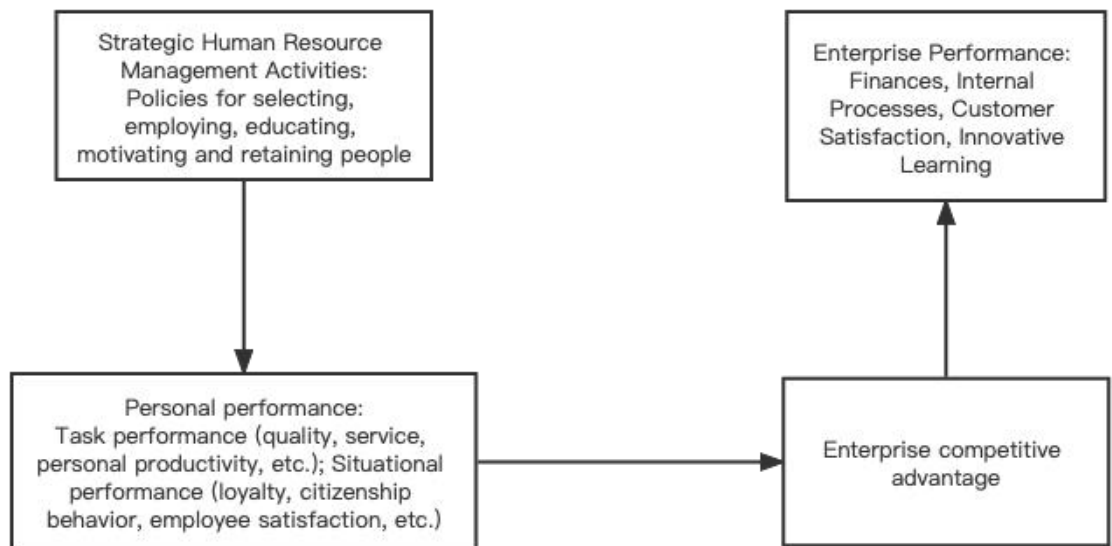


Figure 3-2

(1) Strategic human resource management activities

The enterprise obtains the employees that the enterprise needs through recruitment and selection. After recruiting new employees, the company will conduct training for new employees, so that new employees can adapt to the environment of the company more quickly, integrate into the corporate culture, cultivate values that fit the position, and master the skills required by the position; for the old employees that the company needs, The company will give reasonable compensation and benefit system to keep them. Companies can also increase their productivity by motivating them. However, the premise of motivating employees is that enterprises have professional training methods and a fair assessment mechanism. This is the personal trait aspect of the employee. The organizational climate of a company is also affected by many factors. Such as salary system, communication mechanism between superiors and subordinates, work design.

(2) Strategic Human Resource Management Activities—Personal Performance

An employee's personal performance is mainly affected by the employee's personal characteristics and organizational climate. The personal characteristics of employees include factors such as their ability, character, motivation, values, attitude, etc. The sum of all employees' personal performance will directly determine the performance of the enterprise. The organizational climate is mainly determined by the rules and regulations and management style, which indirectly determines the performance of the enterprise. Enterprises must establish a sound management mechanism. The organizational climate and work environment are then adjusted based on the overall performance of the employee. These aspects can positively guide employees, thereby improving their individual performance.

(3) Personal Performance—Enterprise Competitive Advantage

A firm's competitive advantage is determined by several factors: product cost and

quality, firm-specific assets and technology, barriers to deter competitors, and greater investment of resources. Maintaining and improving the work efficiency of employees and improving their service quality have a great effect on maintaining the company's competitive advantage. At the same time, the company also needs to keep employees satisfied with the company's atmosphere and benefits. When employees are more satisfied with the company, they will be more loyal to the company, thereby saving a lot of human resource costs and establishing the company's brand image. To sum up, the competitive advantage of a company will have a positive impact on the performance of the company.

(4) Enterprise Competitive Advantage—Enterprise Performance

Competitive advantage is enterprises' characteristic. The competitiveness of the enterprise is large enough to form an advantage, so this advantage is unique. The greater the advantage of the enterprise, the more resources it has, and it can gain a greater competitive advantage and seize more market share. After an enterprise obtains a competitive advantage, it can further increase resources and increase investment through the profits obtained, so as to continuously ensure its own competitive advantage and achieve sustainable development of the enterprise.

3.2.2 The Coordination between SHRM and Enterprise Strategy

Through the analysis and adaptation of the enterprise strategy, and the coordination with the enterprise's competitive advantage, the strategic human resource management has formed a mutual adjustment mechanism with the enterprise strategy. When designing a strategic human resource management system, first of all, it should be based on the overall strategy of the enterprise. The main significance of

strategic human resource management to corporate strategy is as follows:

(1) By providing the basis for the enterprise to formulate the strategy, make the enterprise strategy more accurate and effective;

(2) Guiding the direction of corporate strategy formulation;

(3) Coordinate and promote the implementation of corporate strategies;

(4) Through the continuous opposition to the corporate strategy, the corporate strategy can be updated dynamically.

Therefore, participating in the formulation of corporate strategies is one of the important functions of strategic human resource management. The traditional human resource management does not have this function.

With the rapid development of economy and technology, knowledge has become an important part of enterprise development. Market competition is also increasing. The advantages that companies have are also in a precarious state. Therefore, when making strategies, enterprises need to understand the internal and external environment and grasp its characteristics and changes, and strengthen SWOT analysis. These jobs also fall under the category of strategic human resource management. Put forward rationalization suggestions to make strategy formulation more targeted. When an enterprise formulates its strategy, it should also consider the human resource status of the enterprise. In the analysis of the overall human resource situation of the company, the structure and situation of knowledge and skills can be taken into account and incorporated into strategy formulation and adjustment. In addition, a company's strategy should always be in a dynamic process, adapting as the company's specific circumstances change. The strategies of companies in different periods of development are often very different, and even need to be re-engineered. The implementation of the strategy of the enterprise must have the participation of talents, so the strategy formulation of HRM should also be adapted to the corporate strategy.

3.3 The impact of SHRM on enterprise performance at individual level

This part of the process is based on individual employees for human resource management. The whole process has the following three stages:

(1) Before recruitment

Before recruiting, the human resources department should first make human resources planning according to the overall situation of the enterprise, then design the job positions and work content, and make a talent demand list according to the designed work content. The operation of an enterprise requires the maintenance and promotion of suitable talents. Under the appropriate human resource management mechanism, the work ability of employees will also be improved, and the self-worth will be improved. In addition, it is necessary to set reasonable incentives and punishments to maintain a positive and good atmosphere within the company, so that the enthusiasm of employees can grow faster; the human resources management department also needs to conduct job analysis and job design. According to the practical experience of many companies, if employees work in a more coordinated team, employees will be more productive, the quality of products and services will be higher, and the ability to change with changes in the external environment will also be stronger. Doing so also ensures product quality and reduces business costs. Finally, job analysis and job design can also keep employees in good working order and improve employee satisfaction with their jobs, thereby retaining talent. Generally speaking, the strategic human resource management of the enterprise plays a particularly important role in the enterprise strategy.

(2) Recruitment

Employees have a huge impact on business performance. Therefore, companies

need to pay special attention to their employees. When choosing employees, companies should not only consider their work ability, but also their values and other qualities, so as to maximize their contribution to the company. In order to select the right employees, the human resource management department needs to design a rational process to recruit talents through careful steps. A successful recruiting effort can save a business many operating costs. If the recruited employees do not meet the job requirements, the company needs to spend more recruitment costs, training costs and dismissal costs. Recruited employees can only create value for the enterprise if they match the employees required by the enterprise.

(3) After recruitment

Enterprises need to train newly recruited employees so that they can adapt to their job functions as soon as possible and master the essentials of work. At the same time, the salary of employees will also directly affect their work efficiency. A reasonable salary system will make employees feel recognized and stimulate their enthusiasm for work. Therefore, employees can make greater contributions to the improvement of corporate performance while pursuing their own interests. The performance appraisal system should limit the interests of employees according to their contributions, which can improve the work efficiency of employees and create a fair corporate culture.

3.4 The impact of SHRM on enterprise performance at firm level

The influence of strategic human resource management at the enterprise level is mainly reflected in the fact that it can provide reference for the formulation of enterprise strategies. The strategy formulated in this way can make good use of the existing human resources of the enterprise and make the strategic goals of the enterprise closer to the current situation of the enterprise . This is the impact of

strategic human resource management at the enterprise level. In the early days, the human resource management department was just a department that managed the trivial affairs of the enterprise. Its job function is to carry out some basic management of employees according to the strategy formulated by the enterprise, and has little impact on the enterprise strategy. With the development of strategic human resource management theory and the progress of the knowledge era, more and more enterprises have begun to adopt strategic human resource management, and the role of human resource management department cannot be ignored. In today's era, knowledge-based talents are the key to forming the core competitiveness of enterprises. This theory proves that if an enterprise wants to implement its strategy successfully, it must play the role of strategic human resources. The role of strategic human resources can also help companies achieve strategic goals. This effect is bidirectional. The formulation and implementation of the entire strategy need to refer to the current situation of talents, management and other aspects of the enterprise.

As shown in Figure 3-3

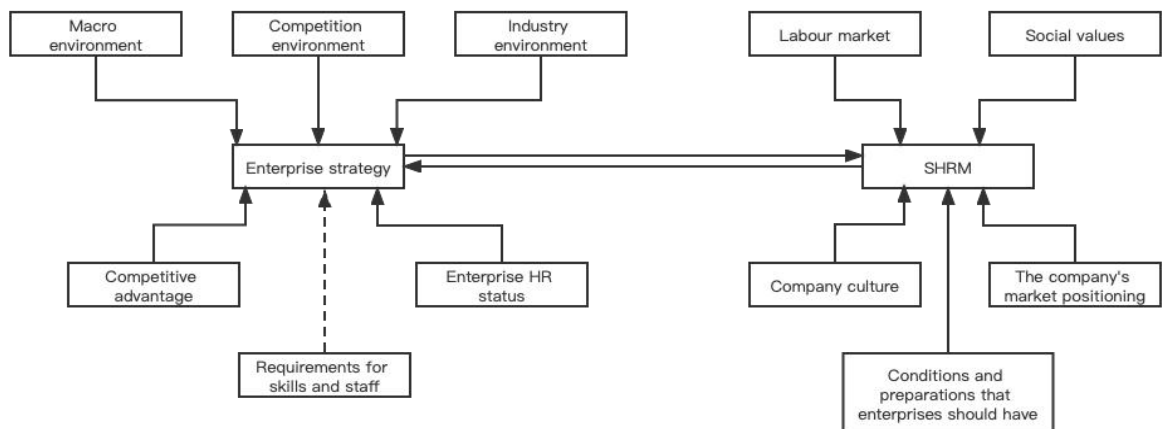


Figure 3-3

The importance of knowledge-based talents is becoming more and more prominent in this era of knowledge economy. The status of strategic human resource

management in enterprises has gradually improved. The abilities and values of employees of an enterprise directly determine their behavior and also affect the efficiency of the enterprise, which will have a great impact on the ultimate strategic goal of the enterprise. Therefore, we can say that the potential and development level of an enterprise are directly controlled by human resources. Enterprises should formulate appropriate human resource strategies based on market demands and their own human resources. This is the role of strategic human resource management at the enterprise level. Through these functions of strategic human resource management, the performance of the enterprise will be positively affected, and the overall competitiveness will be enhanced.

3.5 Current Situation and Problems of HRM in Technology companies

At present, the human resource management model of technology enterprises, especially small and medium-sized technology companies, has not completely escaped the shackles of traditional human resource management models(Hanting Fang,2004). The traditional human resource management model is difficult to adjust according to the internal and external environment and corporate strategy of the enterprise, and it can make little contribution to the strategic goal of the enterprise. In order to maintain a long-term competitive advantage and gradually develop and grow, small and medium-sized technology enterprises must establish a strategic human resource management model suitable for the enterprise(Yi Yang, 2017).

(1) Insufficient understanding of the importance of human resource management

Most technology companies cannot truly recognize the irreplaceable role of strategic human resource management in the overall strategy of the enterprise. They often regard capital and technology as the only driving force for development. All the

activities of the enterprise revolve around introducing technology and absorbing capital, while human resources are not regarded as one of the important resources required for enterprise development.

(2)The human resource management system is not complete enough

Many entrepreneurs try to formulate various human resource management systems and try to implement them. However, from the perspective of the human resource management system of many technology-based enterprises, more basic management is centered on the strategic development and rules and regulations of the enterprise. For example, employees are restricted in terms of employee attendance, reward and punishment system, salary distribution, work rules, etc. Such a management method is difficult to improve the enthusiasm of employees, and naturally it is difficult to maintain the competitive advantage of the enterprise.

(3)Lack of SHRM coordinated with corporate strategic planning

With the changes in the market environment, many technology-based companies have begun to focus on introducing strategic management. However, due to the weak concept of human resources as the primary resource, most small and medium-sized technology companies have not formulated corresponding human resources when formulating corporate strategies. The management strategy matches it.

(4)Insufficient staffing of human resources management department

Under the dual effects of lagging concepts and unbalanced human resource strategies, technology-based enterprises lead to unclear functional positioning of human resource management departments, unscientific human resource management mechanisms, and few professional human resource managers.

(5)The salary system and incentive mechanism are unscientific and imperfect

In terms of human resource incentives, quite a number of technology-based companies rely solely on material incentives, and they overemphasize the pragmatic

concept that employees are motivated to work for the purpose of obtaining material rewards. The incentive measures of technology-based enterprises are more arbitrary, and it is difficult to mobilize the enthusiasm of employees and realize the self-worth of employees, resulting in the failure of personal and corporate performance to improve.

(6)Lack of talent training mechanism

Most technology-based enterprises have not formed a systematic and continuous training mechanism that matches the enterprise development strategy. On the whole, the training of employees is still mainly based on actual work training, lack of professional training, and the training content is mainly based on the emergency needs of the enterprise.

(7)The corporate culture is immature

Many technology-based enterprises have low human resource quality and corporate management concepts, do not realize the importance of corporate culture construction to human resource management, and ignore the cultural identity and value identity of employees. As a result, companies cannot unite human resources through a positive corporate culture. Condensed to the strategic goals of the company, so as to achieve the coordination and unity of personal goals and corporate goals.

4. Empirical Analysis

4.1 Indicator System and Model Designing

(1) Design of SHRM indicator system

A suitable strategic human resource management system can have a huge positive impact on the work efficiency of an enterprise. As long as the enterprise managers make reasonable plans according to the actual situation of the enterprise and the status quo of human resources, and formulate a strategic human resource management system suitable for the development of the enterprise according to the enterprise strategy, can continuously improve its core competitiveness in the process of future enterprise development.

In recent years, scholars from all over the world have studied the theoretical model of enterprise strategic human resource management in many different ways and perspectives. They divided strategic human resource management into many different indicators, and analyzed the impact of these indicators on enterprise performance. In general, the specific indicators of strategic human resource management are: human resource planning, job analysis and design, recruitment, employee training, performance management, compensation management, human resource policies and regulations, labor relations. Protocols and research subjects are different, so the final conclusions are also different.

Based on the research of scholars, this study selects the following indicators for the analysis of strategic human resource management: human resource planning, job design, recruitment, training, performance management, compensation and benefits, and excitement.

(2)Design of Enterprise Performance Indicators System

In the past, the measurement of enterprise performance was mainly based on simple financial indicators. With the progress of theoretical research, some non-financial indicators have entered the ranks of measuring enterprise performance. Based on the research of Quinn (1988), Cameron & Quinn (1999), Wu Jinfu (2008), this study summarizes the evaluation indicators to measure enterprise performance.

Summary of indicators of enterprise performance

Dimension	Variable	Reference
Finance	Financial target achievement rate	Quinn (1988); Cameron & Quinn (1999); Wu Jinfu (2008)
customer	Customer satisfaction	
Internal process	Product and service quality Employee absenteeism and attrition rate	
Learning and innovation	New product development speed	

The basic requirement of enterprise development is to have stable financial income, which is also the most intuitive performance of enterprise performance.

Customers' perceptions and satisfaction with a business have a huge impact on a business. Enterprises should not only be good at self-analysis, but also be good at understanding the needs of customers and looking at problems from the perspective of customers. Customer satisfaction will directly affect the sales and operation of the enterprise, so it can also be listed as an important indicator of enterprise performance evaluation.

The internal optimization of the enterprise also affects the performance of the enterprise. Whether an employee is recruited or resigned, it will affect the internal work process of the company, and at the same time need to pay a lot of recruitment and resignation costs. The absenteeism rate of employees also affects the normal operation of the enterprise. Employee turnover will also be detrimental to the

company's development in the industry. Therefore, the rate of employee absenteeism and turnover also directly affects the performance of the company.

To improve customer satisfaction, the quality of products and services is a fundamental and important factor. Enterprises must have qualified products and services in order to have sufficient competitiveness in the industry and to improve their performance by satisfying customers. Therefore, the quality of products and services is also an important factor in evaluating the performance of an enterprise.

With the advancement of science and technology and the advancement of the knowledge era, the innovation ability of enterprises is particularly important. Only with strong innovation ability can we always have market competitiveness in the development of enterprises. In addition, enterprises also need to continuously introduce new products and services according to changes in the market and competitive environment to meet the increase in customers and changes in customer needs. Therefore, the innovation ability of enterprises and the speed of changing new products and services can also become important indicators for evaluating enterprise performance.

(3) Model designing of the impact of SHRM on enterprise performance

Based on the above analysis and past research in the field of comprehensive strategic human resource management, this paper summarizes the following model(Figure 4-1).

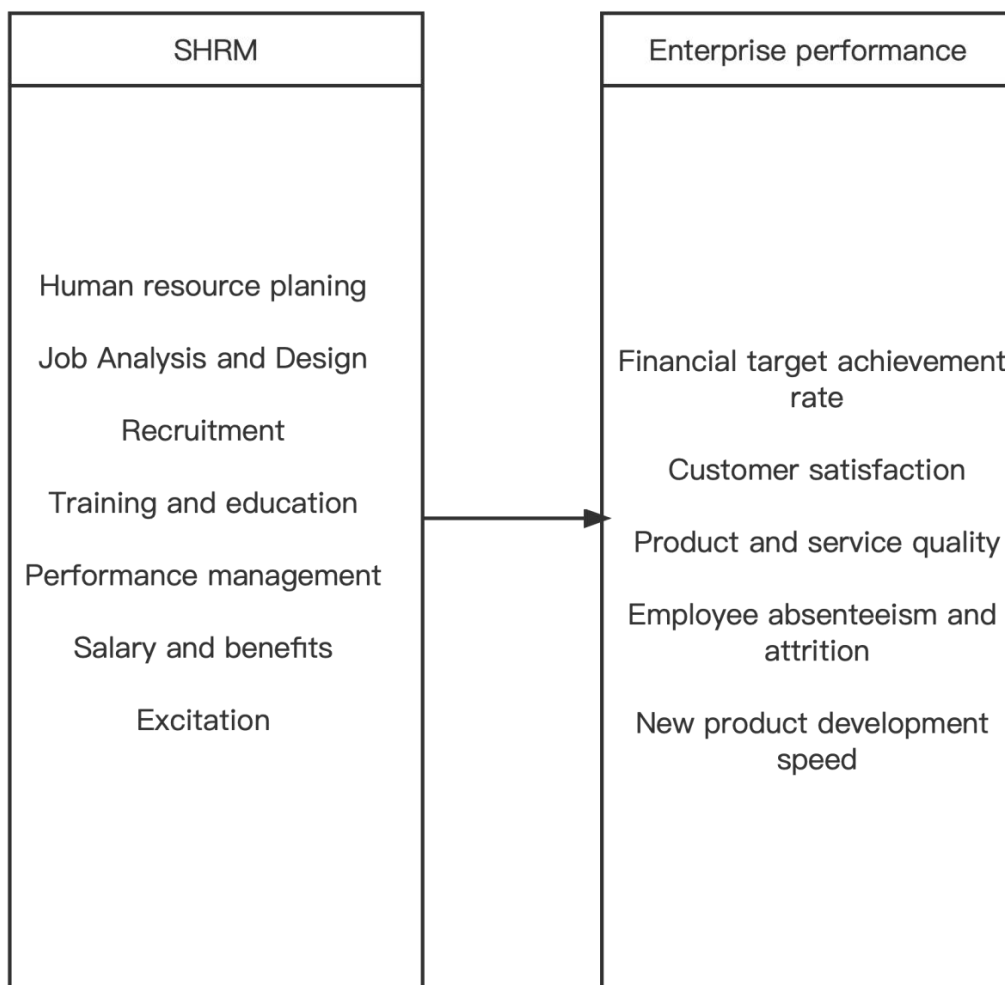


Figure 4-1

4.2 Questionnaire design and distribution

(1) Questionnaire Design

Before this, many strategic human resource management experts have done a lot of questionnaires in the research of enterprise performance, which has been relatively mature in this aspect. Therefore, on the basis of collecting and sorting out the

questionnaires of previous scholars (Becker & Huselid, Arthur, Delaney, Jiang Chunyan, etc.), this paper makes some slight changes.

This questionnaire will be divided into three parts. The first part is the collection and classification of the basic information of the enterprise, the second part is the investigation of the internal human resource management mechanism of the enterprise, and the third part is the investigation of the enterprise performance.

The relationship between strategic human resource management and enterprise performance has been proved by a lot of research. However, because everyone adopts different evaluation indicators, and the number of indicators is large, it will cause a lot of errors. In this paper, factor analysis will be carried out on the indicators taken, and finally the comprehensive indicators will be analyzed and further analyzed. In addition, this article will compare technology companies and non-tech companies, analyze the advantages and disadvantages of technology companies relative to non-tech companies, and make recommendations.

(2) Questionnaire distribution

The sample of companies used in this study came from cities such as Lisbon, Portugal, Beijing, China, and Guangzhou, China. These samples include companies of various natures and the industry environments in which they operate. Due to the limitations of the research and investigation process in this paper (restriction of research level, time and space), I distributed questionnaires through the Internet and collected a total of 202 copies. The following basic information was obtained from the questionnaires(Figure 4-2).

Type of companies

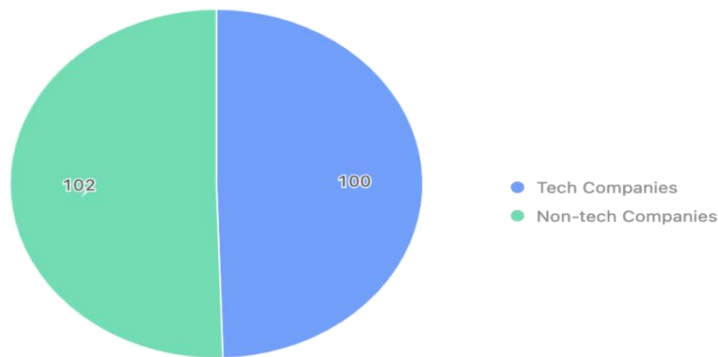


Figure 4-2

From the perspective of company type, a total of 100 questionnaires from technology companies and 102 questionnaires from non-tech companies were collected this time. The percentages of the two are about 50%, and the data is relatively balanced.

For technology companies, 40 respondents work for companies with more than 200 employees, accounting for the largest number of employees of all sizes. On the contrary, the respondents working for companies with less than 50 employees accounted for the smallest proportion, and only 15 people worked in companies of this size.

For non-tech companies, 38 respondents work for companies with more than 200 employees, accounting for the largest number of employees of all sizes. On the contrary, the respondents working for companies with 50 to 100 employees had the smallest proportion, at only 20(Figure 4-3).

Number of employees in different types of companies

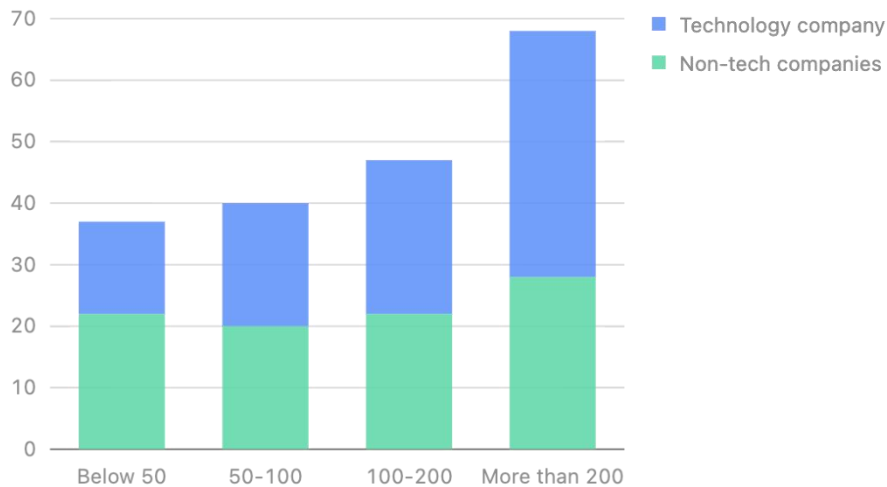


Figure 4-3

In this survey, for respondents working in non-tech companies, most of the respondents (43) have worked in non-tech companies that have been in non-tech companies for more than 10 years, while only 14 respondents have worked in non-tech companies. Non-tech companies were established less than 3 years ago. For the respondents working in technology companies, the technology companies where 34 of them were established were 5 to 10 years ago, accounting for the largest proportion, while the technology companies where the respondents worked were established less than 3 years ago, accounting for the largest proportion. The ratio is the least, with only 17 people(Figure 4-4、 4-5).

Years of establishment of different types of companies

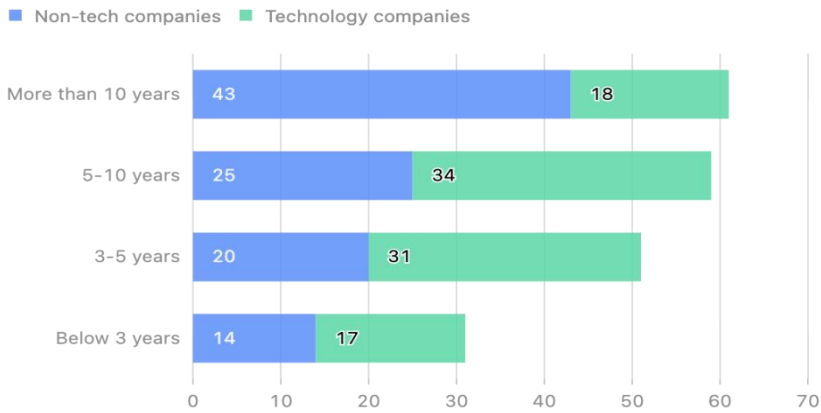


Figure 4-4

Industry of the company

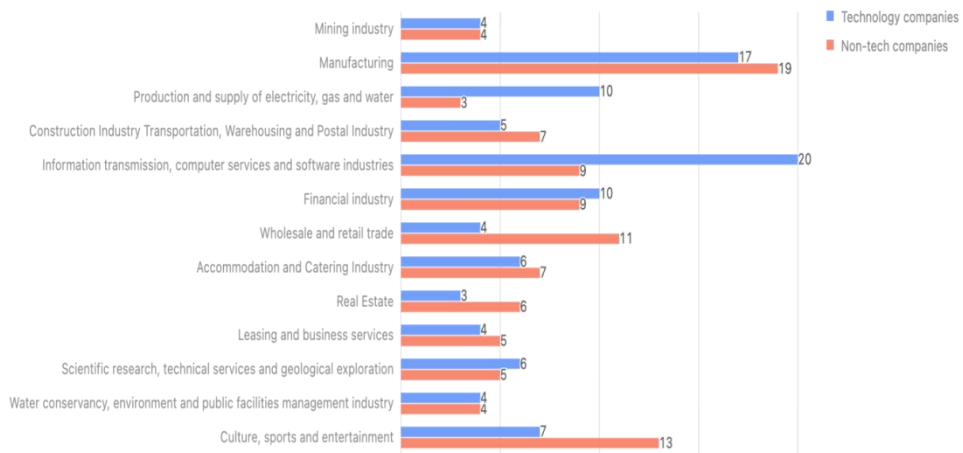


Figure 4-5

For technology companies, most of the respondents work in the information transmission, computer services and software industries (20 respondents), and only 3 respondents work in the real estate industry. For non-tech companies, there are 19 more respondents in the manufacturing industry, and only 3 respondents work in companies in the production and supply industries of electricity, gas and water.

4.3 The Index System of the Impact of SHRM on Enterprise Performance

First-level indicator	Second-level indicators	Third-level indicators
The Impact of Strategic Human Resource Management on Enterprise Performance	Human Resource Planning and Job Designing Factors	Human resource planning and organizational strategies are demand-oriented
		Regularly carry out human resource planning
		Clear job description
	Recruiting Factors	Job descriptions and specifications as the basis for recruitment, training and assessment
		The company's recruitment plan is consistent with the company's long-term strategic plan
		Recruitment strictly follows certain procedures and methods
	Training and Developing Factors	Job matching when recruiting talents
		Provide pre-job training for new employees
		Various training methods and comprehensive content
	Performance Evaluating Factors	Targeted training based on performance evaluation
		Evaluation of employees includes behavior, process and task results, and is fair and impartial
		The evaluating method meets the needs of the organization and requires the participation of all employees
	Salary and Benefits Factors	Feedback and interview at the end of the assessment
		Competitive salary among the industry
		Employee compensation is related to employee labor output
	Encouraging Factors	The company benefits package is guaranteed and attractive
		Fill vacant management positions primarily through internal promotions
		Formal staff suggestion mechanism

		Provide secure employment security
		Design career development plans for employees and help them achieve them

(1) Reliability Analysis

Cronbach coefficient	0.880
Number of items	29

The reliability test of the questionnaire shows that the Cronbach's Alpha reliability coefficient is 0.808, which is greater than 0.7, and the scale is considered to have considerable reliability.

(2) Validity analysis

According to the KMO metric given by Kaiser: 0.9 or more is very suitable; 0.8 is suitable; 0.7 is moderate; 0.6 is not very suitable; 0.5 or less means very unsuitable. Therefore, it can be judged that the KMO and Bartlett test of the questionnaire are very suitable by the validity test of the questionnaire.

KMO and Bartlett's test		
Kaiser-Meyer-Olkin measure of sampling adequacy		.920
Bartlett's Test of Sphericity Approx	Chi-Square	2490.652
	df	406
	sig.	.000

(3) Factor analysis

According to the index system of the impact of strategic human resource management on enterprise performance, this paper explores the specific impact of strategic human resource management factors on the performance of different types of enterprises (including technology companies and non-tech companies) in different aspects. Since the exploration methods of non-tech companies and technology

companies are the same, the specific calculation methods are given here by taking non-tech companies as an example, and the calculations of non-tech companies directly give the results.

First, factor analysis is performed on the secondary indicators of non-tech companies. Through the KMO and Bartlett's test, the KMO values obtained for each secondary index are respectively, all of which are greater than 0.5, reaching the standard for factor analysis. And $p=0.000 < 0.05$, so the null hypothesis is rejected, and there is a certain correlation between the variables. It is verified again from the correlation coefficient matrix of each variable that there is a certain correlation between the data variables, which fully proves that the data is suitable for factor analysis.

KMO and Bartlett's test				
Second-level indicators	KMO	Chi-Square	df	p-value
Human Resource Planning and Job Designing Factors	0.699	101.165	6	0.000
Recruiting Factors	0.680	72.559	3	0.000
Training and Developing Factors	0.572	44.286	3	0.000
Performance Evaluating Factors	0.704	93.090	3	0.000
Salary and Benefits Factors	0.579	37.047	3	0.000
Encouraging Factors	0.761	96.465	6	0.000

Common factors ANOVA			
Second-level indicators	Third-level indicators	Initial value	Extract
Human Resource Planning and Job Designing Factors	Human resource planning and organizational strategies are demand-oriented	1.000	.512
	Regularly carry out human resource planning	1.000	.634
	Clear job description	1.000	.631
	Job descriptions and specifications as the basis for recruitment, training and	1.000	.521

	assessment		
Recruiting Factors	The company's recruitment plan is consistent with the company's long-term strategic plan	1.000	.623
	Recruitment strictly follows certain procedures and methods	1.000	.727
	Job matching when recruiting talents	1.000	.662
Training and Developing Factors	Provide pre-job training for new employees	1.000	.575
	Various training methods and comprehensive content	1.000	.732
	Targeted training based on performance evaluation	1.000	.535
Performance Evaluating Factors	Evaluation of employees includes behavior, process and task results, and is fair and impartial	1.000	.676
	The evaluating method meets the needs of the organization and requires the participation of all employees	1.000	.716
	Feedback and interview at the end of the assessment	1.000	.747
Salary and Benefits Factors	Competitive salary among the industry	1.000	.703
	Employee compensation is related to employee labor output	1.000	.545
	The company benefits package is guaranteed and attractive	1.000	.540
Encouraging Factors	Fill vacant management positions primarily through internal promotions	1.000	.521
	Formal staff suggestion mechanism	1.000	.680
	Provide secure employment security	1.000	.598
	Design career development plans for employees and help them achieve them	1.000	.546

From the common factor variance table of each second-level indicators, it can be found that the information extracted from each initial value has reached more than 50%, indicating that the information extracted by this analysis process includes most of the information of the overall index data.

Each second-level indicators extracts the characteristic root and variance contribution rate of the common factors			
Second-level indicators	Common factors	Characteristic root	Variance contribution rate
Human Resource Planning and Job Designing Factors	Common factor 1	2.299	57.468%
Recruiting Factors	Common factor 1	2.012	67.062%
Training and Developing Factors	Common factor 1	1.742	58.073%
Performance Evaluating Factors	Common factor 1	2.139	71.305%
Salary and Benefits Factors	Common factor 1	1.688	56.267%
Encouraging Factors	Common factor 1	2.344	58.606%

Through the calculation, each second-level indicator extracts a common factor, the characteristic roots are 2.299, 2.012, 1.742, 2.139, 1.688, 2.344, and the variance contribution rates are 57.468%, 67.062%, 58.073%, 71.305%, 56.267 %, 58.606%. All have good representation, so just keep this factor. Since only one common factor is extracted, there is no rotated factor loading matrix.

Unrotated factor loading matrix		
Second-level indicators	Third-level indicators	Common factor 1
Human Resource Planning and Job Designing Factors	Human resource planning and organizational strategies are demand-oriented	.716
	Regularly carry out human resource planning	.796
	Clear job description	.795
	Job descriptions and specifications as the basis for recruitment, training and assessment	.722
Recruiting Factors	The company's recruitment plan is consistent with the company's long-term strategic plan	.789
	Recruitment strictly follows certain procedures and methods	.853
	Job matching when recruiting talents	.814
Training and Developing Factors	Provide pre-job training for new employees	.395
	Various training methods and comprehensive	.491

	content	
	Targeted training based on performance evaluation	.420
Performance Evaluating Factors	Evaluation of employees includes behavior, process and task results, and is fair and impartial	.384
	The evaluating method meets the needs of the organization and requires the participation of all employees	.395
	Feedback and interview at the end of the assessment	.404
Salary and Benefits Factors	Competitive salary among the industry	.838
	Employee compensation is related to employee labor output	.738
	The company benefits package is guaranteed and attractive	.664
Encouraging Factors	Fill vacant management positions primarily through internal promotions	.722
	Formal staff suggestion mechanism	.824
	Provide secure employment security	.773
	Design career development plans for employees and help them achieve them	.739

Factor score matrix		
Second-level indicators	Third-level indicators	Common factor 1
Human Resource Planning and Job Designing Factors	Human resource planning and organizational strategies are demand-oriented	.311
	Regularly carry out human resource planning	.346
	Clear job description	.346
	Job descriptions and specifications as the basis for recruitment, training and assessment	.314
Recruiting Factors	The company's recruitment plan is consistent with the company's long-term strategic plan	.392
	Recruitment strictly follows certain procedures and methods	.424
	Job matching when recruiting talents	.404
Training and	Provide pre-job training for new employees	.395

Developing Factors	Various training methods and comprehensive content	.491
	Targeted training based on performance evaluation	.420
Performance Evaluating Factors	Evaluation of employees includes behavior, process and task results, and is fair and impartial	.384
	The evaluating method meets the needs of the organization and requires the participation of all employees	.395
	Feedback and interview at the end of the assessment	.404
Salary and Benefits Factors	Competitive salary among the industry	.497
	Employee compensation is related to employee labor output	.437
	The company benefits package is guaranteed and attractive	.393
Encouraging Factors	Fill vacant management positions primarily through internal promotions	.308
	Formal staff suggestion mechanism	.352
	Provide secure employment security	.330
	Design career development plans for employees and help them achieve them	.315

The four variables of Human Resource Planning and Job Designing Factors are expressed as x_1, x_2, x_3, x_4 , and the common factor is recorded as Y_1 . According to the score coefficient matrix, the following formula is obtained:

$$Y_1 = 0.311x_1 + 0.346x_2 + 0.346x_3 + 0.314x_4$$

Similarly, other non-tech companies' second-level indicators of Recruiting Factors, Training and Developing Factors, Performance Evaluating Factors, Salary and Benefits Factors, Encouraging Factors. The corresponding score coefficient matrices of these factors can be obtained. The formulas obtained are as follows:

$$Y_2 = 0.392x_1 + 0.424x_2 + 0.404x_3$$

$$Y_3 = 0.395x_1 + 0.491x_2 + 0.420x_3$$

$$Y_4 = 0.384x_1 + 0.395x_2 + 0.404x_3$$

$$Y_5 = 0.497x_1 + 0.437x_2 + 0.393x_3$$

$$Y_6 = 0.308x_1 + 0.352x_2 + 0.330x_3 + 0.315x_4$$

The final score of each secondary indicator is recorded as F1, F2, F3, F4, F5, F6. Considering the different contribution rates of different common factors, according to the contribution rate of each common factor, the corresponding weight is given to obtain the formula:

$$F_1 = 0.57468Y_1$$

$$F_2 = 0.67062Y_1$$

$$F_3 = 0.58073Y_1$$

$$F_4 = 0.71305Y_1$$

$$F_5 = 0.56267Y_1$$

$$F_6 = 0.58606Y_1$$

The above formula is further integrated to obtain the formula:

$$I_1 = 0.178725x_1 + 0.198839x_2 + 0.198839x_3 + 0.18045x_4$$

$$I_2 = 0.262883x_1 + 0.284343x_2 + 0.27093x_3$$

$$I_3 = 0.229388x_1 + 0.285138x_2 + 0.243907x_3$$

$$I_4 = 0.273811x_1 + 0.281655x_2 + 0.288072x_3$$

$$I_5 = 0.279647x_1 + 0.245887x_2 + 0.221129x_3$$

$$I_6 = 0.180506x_1 + 0.206293x_2 + 0.1934x_3 + 0.184609x_4$$

According to the above formula, the score of strategic human resource management of each secondary index is obtained, and then it is used as a dependent variable for regression analysis with financial target achievement rate (x1), customer satisfaction (x2), product and service quality (x3), employee absenteeism rate and turnover rate (x4) and new product development speed (x5).

Regression Equation Summary Table			
R	R ²	Adjusted R ²	Standard deviation
.735	.540	.521	5.1754

ANOVA					
Source	SS	df	MS	F	sig.
Regression	3053.916	4	763.479	28.504	.000
Residual	2598.104	97	26.785		
Sum	5652.020	101			

Coefficients					
	Unstandardized coefficients		Standardized coefficients	t	sig.
	B	Std.err	Beta		
Constant(C)	15.780	3.562		4.430	.000
Financial target achievement rate (x1)	-.957	.757	-.097	-1.264	.209
customer satisfaction (x2)	3.798	.795	.385	4.775	.000
product and service quality (x3)	2.853	.706	.308	4.038	.000
employee absenteeism rate and turnover rate (x4)	1.538	.600	.199	2.561	.012
new product development speed (x5)	1.587	.603	.197	2.634	.010

The variables are screened by the stepwise regression method, and the

insignificant independent variables are eliminated, so that the final regression subset is the optimal regression subset. From the coefficient table, we can see the scores of the respective variables on the impact of strategic human resource management on enterprise performance. The specific formula is as follows:

$$Y_1 = 15.780 - 0.957x_1 + 3.798x_2 + 2.853x_3 + 1.538x_4 + 1.587x_5$$

Similarly, for technology companies, the final formula obtained is

$$Y_2 = 6.875 + 1.767x_1 + 4.093x_2 + 3.124x_3 + 3.553x_4 + 0.822x_5$$

From the regression results, for non-tech companies, strategic human resource management has a negative impact on the indicator of financial target achievement rate (x_1), while for technology companies, it has a positive impact. But since the significance is greater than 0.1, the degree of explanation is not enough.

The impact of strategic human resource management on enterprise performance is the same as that of other indicators, showing a positive impact. However, for technology companies, strategic human resource management has a greater impact on customer satisfaction (x_2), product and service quality (x_3), and employee absenteeism and turnover (x_4) than non-tech companies; In other words, strategic human resource management is faster for new product development (x_5) than technology companies.

Therefore, we can know that in most aspects, the impact of strategic human resource management on business performance is positive. And in technology companies, the impact of strategic human resource management on business performance is greater and more effective. Therefore, in the management of technology companies, we must make up for the deficiencies as soon as possible, and make more use of a sound strategic human resource management system.

5. Discussion and Conclusion

5.1 Measures to Improve Enterprise Performance of Technology companies

According to the above analysis and pertinent literature(Han, Zhang &Cao,2012), I sorted out 6 SHRM measures to improve enterprise performance of technology companies.

1. Reasonable design of post system

In the process of building a strategic human resource management system, a strategic rank system should be established. According to the operation and management needs of scientific and technological enterprises, the specific requirements of the enterprise in terms of organizational structure and human resources knowledge and capabilities are specified. Job design, job evaluation and other processes, establish and improve the enterprise rank system, rationally design positions, and clarify the number of employees. In the process of work, technology-based enterprises should determine multi-level job content, responsibilities and assessment methods according to product development, sales, service and other needs, and compile job descriptions to provide reference for employee selection, training, and performance appraisal. At the same time, it integrates and applies quantitative and qualitative methods, adopts factor comparison method, position ranking method, etc. to conduct job evaluation, clarify the relationship between different positions, and build a hierarchical framework.

2. Establish a strategic talent recruitment mechanism

Technology-based companies have relatively high employee mobility and may be assessed annually. Enterprises should adhere to the principles of fairness, open

competition, and merit-based admission, carry out recruitment activities, including campus recruitment, early-year recruitment, etc., and participate in various recruitment activities. Recruitment activities, do a good job of publicity, let more people participate. Improve the talent flow system, increase the activity of the company's talent team, and stimulate the creativity and enthusiasm of employees. According to the enterprise rank system and corresponding job descriptions, establish a job competency model, formulate scientific job recruitment standards, comprehensively and objectively evaluate candidates' personal qualities, innovation ability and teamwork spirit, and recognize the company's value concept and professional quality. Introduce talents with innovative spirit, enterprising spirit, and strong sense of teamwork, and put them in suitable positions, such as talents with strong scientific research ability and strong innovation ability, and introduce technical positions with overall view, strategic thinking, and strong sense of responsibility. Introduce talents with strong leadership skills into management positions.

3. Formulate a scientific talent training and development plan

In order to improve the overall quality of the workforce, enterprises should formulate scientific and reasonable training programs according to the law and characteristics of talent growth to promote the growth and progress of employees. During this process, the human resources management department should collect information such as the employee's education, resume, further education, and training in the personnel information, and conduct a comprehensive analysis based on the company's development strategy and current and future positions. Make training and development plans in a targeted and forward-looking manner, and organize employees to carry out training and advanced studies in combination with the company's work arrangements. The human resources management department should strengthen the communication with employees, understand the development vision of

employees, guide employees to plan their careers, correctly understand their current qualities and abilities, and strengthen the identification of deficiencies, so as to build a knowledge-based enterprise with a reasonable internal measurement and communication mechanism. Provide employees with dual development channels of technology and management, so that employees can clarify their position in the development of the enterprise and clarify their own direction of efforts.

4. Establish a comprehensive and scientific performance management system

Technology-based enterprises cannot apply a general performance management model, but should establish a comprehensive and scientific performance index evaluation system according to the characteristics of profit sources and value creation, and decompose the enterprise's strategic goals into specific indicators. And evaluate employee performance against these specific metrics. In the performance appraisal system, it is necessary to comprehensively check the performance of employees and their departments. Personal performance includes the employee's personal ability, effort, final performance, visible performance and potential contribution, and the performance appraisal workflow and appraisal cycle should be clearly defined. Determine employees' wages, benefits and bonuses according to the results, and give additional spiritual and material rewards to outstanding employees; punish those with unqualified performance. Form a performance-oriented corporate value concept.

5. Build a fair and reasonable salary distribution system

For technology-based enterprises, salary distribution should be based on job performance evaluation, taking into account factors such as professional ability and rank, and fairly and objectively reflect the value created by knowledge-based employees in terms of technology and management. Let the people who can create higher value in the enterprise get more compensation. Such a salary distribution system can stimulate the enthusiasm of employees and promote healthy competition

within the enterprise, thereby promoting the steady improvement of the human resources strength of the enterprise. Moreover, in the company's compensation system, it is divided into two parts: direct compensation (such as performance bonus, profit sharing, stock options, etc.) and indirect compensation (such as benefits, allowances, etc.). The corresponding returns link the development of the enterprise with the interests of the employees, thereby effectively stimulating the enthusiasm and creativity of the employees.

6. Implementing Diversified Incentive Mechanisms

Tech-based companies are businesses that focus on innovation and creating profits. Implement diversified incentive mechanisms, rely on knowledge-based employees to realize the vision of self-worth, continuously stimulate employees' enthusiasm for work, and realize the common progress of enterprises and employees. The self-worth of employees is not only reflected in salary, but also in personal growth, career development, recognition and respect, and decision-making participation. Enterprises should pay attention to the demands of employees and adopt compensation incentives, training incentives, promotion incentives, honor incentives and other methods. Let knowledge-based employees have better career development and let them participate in corporate decision-making, so as to retain high-quality talents and maintain the stability of the company's core team.

5.2 Conclusion

Both strategic human resource management and enterprise performance play important roles in corporate management. Through the analysis and research of strategic human resource management, this paper sorts out the internal connection between strategic human resource management and enterprise performance. Finally,

it draws the way to optimize enterprise management and improve enterprise performance. In this paper, a large number of theoretical researches have been sorted and analyzed, and empirical research has been carried out on the basis of theoretical researches. In the part of theoretical research, this paper analyzes the influence mechanism of strategic human resource management on enterprise performance, and then studies the mutual coordination mechanism among strategic human resource management, enterprise strategy and enterprise competitive advantage. The status and deficiencies in the field of strategic human resource management. In the empirical research stage, this paper focuses on analyzing the impact of strategic human resource management on enterprise performance through spss, and compares technology companies and non-tech companies, and aims at the characteristics of technology companies. A solution is proposed. Through a series of researches and data analysis, this paper proves that strategic human resource management can promote the performance of enterprises, and puts forward relevant plans and measures to improve the performance of enterprises. In order to improve the performance of enterprises, especially technology-based enterprises, a strategic human resource management system should be established and perfected according to the state of the enterprise and the strategic goals of the enterprise.

5.3 Weaknesses and Prospects of Research

This paper adopts the method of combining theory and empirical analysis to analyze the internal connection and related influence mechanism between enterprise performance and strategic human resource management of science and technology enterprises. An empirical investigation is conducted to discuss in detail the impact of the implementation of strategic human resource management on firm performance

through data analysis, and to discuss differences between tech and non-tech firms. Finally, some measures to improve the performance of the enterprise are put forward in view of the shortcomings in the human resource management of scientific and technological enterprises. Due to the limitations of conditions and lack of data, this paper mainly compares the role of strategic human resource management in technology companies and non-technology companies from a theoretical perspective. The empirical analysis part of this paper is relatively weak. In future research, I will try to improve the empirical research. In-depth exploration of the relationship between the two and the degree of influence.

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7. Appendix

Questionnaire on SHRM and Enterprise Performance

Dear Sir/Madam:

Hello! We are doing a study about the human resource management in a company, I hope you can take the time to fill out this questionnaire based on the real situation of your company, thank you very much!

Questionnaire Description:

1. The content of this questionnaire is only related to this research. You do not need to sign when filling out the questionnaire, and you do not need to worry about content leakage.
2. The questionnaire is divided into three parts. The setting of each question is a subjective question, and there is no objective answer. Please fill in it according to the actual situation.

Part 1 Basic Information

1. The year your company was founded:

- A Below 3 years
- B 3 to 5 years
- C 5 to 10 years
- D more than 10 years

2. The number of employees in your company:

- A Below 50 people
- B 50 to 100 people
- C 100 to 200 people
- D More than 200 people

3. The type of your company:

- A technology companies
- B non-tech companies

4. Which of the following industries does your company belong to: (single-choice questions, please answer with the main business of the company)

- A Mining industry

- B Manufacturing
- C Production and supply of electricity, gas and water
- D Construction Industry Transportation, Warehousing and Postal Industry
- E Information transmission, computer services and software industries
- F Financial industry
- G Wholesale and retail trade
- H Accommodation and Catering Industry
- I Real Estate
- J Leasing and business services
- K Scientific research, technical services and geological exploration
- L Water conservancy, environment and public facilities management industry
- M Culture, sports and entertainment

Part 2 Human Resource Management Status

7. Your company's human resource planning and organizational strategy are oriented

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

8. Your company regularly conducts human resource planning

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

7. Each position in your company has a clear job description

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

8. Job descriptions and job specifications serve as the basis for recruitment, training and assessment

- A Totally disagree

- B Disagree
- C Not sure
- D Agree
- E Totally agree

9. Your company's recruitment plan is consistent with the company's long-term strategic plan

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

10. Your company strictly abides by certain procedures and methods when recruiting

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

11. Your company's recruitment requires job matching, and select suitable talents according to the nature of the position

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

12. Your company provides pre-job training for new recruits so that they can adapt to the organization as soon as possible and accept group Culture

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

13. Your company has various training methods and comprehensive training content to improve the comprehensive quality of employees

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

14. Your company will conduct targeted training according to the performance appraisal results

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

15. Your company evaluates both the behavior process and the task results, and is fair and just

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

16. The assessment method meets the needs of the organization and all employees participate in the performance assessment process

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

17. Conduct feedback and interviews after your company's performance appraisal to help employees grow

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

18. Your company's salary is competitive with peers, and there is fairness among employees

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

19. Your company's compensation is closely related to employees' work behavior and labor output

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

20. Your company's welfare package provides the necessary protection for employees and is attractive

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

21. Your company mainly fills vacant management positions through internal promotions

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

22. Your company has a full employee suggestion and feedback mechanism

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

23. Your company has a complete employee protection mechanism and will not lay off employees at will

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

24. Your company will design career development programs for employees and assist them

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

Part 3 Enterprise Performance Status

25. Your company's financial target compliance rate is higher than its peers

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

26. Your company's customer satisfaction is higher than its peers

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

27. The quality of your company's products and services is higher than that of its peers

- A Totally disagree
- B Disagree
- C Not sure
- D Agree
- E Totally agree

28. Your company's new product development speed is higher than that of its peers

A Totally disagree

B Disagree

C Not sure

D Agree

E Totally agree

29. Your company's absenteeism rate and turnover rate are better than those of its peers

A Totally disagree

B Disagree

C Not sure

D Agree

E Totally agree

This is the end of the questionnaire, thank you very much for your support!