Chapter 2

Literature Review

The researcher has studied concepts, theories and related research used to determine the research guidelines as follows:

1. Digital Transformation
2. High Performance Work System
3. Designing of High-Performance Work System
4. Related Research

Digital Transformation

1. Study on the motivation of digital transformation

Regarding the motivation of digital transformation, domestic and foreign scholars have mainly studied two aspects: the motivation and pressure exerted by the environment on enterprises. In terms of digital transformation dynamics, scholars consider technological advances, management and economic trends as important sources. Loebbecke advocate that advances in digital technology are one of the important reasons for driving digital transformation, and he argues that digitalization and big data analytics drive corporate and social transformation (Loebbecke & Picot, 2015, pp. 149-157). Hess through a study of three German companies that successfully achieved digital transformation The study found that top-down drive by management was an important driver of corporate transformation (Hess, et al., 2016, p. 693), Zhang argued that the big data environment gave rise to a digital technology revolution (Zhang, et al., 2015, pp. 469-476), which in turn drove the digital transformation of enterprises. (Ji, Feng, et al. 2016), based on rooting theory, found that factors such as changes in the corporate environment, corporate resources, entrepreneurship and corporate environmental insight, coordination and integration capabilities, and technological innovation capabilities are important drivers of corporate transformation through a case study of 11 transforming companies. Chi pointed out that the digital economy is the new high point of the future economy, and digital transformation to create new advantages in the digital economy has become a key area for enterprise development in the new era (Li & Chi, 2021, p. 161). Lu and Yi argue that digital technology empowers enterprises with

dynamic capabilities and new strategic approaches to cope with the changing environment, laying the foundation for transformation (Lu, 2021).

In terms of pressure for digital transformation, scholars point out that the pressure may originate from consumers and local governments. Chen Chunhua in 2019 points out that with the advent of the intelligent era, the biggest challenge faced by traditional enterprises is that the way of creating customer value is completely changed, so traditional enterprises must create a new competence system to achieve corporate transformation. Xu Xiao and Qi I.D. point out that information technology has overturned the traditional business logic and reconstructed the competitive landscape of the industry, for which enterprises must actively adjust their development strategies (Xu & Qi, 2020, pp. 135-152). Cai Chunhua, and Liu Wei use a case study and root analysis approach to combine the case of Tianhong, and find that under the trend of consumer upgrading, the user value proposition has been upgraded from functional to emotional (Cai, et al., 2020, pp. 98-108); the necessity of goods has been greatly reduced, and personal "experience" has become the new criterion for purchasing goods; and the main body of value creation has shifted from business-led to business-customer-led. The main body of value creation is shifted from being dominated by enterprises to being dominated by enterprises and customers together. Chen Yujiao finds that institutional pressure from the regional level will play a catalytic role in the digital transformation of enterprises by means of empirical tests (Chen, et al., 2021, pp. 1-15).

Scholars at home and abroad have mainly focused on internal organizational learning and external cooperation for digital transformation, which can be broadly summarized into the following two specific paths.

Path 1: Digital transformation of existing products and production processes. According to Koo and Cao (Koo, 2016), digital technology must be integrated into the whole life cycle of the manufacturing industry to change the operation mode of R&D design, manufacturing, and sales service by intelligently transforming various aspects of production and sales in traditional industries, and then promoting industrial transformation and upgrading. According to Wu Qun, the focus of digital transformation is to integrate digital technology into enterprise manufacturing, logistics and warehousing, R&D innovation, sales and after-sales, etc. (Wu, 2017), and realize enterprise transformation and upgrading through digital technology. Jiao Yong summarized four ways of integrating manufacturing with the digital economy, which are deep integration with the Internet, deep integration with the R&D end, deep integration with the service industry, and deep integration with new technologies (Jiao, 2020, pp. 87-94). Fei-Fei Yu and Xia Gao summarized that the transformation path of China's manufacturing industry includes

three levels of "product-platform-industry", namely, to achieve interconnection of production and operation activities at the product level (Yu, 2020); to achieve multi-subject gathering and resource sharing at the platform level; and to achieve cross-border integration of industrial ecology at the industry level. At the level of industry, it realizes cross-border integration of industrial ecology. Chen Jian points out that digital technology has had at least two impacts on the production process of companies (Chen, 2020, pp. 117-128). On the one hand, companies have gained access to more consumer-side data, which enables them to more accurately characterize consumer behavior at both the overall and individual levels, design products that are more closely aligned with user needs, and respond more nimbly to changing consumer trends. On the other hand, companies have the ability to automate the processing process.

Path 2: Generating new directions in manufacturing with digital thinking. Patrick found through a large number of case studies that digitization of business models to achieve digital transformation is the main strategy of most companies (Planing, et al., 2016, pp. 66-70). Liu based on the theory of strategic fit view, pointed out that companies should strengthen internal and external resource integration capabilities as well as value sharing capabilities in order to achieve digital transformation (Liu, 2017). Xing Jihong believe that the emergence of "Internet+" has a huge impact on the business development of traditional enterprises, and she points out that traditional enterprises should carry out business model innovation through product intelligence (Xing, 2017), networking activities, and creating an intelligent O2O platform, and then realize the digital transformation of enterprises. By analyzing the main problems faced by China's traditional industries in the era of digital economy, Lv Tie proposed intelligent manufacturing, industry platform empowerment and park ecological construction as potential ways of digital transformation of enterprises (Lv, 2019). He Wei, Zhang Weidong argue that the new requirements of full linkage, full data aggregation and full intelligent decision making for enterprises in the digital economy era are becoming increasingly prominent, and ecological development for enterprises becomes the key to realize global transformation (He, 2020). Based on the theory related to strategic management and the current situation of digital transformation of Chinese enterprises, Kong Cunyu and Ding Zhifan proposed a four-dimensional path of dynamic capability enhancement, dual integration, multidisciplinary collaboration, and open sharing (Kong, 2021). Chen Weiru and Wang Juxiang point out that traditional enterprises can choose to join the platform ecosystem and promote their own digital

transformation by cooperating with platform enterprises (Chen & Wang, 2021, pp. 195-214).

2. Study on the correlation between digital transformation and business performance

Most scholars agree that digital transformation facilitates the improvement of employee efficiency, which in turn improves the efficiency of the company and finally increases the competitiveness of the company in the industry. And three main ways to improve business performance are through reducing cost, improving efficiency of asset use and enhancing value creation. Firstly, digital transformation improves business performance by reducing the cost of costs. According to Vial, digital transformation can help companies build flexible departments according to business needs, which can not only react quickly to market trends, but also deploy human resources accurately, realize intelligent operations, and reduce operating costs (Vial, 2019, pp. 118-144). Wang Haijun, and Feng, Qian found that networking promotes the interoperability of information and makes the exchange of information between traders tend to be efficient, thus reducing the cost of activities such as information search, bargaining and contracting, and monitoring transactions (Wang & Feng, 2015, pp. 144-152). Yang pointed out that the integration of traditional industries with the Internet helps companies improve their innovation capabilities as well as reduce costs, which in turn contributes to the improvement of company performance (Yang, 2018, p. 49). Huang Qunhui and Yu Yongze established a theoretical model of the impact of Internet development on manufacturing efficiency and found that networking reduces transaction costs and resource mismatch, resulting in an increase in manufacturing productivity (Huang, et al., 2019, pp. 5-23). Xiao Xu and Qi I.D argued that in the digital economy, the application of digital technology further promotes cooperation between enterprises online and offline, creating conditions for enterprises to obtain factor resources from outside the organization, thus reducing transaction costs (Xu, 2020, p. 250). Li Hui found that the application of artificial intelligence in enterprise production has changed the way of input, combination and use of production factors (Li, 2020, pp. 26-30), enabling enterprises to achieve greater output with minimal inputs of capital, land, labor, resources and other factors, increasing enterprise economic benefits. Qiu Haoran and Xu Hui point out that the effective use of digital technologies in digital transformation can help companies to obtain higher returns at lower cost with technology in the early stage of technology diffusion in the production market (Qiu, 2022, pp. 63-68).

Second, digital transformation improves business performance by enhancing efficiency. Haishi Li argues that in the Internet era, networking has had a positive impact on improving the performance of industrial enterprises by changing the place of business transactions, widening the time of transactions, enriching the categories of transactions, speeding them up, and reducing intermediate links (Haishi, et al., 2022, p. 3797). Xiao, Jing-Hua found that with the development of enterprise network platform, the process of overall business process reorganization of enterprises achieves speed up, which not only enables information exchange between enterprises free from time and space constraints (Xiao, 2020, pp. 37-49), but also enables cooperation with third-party logistics or payment applications to ensure smooth transaction channels and achieve the effect of satisfying customer needs and reasonably reducing costs and expenses.

Liu, Tao-Xiong and Xu, Xiaofei point out that both structured and unstructured information in digital technology helps enterprises open up digital mining space, which leads to specialized division of labor and collaborative operations in the industry and improves the overall operational efficiency of enterprises (Liu & Xu, 2017, pp. 57-64). Tian Yin argues that "big data" leads to intelligent financial management, transferring financial accounting service functions from offline to online, breaking time and geographical restrictions, filling the "big data" gap to the greatest extent, and improving financial management efficiency (Yin, 2018). According to Wang Yonglong and Yu Na, the digital economy enables total factor productivity, enabling traditional manufacturing activities to break through technical and economic accessibility constraints (Wang, 2020), and greatly promoting the efficiency of factor flow and supply chain collaboration. Liu Fei analyzed the triple impact mechanisms of digital transformation on the productivity of listed manufacturing companies and found that three mechanisms significantly influenced the productivity of enterprises after 2013 and contributed to the high-quality development of manufacturing industry (Liu, 2020, pp. 93-107). Huanjie Li and Yuan Zhang took micro enterprises as the entry point and found that digital transformation significantly improved manufacturing servitization and demonstrated that manufacturing servitization could optimize resource allocation and thus improve firm performance (Li, 2021, pp. 110-112).

Third, digital transformation improves business performance through value creation. Through an empirical analysis of 1,692 manufacturing industries in 25 major cities across China, Wang Ke found that networks can optimize the performance of manufacturing industries in terms of innovation, supply chain collaboration, sales and marketing (Wang, 2018, pp. 108-116). Li Xiaozhong and Chen Hanle found that coordinated design through the network can help meet consumers' personalized customization

needs, change the original situation of double high production and design costs, and significantly increase the economic benefits of enterprises (Li, 2018, pp. 22-30). Ma Mingjie argued that the network is a key element to drive the transformation of enterprise production methods to digitalization (Ma, 2019, p. 5489). In the manufacturing sector, the establishment of an industrial Internet platform has become a development trend that will help promote the efficiency of R&D activities and improve innovation capabilities. Zhang Caifeng and Xie Weihong divided big data capability into two dimensions: big data resources and big data resource integration capability, and found that both dimensions have a significant positive impact on the market performance and financial performance of enterprises (Zhang, et al., 2019, pp. 113-120). From the perspective of digital empowerment, Mao-Mao Chi and Ding-Ling Ye constructed the dual capabilities of production and R&D through digital transformation of small and medium-sized manufacturing enterprises in China in the context of digitalization, and found that digital transformation carried out by enterprises could improve the performance of new product development (Maomao, et al., 2020, pp. 63-75). Liu Shuchun conducted an empirical study on the digital management data of 1950 enterprises in Zhejiang Province in the national demonstration zone of deep integration of informatization and industrialization for five consecutive years from 2015 to 2019, and found that the digital input of enterprises had an inverted U-shaped relationship with input-output efficiency, and the investment threshold was between 1 and 2 million (Liu, et al., 2021, pp. 170-190). Taking A-share listed enterprises from 2007-2018 as a sample, Ni Ke-jin and Liu Xiuyan found that digital transformation can promote enterprise growth, and digital transformation has a greater effect on the growth of head enterprises (Ni, et al., 2021, pp. 79-97). Zhang Zhengang and Zhang Junqiu found that digital transformation of enterprises has a significant positive impact on business model innovation and can provide a clear direction for enterprise growth and value creation (Zhang, et al., 2022, pp. 114-123).

High Performance Work System

1. Theoretical Foundations of High-Performance Work Systems Research

High-performance work systems mainly affect employees' work behavior, which in turn affects the performance of the company (Jackson, et al., 2014, pp. 1-56). To study the analysis and change patterns in them, better theoretical foundations are needed to analyze and reveal the relationships. In conducting research on high performance work systems, the following theoretical foundations are included.

(1) Human Resource Theory

Human resource theory mainly emphasizes the importance of human capital in business management and the investment in human capital to enhance the productivity of the entire organization (Jiang & Liu, 2015, pp. 126-137). Human capital theory believes that human capital is embodied through people, and can obtain assets that get certain value in the future period, so as to obtain assets for the organization. In the above process, it is mainly through the human talent, knowledge and skills that people have that can show the human value behavior, and the value is significant for the whole organization (Lepak & Snell, 2002, pp. 517-543). In the related academic research, scholars consider human capital as an intermediate variable in economic operations through human capital theory, and hope to use this management approach to achieve the management of practices that can improve the knowledge and skills of employees and thus improve corporate performance.

(2) Resource base theory

For resource-based theory, it is believed that for a firm to gain and obtain competitive advantage, it needs to have four characteristics: value, scarcity, imperfect imitability, and imperfect substitutability. In the mid-1990s, resource-based theory was used in strategic human resource research, in which scholars expected to conduct academic research through resource-based theory for guiding the impact of high-performing jobs on firms in competitive advantage. Wright & and McMahan et al. argue that through human resource pools, human resources can be highly skilled and highly motivated, thus Lado & Wilson et al. argue that HRM systems can help companies maximize their capabilities (Loebbecke & Picot, 2015, pp. 149-157), and that the process is unique and causal, although ambiguous and path-dependent, but does not prevent companies from continuously improving their competitive advantage, and that the process is difficult to be The process is difficult to repeat and imitate. Therefore, the human resource system is complex and difficult to imitate, and is the root cause of ensuring the unique competitive advantage of the company (Nambisan, et al., 2019, pp. 71-73).

(3) Behavioral Theory

Behavior theory is mainly rooted in role theory and is concerned with the role relationship between employees and the organization. Social psychologists define role as follows: when a person produces behavior and correlates it with the behavior of others, it can lead to the expectation of future outcomes. For behavioral theory, it is determined that role behavior is a manifestation of the repetitive behavior of an employee, that the behavior can be correlated with the repetitive activities of others,

and that the interaction between the individual employee's behavior and the organization's behavior can lead to an expected outcome (Philipp, 2017, pp. 1-21). In practice, when the HRM practices provided by the organization are fed back to the employees in a timely manner, the employees will show behavioral results that are consistent with them, thus giving the company a positive external image. Colakoglu, et al. argue that employee behavior can play a significant role in improving organizational effectiveness, while Jack et al. argue that AMO theory has contributed to the development of behavioral theory. In subsequent academic studies, employee attitudes (e.g., organizational commitment, job satisfaction) and employee behaviors (organizational citizenship and in-role behaviors) have been commonly used as mediating variables between high performance systems and organizational performance, and their mechanisms have been studied.

(4) Social Exchange Theory

Social exchange theory suggests that when a company adopts a high-performance work system, employees will benefit from the high performance work system by obtaining higher benefits and compensation for themselves, as well as training and promotion opportunities, and a better and more comfortable work environment and atmosphere (Victor, 2014). Through the above HRM model, the implicit exchange relationship will have an impact on employees' attitudes and behaviors, and they will be able to recognize the organization in their hearts and will have a higher psychological commitment to work better in the future to reward the company, which will ultimately drive the growth of the company's performance. Social exchange theory and behavioral theory have a greater impact on corporate performance in high performance work systems and are similar in their mechanisms of action, both focusing on the impact of HRM practices on employees, including the impact of employee attitudes and behaviors (Hill, et al., 2016, pp. 132-149). Therefore, these scholars have conducted studies in which the relationship between high performance work systems and firm performance is the focus of research, with particular attention to the mechanisms of action that exist within them.

2. High Performance Work System Concept

High Performance Work System (HPWS) is also known as Best HRM Practices, or High Engagement Work System, High Commitment Work System, High Performance Work Practices, Innovative HR Practices, etc. In recent years, many scholars have conducted research on High Performance Work System and used it to give corresponding concepts and definitions.

(1) Universal view. In 1994, based on the universal view, Pfefter argued that there is a universal HRM model in practice, and the HRM measures in this model can

be implemented in an additive way to help improve business performance, which is often referred to as high performance human resource management (HPWS) (Sadeghi & Biancone, 2018, pp. 597-606). Scholars also believe that such a relationship exists in companies that can adopt the best HRM practices to drive increased organizational financial performance and achieve the organization's strategic goals.

(2) The power-change perspective: From the power-change perspective, Huselid argues that HPWS is an internal company policy and activity that serves and ensures that HRM can contribute to the achievement of corporate strategic goals (Porter & Heppelmann, 2014, pp. 11-64). In the power-change view, it is determined that the universal view does not realize and value the complexity of results and management within the organization and is slightly inadequate in actual business management. Also, there are complex relationships among HRM practices that do not simply add up. Through the weighted view, it is argued that the implementation of HRM needs to be aligned with corporate strategy, which in turn promotes corporate performance. However, the above view does not actually take into account the human resource structure within the company, and it is not easy for the company to adjust under the strategy, especially it is difficult to carry out human resource allocation. Therefore, for high performance work system, the concept of its content needs to be further improved and defined.

(3) Configuration view. Based on the configuration view, scholars believe that the high-performance work system is a set of practice activities that match with different levels of corporate strategy, policy and practice, which is a complement and improvement to the power-change view (Messersmith, et al., 2011, pp. 1105-1118). For the configuration view, HRM practices need to be highly consistent with corporate strategies in terms of implementation, and HRM practices should also match each other, so as to achieve horizontal and vertical matching and perfection.

3. Structure and measurement of high-performance work systems

(1) The structure of high-performance work system. Although scholars are able to give definitions and concepts of high-performance systems from different perspectives, there are still controversies in the above specific determinations as to which HRM policies and measures can structurally form a complete set of high-performance work systems (Liu, et al., 2011, pp. 1728-1742). Therefore, domestic and foreign scholars have conducted sufficient research on the structure of high-performance work systems. The structure and measurement of high-performing work systems have been studied extensively by domestic and international scholars. Among them, Pfeffer in 1998 analyzed the composition of high performance work system

components through interview induction, and constructed a 7-dimensional high performance system for how to enhance the competitive advantage of enterprises (Pfeffer, 1998, p. 321), which mainly includes employment security, selection and recruitment, autonomous management team and decentralized decision-making, high performance-based wage system, intensive training, narrowing the gap between management levels, and information sharing. Evans et al. argued that high performance work systems consist of seven components, but unlike Pfefter et al. believe that flexible work tasks need to be incorporated into the high-performance work system to narrow the gap between management levels.

In China, scholars have also conducted research on the architecture of high-performance work systems, and have argued that there is a need to define its components. Based on the previous work, Zhang Yichi used empirical evidence to classify more than 30 popular HR activities into eight dimensions, including basic management, employee engagement, procedural fairness, management focus, interpersonal communication, seniority role, talent sources and hiring criteria (Jiang & Liu, 2015, pp. 126-137). However, when the validation of the structure was conducted, there were some factors with loadings below 0.5, namely seniority, talent source and hiring criteria, which meant that the structure needed to be adjusted to be more reasonable and effective. In contrast, Wang Hong et al. in 2010 used Chinese companies as a context to obtain eight dimensions of high-performance jobs, mainly including structural assessment, extensive training, communication and sharing, employee benefits, work team, employment security, weighted compensation, and rigorous selection (Li & Jia, 2018, pp. 1136-1147). In contrast, Yao Qin et al. developed a high-performance work system scale applicable to Chinese companies in 2013, which mainly includes 7 dimensions such as training system, performance management, recruitment and selection, information sharing, job design and benefit security, and performance-based employee motivation (Jiang & Liu, 2015, pp. 126-137).

The comprehensive analysis above shows that different scholars carry out research work on high performance work systems, and different scholars give different structural dimensions to carry out analysis work, but due to the different research perspectives, it also produces differences in different HRM practices, and the improvement triggered by corporate performance is more obvious differences. In addition, due to the differences in survey respondents, differences in employee behavior and behavioral differences, all bring differences in the structure of high-performance systems (Hannonen, 2020, pp. 335-353). Boxall conducted a research analysis of manufacturing and service industries in 2012 and concluded that there are differences between manufacturing

and service industries in terms of high performance work systems, although the above differences are more obvious in terms of structure, the structure of high performance work systems are centered on employee competencies (Bughin, et al., 2017, pp. 1-15), Although these differences are apparent in the structure, high performance work systems are structured around employee competencies, employee motivation, and employee engagement.

(2) Measurement of high-performing work systems.

For the measurement of high-performance work systems, scholars have given different measurement tools according to their research directions, but there are commonalities regarding HR practices. The high-performance work system Scale developed by Huselid (1995, pp. 635-672), a foreign scholar, is the most representative. The scale consists of 13 HRM practices and is made up of two parts. Delery divided the high-performance work system into seven areas, namely, internal market opportunities, employee security, involvement, job description, outcomes, training, and benefit systems (Delery and Doty, 1996, pp. 802-835). Guided assessment, training and benefit system. The scale consists of 23 questions in total. Baeetal developed a three-factor high performance work system scale, which consists of three items: human resource mobility, work system, and compensation system, with 27 questions. This scale is more commonly used in Taiwan (Bae, et al., 1998, pp. 653-670).

Although foreign scholars have developed the High-Performance Work System Scale, and Chinese scholars have drawn on it in their research, there are differences between China's national conditions and those of foreign countries. Therefore, domestic scholars have developed a high-performance work system measurement scale suitable for China's national context. Su Zhongxing developed the High-Performance Work System Scale for Chinese companies in transition (Su, 2010, pp. 99-108). The scale includes eight dimensions and consists of 28 practices, including three items of extensive training, five items of strict competitive mobility and discipline management, three items of information sharing, four items of strict recruitment, four items of result-oriented performance appraisal, three items of compensation management, three items of internal labor market, and three items of employee engagement management.

Wang Hong conducted a questionnaire survey of managers and employees in 107 companies and developed a high-performance work system measurement scale with 812 data (Wang, 2011). The scale consisted of 8 factors: outcome assessment, extensive training, communication sharing, employee well-being, work team, employment security, weighted compensation, and rigorous selection, and the scale consisted of 32 items. Zhang Huiyan et al. developed a high-performance work system scale suitable for the

Chinese context (Zhang, et al., 2013, pp. 46-51), drawing on the high performance work system scale developed by Farch (1997), and combining the methods of interviews and open-ended questionnaires. The scale consists of 32 questions in seven dimensions, including training system, systematic performance management, rigorous recruitment/ selection, timely information sharing, clear work design, comprehensive benefits, and performance-based employee motivation. In terms of the measurement of high-performance work system, many domestic scholars refer to the questionnaires developed by foreign scholars, even though some domestic scholars have developed high performance work system scales for China's national conditions, but there is still a lack of industry-specific questionnaires for measuring high performance work system.

4. A study of structural variables of high performance work systems

(1) HPWS and employee attitudes. The communicability of daily HR practices can determine employee attitudes and work behaviors. Through the lens of communicability perspective, HPWS can enhance the development of psychological links by increasing trust and forming reciprocal exchange patterns between companies and employees. HPWS, as a set of human resource management practices, can improve employees' attitudes toward work. The important work attitudes of employees can be divided into four categories: job satisfaction, job involvement, organizational commitment, and others (organizational support and employee engagement). Scholars have studied the relationship between high performance work systems and job satisfaction. guest argued that high performance work systems enhance job satisfaction by increasing the opportunity for employees to participate in decision making and by having access to more career information. Macky came to a similar conclusion that HPWS increase employee job satisfaction (Boxall & Macky, 2009, pp. 3-23). In addition, the relationship between high performance work systems and job satisfaction has also been studied for specific populations. For example, Young for medical personnel and Messersmith for the public sector similarly reached the same conclusion (Young, et al., 2010, pp. 182-199; Messersmith, et al., 2011, pp. 1105-1118). Our scholar, Sun Jianmin, based on the Chinese management context, concluded that the impact of HPWS on employee job satisfaction varies across HRM practices as well as across ownership firms (Zhang & Sun, 2015, pp. 31-37).

Organizational commitment generally refers to the strength of an individual's identification and involvement in an organization. Zaleska argues that employees show higher organizational commitment when the organization provides them with development opportunities and helps them to accumulate skills, knowledge, and abilities (Zaleska, et al., 2007, pp. 987-1017). Wu studies indicate that employees in HPWS conditions

often receive more investment and development opportunities from the organization than what the contract in exchange, employees identify with and are more loyal to their organizations (Wu, et al., 2009, pp. 1228-1247). Other studies by foreign scholars have also demonstrated that HPWS can increase employees' organizational commitment. In a study of the relationship between HPWS and employee attitudes in the context of the Chinese scenario, Chinese scholars Miao, Rentao concluded that high-performing work systems can promote employees' organizational commitment (Miao, et al., 2013, pp. 38-50).

Kahn summarized the definition of employee engagement through the relationship between the employee and the job role. He states that engagement is an expression of the employee's satisfaction with the job to which he or she belongs, and is essentially the integration of the job and the employee's ego. It means that employees simultaneously employ and express their dominant self autonomously in their task behaviors, and its external manifestations are three aspects of cognitive focus, emotional activity, and behavioral effort. Huang Yu-fang conducted a survey on front-line employees in the service and manufacturing industries in southern Jiangsu, involving a total of 10 enterprises and institutions of different nature in four cities (Shen, et al., 2014, p. 817), and concluded through two rounds of surveys that HPWS can influence employee engagement through job well-being and job satisfaction. Perceived Organizational Support (POS) refers to employees' overall perception of the extent to which the organization values their contributions and cares about their well-being. Miao Rentao concluded that high performance work systems can improve employees' perceptions of organizational support (Miao, et al., 2013, pp. 38-50). Perceived organizational support is generally studied as an intermediate variable, and the mechanism of the effect of high-performance work system and perceived organizational support needs to be further explored.

(2) High performance work system and employee behavior.

Employee work behavior refers to the more stable behavioral responses made by employees to meet their needs for survival and development and to adapt to the ever-changing work environment. Common employee work behaviors include in-role behaviors, organizational citizenship behaviors, absenteeism, and counterproductive behaviors. Scholars have tended to focus their research on employee work behaviors, including organizational citizenship behaviors and in-role behaviors, on active work behaviors.

For organizational citizenship behavior. Yanqiu Zhang and Ling studied the relationship between individual HRM practices, such as job analysis, recruitment,

and compensation, and organizational citizenship behavior, and concluded that individual HRM practices can promote employees' organizational citizenship behavior (Zhang, 2003). However, only individual HRM practices were studied, while a high-performance work system consisting of a group of HRM practices can have a greater effect than one plus one. Therefore, scholars have expanded to study the relationship between high-performing work systems and organizational citizenship behavior. Yang Shengbin and Meng Xianfang studied the direct relationship between high-performing work systems and organizational citizenship behavior and concluded that high-performing work systems can directly influence organizational citizenship behavior (Yang, 2009). Cheng, Dejun, and Wang, Beibei further investigated the mechanism between the two and concluded that high performance work systems positively influence organizational citizenship behavior through cognitive trust and affective trust (Cheng & Wang, 2011, pp. 727-733), while the correlation between the two types of trust and organizational citizenship behavior is moderated by the sense of distributive justice. Fei Zhou and Chuanqing Zhang concluded that psychological capital plays a mediating role in the relationship between high-performing work systems and organizational citizenship behavior (Zhou & Zhang, 2012, pp. 33-40).

Targeting intra-role behaviors. Earlier scholars focused their research on high-performing work systems and organizational citizenship behaviors and neglected to study intra-role behaviors. To address this issue, scholars have recently conducted research on the relationship between high-performing work systems and intra-role behaviors. Fei Zhou and Chuanqing Zhangstudied the relationship between high-performing work systems and in-role behaviors and concluded that high-performing work systems can influence employees' in-role behaviors both directly and through psychological capital (Zhou, 2012, pp. 33-40). Zhang Chuanqing added moderating variables between high performance work systems and in-role behaviors and concluded that line manager involvement in human resource activities plays a moderating effect in the process of high-performance work systems influencing employees' in-role behaviors (Zhang, 2014, pp. 110-115). Miao Rentaoon the other hand, added mediating variables between the two variables to investigate their mechanisms of action and concluded that subordinates' sense of organizational support and leader-member exchange partially mediated the positive relationship between high performance work systems on subordinates' in-role behaviors (Miao, et al., 2013, pp. 38-50).

The effect of high-performance work systems on employees' work attitudes as well as employees' work behaviors is a complex process. Most scholars believe that

high performance work systems can bring positive attitudes and behaviors to employees, but Ehrnrooth and Bjorkman concluded that high performance work systems can have both negative and positive effects on employees (Ehrnrooth & Björkman, 2012, pp. 1109-1135). Therefore, do high performance work systems necessarily lead to better employee attitudes, behaviors, and organizational performance? This needs to be analyzed in depth from a long-term perspective (Jiang, et al., 2012, pp. 1264-1294). It is also necessary to dig deeper into the mechanism of action between the two.

Designing of High-Performance Work System

1. High performance working system

An important aspect of establishing and implementing HPWS is the enterprise's HRM. Practice has proved that innovation in HR practice is the basis for establishing a HPWS, and it is also the fundamental guarantee for the implementation of a HPWS to achieve good results. Organizational design is one of the important factors that affect organizational culture, and organizational culture in turn affects the ultimate performance of business operations. As the main body of enterprise activities, HR exert their initiative under the influence of a series of organizational design activities (such as organizational structure, salary system, decision-making and information system, etc., and the core culture of the enterprise), and have unlimited potential. Although western management scholars believe that the design of HPWS should be different according to the different environmental conditions of enterprises when they study HPWS, they have also reached a considerable degree of consensus on some commonalities of HPWS. Especially the main design principles, such as the two most important concepts - employee participation and empowerment, lead the implementation of HPWS from employee control to active guidance and self-development of employees. In addition, self-managed team building, total quality management, flattening of the organizational structure, as well as innovative compensation systems and comprehensive training activities are also important aspects emphasized by the HPWS.

HPWS is actually a work system that helps an enterprise rationally utilize its own resources, improve the efficiency of its employees, and thus increase the competitiveness of the enterprise in the industry. HPWS is defined as: "a series of policies and activities that are highly consistent within the company and ensure that HR serve the strategic goals of the company" (Huselid, Jackson & Schuler, 1997, pp. 171-188). The theoretical assumption implied by the HPWS is: the organization treats its own Members, employees will change their work attitude and continue to increase

their satisfaction and commitment. This attitude will continue to influence behavior, which in turn can promote improvements in organizational performance (Edwards & Wright, 2001, pp. 568-585). The basic model of a complete HPWS is fundamentally different from the traditional hierarchical enterprise model. By maximizing employee knowledge, skills, resilience, initiative. An effective coordination system of HRM practices, work organization structure, and production operation procedures that quickly wins organizational competitive advantages is an organic integration of technical systems and social systems (Wu & Wu, 2017 cited from He, 2018, p. 7).

2. The role of high-performance work system design

HPWS is a tool to increase the productivity of employees. It allows employees to find more fun in their work, to better realize their development goals, to feel a sense of belonging in the company, to stimulate more possibilities and innovation, and to feel secure in the company. In addition, high-performance work system also needs the full cooperation of the employees, because if the employees do not cooperate, then the tool will not be able to play its maximum role, so it needs to maintain a good working condition of the employees.

HPWS create a sustainable competitive advantage for organizations by eveloping employee capabilities. Values HPWS adds value to an organization by improving performance, reducing costs, improving work processes, and providing customers with unique products and services. Scarcity HPWS help organizations develop and improve knowledge, skills, and abilities that others do not have. Exclusive HPWS are designed around the team's workflow and technical capabilities and cannot be ported, copied, or copied by competitors. Organizational HPWS combine the strengths of each employee and quickly apply them to work with maximum flexibility. It is a comprehensive and complex system with the core of improving employees' investment in the enterprise, the ultimate goal of improving enterprise performance, and the means of work structure design, HRM practice, organizational culture construction and other technical and management support subsystems.

3. Design of high-performance working system

The design of HPWS focuses on the company's customers, including internal customers (employees, subordinates, etc.) and external customers. As the basic unit of the enterprise's HPWS design, the team is the core for the entire organization to establish authorization mechanisms and self-management. Teams at all levels established around the overall work system of the enterprise should have clear goals and task boundaries, and work autonomously within their respective work boundaries to the greatest extent. Information acquisition and information sharing: The team can only

make effective decisions if it obtains sufficient information, which is also the prerequisite for effective implementation of authorization. Integration of social and information systems. The design of HPWS expands the organization's overall needs for HR and technology systems, and also promotes the integration of the two. Diversity of workforce skills. Establish a job rotation system for team members to diversify employee skills as much as possible, thus greatly increasing the organization's flexibility and adaptability. Establish an overall organizational management structure that facilitates delegation. Establish specific HRM measures to support delegation, such as selection mechanisms, team-based reward plans, etc. Strengthen the organization's ability to correct errors and update. Based on the continuous enhancement of the team's self-detection and error correction capabilities, the organization's rapid update capabilities are formed, making the enterprise more dynamic and flexible.

Related Research

HPWS has been a hot topic of discussion among management in the past few years. In today's era of rapid technological development and rapid dissemination of information, human resource management has become very important because companies need to improve the efficiency of human resource management if they want to increase their competitiveness in the market. In the academic world, there is no strict definition of "High Performance Work System", because HPWS includes a lot of content, and it also has a lot of different names at the same time. HPWS is actually a tool that can help employees to be more productive, thus making the company more competitive in the industry (Nadler, Gerstein & Shaw, 1992, p. 671). The kernel of a HPWS is to improve employee benefits so that employees feel more secure working for the company, increasing employee loyalty and thus increasing employee productivity. Changes in the mindset of employees will affect changes in productivity (Edwards & Wright, 2001, pp. 568-585).

Academics differ on what best HR practices are included in HPWS. One of the more influential is the findings of Pfeffer, who initially proposed 16 best HRM practices, which were later succinctly summarized as job security, selective hiring of new employees, autonomous management teams and decentralized decision-making as a fundamental principle of organizational design, performance-based contingent variable high wage systems, employee training, narrowing of gaps and barriers between managerial levels, and extensive sharing of financial and performance-related information, and seven other areas. Some articles have proposed job design elements for different positions

in a HPWS that are relevant to the core HRM practices of people in different positions (Qing Yang, 2006). In addition, there are some studies devoted to the role of individual HRM practices in HPWS, such as emphasizing the role of corporate strategy (Boxall, et al., 2009, pp. 3-23), technology as one of the main environmental factors affecting work processes (Baron, 1999, pp. 9-10), and the relationship between HPWS and occupational safety (Zacharatos, et al., 2005, pp. 77-93). In fact, many of the studies address more fundamental principles such as team building and empowerment, employee engagement, incentive systems, and correlation between employee compensation and performance.

Through the collation of related literature at home and abroad, it can be seen that Chinese and foreign scholars have studied a lot in the design of high-performance work systems, but still leave some shortcomings in the digital transformation of the same enterprise and its impact.

(1) The ultimate purpose of HPWS implementation is to bring about organizational performance improvement. Scholars have studied the relationship between HPWS and organizational performance. Resource-based theory, behavioral theory, social capital theory, and social exchange theory are usually used to explain the impact of HPWS on business performance. Digital transformation, on the other hand, is the need for enterprises to pay attention to the necessity and transformation mode of digital transformation in the digital economy, and it can be said that digital transformation and enterprise performance are closely related, so the study of HPWS helps to analyze the impact of digital transformation on enterprise performance.

(2) Most of the existing studies on digitalization adopt the empirical research approach, mainly examining the correlation between digital transformation and "cost reduction", "improvement of operational efficiency" and "improvement of value creation capability". The correlation between digital transformation and "cost reduction", "operational efficiency" and "value creation capability" has been examined, but there is less research on the specific path transmission mechanism, and there is a lack of case studies in the literature, which leads to the theory not being able to guide the practice well. Therefore, based on the existing research results, this paper compares the impact mechanism of HPWS on enterprise performance and speculates on the necessity of digital transformation of enterprises. Then, Company D is selected as a case study to evaluate the link between the selection of HPWS and the implementation of digital transformation at three levels: strategic level, organizational management, and business level. Through the analysis of Company D, we hope to provide valuable references for other enterprises to implement digital transformation with high-performance work systems.