



Multiple Dimensions of Promoting Digital Transformation of Human Resource Management

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Abstract. With the advent of digital age, digitalization has brought significant changes to human life, such as people's communication means becoming more diversified. Therefore, relevant enterprises' management methods in the digital development process also need to be reformed. In order to maintain core competitiveness, enterprises not only need to make full use of digital technologies but also should stand in a higher strategic perspective to make successful digital transformation in the human resource management (HRM) section. This paper first elaborates on the connotation of digitalization of current enterprises' HRM and the necessity of implementing the digital revolution. Then it analyzes the difficulties and challenges that enterprises have when they try to implement digital transformation of HRM. The difficulties and challenges come from four aspects, which are digital talents, transformation process, technology application and ecosystem construction. Finally, this paper puts forward countermeasures in multiple dimensions for enterprises to accomplish the transformation of HRM in the digital era. The four dimensions of promoting the transformation are the training of professional talents, the establishment of a sharing-service mechanism, the application of digital technology and the construction of a digital ecosystem. This paper gives enterprises a distinct roadmap about how to carry out digital transformation of HRM based on current enterprises' digitalization background.

Keywords: Human Resource Management, Digital Transformation, Digital Technology.

1 Introduction

In early 2020, the COVID-19 pandemic suddenly swept the world. In the face of the outbreak, some enterprises have made emergency responses, such as adopting a combination of working from home and on-site and striving to fully resume work as soon as possible [1]. The management of employees has a great impact on the implementation of daily business activities [1]. How to effectively carry out human resource management (HRM) and maximize the effectiveness of people in the organization under the condition of dispersed personnel becomes an urgent problem that needs to be seriously thought about and dealt with in the post-pandemic era.

In accordance with the White Paper on the Development of Chinese Digital Economy published by China Academy of Information and Communications

Technology on the Internet in July 2022, the average annual growth rate of Chinese digital economy has been 15.9% since 2012, which is observably higher than the gross domestic product growth rate over the same period [2]. Digital economy is becoming a core force to promote Chinese economic development and an important method to cope with economic pressure, and its position in the national economy has further appeared [2]. Digital transformation and innovation with digital knowledge and information as the key factors gradually become a brand-new way of business and communication [3]. The reorganization of different subjects through digital resources will produce new products, processes, services, and business models, thus practicing digital innovation [3]. With the key boost of digital technology and the connectivity of current information networks, the real economy and the digital economy converge. Digitalization promotes the development of social productivity and speeds up the reconstruction of economic development and social governance model [3]. For enterprises, digitalization not only upgrades the current infrastructure and software and hardware tools, but also accelerates the self-innovation of enterprise architecture, business process, operation system and business model, and enhances the production and operation efficiency of enterprises [4]. For instance, during the COVID-19 pandemic, enterprises' online operations promoted development and resumed work and production steadily [1]. The government and enterprises paid more attention to the use of digital concepts, methods, and tools, and actively adopted digital empowerment to continuously enhance production vitality and sustainable development power [1].

In addition, in people's communication and cooperation, digitalization is profoundly changing the actual life of human beings in an all-around way. Along with the evolution of information technology, human beings' production, operation and management methods have also changed. For instance, many banks, shopping malls and hotels have adopted intelligent robots to provide customers with basic services [5]. From the perspective of organizational operation of modern enterprises, the new generation of young people have active ideas, distinct personalities and are accustomed to networking [6]. They are constantly making progress in the development of enterprise digitalization, and they are more willing to contribute to the digital economy [6]. Therefore, HRM should follow the trend of enterprise digital transformation to better organize and manage the younger generation of employees. Current HRM can occupy a supervisory position in the operation of enterprises [7]. Through digital transformation, enterprises can improve the efficiency of enterprise operations, effectively control the capital investment in the process of enterprise operation and establish a modern enterprise talent training system.

The intention of this paper is to canvass the difficulties and challenges in the current digital innovation process of HRM, and then give some suggestions on how to promote digital transformation from multiple dimensions in HRM practice.

2 Importance and Impact of HRM Transforming from Traditional Model to Digital Model

Under the background of the information society, updated HRM mechanisms by means of the digital revolution will rise the function of facilitating the development of enterprises.

First, digital transformation can help enterprises improve the quality of HRM. Corporations can reform the human capital planning and management system, using Enterprise Resource Planning (ERP) and Electronic Human Resource (e-HR) gradually transforming from traditional mode to digital mode [8]. Exploring the digitalization process of HRM is conducive to making enterprise digitalization consistent with the whole operation and development needs and improving the overall management level of enterprises to a certain extent.

Secondly, digital transformation helps enterprises to improve their human resource analysis ability. The traditional human resource analysis of enterprises is mainly based on the subjective evaluation of managers and lacks objective and multiple evaluation mechanisms [7]. In the digital management mode, enterprises can use artificial intelligence, blockchain technology, cloud computing and other technologies to carry out a comprehensive and in-depth analysis of HRM [9]. Also, digitalized HRM can use scientific algorithms to carry out matching positions for suitable talents [9]. Furthermore, digital transformation can implement the optimization of departments, positions, and decision-making mechanisms from the perspective of enterprise development strategy, to promote the sustainable development of corporations and enhance the competitiveness of organizations.

Thirdly, after digitalized revolution, new HRM will facilitate the innovation of the organizational behavior of enterprises. A new human resource service system based on digital technology and guided by an efficient operation approach will be built in the digital transformation of HRM. Differing from traditional HRM methods, the new digital version will be more intuitive and efficient in the management and cognition of employees, which is a revolutionary transformation of enterprise organizational culture and thinking mode [9].

3 Current Digital Transformation of HRM

With the application and disruption of emerging technologies such as 5G and big data technology, the digital economy is growing in faster pace all around the world. Many enterprises have already started to make digital transformations in their HRM, but it is all about fragmented innovation. For example, some enterprises have adopted the online delivery of resumes and online interviews [10]. Many well-known enterprises have established official websites with their own job descriptions and characteristics to screen resumes [10]. Recruitment supervisors can directly find candidates who meet the recruitment standards, which has greatly improved the efficiency of recruitment [10]. Precise data push technology can help enterprises to recruit the best talent to meet their actual needs. In the performance management section of HRM,

some enterprises build an effective performance communication system, which optimizes and simplifies all aspects of performance management. For example, WeChat has some functions that can help employees handle complex and changeable tasks, update timely data, and provide accurate and efficient plans [11]. Applications like WeChat have helped to improve the overall work efficiency of the organization and lay the foundation for the efficient completion of performance management [11]. In addition, some enterprises have implemented digital reform in terms of compensation and welfare and started to use online applications to carry out compensation summaries [11]. Using digitalized management platform helps enterprises make the compensation payment and process management fairer. It also helps employees realize the influence of their work results on enterprises and improve their work cognition level.

However, these fragmented innovations above are the misunderstanding part that some human resource managers have about the transformation in the digital era. They believe that digital transformation is only about the upgrade of the information platform, with the purchase of software and the assistance from technical department [4]. They just optimize the human capital and resource management functions through online applications and internet tools and regard this kind of innovation as completing the whole digitalized transformation process of HRM.

4 Difficulties and Challenges of Digital Transformation of HRM

If enterprises want to improve the quality of HRM through digital transformation, they need to resolve the misunderstanding mentioned before and have holistic cognition. Although many companies claim to accomplish better digital transformation of HRM, they face some difficulties and challenges in the actual operation of implementing digital transformation of HRM. Specific descriptions are as follows.

4.1 Lack of Versatile Digital Talents

Digital transformation is the only way for all industries and enterprises to cope with the development of digitalization. At present, there is a serious shortage of digital talents, and it is difficult to quickly meet the increasing demands. According to the Research and Development Report on Industrial Digital Talents (2023), the shortage of Chinese digital talents is currently between 25 million and 30 million [12]. The talent shortage problem is an unavoidable problem in the course of digital transformation. At the same time, it's important to notice that it's not just regular positions that have a shortage of digital talent, many leadership positions also need a large number of digital talent [12].

The first driving force for the development of an enterprise is human resources [7]. Only by adhering to the strategy of giving priority to talents and establishing the concept of giving priority to the development of human capital, can enterprises better provide a steady flow of talent and intelligence support for the digital transformation

of the enterprise [12]. In the digital era, digital talents refer to inter-disciplinary talents who have active digital thinking, can screen out useful information from large amounts of data, and carry out efficient management and application according to different needs [12]. At present, some enterprises lack compound digital talents with both management ability and digital application ability. Also, some management personnel of enterprises lacks data literacy, unable to achieve a clear digital employment orientation.

In traditional enterprise management, the human resources department pays more attention to traditional personnel management, such as salary and welfare, selection and retention [9]. However, due to the expansion of digital disruption, traditional personnel management cannot satisfy the requirement for the digitalization of enterprises. Enterprise now requires their human resource managers to have the ability of team collaboration, information analysis and processing, and enterprise resource planning and sharing [13]. However, for many human resource managers, their digital ability is not that professional, they lack the cognition and skills of digital-related knowledge. Besides it is difficult for the leaders to achieve the expected goals of enterprises in a short time. For example, some human resource managers do not have the ability to carry out digital talent recruitment and selection because they lack systematic thinking in the course of digital transformation [12]. Therefore, this kind of management personnel restricts the construction of digitalized progress of enterprises. In addition, some human resource managers lack digital leadership ability and lack digital insight and sensitivity to the market [12]. In terms of talent allocation, digital thinking cannot be quickly used to adjust or improve the organization's talent strategy in time, so enterprises lag in a talent competition.

4.2 Incomplete Process of Transformation

When some enterprises want to implement the digital transformation of HRM, they terminate with ineffective implementation and incomplete transformation. For example, some modules like recruitment and training mechanism have not been completely digitized, which do not match the expectation of overall enterprises' digital transformation. In the human resource recruitment section, many enterprises especially some countries' state-owned enterprises generally adopt the way of on-site interviews, they lack trust in online interviews and are not familiar with the relevant process and operation. Although some enterprises adopt the online interview method, they only apply it to the preliminary examination stage. After the online preliminary examination, they still require talents to attend the second round of interviews on-site, which wastes the convenient conditions brought by the digital transformation of human resources for enterprise talent recruitment. In addition, some enterprises will use online training when formulating human resource training plans, but the actual training course is still carried out in the form of offline teaching. This training mode does not make full use of the advantages of online training. For example, some enterprises do not have the knowledge to use data analysis to carry out the results of the training program because they only have offline training courses that cannot timely reflect the learning status of employees [4].

4.3 Lack of Application of Digital Technology

Although many corporations have started to enforce digital transformation, the adhibition of big data analysis techniques in the HRM area still needs to be further strengthened. When some enterprises carry out human resource evaluation, they mainly evaluate the overall talent strategy and the ability of the post talent but lack the evaluation of the matching degree between employees and their positions. Therefore, the efficiency of the talent optimization of the enterprise is relatively low. At the same time, some enterprises do not have a comprehensive understanding of digital transformation, so they cannot use big data or another method to analyze enterprise strategy, organizational structure, talent management, and decision-making mechanism [14]. Deficiency in the application of digital technology will lead to a mismatch between the HRM mechanism and enterprise development strategy, thus affecting the management efficiency and management quality of enterprises.

4.4 Insufficient Construction of Human Resource Digital Ecosystem

Some enterprises lack awareness of the construction of a human resource ecosystem when starting digital transformation [2]. Normally, the human resource ecosystem constructed by such enterprises does not match its management mode. And there are certain deficiencies in the construction of the talent pool and the evaluation system of talents, which leads to obstacles in the conversion. Secondly, although some enterprises establish and use the HRM digital ecosystem, other relevant systems such as the resource operation system may not be digitized enough to well use in the actual practice, which seriously affects HRM effectiveness level.

5 Multiple Dimensions of Promoting Digital Transformation of HRM

Many corporations are gradually transforming to digital HRM at the moment. Enterprises should exploit more consummate digital transformation strategies for HRM in order to increase the potency of transformation and avoid the blindness of related work [3]. Based on the difficulties and challenges mentioned above, several dimensions can promote digital transformation of HRM.

5.1 Strengthening the Training of Digital Human Resource Managers

In the digital era, human resource managers are required to master more information about digital science and technology in addition to solid theoretical knowledge of human resources [12]. The key is to flexibly use data analysis and take the initiative to find and solve problems. Strengthening the cultivation of digital ability is helpful for human resource managers to completely match more demand of digital development, especially to enhance their understanding, cognition, and application of core digital ability. Also, enterprises should emphasize the magnitude of digital ability in daily work. Human resource managers should keep learning to be good at simplifying daily workflow and using the digital mind to accomplish productivity

improvement. Enterprises should turn human resource managers into promoters of digital transformation. And not only human resource managers but also other employees should endeavor to invent enterprise digital civilization, build up their capability level, and work breadth of thinking. Furthermore, human resource managers should preferably seize the business dynamics of the market, keep enthusiasm and initiative, and further improve the efficiency of managing human resources to promote the process of digital transformation.

5.2 Establishment of HRM Sharing Service Mechanism

Enterprises should build a sharing service mechanism with the help of digital transformation that provides HRM all-around improvement. First, enterprises should rely on big data and cloud technology to establish a HRM service-sharing center. This sharing center can help enterprises accomplish the one-stop management system of employee recruitment, welfare treatment, performance, and other matters. In the process of building a sharing center, enterprises should ensure the authenticity, effectiveness and shareability of data to avoid conflicts between different management modules in the platform. In addition, enterprises can access the employee problem-solving module in the shared platform, such as building the EAP psychological counseling room and arranging special personnel to solve teamwork conflicts.

5.3 Application of Digital Technology

Currently, there are many technologies such as big data analysis and cloud computing service applications that can help the digital transformation of enterprises [14]. Enterprises should establish big data analysis mechanisms for HRM according to management needs. Enterprises should use big data and cloud computing technologies to build a sound big data analysis mechanism. Through extensive collection and analysis of information, they can evaluate the completion degree of employees' work and whether they can meet the working requirements. The application of digital technology can lay a solid foundation for enterprises' person-post matching and management efficiency improvement. In addition, the enterprise should establish a scenario-based analysis mechanism to combine the enterprise strategy, organizational structure, talent management and decision-making mechanism together into the big data analysis platform. Based on scenario-based verification, human resource modules such as recruitment and training should be optimized to ensure that the digitized mechanism can meet and serve the enterprise's practical development and comprehensive digital transformation of management.

5.4 Construction of Digital Ecosystem of HRM

If organizations desire to complete the digital transformation of HRM with high quality, they need to construct a perfect ecological system of HRM actively. In the process of constructing a digital ecological system, enterprises should integrate employee career planning, talent pool construction, skills evaluation, and other sections into the ecological system to carry out the whole-process management of employee careers. Enterprises should also combine the digital ecosystem with the actual situation of employee management which can give them clear directions about

the transformation. Besides, the ecosystem should ensure the scientific and effective human resources strategy and help enterprises accomplish comprehensive human resources digital management.

6 Conclusion

This paper states the current situation of enterprises' digitalization progress of HRM, expounds on the difficulties happening in the process of transformation and then gives multiple dimensions to promote better digital innovation of HRM. For instance, when enterprises try to make progress on the digitalization, they lack of versatile digital talents and do not finish the transformation completely. This paper suggests that enterprises can strengthen the training of human resource managers and build up sharing service mechanism to complete the transformation of HRM. Besides, this paper suggests to thoroughly apply new digital tools to make transformation and build up digital ecosystem. Digital transformation is conducive to improving the HRM level of enterprises. Enterprises should establish a management mechanism sharing service center, perfect big data analysis system, and construct a digital ecosystem in the digital transformation of HRM. To sum up, with the growth of the social economy and the advancement of science and technology, enterprises should constantly innovate in HRM to accomplish the transformation and expansion of enterprises. The results of this study can provide reference and decision-making guidance for the Digital transformation of HRM.

However, there are still shortcomings in this paper, such as only based on the current digital economy and technology, providing multiple dimensions of promotion for HRM, and not conducting in-depth analysis for specific enterprise cases. In future research, specific cases of different enterprises can be analyzed to obtain more targeted strategies.

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