

Research on Digital Transformation of Human Resources in Enterprise Management

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Abstract: Affected by COVID-19 and political factors, enterprises around the world are facing many problems, such as an unstable market environment, stagnant productivity growth, and overcapacity. At the same time, the development and innovation of digital technology indicate the inevitability of digital transformation and point out a new direction for the development of enterprises. This paper studies the digital transformation of human resources in enterprise management. It is found that digitalization still has a lot of room for progress in human resources. During the implementation, the digitalization of human resources still faces many difficulties, such as the lack of strategic planning, the lack of systematic training of digital skills, the failure to cultivate relevant talents, and the failure to combine performance with digitalization. As a result, the scope of transformation is narrow, the efficiency of transformation is low, and the goal of transformation cannot be achieved. This requires the digitization and modernization of the basic elements of human resources, the digitization of talent ability, and the data visualization of the performance management system. Only in this way can digital technology be used to continuously empower the enterprise's human resource management, which is conducive to the enterprise's sustainable competitiveness and thus improve the enterprise's economic benefits.

Keywords: Digital transformation, Human resource management, Data driven

1. Introduction

Nowadays, in terms of the policy, many countries are actively promoting the digital transformation of enterprises; in terms of the economy, the reduction of demographic dividend and the upgrading of consumption structure force the transformation of the manufacturing industry; in terms of technology, the new generation of information and communication technologies, represented by big data, the Internet of Things, 5G, cloud computing, and artificial intelligence, are gradually maturing. With the acceleration of the digital revolution, the earlier an enterprise achieves results in the field of digital transformation, the easier it can survive in the complex business environment. Among them, human resource management is not only the core function of the enterprise management system, but also the key to obtaining sustainable competitiveness and an important cornerstone of enterprise digital transformation.

In the development of global digital technology, the collection, analysis, and use of data have fully and deeply affected every field of production and life, playing an increasingly important role in social and economic growth. According to the "White Paper on the Development of China's Digital

Economy", the overall scale of China's digital economy in 2021 reached 45.5 trillion yuan, accounting for 39.8% of GDP, among which the scale of digital industrialization reached 8.35 trillion yuan, accounting for 7.3% of GDP. The scale of industrial digitalization reached 37.18 trillion yuan, accounting for 32.5% of GDP. According to the relevant data of "Digital Talent Management: From Now to the Future" by Talent Management Research Institute of North Institute, 22.2% of Chinese enterprises have practical digital experience in human resource management, 70.6% of enterprises are ready for development in the field of digital human resource management, and only 3.2% of enterprises think they have successful practice [1].

Based on the investigation and research on the digital transformation strategies of Haier Group's COSMOPlat and Hisense Group, this paper analyzes difficulties in the digital transformation of human resource management and proposes several ways of digital implementation of human resource management. This paper can help enterprises improve their management quality and efficiency, reduce management costs, and increase economic benefits.

2. Difficulties in Digitization of Human Resources in Enterprise Management

2.1. The Lack of Digital Planning of Human Resources Strategy

Today's human resources strategy still follows the traditional management model, development planning, and deployment. In the process of enterprise digitalization, the talent strategy should be combined with the business strategy of the enterprise, and the improvement, innovation, reorganization, and future direction planning of human resources should be undertaken, so that the digital strategic planning can become the leading sign and strategic guidance to promote the completion of the digital transformation of the enterprise. Supporting enterprises to achieve business objectives will certainly promote the digitalization of human resources and the completion of the digitalization of human resources strategy, which is the mission and value of human resources management in the new era [2].

After analyzing 17 digitalization cases of COSMOPlat, the author found that the leaders of 9 companies had never been exposed to digital transformation before, and the leaders of 11 companies had no knowledge of the digitalization of human resources. This shows that most enterprises are still carrying out traditional human resource strategic management, which makes digital reform particularly difficult. Especially in the traditional manufacturing industry, the leadership's habitual thinking seriously hinders the development of digital transformation. Some enterprises realize the importance of digital transformation. However, in terms of human resources, they are unable to plan detailed supporting systems for digital transformation and remodeling organizational departments. Due to the lack of rights and responsibilities division and assessment system, it is difficult to effectively motivate employees to cooperate with the completion of the digital transformation for human resources.

2.2. The Absence of the Training System of Digital Talents

Digital talents are those who can use digital technology and complementary skills to empower businesses. "Digital talent shortage" is one of the important reasons hindering enterprises' digital transformation. The White Paper on China's ICT Talent Ecology 2022, jointly released by Ernst & Young and Huawei, points out that there is a large gap in the demand for digital talents.

At present, many enterprises cannot form a complete and clear digital talent training system in the process of digitization. In the process of operation and management, employees do not have clear guidance for digital transformation. This will lead to an "unrealistic and unrecognizable" atmosphere, which will make employees stuck in the original work inertia of the enterprise, making their work modes and habits difficult to adapt to the requirements of digital transformation. What is more, the

lack of knowledge of digital transformation can also seriously slow down the speed of enterprise digital transformation [3]. At the same time, improper transformation training may cause non-cooperation or even resistance of employees, thereby hindering the digital development of enterprises.

2.3. The Separation of Digital Transformation and Traditional Performance Appraisal

In the process of digital transformation, the traditional performance management of enterprises is faced with huge challenges. The digital era not only simplifies the integration, induction, and storage steps of data information, but also greatly improves the accuracy of data information and expands the storage way and capacity of data information. At the same time, many positions within enterprises have also emerged. Therefore, it is completely different from the traditional mode in personnel allocation, assessment, and work content [4]. The traditional performance appraisal method will certainly delay the operation of the new management mode. In the process of digital reform of the whole enterprise, the ability of employees will be reflected in data. If the past performance appraisal method is used, there will be an imbalance in the organizational structure, which will affect the enthusiasm of talents, reduce the value of employees who adapt to the new mode, and hinder the digital development.

2.4. The Lag of Digital Platform and the Imperfect Management System

The main core of the digital transformation of enterprise operation and management is to realize the sharing of elements and resources through the digital platform, so as to achieve the digitalization, intelligence, and networking of enterprise operation and management. By studying the management practice of Hisense's digital twin and combining the data, it is found that the number of network digital platforms is small and the data assets are weak, which makes it difficult to realize the synchronization of digital information among the underlying equipment, employees, and the top class [5], thus forming a "data island" since the changes cannot be perceived in time [6]. As a result, some enterprises are unwilling to carry out digital transformation, or the integration process is slow in transformation.

3. The Way of Digital Implementation of Human Resource Management

3.1. Strategic Planning

Once an enterprise decides to carry out the digital transformation of human resource management to improve itself, its first task should be to clarify the transformation objectives, create a positive corporate atmosphere for digital transformation, create a good environment for digital talent training, and formulate detailed digital transformation methods.

Subsequently, enterprises need to construct digital transformation in terms of target targeting, determination, and input of factors. At the same time, they should set up new departments in line with the characteristics of digital operation, carry out organizational restructuring and department remodeling, and fundamentally guarantee the transformation effect of digital transformation.

3.2. Digitalization of BOPS Competency Model and Standardization of Digitalized Personnel Training

BOPS refers to basic competence, operational competence, professional competence, and skill competence. Digital personnel training is an important basis to realize the digital transformation of human resource management. First of all, there is a need to timely change the management concept from the traditional position management to the establishment of the talent data grid model and pay

attention to the value of talents [7]. Second, it is necessary to digitize the basic ability, management ability, professional ability, and technical ability of personnel, and establish the digitalized talent pool of the competency model. At the same time, the training of digital talents should be strengthened and the company's internal training, external training, and other channels should be used to improve the ability of digital talents. Transformation is essential in the creation of a matching digital environment. It is important to explore efficient and flexible policies for the selection, introduction, training, and incentive of digital talents in HR, so as to improve the digital integration of digital talent selection, training, and employment.

3.3. Building an Efficient Performance Management System

In this process, enterprises can introduce artificial intelligence technology to design performance management models based on employees' personal information, education, work experience, job data, performance, and performance appraisal for different project teams and positions to achieve enterprise management objectives [8]. In terms of the management mode, performance appraisal results should be based on data. By making full use of formulaic operation, different performance appraisal indicators should be established according to different post responsibilities and work content. It is necessary to deepen the reform of performance appraisal index system to improve the authenticity and accuracy of performance feedback. For details, "Visualization of Digital Enterprise Performance Management System with Integrated Simulated Annealing Algorithm" can be referred to for details [9]. In the design of the performance incentive mechanism, the performance ranking reward mechanism can be appropriately carried out to encourage employees to create effective economic benefits for the development of the enterprise.

3.4. Accelerating the Construction of Digital Transformation Facilities

Generally, this can be achieved in two ways: the first is to directly purchase external digital platforms with mature operation, including professional service software, to enable the digital upgrade of its own management platform; the second is to rely on the independent research and development of its own scientific research department for early construction and later maintenance. The construction of facilities is the foundation of digital transformation and the maintenance of facilities is the guarantee for the smooth progress of enterprise digitalization. Enterprises should encourage scientific research departments to carry out scientific research and development and maintenance in this direction, so as to continuously inject energy into the digitalization of enterprise human resources.

3.5. Improving the Enterprise Digital Management System

The good management and efficient operation of the human resource management digital platform can support the overall planning, unified storage, and unified management of all kinds of human resource business data. Only a system with a well-built algorithm library, model library, and tool library can flexibly supply and share business system data on demand to complete the application innovation required by enterprises. Therefore, effective measures should be taken to further improve the enterprise's human resources digital management system.

Through the purchase of relevant digital tools, technical mergers and acquisitions, or business cooperation, a night digital management system can be built to improve the efficiency of personnel work and promote the process of digital transformation.

4. Conclusion

In an enterprise, human resource is not only the core element of the enterprise's sustainable growth and development, but also the key to gaining competitiveness [10]. The core focus of the enterprise should fall on the personnel training and management mode. Enterprises should establish the correct concept of talent training and the standard of digital talent training. They should also lay out the digital discipline system, systematically plan the digital talent training plan, and actively build the system framework of digital talent training. At the same time, there is a need for enterprises to promote the digital transformation of human resource management and the combination of talent training and enterprise digital strategic management. Besides, it is also important to build the digital talent training base, management mechanism, and security system, so as to efficiently train the digital talents needed by enterprises and better promote the digital transformation of enterprises.

The digital transformation of human resource management is an overall transformation activity that explores and changes the mode of human resource management by giving full play to the advantages of digital technology and digital system. To enhance the competitiveness of enterprises, enterprises are supposed to further realize the innovation of development concept, the innovation of operating tools, the optimization of business process, the enabling of operation management, the creation of value-added value, and the improvement of overall efficiency.

In the face of the future development trend, the digital transformation of human resource management should actively combine with the future trend to accelerate innovation. Enterprises are supposed to consider the functional positioning and transformation direction in the new era, as well as actively exploring the way and path of innovation breakthrough, so as to form a new driving force to promote the development of enterprises to serve the market competition and sustainable growth. It is crucial to take digital innovation as the core drive and carry out the digital and intelligent transformation through the new path.

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