Exploring the Digital Path of Human Resource Management in Innovation and Entrepreneurship Enterprises

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Abstract: The digitization of human resource management functions can enhance the adaptability of human resource management and promote the comprehensive digital development of innovative and entrepreneurial enterprises. This article first summarizes and evaluates the connotation and research status of the digitalization of enterprise human resource management. Secondly, it analyzes the influencing factors of digitalization of human resource management in innovative and entrepreneurial enterprises from three aspects: employee factors, organizational factors, and technological factors. Finally, it designs a digitalization plan for human resource management in innovative and entrepreneurial enterprises from four aspects: analyzing the current situation, preparing thoroughly, designing plans, and building systems. It emphasizes the value of digitalization of enterprise human resource management for innovative and entrepreneurial enterprises.

Keywords: Innovation and entrepreneurship enterprises; Human resource management; Digital path

1. Introduction

The significant increase in reliance on talent for the development and growth of innovative and entrepreneurial enterprises necessitates a constant focus on market and user needs, understanding emerging technologies and trends, and seeking new business opportunities. Simultaneously, it is crucial to maintain agility and flexibility, continuously adjusting and optimizing one's business model and product solutions to adapt to market changes and evolving user needs. Therefore, digital exploration of human resource management has emerged as a primary concern.

2. Literature review on digitalization of human resource management
2.1. The connotation of digitalization in human resource management

Digital management entails leveraging advanced management theories and technological means to foster close

collaboration among decision-making, functional, and executive levels within a company, thereby achieving digitalization. As a critical component of company management, human resource management should maintain a certain level of sensitivity to enhance the vitality of the company's human resources [1].

2.2. Current research status of digitalization of human resource management in foreign countries

Currently, from the perspective of digital management of human resources in foreign countries, the mainstream view in the United States during the 1980s recognized the crucial importance of information technology for business success [2].

2.2.1. The digital transformation and optimization methods of human resource management

In terms of optimizing human resource management through digital transformation, foreign scholars have proposed various paths based on different theories. Scholars contend that, firstly, from a human resources perspective, in-depth data mining should be conducted to establish a comprehensive data logic chain. Subsequently, this logical framework can be used to organically integrate human resources with organizational goals. Through digital technology, human resource management can more effectively collect, integrate, and analyze various data, thereby better addressing practical management issues and enhancing the professional level of human resources.

2.2.2. The challenges and problems faced by the digital transformation of human resource management

Previous research indicated that managers should possess a profound understanding of the essence of digitalization and promote the digital transformation of human resource management from multiple perspectives. It was also pointed out that currently, many small and medium-sized enterprises encounter challenges such as outdated human resource information systems, lack of data configuration, significant emotional distance between employees, small data-driven team sizes, and urgent needs for human resources. Yao and Gui highlighted that big data analysis technology and its integration with traditional management models pose significant challenges to digital management. However, despite these challenges being identified, there is still insufficient in-depth exploration of digital management performance, with only some achievements noted in academic circles [3]. In contemporary society, an increasing number of scholars are focusing on the potential of digital transformation. For instance, a series of digital transformation strategies for enterprise human resources was proposed.

2.2.3. The path to digital transformation of human resource management

Research indicates that domestic scholars have adopted a similar approach to foreign scholars regarding the path of digital transformation of human resources. Firstly, they emphasize leveraging digital technology to enhance the efficiency of human resource management and improve the structure of talent resources. Secondly, they advocate for systematic redesign and optimization of human resource management within the context of digitalization. Through the study of organizational theory, many scholars recognize that enterprises' human resource management needs to embrace digital change through practical actions to achieve effective management and gain competitiveness.

2.3. Literature review

Scholars are focused on exploring more effective ways to implement digitization and investigating the

challenges and opportunities from various perspectives. With technological advancements, an increasing number of companies are beginning to digitize human resource management. Digital technology has significant applications in operations management, marketing, and financial management, thereby continuously enhancing the level of digitalization in human resource management. However, many studies have concentrated on understanding how to use digital technology to enhance human resource management while overlooking its crucial role in enterprise strategy and development. Hence, it is imperative to delve deeply into the current situation in China, implement effective measures, and enhance the promotion of digitalization in the field of human resources to better serve China's economy and society.

3. The demand and influencing factors of digital transformation of human resource management in innovative and entrepreneurial enterprises

In the digital age, it is imperative to delineate the specific requirements for the digitalization of enterprise human resource management to address shifts in competitive markets and human resource structures.

3.1. Enhancing the management ability of enterprises toward young employees

In the era of the digital economy, human resource management encompasses the integration of post-90s and post-00s generations, characterized by an increasingly youthful age structure and a diverse environment. Consequently, enterprise human resource management naturally necessitates changes akin to the evolutionary transition from personnel management to human resource development to adapt to the current landscape.

3.2. Promoting enterprises to adapt to the development of the digital competitive era

With the rapid development of technology and the onset of the digital age, human resources can enhance management efficiency, reduce costs, and offer employees better experiences and development opportunities through digital transformation. In the digital competitive era, digitalization extends beyond enterprise human resource management, permeating various facets of enterprise operation models. Most innovative and entrepreneurial enterprises are in nascent stages of development, characterized by small personnel and relatively limited human resource management experience. Therefore, digital management is imperative in the practical operation of enterprises.

3.3. Factors influencing the digitalization of human resource management in innovative and entrepreneurial enterprises

3.3.1. Employee factors

In the specific realm of human resource management in innovative and entrepreneurial enterprises, employees constitute the most crucial element that can fundamentally impact enterprise development. Consequently, when implementing digital human resource management in such enterprises, the attitude of employees – the managed entities – holds paramount significance [4]. Gaining the support and understanding of employees prompts active cooperation in this endeavor. Conversely, resistance or misunderstanding towards human resource management digitization from employees poses substantial challenges, potentially leading to employee turnover tendencies or adverse behaviors.

3.3.2. Technical factors

Digitization necessitates expertise not only in human resources but also in related technologies such as data analysis and artificial intelligence. From the perspective of innovative and entrepreneurial enterprises, artificial

intelligence technology and digital management can generate greater value for clients. Hence, the efficacy of digital achievements in human resource management predominantly relies on the application of pertinent technologies. Innovative and entrepreneurial enterprises must adhere to a developmental trajectory characterized by incremental advancements, rapid execution, and continuous upgrades. They must innovate and create within product services and business model design while leveraging new technologies such as digitalization to bolster human resource management. This is indispensable for enhancing operational efficiency in innovative and entrepreneurial enterprises.

4. Implementation path of digital human resource management in innovative and entrepreneurial enterprises

4.1. Analysis of the current situation

The current digital era necessitates industry enterprises to dismantle information barriers, integrate their data systems, and eradicate information silos. Additionally, it is essential to break down information boundaries between industry enterprises, presenting significant opportunities for innovative and entrepreneurial enterprises to thrive. Armed with enterprise, industry, and industry chain data, enterprises can utilize digital-related technologies to initiate digital initiatives in human resource management.

4.2. Preparation

Firstly, execute talent reserve and development strategies and acquire proficiency in core system technologies for digital enterprise human resource management. Innovative and entrepreneurial enterprises require high-caliber talents proficient in technology, professionalism, and management. The provision of digital training for both internal employees and external stakeholders facilitates seamless collaboration in practical work applications. Secondly, strategize meticulously. Digital construction of human resource management in enterprises mirrors the establishment of a simulated human system integrating enterprise performance, human resource management tools, work scenarios, and workflow data. All enterprise decision-making, management, and employees rely on this system to fulfill work responsibilities, complete tasks, and achieve results.

4.3. Design scheme

Firstly, design information data schemes. Establish standardized data resources with consistent rules, unified definitions, clear ownership, and organized retrieval. The databook integration system's foundation necessitates the development of a comprehensive management process plan spanning data lifecycle stages from generation to storage, publication, filtering, use, processing, archiving, etc. Secondly, establish a system and mechanism for initiating data standards, rule formulation, implementation, feedback sharing, and process management to ensure data application reliability and validity. Thirdly, scientifically establish professional operational standards for various human resource management business processes. Innovative and entrepreneurial enterprises must map out workflow links and nodes pertinent to their human resources based on business characteristics, personnel scale, and structure. All human resource management aspects, operations, and services should align with the digital system, presenting a comprehensive enterprise human resource management process through digital thinking [5], achieving business visualization, process intelligence, and structural transparency in human resource management.

4.4. Building the system

Innovative and entrepreneurial enterprises must construct a modular digital human resource management system through planning, design, and implementation. Firstly, promote digital recruitment and talent management,

integral to digital transformation. By establishing online recruitment platforms and recruitment websites as well as leveraging social media channels, companies can expand recruitment scope, enhance effectiveness, and reduce costs. Secondly, implementing employee self-service platforms is pivotal in enhancing employee experience and alleviating the human resources department workload. Employees can independently manage personal information, access salary and benefits details, and apply for leave and training through self-service platforms. Thirdly, establish artificial intelligence technology to aid decision-making. The application of artificial intelligence technology in human resource management facilitates data analysis, talent prediction, and decision support. Fourthly, promote digital training, seizing new opportunities brought forth by digital construction. Enterprises can establish online training platforms, offering diverse training courses and learning resources. Finally, fortify data security and privacy protection, crucial in digital construction and operation processes. Enterprises must establish comprehensive data security measures encompassing encryption, access control, risk assessment, etc.

5. Conclusion

The integration of digital human resources into innovative and entrepreneurial enterprises is the prevailing trend, yet it necessitates systematic planning and proficient execution by these enterprises. Through the implementation of a comprehensive human resource management system, the promotion of digital recruitment and talent management, the establishment of employee self-service platforms, the utilization of artificial intelligence technology for decision-making support, the facilitation of digital training and continuous education, and the reinforcement of data security and privacy measures, enterprises can realize efficient human resource operation and enhance employee experiences. Hence, actively advocating for the digitization of human resource management in innovative and entrepreneurial enterprises is pivotal for their agile deployment and sustainable growth.

Disclosure statement

The author declares no conflict of interest.

References

[1]   Zhang G, 2021, The Optimization Design for Human Resource Management Digital Transformation of F Company, thesis, Dalian University of Technology.
[2]   Wei Y, 2021, Research on Optimizing Strategy and Application of A Company's Human Resources Digital Management, thesis, Shandong Normal University.
[3]   Yao K, Gui H, 2018, Big Data Human Resource Management: Transformation and Challenges. Journal of Fudan University (Social Science Edition), 60(3): 146–155.
[4]   Ano B, Bent R, 2022, Human Determinants Influencing the Digital Transformation Strategy of Multigenerational Family Businesses: A Multiple-Case Study of Five French Growth-Oriented Family Firms. Journal of Family Business Management, 12(4): 876–891. https://doi.org/10.1108/JFBM-12-2020-0117
[5]   Tai J, 2023, Exploring the Digital Transformation of Human Resource Management. China Human Resources and Social Security, 2023(3): 45–46.