Investigating the Evolution of Human Resource Management in Enterprises in the Era of Big Data

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Abstract: Human resource (HR) management plays a crucial role in the overall management of enterprises, exerting a significant influence on their growth and development. With China now firmly entrenched in the era of big data, the conventional HR management approach is no longer adequate to meet the evolving demands of enterprise progress. Therefore, there is a pressing need to actively revamp the management strategies to improve the quality. This article outlines the importance of reforming enterprise HR management in the context of big data, scrutinizes the prevailing challenges in this domain, explores strategies for transforming HR management within enterprises in the era of big data, and provides illustrative examples to summarize valuable managerial insights, thereby offer enterprise leaders a valuable source of reference information.

Keywords: Big data; Business management; Human resource

Online publication: October 20, 2023

1. Introduction

In recent years, China has witnessed rapid advancements in science and technology. Big data technology, in particular, has seen significant growth and refinement, yielding positive outcomes across various sectors. In light of these developments, it is imperative for enterprises to proactively align with the evolving societal landscape. This entails conducting thorough research into the intricacies of big data technology, integrating it into the realm of human resource (HR) management, and ultimately enhancing the quality and efficiency of management. These measures contribute to bolstering internal workforce cohesion, thus fostering the sustained and robust development of the enterprise.

2. The role of enterprise human resource management reformation in the context of big data

HR management stands as a pivotal facet of enterprise management, wielding substantial influence over an enterprise’s development trajectory. In the era of big data, conventional models for enterprise HR management prove inadequate, necessitating active innovation in management approaches to facilitate the stable and
prosperous growth of enterprises. This paper outlines the impact of HR management reforms within enterprises in the context of big data as follows: First, it elevates enterprises’ market competitiveness. In the landscape of big data, talent competition takes center stage in enterprise competition. Enterprises, by embracing altered management concepts and models, can enhance the overall competency of their workforce, thereby augmenting operational efficiency and, in turn, bolstering market competitiveness. Second, it fortifies internal cohesion within the enterprise. Against the backdrop of big data, the adaptation of HR management models enables enterprises to promptly discern employee needs, rationalize compensation structures, and streamline internal organizational dynamics, thus cultivating stronger internal unity within the enterprise.

3. Challenges in enterprise human resource management

3.1. Outdated and ineffective human resource management concepts

At present, some companies continue to adhere to conventional HR management models. These models are rigid and lack flexibility. Managers struggle to promptly grasp employees’ work-related issues and changing perspectives, resulting in decreased employee enthusiasm, reduced work efficiency, and a decline in internal cohesion. Consequently, this leads to a diminished market competitiveness of the enterprises, posing a substantial obstacle to their stable and sustainable development.

3.2. Issues in project time management

Work projects within enterprises are subject to time constraints, necessitating managers to effectively prioritize based on project importance and complexity. However, some companies face difficulties in managing project timelines. This often stems from inadequate understanding of the projects, ineffective communication with employees, unclear allocation of responsibilities, and poorly defined work tasks, all of which impede the timely completion of projects.

3.3. Inadequate analysis of employee needs

In the realm of HR management, it is imperative for enterprises to accurately assess the genuine needs of their employees and formulate management strategies to optimize overall results. Unfortunately, some corporate leaders erroneously believe that employee satisfaction has little impact on the company’s progress. Consequently, they fail to conduct an accurate analysis of employee needs, leading to diminished enthusiasm and hindering the company’s stable and robust development.

3.4. Challenges in performance appraisal

Performance appraisal plays a role in enterprise HR management, aiming to gauge employee performance and provide appropriate incentives to enhance overall workforce cohesion. Nonetheless, certain companies have yet to establish comprehensive performance appraisal systems. Their incentive structures fail to align with employee needs, salary systems lack rationality, and the integration between performance appraisal and salary management needs substantial improvement. These issues, in turn, adversely affect the stable and healthy development of the enterprise.

4. Strategies for reforming enterprise human resource management in the era of big data

4.1. Revamping human resource management concepts leveraging big data

In the context of the big data era, the transformation of enterprise HR management is a necessity. To achieve
this, corporate leaders must delve into the nuances of big data technology and refine HR management concepts to enhance the overall standard of HR management. First, enterprises should depart from traditional recruitment models by incorporating big data into their hiring processes, employing intermediary agencies, the Internet, and job fairs to recruit talent. This should include offering competitive compensation and establishing a strong employer brand to attract top talent. Simultaneously, enterprises should harness big data technology to construct a talent resource database, enabling them to identify and match talent with corporate positions efficiently, thereby bolstering the overall competence of the workforce [5]. Second, enterprises should prioritize employee training, shifting their approach to align with big data models. This entails utilizing big data technology to identify issues within employee work and tailoring training content accordingly. An online training platform should be established to facilitate independent learning. Post-training, big data analysis should be employed to gauge the effectiveness of training and adapt the training plan as necessary to optimize outcomes [6].

4.2. Utilizing big data technology for enhanced project time management

The progress of an enterprise is intricately linked to effective project management, where timely completion relies on efficient workforce and time management. Corporate leaders must employ big data technology to support project time management. This involves the precise prediction of project timelines through data analysis, in-depth assessment of prediction results, and the formulation of a final time management and allocation plan [7]. Meanwhile, big data technology should be harnessed to refine and adapt the project time management system. Accurate analysis of employee work data and project progress data should drive necessary adjustments to staffing and scheduling, ensuring projects are completed with both high quality and within designated timeframes.

4.3. Gaining insight into employee needs through big data

Within the sphere of HR management, effective communication with employees is essential. This includes conveying the enterprise’s requirements, gaining profound insight into employee work conditions and actual needs through big data technology, and optimizing the management system with an employee-centric approach. The aim is to stimulate employee work enthusiasm and elevate overall market competitiveness [8]. In this process, questionnaires can be employed to gather employee feedback. These questionnaires should be methodically organized and analyzed through big data technology to derive significant insights into employee needs. Based on these insights, enterprises can formulate development plans that guide employee needs, foster job satisfaction, strengthen the sense of belonging to the company, promote internal cohesion, and ultimately drive the enterprise’s stable and healthy development [9].

4.4. Instituting a performance management model in the age of big data

Performance management is a cornerstone of enterprise HR management, with the potential to enhance employee motivation, skills, and efficiency. In the era of big data, enterprises should make strategic use of this technology to analyze and address existing performance management issues, adapt management models, enhance performance-related aspects, and amplify the impact of performance incentives. Simultaneously, a comprehensive performance management supervision system should be established, along with a performance management feedback platform. This enables the dynamic analysis of employee performance data and the flexible adjustment of performance management models to improve their effectiveness [10]. Furthermore, fairness and sustainability should be guiding principles in performance management. Ensuring transparency in the salary system and involving employees in performance management system formulation can build trust and promote effective communication between enterprise management and employees, thus yielding the best
performance management results.

5. A case analysis
The company was founded in 2008 as a business-to-consumer (B2C) e-commerce firm, encompassing operations in food production, e-commerce sales channels, and cold chain logistics. At present, the company boasts approximately 1,400 employees, consisting of 8% in senior management positions, 22% in mid-level roles, and the remaining staff as junior employees. As the company evolved, it became evident that there was a need for great emphasis on economic performance and HR management. The organization faced challenges related to talent acquisition, salary structures, and benefits. Consequently, it was imperative to optimize and adjust the HR management model to facilitate stable and healthy company development.

In the era of big data, it is recommended that the company embrace the following HR management model. Firstly, elevate the level of attention to HR management. In the backdrop of big data, company management should intensify their focus on HR management. They should utilize big data technology to scrutinize prevailing issues in HR management and fine-tune the management model accordingly. Secondly, increase capital investment. With the influence of big data, the company should allocate greater resources to HR management, actively integrating software and hardware solutions in line with big data technology. This should lead to the continual enhancement of HR management informatization, thus advancing the overall standard of HR management. Thirdly, establish a robust organizational structure system. In the age of big data, the company should create a dedicated HR management informatization project department and recruit specialized technical personnel to engage in the development of HR management informatization. Concurrently, the company should leverage big data to analyze current issues within the organizational structure and optimize HR management plans to achieve optimal management outcomes.

6. Conclusion
In the era of big data, the conventional enterprise HR management model falls short of meeting societal requirements. Consequently, there is a need to refine and adapt the management model, introduce innovation into the HR management system, modernize management principles, and bolster both performance management and project time management to enhance enterprise HR management.

Funding
Research Projects of Philosophy and Social Sciences from Universities of Jiangsu Province in 2021, “Study on the Influencing Factors of Archives Heritage’s Development and Protection from the Perspective of World Memory” (2021SJA2367); Research Projects of Suzhou City University (2910353422, 2910357423, 2910351222)

Disclosure statement
The author declares no conflict of interest.
References


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