

Performance Management of Chinese State-owned Enterprises in the Context of Big Data

Yaxing Zi

*YCIH Green High-performance Concrete Company Limited
Yaxing Zi. Email: ziyaxing9142@hotmail.com*

ABSTRACT

In the context of the era of big data, data has a profound impact on social life and technological progress. The development of science and technology promotes the concept of "big data" appearing in the daily management activities of enterprises. Big data has also begun to be applied to performance management, especially by many Chinese state-owned enterprises. However, due to the corporate mechanism and managerial concept, big data does not play the most crucial role in the performance management of State-owned enterprises in China. Therefore, from the perspective of combining the application of "big data" technology with the improvement of corporate performance management level, this article analyzes the deficiencies in Chinese state-owned enterprises' performance management and puts forward corresponding solutions to help enterprises optimize performance management through big data technology.

Keywords: *Performance management, Chinese state-owned enterprise, Big data*

1. INTRODUCTION

Performance management (PM) is an essential task of enterprise human resource management, and one of the most essential management methods to achieve enterprise strategic goals. As a vital productive force in the network era, big data has brought new opportunities for enterprise operation reform and PM. Enterprises can reform their internal management modes by analyzing large amounts of data and improving the efficiency and quality of their PM.

With the rapid development of the market economy and globalization, the management of Chinese state-owned enterprises (SOEs) is facing severe challenges, requiring Chinese SOEs to strengthen their organizational reform and innovation, and improve their ability to respond to the market. To improve the management of Chinese SOEs, enhancing performance management is the primary task. At present, most SOEs have realized the importance of PM, and explored and practiced many countermeasures, and achieved concrete results. However, due to the system's limitation and mechanism, the work of managers in most SOEs is often a mere formality, and they cannot improve the performance of individuals and teams through performance appraisal in a real sense [1]. How to better use the concept of big data technology to promote the transformation and upgrading of the PM of Chinese

SOEs, so that enterprises always maintain their core competitive advantages, is an urgent problem.

2. BUSINESS PERFORMANCE MANAGEMENT

Business PM is a comprehensive management system. It guides and restricts employees' daily behaviors, achieves the strategic management goals of the company, and encourages managers and employees at all levels to make continuous progress and improvement. Its purpose is to improve the performance of individual departments and organizations continuously, help enterprises develop more actively and healthily while realizing equity and justice, and improve the management level and competitiveness of enterprises [2]. Effective management can improve management and business processes to optimize strategic management. The PM system systematically and scientifically connects individuals, departments, and enterprises to achieve a streamlined execution mode. The complex management process is divided into several operation execution management parts. The interests obtained by each responsibility management center are added up, thus forming the overall benefits of the enterprise [3].

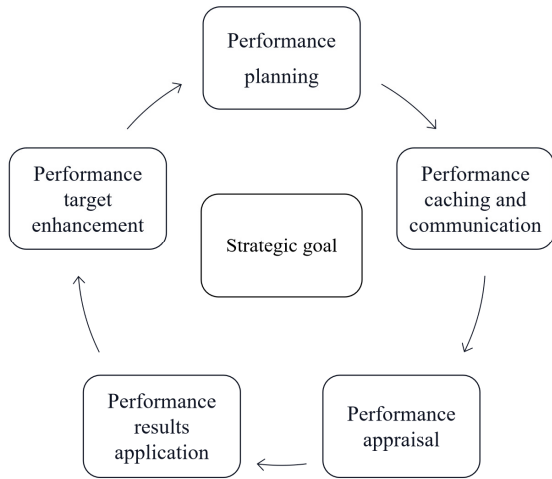


Figure 1 Performance management system

3. THE ROLE OF BIG DATA IN BUSINESS PERFORMANCE MANAGEMENT

3.1. Improve management efficiency

Business PM is often based on experience-oriented when it lacks extensive data support. This will lead to the rigidity and inefficiency of the internal management within the enterprise, which will hinder the structural reform of the enterprise's system and decision-making. In big data, PM is based on objective operating data. This scientific and reasonable PM model makes business PM more efficient.

3.2. Realize interactive performance management

Traditional PM is mostly one-way management to employees, whose participation in PM is relatively low, making the management unable to understand the problems affecting employees' work performance timely. However, with the advent of the significant data era, companies can dynamically and continuously collect employee feedback, integrate employee performance data, explore the internal relationship between these data, and understand the reasons affecting employee performance, enabling interactive management of performance by formulating targeted countermeasures. This interactive PM can realize the communication between the management and employees as well as between employees and employees, which is conducive to enhancing the cohesion of the corporate and accelerating the construction of corporate culture.

3.3. Optimize organizational framework to achieve flat management

In the era of big data, through modern network technology media, the organizational framework of

enterprises tends to be flat. In this mode, employees can cross management departments and levels, significantly improving the speed and efficiency of information dissemination and the quality of management. At the same time, those young employees with advanced ideas can effectively use big data to achieve self-management. In the analysis of performance data, enterprises can screen out helpful information through effective screening and use this information to solve the problems in the process of team cooperation, to ensure that the company's leaders and employees establish a harmonious relationship, which is more conducive to the long-term development of enterprises.

3.4. Digitization of non-quantitative information

Enterprises often touch on some non-quantitative factors when evaluating employees' performance, such as whether their work attitudes are correct, whether they love their work, and other evaluation indicators, making the evaluation results somewhat subjectively. However, the era of big data has fundamentally changed this situation. It can effectively quantify these non-quantitative factors. For example, enterprises can use information technology to collect employees' daily workload, check-in and check-out records, and other data when evaluating employees' work attitudes. Management can use this data as part of an objective evaluation of employees' work attitudes and performance.

4. THE ISSUES OF PERFORMANCE MANAGEMENT IN CHINESE STATE-OWNED ENTERPRISES

China's enterprise management model has undergone significant changes with the establishment and continuous improvement of the modern enterprise management system. With the constant advancement of human resource management in recent years, PM has also attracted more and more attention. Due to the relatively late implementation of performance management in Chinese enterprises, there are different problems in performance management, performance planning, performance implementation, performance evaluation, performance feedback, interviews, application of assessment results, and other components [4]. The main issues are as follows:

4.1. Backward management concepts

Performance management is the evaluation of staff's daily work status and the quantification of staff's daily work content. Although big data technology has gradually entered some SOEs in recent years, they still use traditional management concepts in their work. Some traditional management concepts have penetrated all aspects of management work, forming a mode of thinking.

This is not conducive to the development of enterprises. At present, many SOEs simply equate PM with performance appraisal, believing that the implementation of performance appraisal is the implementation of PM. Performance appraisal is only one component of the PM, a management process to ensure that employees' work goals align with the enterprise's goals. Performance appraisal is only one way to evaluate employees' work performance. These backward concepts are no longer applicable to the management of SOEs in the current era of big data and even hinder the application of big data and other information technology in PM. In addition, the management system and evaluation system of SOEs are relatively backward, and the link of information connection is relatively slow, which eventually leads to the lack of active working state of some employees and the lack of competitiveness of enterprises

4.2. Insufficient coverage of performance management

The PM work of many SOEs in China has deviated from the enterprise development policy. At the same time, many companies use PM metrics to measure how much work is being done by their employees. This state of separation from the enterprise development strategy will inevitably lead to the long-term level of purely mechanical, repetitive work of employees, who will not realize that their behavior is related to the development of the enterprise. In severe cases, many employees will be passive, unable to give full play to their subjective initiative in the operation of the enterprise and unable to help create more value for the enterprise [5].

4.3. Lack of objectivity in performance appraisal

At present, the performance evaluation of SOEs in China is primarily subjective. For example, some enterprises use the method of employee scoring to evaluate the performance of employees, but do not apply information technology to the performance evaluation of enterprises. Therefore, the assessment results seriously lack fairness, leading to employees no longer taking the results as the work goal, and blindly pursuing the interpersonal relationship, which is not conducive to the construction of corporate culture. While some companies have introduced Internet technology into performance reviews, most simply use databases or office software such as EXCEL to evaluate employees' working conditions. However, leaders often have particular subjectivity in the face of evaluation data. They tend to expand specific evaluation indicators according to their own subjective will, leading to the final evaluation result being one-sided sex. For example, to pursue higher economic benefits, many leaders tend to care only about the performance of their employees, but do not know much about their work attitudes. The subjectivity of the

performance appraisal system will severely impact employees' enthusiasm and affect the company's long-term development.

4.4. Lack of compound talents and low intelligent application

Using big data to manage is an integral part of management method innovation in the information age [6]. However, some SOEs have been affected by traditional human resource PM methods. For a long time, they have not paid enough attention to informatization construction, resulting in a lack of relevant data-based talents within SOEs, which creates a barrier to innovation in the current PM model. Performance management innovation needs more technical support, but in the era of big data, the lack of technical talent reserve is also a common phenomenon in some SOEs. On the one hand, the failure of enterprises to introduce big data will have a great impact on PM. However, after the introduction of big data, big data technology has become a decoration due to the lack of data composite talents. It cannot be used to improve the performance of enterprises. The lack of data interdisciplinary skills has undoubtedly become an important factor hindering the application of big data in SOEs' PM.

4.5. Inability to conduct a comprehensive evaluation

At present, most of the performance appraisal work of SOEs has only become a form, focusing on the end of the month or the end of the year, leading to the relevant department leaders to evaluate employees only to obtain the final results based on the current situation of employees, which is easy to ignore the work attitude of employees. Moreover, because performance appraisal is linked to salary performance, leaders attach importance to results, but ignore the process of employees' contribution, and the evaluation of employees is not objective and unfair. This is unreasonable to a certain extent, but in the context of big data, corporate performance evaluation can effectively avoid such problems, and the data provided by big data can ensure that PM is fairer.

5. INNOVATIVE STRATEGIES OF PERFORMANCE MANAGEMENT IN CHINESE STATE-OWNED ENTERPRISES UNDER THE BACKGROUND OF THE BIG DATA

5.1. Innovative performance management methods

First of all, the way of performance appraisal can be changed. Enterprises should adopt a comprehensive

performance appraisal method, which should not only pay attention to the performance of employees but also pay attention to the process of employees' efforts in work. Companies should also adjust the means of performance appraisal according to the operational status of employees to mobilize the enthusiasm of employees and improve the efficiency of performance appraisal. Second, the organizational structure should be optimized to achieve flat management. Flat management in the context of big data is conducive to the dissemination of information [7]. Enterprise information can be circulated faster and more accurately within the enterprise, communication between departments is more convenient, and problems can be solved for the first time, thus improving the efficiency of data use.

5.2. Innovative performance management concept

Under big data background, SOEs need to make more effective adjustments. They can no longer use traditional concepts to perform some management tasks but carry out changes and innovations in ideology to guide practice and innovation. SOEs' human resource management departments should pay attention to improve their business capabilities and comprehensive quality and make corresponding decisions according to changes in market demand, update management concepts, integrate big data innovative thinking into the performance management of SOEs, and comprehensively control performance management.

5.3. Improve the management level of human resources managers

The workability and management level of human resources managers will also affect the quality and efficiency of management work. Therefore, in the context of big data, managers should pay more attention to their management quality and level and constantly improve the self-quality level. At the same time, managers of SOEs should also be aware of the importance of PM for the development of SOEs so as to make better use of big data, create more convenience for management, and let big data penetrate more work links to improve work efficiency.

5.4. Optimizing existing talent assessment methods

In the process of talent evaluation and management, to reflect PM's fairness and impartiality, enterprises can use big data to carry out a reasonable evaluation of talents and apply all-around evaluation methods, which provides a new way for PM. At the same time, there is a potential connection between data.

5.5. Establishing a sound and complete evaluation index system

For enterprises, the diversification of performance standards is a crucial way to improve employees' sense of enterprise identity. It is necessary to take advantage of enterprise informationization, use ERP employee management systems, and perform detailed statistics on various indicators of employees. From the perspective of data collection, through data analysis to complete the performance appraisal indicators, thereby enhancing the rationality of the appraisal system.

6. CONCLUSION

With the continuous development of information technology, Internet technology has been applied to all aspects of enterprise management. The advent of big data is an inevitable trend of social development, which brings both opportunities and significant challenges to enterprise management. In the era of big data, PM is essential, especially in today's increasingly fierce market competition. The competition between companies is the competition of talents. PM is an essential means to stimulate work enthusiasm and retain outstanding talents. To improve the comprehensive competitiveness of an enterprise, it is necessary to rely on PM, optimize the internal human resource structure of the enterprise, and mobilize the enthusiasm of human resource directors so that it can create more value for the enterprise [8]. For corporate human resource managers, it is necessary to recognize the impact of the era of big data on PM, continuously innovate management concepts and methods, optimize the efficiency of corporate human resource management, and promote the realization of sustainable development of the enterprise.

In recent years, big data has gradually become the trend of current social development, and enterprise PM should also actively introduce big data. The application of big data can realize interactive PM of enterprises, make performance appraisal more objective and fair, improve enterprise talent planning, and optimize the structure of enterprise human resource PM. However, at present, Chinese SOEs are currently facing many challenges in introducing big data, such as subjective performance appraisal, lack of impartiality, insufficient attention from corporate leaders, and insufficient depth of data mining by management. Based on this, in the era of big data, Chinese SOEs must take reasonable measures to solve the above problems to improve their PM.

REFERENCES

- [1] Yi Xiong, Status Quo of Employees' Fair Perception and Countermeasures in Performance Management of Chinese State-owned Enterprises, in: *Statistics and Decision*, 2011 (21), pp.179.

- [2] Songsong Lei, Research on the Optimization of Enterprise Performance Management under the Background of "Big Data", in: *Journal of Qiqihar Junior Teacher's College* (1), 2020, pp.105. DOI: 10.16322/j.cnki.23-1534/z.2020.01.037.
- [3] Mengqi Wang, The integrated development of enterprise performance management in the era of blockchain 3.0, in: *Liaoning Economy*, pp.95.
- [4] Songsong Lei, Research on the Optimization of Enterprise Performance Management under the Background of "Big Data", in: *Journal of Qiqihar Junior Teacher's College* (1), 2020, pp.105. DOI: 10.16322/j.cnki.23-1534/z.2020.01.037.
- [5] Yuxin Cao, Discussion on Business Performance Management under the Background of Big Data [J], in: *Market Modernization*, 2016 (29), pp.74-75.
- [6] Juan Guo, Human Resource Performance Management Innovation of State-owned Enterprises in the Big Data Era, in: *Human Resource Management*, 2021, pp.72.
- [7] Yinhan Yang, Enterprise human resource performance management innovation under the background of big data, in: *Human Resource Management*, pp.123.
- [8] Zhao Liu, A Preliminary Study on Enterprise Human Resources Performance Management in the Era of Big Data, in: *China Management Informationization*, 2019 (4), pp.71.