

Innovation of Performance Management in Enterprise Human Resources Based on Big Data

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Abstract: The era of big data brings reform and innovation to enterprise human resources management. Under the background of big data, the data has deeply affected all aspects of human resources management. Human resources performance management uses data to show the performance level of each department through the analysis and collation of massive data. To conform to the development trend of the times, enterprise need to make changes and innovations. Based on the author's study and practical experience, this work first analyzed the characteristics and sources of the big data in the enterprise human resources management, and then put forward the innovation strategy of the performance management in enterprise human resources in the background of big data.

1. Introduction

Big data is a product of the continuous development of information and communication technology. Only through the new processing modes can enterprise have the abilities of decision-making power, insight into discovery and process optimization to deal with diverse information assets with high grow rates [1]. To some extent, both macro-government management and micro-enterprise human resources management have been in the big data environment, whose management way of thinking has essential changes. Under the background of big data, the enterprise can use data for reporting and analyzing through developing the corresponding data analysis model and system network, thus applying the data to recruitment, training and assessment, which makes the human resources performance data more valuable [2]. Therefore, perfecting and innovating the level of human resources performance management in big data era is a problem that enterprises and managers must pay attention to.

2. Characteristics and Sources of Big Data in Enterprise Human Resources Management

2.1 The Characteristics of Big Data.

Big data is an abstract concept without a unified conclusion in academia at present. According to Wikipedia, big data or huge amount of data is a collection of data that cannot be captured, managed and processed by conventional software tools in the limited time. James O.McKinsey defines big data as a data set with big size which exceeds the capabilities of regular database tools for acquiring, storing, managing and analyzing. Although these definitions are different, the characteristics of big data behind them are similar, which are the characteristics of 4 "V". Large data volumes (Volumes). The data has evolved from GB to ZB. Data type diversity (Variety). Typically, data types are divided into structured and unstructured. The former refers to text data that is easy to store, the latter refers to non-text-based data, including video, audio, web logs, pictures and geolocation information [3]. In the era of big data, unstructured and semi-structured data grew explosively. Low value density and high business value (Value). There is only a small amount of valuable data in the mass data, which can be used as a resource to obtain high commercial value. High speed (Velocity). This is means the one second law for data processing.

2.2 The Origin of Big Data.

Original data refers to the basic information of employees, including age, academic background, professional level, work experience and job status. Capacity data refers to the quantitative data of employees' current practical ability, including staff training experience, training hours, training assessment, rewards and punishments. Efficiency data refers to the performance data of employees, including the efficiency of task completion, the completion time of individual tasks and the failure rate [4]. Potential data refers to the data reflecting the development potential of employees, including the rate of improvement in work efficiency, the level of improvement in income, the extent of promotion in occupation and the rate of improvement in performance.

3. Innovation Strategy of Enterprise Human Resources Performance Management under the Background of Big Data

3.1 Expand Data Collection Sources.

The data of human resources performance management includes three aspects. The first is the objective basic data of enterprise human resources. The second is the dynamic data to record the changes of human resources in enterprise. The third is the analytical data to record the quality of human resources. The objective basic data of enterprise human resources, including the amount, gender, age, education, position, birthplace and work experience of performance evaluation objects [5]. Through the statistical analysis of these data, can enterprise obtain objective basic situation of human resources in this stage. The enterprise can update the changes of the employees and know the basic information of the employees according to the database system, thus making a good adjustment. Generally, it is easy to collect these data due to employees need to fill in their resumes during the recruitment process, which includes these information. Therefore, enterprise only need to enter employees' data into the database for simple analysis when formally identifies employees as employees. In addition, the Enterprise Human Resources Center can generate monthly human resources base data statements to allow the decision makers to compare them with comparable period data. Thus the basic data of human resources can obtain a general understanding of the current situation [6]. The dynamic data of human resources changes in enterprise, including recruitment completion rate, human resources change rate, recruitment cycle, staff turnover rate (including core staff and basic staff) and employee turnover rate in each branch or within the enterprise. If an enterprise can obtain a higher recruitment completion rate in a shorter recruitment cycle, this can basically show that the enterprise has a strong competitiveness in the recruitment enterprise and will be very popular with candidates, thus having a good employee input channel. On the contrary, if the data show that the enterprise takes a long time for recruiting and has a long recruitment cycle, the HR director will need to analyze it in greater detail. Moreover, the enterprise internal staff turnover rate can reveal the enterprise staff promotion, transfer and other aspects of the situation. Therefore, these dynamic data can well reflect the vitality of enterprises in a period of time. In the aspect of collecting dynamic data, enterprise can update the data accumulated in the past according to market conditions and carry out horizontal and vertical comparative analysis of such data, in order to make an objective evaluation to the vitality of enterprise human resources. The analysis data of human resources quality, including the utilization of hours, attendance, the return on investment in human capital, the average cost of human resources and the satisfaction of employees. The analysis of these data should be flexible, which means to excavate the latent intrinsic relation between the data.

3.2 Innovate Human Resources Performance Management Method.

Firstly, enterprise should improve the performance evaluation method. Enterprises can abandon behavior-oriented and result-oriented performance evaluation methods and adopt comprehensive performance evaluation methods, including synthetic evaluation method, graphical evaluation scale method and evaluation center method [7]. All kinds of comprehensive performance evaluation methods have their own characteristics, such as graphical evaluation scale method involving a large

range of testing content, including the personal quality characteristics, work performance and dress of stuff. Enterprises can choose and design appropriate performance evaluation methods according to their conditions on account of the comprehensive evaluation method has a wide applicability. Although the testers will produce the deviation of halo benefit in the process of selecting the evaluation elements and personnel, the enterprise can reduce the impact by collecting and analyzing the evaluation data of the employees in different positions for many times with the application of big data.

Secondly, enterprise should reasonably design performance evaluation index system and standards. The enterprise sets needs, more needs and extremely needs three grades by listing the factors related to the evaluation of the job to obtain the performance appraisal index system and invites the relevant experts to evaluate the grade of each index element, thus obtaining the performance evaluation index system according to the opinions of experts. For instance, based on the nature of the salesman position, the enterprise uses this method to analyze repeatedly and concludes the performance appraisal system of the salesman is composed of five main indicators, including service attitude, contract performance rate, customer complaint rate, sales expenses and sales growth rate [8]. Therefore, the performance appraisal of salesmen can be analyzed by collecting, counting and analyzing the relevant data of the five indicators, thus finding the performance management methods to solve these problems

Thirdly, enterprise should set and apply the key performance indicators. The key performance indicators (KPI) refers to the indicators which are in the core or important position of the performance appraisal indicator system and can reflect, influence and restrict the other variables in the objective problems. This method can be used to measure the effectiveness of performance management decision execution, due to these indicators are decomposed and transformed according to the macro-strategic objectives of the enterprise. These indexes can be used to control, supervise and feedback the enterprise human resources performance in advance, in the event and after the event.

Fourthly, enterprise should use 360 degree evaluation method based on Internet correction. The 360-degree evaluation method, also known as the all-round perspective evaluation method, which generally refers to the evaluation of employees from all angles of view by the leaders, colleagues, customers (including internal customers and external customers) and themselves as the examiners. After that, the feedback program is used to help improve the work behavior of employee to achieve the purpose of performance appraisal. The traditional 360-degree evaluation method has many weaknesses, such as the unfair evaluation results, the less feedback interview, the huge workload and the excessive consuming time [9]. In order to avoid the defect of the traditional 360-degree evaluation method, combined with the application of big data, the 360-degree evaluation based on the Internet has replaced the traditional 360-degree evaluation method. With the help of the Internet advantages, this method greatly simplifies the work of performance appraisal and makes the evaluation process more real-time, thus saving manpower and material resources [10]. In order to enhance the communication between the enterprise and the supplier, the human resources performance appraisal system needs to keep up with the organization and business process of the enterprise and ensures the validity and convenience of the information transmission within the enterprise. Therefore, the enterprise needs to carry on the computer information management platform construction based on their own characteristics in big data era.

4. Summary

Big data has become a symbol of the times. Network information technology participates every link in the field of human resources management, which brings both opportunities and challenges to performance management. It has become an inevitable requirement for human resources managers to change from traditional thinking mode to big data thinking mode. Under the background of big data era, enterprise must establish a suitable computer information management system, train computer data talents and use the application of system to manage and control enterprise performance, in order to achieve the effective integration of talent, computer and system, thus effectively using big data to

provide help for enterprise human resources performance management.

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