On the Application of Big Data Technology in Human Resource Management in the New Era

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Abstract. Big data technology has entered our lives strongly, and it can be applied systematically in enterprises to play a great role in the original. Human resource managers of enterprises should establish the thinking mode of big data, have keen insight ability in talent allocation, have foresight consciousness in strategy formulation, devote themselves to daily management work, and apply innovative ideas into practice. For any enterprise, the human resource management department is faced with huge and complex information every day. Some systems or software can help.

Keywords: Big Data Technology, Human Resource Management, Application

1. Introduction

One of the main responsibilities of human resources is to fill job vacancies. In the past, it was relatively easy to collect certain employee data (such as salary and benefits package), and human resources often used more traditional methods to acquire talent. As the market changes, human resources need more and more data, more and more complex, more and more trouble to collect information. So they often face recruitment difficulties, recruitment takes a long time, high cost problems. Recruiters are starting to experiment with new ways to use big data in the hiring process. Big data can enable human resource managers to monitor and track the efficiency of recruitment efforts to better determine the most effective strategies for attracting ideal candidates. In this way, big data can simplify the recruitment process and make it easier to narrow a large number of applicants to a smaller, more qualified talent pool. In addition, big data can give HR departments the opportunity to identify patterns and trends in employees and develop programs aimed at increasing employee loyalty and reducing turnover. With big data, HR managers can understand not only how to hire talent, but also how to keep it. In a word, big data plays a wide role in human resource management in the new era.

2. Status of human resources management
As the traditional concept is deeply rooted, some managers even think that human resource management is only the routine management of enterprise internalization. There are generally "absolute empiricists" and "intuitive decision makers ", that is, relying on experience or reporting, intuition and subjectivity of a single expert to judge , management methods [1]. A number of corporate executives do not attach the same importance to information management as talent, capital and brand management. Many executives view data as transactions that should be entrusted to IT departments, or think that they do not have the professional skills to participate in the sharing process of data in the organization. the concept of human resource management can not keep pace with the times, so it is necessary to carry out some innovation. with the advent of the big data era, enterprise managers need to update their management. the most important thing is to change the management concept. big data will certainly promote the transformation and upgrading of human resource management to achieve a significant increase in value and professionalism [2].

3. The significance of using big data in human resource management

Ma Yun once said :": the biggest energy in the future is data ". Data is new energy, so data assets are very important. Data has become an important factor of production, which can have an important position as material assets and human capital. More and more enterprises begin to use big data to identify and manage talents, rather than "seeing trees without forest ". Human resources management needs to take the initiative to deal with changes, make choices, not to be selected, or to be eliminated [3]. Data analysis can provide strong decision support for human resources managers, help human resources managers broaden their horizons, open their minds, deepen their understanding of data analysis, integrate data analysis seamlessly into human resources management practice, and promote decision makers to look at a person more comprehensively and systematically and make more informed decisions.

4. How to enable digital transformation

Enterprises need to build a digital atmosphere and digital governance mechanism. The atmosphere of digital enterprise is different from traditional enterprise, it should be more open, equal, more humane and can embrace culture at the same time. In Sinopec sharing center is all open office, everyone is sitting in a relatively open office area, sharing various resources, often organize various activities to cultivate the spirit of cooperation between colleagues. In addition, if you can enter by brushing your face or fingerprints, through the creation of these atmosphere, employees can experience the changes brought about by digitization, and can also effectively promote the implementation of digital strategy. HR to understand the main trend of digitization, and to help enterprises attract and train digital talents, cultivate the acumen of digital staff, digital acumen will become a key personal and organizational ability more and more. The future labor force will need to have digital ability, pay attention to the digital governance and cultural of enterprises [4].

5. Achieving human resources management roles and competencies change

In the era of big data, human resource management will change from empiricism to more scientific and standardized management, which will make human resource management more efficient, more accurate and more powerful. Therefore, HR work should rely more on advanced technology platform to obtain data and improve the ability of data analysis, and more consulting, auditing and decision-making tasks
[5]. The application of big data involves psychology, computer science, statistics and other disciplines, which also puts forward a change in the ability of HR positions. Data analysis reflects the technical rigidity of human resources management practitioners, their own work efficiency, vocational skills and so on need to be further upgraded.

6. Big Data Optimizing Human Resource Management

![Diagram](image)

**Figure 1.** The optimization direction of big data for HR

First, make effective human resource management plan. Big data era, it is necessary to formulate human resource strategy and plan consistent with enterprise strategy, and provide good talent capital guarantee for enterprise development [6]. At the same time, in the era of big data, the organizational form will change, the original kind of hierarchical, functional, matrix organization, is gradually replaced by some new organizational models, in the future, will see more network organizations, platform organizations, circle organizations and other organizations, and these organizations have their own characteristics.

Second, big data helps enterprises recruit. Previous talent recruitment, like a big funnel, the enterprise according to the order, and then missed part of the bad luck. This extensive talent acquisition method is not only a waste of time, but also unfair, because of cost considerations, it is impossible to carefully select and evaluate candidates. Big data uses talent recruitment to improve the accuracy of talent recruitment. [7] It is no exaggeration to say that the recruitment period may be shortened from the past month to only one week. HR need to help the company become faster and faster. Big data is used in recruitment, such as artificial intelligence, not only saves time, but also saves cost and efficiency. It also avoids bias in the recruitment process, such as gender, race, discrimination, etc. There is a talent recruitment website in Sinopec system, through the resource allocation platform registration, audit, employment and a series of operations, so that Sinopec staff information more accurate, more timely, more dynamic, In a particularly short time can quickly grasp the characteristics of internal candidates, key points. For example, talent radar scanner, retrieval and identification of all people in the enterprise, the past talent recruitment is relatively simple, there are examinations, expert understanding, mass recommendation and other forms, and big data to make accurate, quantitative judgment of talent, talent characteristics, excellence, level of appraisal, and as a basis for subsequent appointment, development, promotion or elimination, HR departments in the use of talent, play a number of roles, such as referee, recommendation, guidance, and no matter which role, need big data, to ensure its fair, neutral, objective
identity, why choose, recommend, develop or eliminate, There must be an objective basis, and this basis is the result of big data [8].

Third, adjust employee training. With the arrival of the big data era, new requirements have been put forward for talent training. It is necessary to speed up the training of talents. Enterprises should popularize big data knowledge to employees and improve their ability of data analysis. Understand the various factors and calculation methods behind the data, and learn to think critically about the accuracy, sample size, objectivity and quality of the data. Even college statistics professionals may need training to apply what they have learned to practical work, and data needs relevance, accuracy, cubism, and predictability [9].

Fourth, big data helps employees motivate. The ever-increasing volume of data and accelerating social development have forced the organization to make adjustments, but the ongoing restructuring, downsizing and change activities will reduce the sense of security and stability of employees. Need to understand the employee's concerns and willingness to respond to him

7. Get HR away from big data mistakes

![Figure 2. Misunderstanding schematic](image)

Myth one: the larger the amount of data, the better. It is believed that only a large amount of data can accurately reveal the law of things. As long as the appropriate data sample size can be obtained, do not need the so-called sea volume data [10]. Do not blindly obtain more data, the key is the representative, authenticity, validity and suitable sample size. The "big" of big data refers to the quantity and type of data.

Myth two: electronic information is equivalent to data. Some departments electronic processing of past personnel files, through paperless office, information into the electronic management system, but this is not into the big data era. In the era of big data, truly valuable and meaningful data are quantifiable information that can be judged and analyzed.

Myth 3: as long as a large number of data, even into the era of big data management. Some people think that as long as the establishment of information electronic data management system, a large number of data collection, preservation, improve the efficiency of data use, even into the era of big data management. In fact, this is far from real big data management. The fundamental purpose of quantitative digital management is to improve the accuracy of understanding things in order to make more accurate decisions.
Myth 4: the application of big data, can make immediate results. In the process of implementing digitization, many enterprises are like blind people touching elephants, seeing trees and trees without forest, lacking complete thinking about numbers, leading to "piecemeal" in practical applications, and in order to truly become digital enterprises, We need to pay attention to both external and internal dimensions.

8. Conclusion

With the rapid development of the Internet industry, focusing on quality, efficiency and speed has become the internal requirements of organizational development. At the same time, with the advent of the digital era, enterprises of all sizes have begun to transform and upgrade. In the past few years, the practicality and application value of using human resource data to analyze, forecast and improve performance have been constantly rising in the world, and there is a trend of further popularization in the future. Obviously, big data and human resources have been well integrated and applied.

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