Original Research Article

Exploration into the optimization path of informationization construction in university human resource management

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Abstract: The informatization construction of human resource management in universities is imperative and is the key to empowering the teaching and education functions of universities. Based on years of work practice, this article analyzes the characteristics and necessity of informationization in human resource management in universities, and proposes a path to optimize the informationization construction of human resource management in universities, providing reference for the informationization construction of human resource management in universities.

Keywords: Universities; Human resource management; Promotion of information technology

1. Introduction

Human resources are the main resources of universities and the core force for universities to achieve the fundamental goal of cultivating morality and talents. Based on the development of big data technology, especially the application of artificial intelligence in university administrative management, traditional human resource management models are difficult to adapt to the trend of university development. In the context of vigorously developing the construction of the Guangdong Hong Kong Macao Greater Bay Area, it is imperative to promote the informatization of human resource management in universities. Therefore, universities should actively explore the path of informatization of human resource management and help promote the high-quality development of human resource management work in universities.

2. Overview of Informationization Construction of Human Resource Management in Colleges and Universities

The informatization of human resource management in universities is the use of new generation information technologies such as big data to effectively manage various aspects of human resource planning, recruitment, training, assessment, and motivation, in order to maximize the value of human resources. For example, in the human resources incentive process, universities use big data technology to collect the demands of faculty and staff, formulate corresponding incentive policies based on their differentiated demands, and use online platforms to disclose incentive policies, processes, and personnel, achieving transparency in incentive measures and openness in incentive targets. Compared to traditional human resource management models, human resource management informatization has the following characteristics: highly matching network information. As a knowledge intensive organization, universities can be provided with open spaces through online platforms. Through online platforms, universities can achieve communication and collaboration across time, space, and departments. With the help of online platforms, real-time interaction and personalized customization of human resource management can be achieved, making information system iteration more flexible; Highly adaptable to decision-making data requirements. Human resource management serves the

strategic decision-making of units. The object of human resource management in universities is complex and the content is cumbersome. In the context of big data, the foundation of human resource management in universities is data. By collecting, organizing, and analyzing data, useful information can be provided for university decision-making. For example, by building a teacher resource library, universities can achieve classified management and dynamic allocation of teachers, thereby optimizing talent introduction decisions; Highly value user experience. The key to the informatization of human resource management is to provide users with high-quality service experience. The users of informationization in human resource management in universities include university managers, faculty, full-time human resource managers, and other relevant personnel. The integration of the people-oriented concept into human resource management informationization is a significant characteristic.

3. The necessity of informationization construction in university human resource management

3.1. Enhance the scientificity of talent selection and breeding

One of the main tasks of human resource management is to provide a high-quality talent team for the high-quality development of universities. By building an information system for human resource management, universities can rely on information technology and big data to intuitively grasp the quantity, quality, structure, and utilization of human resources in universities. Based on the current situation of talent team construction in universities, scientific talent selection plans can be formulated. On the one hand, the information system for human resource management accurately records the characteristics of various positions in universities, and selects corresponding talents for universities through future development trends and discipline construction, improving the accuracy of talent selection and recruitment; On the other hand, the informatization of human resource management provides an integrated support environment for talent cultivation. The informatization of human resource management is not only reflected in the scientific nature of talent recruitment, but also in the presentation of intuitive document and policy information to faculty and staff based on system functions, allowing them to timely understand relevant policies of universities, integrate them into the high-quality development system of universities in combination with personal career development plans, form a personalized and professional education and training system, and promote the continuous optimization of knowledge structure and improvement of job performance ability of faculty and staff.

3.2. Improve the efficiency of human resource management

The traditional human resource management model has problems such as poor departmental information sharing and low work efficiency. The informatization construction of human resource management has changed the drawbacks of low efficiency in traditional human resource management work. With advanced information technology and big data as support, it makes the workflow of human resource management in universities faster and more automated, effectively improving the efficiency of human resource management in universities. For example, based on the continuous expansion of the scale of universities, human resource management workers in universities not only need to handle personal information and job structure of faculty and staff, but also need to do a good job in statistical recording of student related information. The construction based on human resource management informatization can effectively reduce the manual statistical process. It integrates data statistics and business processing through the use of information systems, establishes a personnel information

database, and liberates human resource managers from tedious transactional work to carry out innovative human resource management work.

3.3. Improve the accuracy of human resources information recording

The informatization of human resource management has changed the traditional paper-based document transmission mode. It uses computer technology and mobile terminal devices to achieve real-time and visual transmission of human resource information, greatly improving the efficiency of human resource information transmission in universities and ensuring the accuracy of recorded information. Firstly, universities rely on human resource management information systems to transmit important information such as human resource management systems and work arrangements to university faculty and staff, ensuring that the majority of faculty and staff can receive relevant information and improve the transmission of human resource decision-making information. For example, universities can send relevant human resource systems to the university staff work group through the human resource management system, which solves the traditional mode of relying on manual transmission and effectively solves the problems of slow delivery time caused by manual transmission; The second is to rely on the human resources information system to achieve real-time communication and interaction between the business departments of the human resources management department, use the information system to automatically record relevant information of the assessment objects, avoid the drawbacks of manual recording errors, and achieve information sharing in human resources management.

4. Optimization path for informationization construction of human resource management in colleges and universities

4.1. Strengthen the governance of human resource data and prevent risks in human resource management

In the digital environment, all management activities and processes are centered around data flow. The objective authenticity of data has a direct impact on the accuracy of human resource management, making data governance particularly important. Firstly, we need to thoroughly clean up the existing data, which is a complex systems engineering task due to the ongoing nature of human resource management. Based on the detailed data of personnel files, we digitize key file information as the basic data for various business operations. Secondly, establishing a data review and confirmation mechanism is crucial. When constructing the system, it is necessary to fully consider the modification process of management data, including initiation, review, approval, and other links, to ensure the security of system data. Data adjustments must be reviewed and confirmed by at least two personnel. For modifications to key data, approval from authorized approvers is also required to ensure the legality and accuracy of data adjustments. In addition, establishing a cross validation mechanism between data is also essential. Due to the close correlation between human resource management data, parameterizing relevant business data can ensure data accuracy through cross comparison. Finally, to implement business parameter management, the system design needs to decompose and parameterize the result data based on business logic, in order to achieve automated processing of routine business. For example, the calculation of employee wages is influenced by factors such as years of work experience, position, assessment, attendance, and school allocation plans. These factors are broken down to form parameters for wage distribution. If the natural increase in wages caused by years of work experience, adjustment data should be automatically generated by the system.

4.2. Build a personnel work platform to achieve "maximum one run"

Based on the development of big data technology, in order to improve the efficiency of human resource management in universities, universities need to strengthen the application of big data technology, create high-quality personnel work platforms, and optimize the business processes of human resources in universities. Firstly, universities need to establish data standards and consolidate the foundation of personnel information. Data is the foundation of the informationization construction of human resource management. Universities should establish data standards that meet the requirements of human resource management work in accordance with relevant departments, form high-quality electronic files of personnel information, and establish a master database of accurate and standardized data for the entire life cycle of faculty and staff. Basic information, work experience, educational experience, appointment information, transfer information, contract information, certificate information, resignation information and other information of faculty and staff should be included in the database to provide core personnel information for the informationization construction of human resource management in universities; Secondly, build concise service functions. The human resources management department in universities has a wide range of functions, and it communicates and exchanges with various departments and departments almost every day. Providing a convenient service platform for employees is the key to promoting the efficiency of human resources management work. Universities should establish a high-frequency business processing service platform to transfer tedious human resource management tasks from offline to online, such as setting up leave, business trip approval, hanging out for training, applying for training hours recognition, annual assessment registration, part-time teacher employment management, course compensation approval, etc. These personnel related processes can be processed through online platforms to minimize the time and energy required for faculty and staff business processing and information filling; Finally, a closed-loop management system is established to achieve a maximum of one run. Colleges and universities combine the needs of human resource management work, optimize business processes, promote business flow through forms, and create a one-stop service platform for personnel management, transforming from "people looking for things" to "things looking for people". For example, in order to improve the efficiency of human resource management in universities, a one-stop schematic diagram is established to clarify the content of various human resource management matters, which are divided into modules such as "onboarding", "regularization", "job transfer", "resignation and retirement", "overseas travel permits and licenses", "contract information", and "job promotion".

4.3. Digital empowerment and innovative human resource assessment models

The key to innovative development in universities lies in talent, and stimulating the enthusiasm of faculty and staff to form higher innovation efficiency is one of the goals of human resource management in universities. As a knowledge intensive institution, the performance evaluation of human resources in universities has always been a difficult problem, especially for the evaluation of teacher positions, which lacks objective evaluation standards, results are difficult to clearly divide into positions, and the evaluation system is incomplete. To promote the informatization construction of human resource management, universities should leverage digital technology optimization and establish assessment models that are compatible with human resource management informatization. Firstly, universities should base themselves on the current situation of human resource management, set assessment indicators for teaching positions, research positions, and logistics

positions, preset indicator libraries and template libraries, and assist in the scientific design of evaluation systems. The performance management system can integrate business systems such as financial management system, project management system, asset management system, etc., and support automatic collection of data for all involved assessment departments, assessment indicators, and participating departments; The distribution, scoring, collection, statistics, and analysis of assessment forms can be fully automated and self-service online, greatly reducing the workload of evaluation; The second is to innovate the human resources assessment and evaluation model, achieving real-time monitoring of the progress of the assessment process. For a long time, there has been a problem of prioritizing results over processes in the assessment of human resources in universities, which has made it difficult for many faculty members to improve their personal shortcomings in a timely manner. For example, when the human resources management department evaluates the assessed objects, their energy is focused on the assessment results, and the assessed objects have difficulty understanding the assessment progress. To this end, universities should rely on big data technology to build a human resources assessment platform, where the progress of the assessment process can be tracked in real time, and attention should be paid to process supervision and target communication. The evaluation results should be directly linked to target correction, dynamic management, performance budgeting, etc., and directly applied to the comprehensive evaluation of universities. At the same time, it should automatically summarize and analyze, visually present and track the performance status of talents, and realize the transformation of decision-making behaviors such as talent evaluation, teacher team planning and development from "experience+feeling" to "fact+data", accelerating the high-quality development of human resources management.

4.4. Strengthen the construction of human resource management team and enhance the level of informatization

The talent team is a key factor in the informationization construction of human resource management in universities. The informationization construction of human resource management in universities not only requires human resource managers to possess professional knowledge, but also interdisciplinary skills, especially the ability to use big data technology to carry out human resource management work. Through investigation, it has been found that the majority of personnel engaged in human resource management in universities are high achieving graduates who directly enter the workforce after graduation. Although they possess a solid theoretical foundation, they lack corresponding practical skills. To this end, universities should focus on the current situation of team structure and strengthen team building: firstly, strengthen education and training to enhance the professional skills of human resource management workers. The informationization construction of human resource management requires practitioners to possess corresponding professional skills. Therefore, universities should fully leverage the advantages of on-the-job education and training, and hold various human resource management training activities to enable university human resource managers to master corresponding skills. For example, based on the online operation of the human resource management information system, it covers business scenarios such as organizational structure, job management, faculty management, contract management, report management, personnel changes, faculty onboarding, salary management, insurance management, democratic recommendation, system management, user authorization management, log management, process management, overseas management, professional title evaluation, recruitment management, talent engineering management, annual assessment, self-service, etc. Human resource managers are required to master the system functions. Therefore, universities hire system development

engineers to provide application training for their faculty and staff, in order to improve the application level of the human resource management information system; The second is to strengthen talent introduction and recruit composite human resource management workers. In response to the requirements for the informatization construction of human resource management in universities, universities should increase their efforts to recruit outstanding talents, hire experienced human resource managers to join the university, and effectively improve the quality of the university's human resource management team.

5. Conclusions

In short, promoting the informatization construction of human resource management in universities in the era of big data is the key to promoting high-quality development of universities and an important means to empower the construction of the Guangdong Hong Kong Macao Greater Bay Area. Colleges and universities should increase their efforts in the informatization construction of human resource management, build an information database for all faculty and staff, and establish a personnel management system of "smart management+innovative services", realizing the transformation from "people looking for things" to "things looking for people", in order to improve the efficiency of human resource management in colleges and universities.

References

[1]   Liu Shenbing Research on the Informationization Construction of Human Resource Management in Universities under the Background of "Double First Class" [J]. Science and Informatization 2024 (6): 172-174

[2]   Qing Fangmei. Research on the Path of Informationization Transformation of Human Resource Management in Universities: A Case Study of Open Universities [J]. China Economic and Trade 2023 (23): 196-198

[3]   Zhao Xing. Exploration of Optimization Path for Informationization Construction of Human Resource Management in Universities [J]. China Management Informatization 2023 (22): 133-135

[4]   Huang Zhuting. Research on Human Resource Management Practice in Universities under the Background of Educational Informatization
      Research [J]. Journal of Hubei Open Vocational College, 2022 (13): 54-55

[5]   Zhang Jing. Research on the Application of Information Technology in Human Resource Management in Universities [J]. China New Communications 2024 (4): 108-110

[6]   Zhong Yunyun. Research on Optimization of Human Resource Management in Colleges and Universities from the Perspective of Knowledge Management [J]. Outlook on the Bohai Rim Economy 2024 (3): 38-41

[7]   Zhang Shi. The Current Challenges and Countermeasures of Human Resource Management in Colleges and Universities [J]. Scientific Consulting 2024 (3): 45-48