

The innovation path of digital human resource management in colleges and universities

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Abstract: Based on an overview of the connotation and characteristics of human resource digital management, this paper analyzes the necessity of digital innovation in human resource management in colleges and universities. Based on the current situation of human resource digital management in colleges and universities, it proposes that colleges and universities should realize digital transformation from three aspects including talent, digital technology and campus ecology, introduce digital management system and implement the people-oriented management concept, so as to jointly build a digital human resource ecosystem, improve various management mechanisms in colleges and universities, and realize the digital transformation of college human resource management.

Key words: universities; human resources; digitization; transformation; innovate

1 Introduction

With the popularization of the Internet, both digital and information technology, as well as other innovative initiatives, have brought great development to the global economy. The digitization of human resource management can not only improve work efficiency and reduce management costs, but also bring great convenience to enterprise management. In the 14th Five-Year Plan for 2021, it is clearly proposed to "accelerate digital development and develop digital economy". The plan specifically points out that the "digital economy" is the major factor driving future economic development [1]. The current "digital" transformation of China's economy will allow traditional production factors and production relations to be arranged and combined according to the principle of optimal utilization. As an important subject of the market economy, the level of enterprise digital construction will directly affect the development of the "digital economy". Therefore, the trend of digital transformation is imperative. Human resource management should adapt to the trend of the times and explore effective working paths under the digital background. Digitalization focuses on the reshaping of business by digital technology, and information technology capability is not only a simple solution to the problem of cost reduction and efficiency increase of enterprises, but also an important force for enterprise business model innovation and breakthrough. Digital transformation is the use of digital technology to promote the enterprise organization to change the business model, organizational structure, corporate culture and other change measures [2]. The digital transformation of human resources in colleges and universities is the process of standardization and digitization of university work and staff activities, so as to build a new digital ecosystem. Digital technology fully popularizes the business of human resource management, improves the efficiency of administrative management and teachers' work efficiency, and improves competitiveness.

2 The necessity of digital innovation of human resource management in universities

On the one hand, the digital transformation of human resources is the process of digitizing, streamlining, and standardizing staff activities and daily work of universities, so as to build a new digital ecosystem [3]. Whether from the perspective of human resource management or the perspective of faculty, digital technology is fully integrated into each subdivision function of human resource management, which improves the work efficiency of administrators and teachers to the greatest extent, and enhances the competitiveness. University management has always been based on the traditional management mode centered on the opinions of leaders, which deviates from the management mode that integrates management and service in the era of digital economy [4]. The rationality and fairness of management decision-making have become the most important factors for today's "post-90s" and "post-00s" employees, especially among university staff with more concentrated social intelligence and more active ways of thinking. More attention should be paid to the rationality and fairness of management decisions, and their importance is increasing. The management of colleges and universities cannot simply take the "academic qualifications, professional titles, papers, projects and teaching workload" of faculty and staff as the only evaluation index. It is necessary to establish a more comprehensive and objective evaluation system, which also requires the integration of personnel data, and the integration of human resource management in colleges and universities. From the perspectives of scientific research, teaching, human resources, finance, Party politics, student services and logistics, the value of data is mined, the data and university policies are further analyzed, and a complete and comprehensive faculty evaluation system is established, which not only provides data support for university's management model and management decisions, but also provides a strong support for the improvement of the governance capacity of schools. Therefore, the digital transformation of human resource management in universities is an inevitable requirement for entering the era of digital economy [5].

On the other hand, the operation of various systems of smart campus has accumulated a large amount of data, which should not be put aside by the administrators of colleges and universities. Fully exploring the effective information in data, especially the teaching, scientific research, human resources, finance, Party groups and logistics information related to faculty evaluation, to support the faculty evaluation work, will be the only way to improve the scientific and rational evaluation of faculty and staff. It is mainly reflected in the following points: First, the digitalization of human resource management pays more attention to employee experience and organizational effectiveness, and improves employee satisfaction, work enthusiasm and organizational efficiency through digital means; second, the digitalization of human resource management covers employee recruitment and training [6]. The whole process of performance appraisal and salary management realizes the intelligent application of the whole scenario online and offline, and improves the management efficiency; third, through data integration and sharing, the digitalization of human resource management organically combines all kinds of data, which can carry out comprehensive, objective and accurate analysis of data and provide strong support for management decision-making; fourth, the digitalization of human resource management emphasizes data-driven decision-making and evaluates employee performance through data analysis to make salary plan, and make decision more scientific and objective; fifth, the digitalization of human resource management adopts advanced intelligent tools to realize the automation and intelligence of the management process, which greatly improves the work efficiency and quality of human resource management.

3 The current situation of digital innovation of human resource management in universities

3.1 Lack of professional level and low efficiency

In order to save costs when introducing talents, some faculty members are not highly specialized and are not systematically trained. The work of each administrative department is divided into small parts, each performs its own

duties, and there is a lack of cross-departmental coordination. For example, students and teachers have to go to many administrative offices separately to handle one thing, which is inefficient and seriously affects the overall work efficiency [7]. After investigation, it is found that all colleges and universities generally employ retirees from public colleges and universities, or introduce fresh graduates who lack work experience and have no professional titles, etc. The proportion of outstanding talents is low, the faculty is not strong enough, and the personnel structure is unreasonable, which affects the quality of the school.

3.2 Backward management concepts need to be innovated

In the era of digital economy, digital transformation is a major change and a new challenge for all colleges and universities. Therefore, human resources should break the conventional thinking and promote the digital transformation of human resources with digital thinking. First of all, human resources should develop scenario thinking. One needs to be results-oriented and think about how to integrate digital technology into each work scenario. Secondly, human resource departments should have algorithmic thinking, and in the daily work process, they do not use traditional thinking and management models, but instead adopt a more standardized, regulated, and detailed management processes in a "procedural" way.

3.3 The management system is relatively backward

Colleges and universities do not have a sound scientific management system. Although there is a series of personnel management systems, they lack execution ability [8]. At present, school administrators evaluate employees according to personal preferences and biases, and lack a fair talent promotion mechanism. In addition, the promotion mechanism of colleges and universities is mainly based on years of work and seniority, and many young teachers, even if they work hard and are excellent, are not able to have a fair election with the senior staff, resulting in low professional identity of the faculty and staff, and demoralizing work enthusiasm.

3.4 The assessment mechanism is not perfect

With the expansion of enrollment policy, colleges and universities also vigorously increase the size of enrollment and introduce more staff. Due to the increasing number of employees and the different nature of work, the assessment mechanism of colleges and universities needs to be improved. Although a series of achievements have been made, there is still a lack of scientific evaluation system [9]. Qualitative assessment is generally used to assess the adjustment of staff positions and the distribution of salaries, but quantitative assessment is lacking. The assessment of staff lacks quantitative indicators, and the final assessment is just a formality, which cannot improve the behavior of staff through the results of performance assessment.

4 The innovation path of digital management of human resources in universities

4.1 Promote the digital transformation of teachers

Teachers are the top priority for the development of colleges and universities. Promoting the digital transformation of teachers in universities and colleges can help staff improve their work efficiency, and at the same time, it can meet the requirements of comprehensively promoting the digitalization of higher education teaching proposed in the "2022 Work Points of the Department of Higher Education of the Ministry of Education", and adapt to the new form of higher education characterized by digitalization [10]. Colleges and universities should rely on the excellent resources provided by the state to include teachers' training on digital resources into compulsory courses of teacher training, encourage teachers to participate in external exchanges and training of digital professional courses, and promote the digital transformation of existing teachers. It is also necessary to promote the digital transformation of teachers and improve their work enthusiasm and efficiency. All colleges and universities should actively grasp the excellent resources provided by the state, integrate

teachers' training on digital resources into the overall teacher training, encourage teachers to actively participate in the training and exchange of digital courses, and promote the digital transformation of teachers.

4.2 Introduction of digital management system

Human resource management must conform to the trend of digital development, and play a key role of "goal coordination" based on the development goals of colleges and universities. The human resource management department should build a digital talent management system to realize data interoperability and sharing. It is necessary to create a closed loop of the process, fulfill the goal of coordination, and provide human resource guarantee for the high-quality development of universities, so as to keep up with the trend of digital development, build a digital management system, and improve work efficiency and quality with digital technology. For example, human resource management departments can use artificial intelligence to assist in personnel recruitment and training. In management and performance evaluation, big data and cloud computing technology can also be used to collect and analyze the work data of faculty and staff, understand the working status of faculty and staff, provide references for universities to formulate human resource strategies, and attract and retain more interdisciplinary talents. The human resources digital management system should optimize the management process, and the work such as resume screening, interview scheduling and comprehensive talent evaluation can be completed online by using the digital platform, so as to improve the recruitment efficiency, reduce the interference of human factors and ensure the fairness of recruitment.

4.3 Implement the people-oriented management concept

First of all, colleges and universities should clarify the responsibilities of the recruitment positions, use big data and artificial intelligence technology to conduct in-depth analysis of the basic situation of the candidates in all aspects, and strictly compare and match the job requirements with the professional strengths of the candidates, so as to determine the most suitable talents, recruit the talents most in line with the requirements of the job responsibilities and reduce the management cost of recruitment. Secondly, virtual reality, artificial intelligence and other technologies can be introduced to develop more attractive and more effective personnel training programs, and personalized training programs can be provided according to the professional strengths and actual work needs of the staff to enhance the training effect and ensure that the staff can quickly improve their work skills. Thirdly, through big data analysis, colleges and universities can conduct a comprehensive evaluation of talents, screen out faculty and staff with outstanding ability and excellent performance, and provide a scientific and objective basis for the promotion and performance distribution of faculty and staff. Finally, colleges and universities can analyze the needs and preferences of faculty and staff based on modern information technology, form a personalized incentive mechanism, give faculty and staff more autonomy, encourage faculty and staff to actively participate in the construction of disciplines and schools, so as to enhance the sense of belonging and honor of faculty and promote the high-quality development of colleges and universities.

4.4 Build a digital human resources ecosystem together

Digital human resource ecosystem has dynamic characteristics. The development of colleges and universities should adapt to the rapid changes of society, so the digital human resource management system of colleges and universities must utilize advanced digital technology to quickly and efficiently process the basic information of the staff, competency levels and other basic data. Through the analysis of these data, the human resource department can predict the change trend of future job demand, as well as the work demand of the staff, and assist the relevant departments to make a response plan in advance, so as to adopt flexible management measures throughout the whole lifecycle of talents from recruitment to training. It also refines and digitizes management, promotion, incentive and other links. Modern information technology is

used to build an integrated, whole-process digital management platform to realize the deep integration of the human resource department and other departments, and transform the human resource department from the traditional role of administrative support to the work partner of each department.

5 Conclusion

In short, under the background of digital economy, the digital transformation of human resource management in colleges and universities is the future development trend, which can integrate resources, optimize the structure of teachers, and transform the value of talents into the capital value of colleges and universities. The digital transformation of human resources requires the attention of schools, which needs to rely on digital technology and the integration of various subdivisions of human resource management functions, so as to maximize the effective allocation of resources, realize the digitalization of human resource system, promote the digital innovation of human resource management, and promote the healthy and sustainable development of college education.

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

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