Innovation and Development of Talent Management Model in Colleges and Universities Under the Background of Digitalization

Qinteng Hou*

Talent Department, North China Electric Power University, Beijing 102206, China

Corresponding author: Qinteng Hou, qintenghou@gmail.com

Abstract: The vigorous development of the digital economy has put forward new and higher requirements for talent training in colleges and universities. In order to cultivate outstanding talents in the new era with both interdisciplinary knowledge application ability and innovative thinking, colleges and universities must keep up with the pace of the development of the digital era, from macro to local, comprehensive innovation of talent management mode, and lead the development with innovation. Only in this way can they flexibly respond to various challenges and opportunities under the digital background, and help colleges and universities achieve the goal of long-term development. Based on the current situation of talent management in colleges and universities, this paper elaborates the feasible path of innovation and development of talent management mode in colleges and universities under the background of digitalization from the perspectives of talent training and talent service. At the same time, the exposed data security and privacy protection issues are also discussed in depth. To contribute to the realization of the goals of refinement, individuation, and intelligence of talent management in colleges and universities through the research and related exposition.

Keywords: Digitization; Universities; Talent management mode; Introduction to Innovation and development

1. Introduction

With the rapid development of information technology, "digitalization" has become a hot topic in academic circles and permeates into every corner of social life, especially in the field of higher education. Colleges and universities have always been regarded as the cradle of talent training. The innovative development of their talent management mode is closely related to the improvement of education quality and whether they can cultivate more high-quality professional talents to meet the development needs of the digital era. However, there is no denying that talent management in colleges and universities is faced with serious problems and challenges such as outdated management mode and insufficient service level [1]. From this point of view, this paper conducts in-depth research and discussion on the theme of "Innovation and development of talent

management mode in colleges and universities under the digital background," to provide theoretical support and practical guidance for the reform and innovation of talent management mode in colleges and universities and help colleges and universities achieve the goal of sustainable development.

2. The status quo and existing problems of talent management in colleges and universities

2.1. Backward management concept

Advanced school-running and management concepts will undoubtedly lead and promote the rapid and high-quality development of various undertakings in colleges and universities. However, from the actual situation, some universities still stay in the traditional administrative management or command control in the management practice of the traditional framework level [2]. Some managers are more inclined to pay attention to the quantity of talents but ignore the quality of talents, and some managers overemphasize standardization and unification, but ignore the personalized development of students, resulting in college education sometimes being unable to meet the diversified needs of students. In addition, as far as talent evaluation is concerned, universities may pay too much attention to the quantity and quality of academic papers published, and neglect the evaluation of diversified achievements [3], including technology transformation and social services. Similar to the traditional management concept may not only lead to the lack of flexibility and innovation in talent training, talent selection and talent evaluation, but also restrict the comprehensive development of talents, and then affect the overall competitiveness and social influence of colleges and universities.

2.2. Traditional management means

The traditional talent management mode in colleges and universities may be more inclined to administrative instruction management or vertical management and has not widely adopted the horizontal communication and coordination mechanism common in modern enterprises, which may lead to poor information flow between different departments and different individuals, and it is difficult to fully stimulate the enthusiasm and creativity of modern talents [4]. To be specific, the construction of smart campuses in most colleges and universities is not perfect, especially since some managers cannot flexibly use information technology to carry out management work, such as the electronic management of talent information, online education effect evaluation, etc. At the same time, the construction of a remote work support system has not been put on the agenda [5].

2.3. Weak management team

Nowadays, talent management teams in colleges and universities generally have significant problems such as low professional levels and a lack of rich practical experience. The root cause is that, on the one hand, schools rarely arrange systematic and professional human resource management training for personnel in talent management departments, which leads to the managers' vague cognition and insufficient understanding of modern talent management concepts and corresponding methods and tools, thus restricting the improvement of the overall talent management level in colleges and universities. At the same time, it is difficult to meet the rapidly changing needs of talent management [6]. On the other hand, the members of the management team in some colleges and universities are generally older, and they do not accept the emerging management concepts and methods. In addition, colleges and universities have not formulated feasible strategies to attract

or retain high-level talents, which will inevitably affect the overall stability of the talent team in colleges and universities and is not conducive to the full activation of the vitality of the team.

3. The feasible path of innovation and development of talent management mode in colleges and universities under the digital background

3.1. Management concept level

With the rapid development of digital technologies such as big data and artificial intelligence technology, the talent management mode in colleges and universities is undergoing unprecedented changes. In order to cultivate more outstanding talents who meet the development needs of the digital era, the primary task of colleges and universities is to innovate the concept of talent management, respond to the new challenges and problems brought by the development of the digital era with innovation and flexibility, and at the same time, provide reference and reference for reshaping the talent training path of colleges and universities. First of all, colleges and universities must actively change the traditional management concept, but should take the initiative to embrace the new digital-driven management concept [7]. This means that university administrators should be good at using cutting-edge technologies such as big data analysis and artificial intelligence to accurately capture students' learning behaviors, understand their actual needs, and make scientific decisions based on this to help students realize personalized learning and development. In order to achieve this goal, the administrators of colleges and universities must have advanced awareness of digital transformation, and at the same time, they should actively embrace and flexibly apply new technological means to lay a solid foundation for the realization of the fine and intelligent goal of talent management and talent training [8].

Secondly, interdisciplinary and cross-border cooperation should be deepened. Universities must actively break the long-standing departmental boundaries, and instead actively seek the cross-integration of different disciplines, and even collaboration and sharing between different regions to provide broad space and rich opportunities for teachers and students to learn and practice. This will not only help to improve the comprehensive quality of teachers and students but also train students' basic ability to solve complex problems through specific projects, killing two birds with one stone. For example, network technology is ushering distance education into a whole new chapter. Distance education has obvious features of flexibility, sharing and collaboration. Both teachers and students can learn anytime and anywhere as long as they access the network. Teachers and students can control the learning process according to their learning progress and time. Among them, the shared recording and broadcasting courses have been welcomed and respected by the majority of students. Students can play back or suspend the course content at any time according to their personal needs, which plays a positive role in enhancing the freedom and convenience of the learning process [9].

3.2. The level of management means

In the tide of digital change, colleges and universities must deeply realize the importance of using advanced technology to implement talent management, which will play a positive role in improving the efficiency of talent management and strengthening the management effect. From a macro point of view, colleges and universities should build campus data-sharing portals to achieve the ultimate goal of leading modern education management to the digital era.

First, regarding the comprehensive management of campus, through the interconnection of business data, colleges and universities can realize the purpose of barrier-free circulation of data information between

different business fields. On this basis, data integration can form a huge information database to provide scientific and effective services for talent management [10]. In addition, the establishment of efficient log analysis and public opinion analysis functions helps to comprehensively monitor the campus situation to create a safe and stable learning and working environment for teachers and students. To take a very simple example, the core function of the public opinion management module is to help the school timely discover and deal with the network public opinion that may have an impact on the school image to ensure the effectiveness and accuracy of information dissemination. A timely and comprehensive grasp of the dynamic data and information of teachers' and students' thoughts is conducive to improving the effectiveness and effectiveness of ideological and political education in colleges and universities. At the same time, it can also provide students with correct public opinion guidance in time, thus improving the quality and efficiency of management [11].

Second, regarding the daily management of students, colleges and universities can rely on advanced big data technology to build student portraits and conduct multidimensional analyses of students' file information during school, which is closely related to the quality of education and the promotion of educational equity. In this way, it can not only support the fair sharing of educational resources between regions and schools but also help the school management department to implement fine management of talents to promote all-round education and train more outstanding talents for the country to meet the requirements of the digital age [12].

Third, regarding decision-making services, the practicability and scientificity of data services are the core support of talent management decision-making in colleges and universities. Based on this, colleges and universities should pay attention to the detailed data analysis of teaching, learning, scientific research, talents, finance and materials, etc., and write detailed reports according to the analysis results to provide clear and specific decision-making basis for the management at all levels of the school.

3.3. Team building level

The overall quality of college talent management team construction is closely related to the level of talent management. In the digital age, administrators of colleges and universities should have good data analysis skills, so that they can use data more flexibly to make correct decisions, and always lead colleges and universities to move towards higher goals. In order to achieve this goal, colleges and universities should arrange systematic and professional data training courses for managers at all levels and teach them advanced data analysis, data processing, data visualization and other methods to ensure that managers can update their knowledge structure in time, and master advanced big data technology principles and application skills. To lay a good foundation for high-quality work in the later stage [13]. In addition, managers should also give full play to their subjective initiative and actively participate in online courses, workshops, lectures, academic conferences and other activities carried out by different institutions to promote managers to have a deeper and more comprehensive understanding and cognition of big data analysis technology to greatly improve the talent management level. Of course, universities should also put the improvement of teachers' and students' digital literacy in an important position in their work. Only in this way can they help teachers and students better adapt to the digital learning and working environment, such as micro-classes, MOOCs, virtual simulation classrooms, online teaching, etc. to significantly improve the efficiency of study and work. For example, colleges and universities should attach importance to promoting digital office, and at the same time, they should create many new and interesting online courses based on the actual situation and future development of their students to promote the improvement of digital literacy of teachers and students [14].

3.4. Data security

With the progress and development of information technology, the issue of data security and privacy protection should be paid special attention by universities. Especially for colleges and universities, protecting the data security and privacy of teachers and students is not only the concrete embodiment of moral responsibility but also a legal obligation, which requires colleges and universities to raise the information protection work of teachers and students to an unprecedented level, aiming at building a solid and reliable digital fortress for teachers and students of the whole school and ensuring the orderly development of school education and teaching work. First of all, colleges and universities should introduce the latest and most advanced data encryption technology, so as to fully protect the security of student files and school information. Especially for sensitive data information, colleges and universities should adopt high-standard protection measures in each link of its transmission, processing and storage, so that even if the data is stolen or damaged in the process of transmission, processing and storage, the data itself cannot be accessed or tampered with at will to better ensure data security [15]. Furthermore, to strengthen the security of data, universities should constantly improve the access control and audit process. Specifically, for every data access request, universities must carry out strict authentication and continuous audit trails, to ensure comprehensive secure access control. Once there is any abnormal access behavior, the relevant management staff can report and deal with it the first time, which can effectively plug potential security loopholes and return teachers and students to a safe and stable campus environment [16]. More importantly, colleges and universities should build a multi-level protection system covering network security protection, data access control, encrypted information transmission, etc. to resist external attacks and avoid internal abuse.

Secondly, colleges and universities must attach importance to the regular backup of teachers' and students' data. Based on the accurate assessment of the current network environment and potential risks, colleges and universities should back up and synchronize important data of teachers and students in time to prevent data loss caused by emergencies. In this way, even if some data is lost or damaged, it can be recovered in time, thus ensuring the security and integrity of teachers' and students' data.

4. Conclusion

To sum up, the rise and development of digital technology has brought unprecedented opportunities and challenges to the innovation and development of talent management mode in colleges and universities. By reshaping the talent training path of colleges and universities with the help of digital technology, the concept and means of talent management are reformed in a comprehensive way. At the same time, the protection of information security of teachers and students is placed in the core position of talent management, which helps to lead the development of talent training in colleges and universities in a new direction. At the same time, it also plays a positive role in deepening educational achievements.

Disclosure statement

The author declares no conflict of interest.

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