

Digital Transformation of University Administration: Background, Motivation and Strategies

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Abstract

With the rapid development of information technology, digital management has gradually become an important trend in the transformation and upgrading of various industries. As the important work of cultivating high-level talents in universities, the digital transformation of university administration plays a crucial role in the process of digital transformation of its management. In this paper, we purpose to discuss the background, motivation and strategy of digital transformation in university, in order to provide reference for the innovative development of university administration.

Keywords

University administration; Digital transformation; Background; Motivation; Strategy.

1. Introduction

Universities take the important mission of educating students. However, the traditional administrative management of universities has gradually exposed the problems of low efficiency and poor information, which is difficult to adapt to the development needs of the new era. Therefore, to promote the digital transformation of university administration has become the key to improve the quality and efficiency of university management [1].

2. The Background of Digital Transformation in University Administration

Digital transformation of university administration refers to the use of modern information technology means, the various aspects of university administrative work for digital, intelligent processing, to achieve the refinement of university administrative work, efficiently and scientifically. This process not only helps to improve the management level and execution of university administration, but also provides more convenient and efficient services for teachers and students in universities.

Digital transformation of university administration is the choice of the times in line with the digital industrial revolution, and its background is mainly reflected in the following aspects:

2.1. Social Needs for the Development of a Digital Society

With the rapid development and wide application of information technology, society has fully entered the era of digitization and intelligence. This change has not only profoundly changed people's way of life and social interaction patterns, but also put forward new challenges and opportunities for administrative work. 2014 National People's Congress put forward the "Internet +" development strategy, computer-based information technology as the core of the country's economy and people's lives in all fields have a profound impact, the impact of universities is particularly profound. The impact on universities is particularly profound [2]. University as an important base for cultivating high-quality talents, its administrative work

must keep pace with the times, to adapt to the development trend of digitization and intelligence, in order to realize the modernization and scientization of administrative work in universities.

2.2. The Inevitable Choice of Connotative Development of University

In March 2021, the Notice of the Ministry of Education on Strengthening the Informatization of Education Management in the New Era was released, and the informatization system of education management in the new era will be basically built by 2025 to realize the optimization and integration of the information system, drive the digital empowerment of education management, and improve the level of digitization, informatization, and intellectualization of education management [3]. The digital transformation of university administrations is also an inevitable choice to adapt to the connotative development. The connotative development of universities emphasizes the improvement of education quality, optimization of education structure, and innovation of talent cultivation mode, all of which require strong support and leadership of administration. Through the transformation of digital, we can more accurately grasp the ideological dynamics and needs of teachers and students, provide more personalized services, thus promoting the in-depth implementation of the connotative development of universities.

2.3. Full Embodiment of the City's Refined Governance

As an essential part of the city, the governance level of universities also reflects the degree of development of the city's refined governance. The smart campus, as an essential part of the digital city base, determines the height of the development of urban fine governance. Through the digital transformation of university administration, it can improve university governance capacity, and improve the scientific and refined level of university management through data analysis, intelligent decision-making and other means.

To sum up, the background of digital transformation of university administration is the result of the combination of factors such as the development of information technology, the connotative development of universities and the requirements of urban refined governance.

3. Motivation for the Digital Transformation of University Administration

In the wave of informationization and digitization sweeping the world today, all walks of life are actively promoting digital transformation to adapt to the changes and development needs of the times. As an important force leading the development of society, universities must also keep pace with the times and actively embrace digital transformation. Digital transformation is not only a reflection of the development trend of university administration in response to the times, but also an important direction for the innovation and development of university administration. Its motivation is mainly promoted by the following aspects.

3.1. The Need to Improve the Effectiveness of University Administration

Traditional university administration often faces problems, such as poor information transmission and low management efficiency. While digital transformation can realize digital and intelligent management of daily management through the application of modern information technology means, and improve the efficiency and quality of daily administrative management. For example, through the intelligent financial platform, real-time updating, querying and statistical analysis of the financial flow within the university can be achieved to improve the efficiency of fund management and financial reimbursement; through the application of big data analysis technology, the basic information data of teachers and students can be deeply mined and analyzed to provide a more scientific and objective basis for decision-making in teaching, scientific research and extracurricular services.

3.2. Demand for Innovation of Administration Mode in Universities

The transformation of digital provides a broad space and possibility for the innovation of university administration. By using new technology and new applications, it is possible to explore a daily service work mode that is more in line with the characteristics of the times and close to the needs of teachers and students. For example, virtual reality (VR) technology can be used to carry out induction, entrance and departure education, providing teachers and students with a more vivid and intuitive learning experience; social media platforms can be utilized to carry out campus culture publicity and communication activities, broadening the dissemination channels and influence of campus culture construction.

3.3. The Need to Promote the Development of Education Informatization

Digital transformation of university administration is also an important initiative to promote the development of education informatization. Through the application of digital, it can promote the digital, networked and intelligent development of education and teaching in universities, and improve the quality and efficiency of education and teaching. At the same time, the digital transformation can also promote the internal informationization construction of universities, and improve the overall level of informationization and management capacity of university [4].

3.4. The Demand for Integration and Optimization of University Resources

Digital transformation of university administration helps integrate and optimize university education resources. By building databases and information resource libraries based on university-based characteristics, the management resources of various departments within the university can be centrally managed and utilized; by building an on-campus information-sharing platform, the sharing and exchange of teaching, scientific research, and life service resources among different departments and groups can be realized; through the application of cloud computing and other technologies, the dynamic configuration and optimal utilization of campus resources can be realized.

3.5. The Need to Promote the Overall Development of Universities

The digital transformation of university administration will strongly promote the overall development of universities. Digital transformation will enhance the scientific and systematic level of university administration, and then provide strong political assurance and organizational guarantee for universities. At the same time, the digital transformation of university administration will lead and drive the digital transformation of other fields, which can promote the overall progress and development of universities in talent cultivation, scientific research, social services and other aspects.

To conclude, the motivation for the digital transformation of university administration is diverse and profound, which is not only a positive response to the development trend of the times, but also an inevitable requirement to improve the effectiveness of university management, innovate the mode of university administration, promote the development of education informatization, integrate and optimize the educational resources of university as well as promote the overall development of the university. Therefore, universities should actively explore and practice the transformation of administrative work to promote the innovation and development of university administration.

4. Strategies in the Digital Transformation of University Administration

In the context of the era of informationization and intelligence, the digital transformation of university administration has become an important way to improve the level of university management and promote the overall development of universities. The intelligent education

system is an effective way to improve the quality of student education. Universities should make full use of modern information technology, which means to build a campus teaching, research and life service system that combines online and offline. Through the development of online courses and the construction of digital teaching resource libraries, they provide teachers and students with rich learning resources and learning paths; through the combination of online and offline teaching mode, they can realize the personalization and precision of teacher and student services. The following are the specific strategies about the digital transformation in university administration.

4.1. Innovative Digital Learning Mode to Improve the Information Literacy of University Administrative Staff

The traditional learning mode has been difficult to fulfill the needs of the administration of universities in the new era, so it is crucial to innovate the learning mode. The digital transformation requires future university administrative staff to be highly information literate and digitally skilled. Therefore, universities should strengthen the training and education of administrative staff's information literacy and improve their ability to work with modern information technology. Firstly, the innovative learning mode: universities can carry out online learning, distance education and other new learning modes with the help of digital, so that administrative staff can learn at any time and any place, and improve the learning efficiency. At the same time, virtual reality (VR), augmented reality (AR) and other technologies can be used to provide administrative staff with an immersive learning experience, making learning more vivid and intuitive. Secondly, the administrative work innovative resource integration mode: the integration of online and offline resources can effectively enhance the coverage and influence of the university administrative work. Universities should make full use of online platforms, such as the official website, WeChat Official Account, etc., to distribute relevant administrative work information, and at the same time, combine with offline services to form a new mode of combining online and offline work. Thirdly, the conscious establishment of a team to develop a smart education plan is an important guarantee to promote the digital transformation of the university administrative work. Universities should formulate a targeted wisdom education plan based on the actual needs and development trends of the work, and the plan should specify the goals, contents, and methods of wisdom education to ensure the effective implementation and continuous promotion of wisdom education.

4.2. Innovative Construction of Smart Campus Platform

The digitization of administration is aimed at an efficient and accurate management mode in the context of smart campus construction, relying on cloud computing, big data, Internet of things, artificial intelligence and other new-generation information technologies to digitally empower the governance system and governance modernization of universities [5]. Through the establishment of a campus informatization platform, the integrated sharing and real-time updating of information can be realized, providing comprehensive data support for the university administrative work. At the same time, the platform should have the function of data analysis to provide a scientific basis for university decision-making.

Intelligent management is an important guarantee for realizing the efficient operation of administrative work in universities. Universities should use artificial intelligence, big data and other technical means to promote the intelligent management of administrative work. For example, the automatic entry and update of teacher and student information can be realized through intelligent recognition technology, and the automatic classification and filing of administrative work can be realized through intelligent analysis technology, so as to improve the automation level and management efficiency of work.

4.3. Bringing in Data Analytics

In the context of the data era, there are higher requirements for university data. The functions of the various departments within university are different, and the data information obtained is not the same, which results in the division of information within the university and the emergence of “data islands” [6]. In the process of promoting the digital transformation of university administrative work, we must attach great importance to the integration of data, and at the same time pay attention to solving the problem of data security in the process. Through the development of strict data management systems and technical protection measures to ensure data security and confidentiality.

Data analysis technology can help universities more accurately grasp the characteristics and laws of administration. Meanwhile, data analysis technology can also be used to predict and assess the effect of administration, providing strong support for decision-making [6].

In summary, the strategies for the digital transformation of university administration cover such aspects as innovative learning methods, building a smart campus platform, and introducing data analysis technology. The implementation of these strategies will help to improve the level and quality of university administration, and in the specific transformation work, universities should clarify the objectives and tasks of the digital transformation of administration according to their own actual situation and development needs, and formulate feasible and practical implementation plans; step by step to promote the digital transformation of university administration, starting from the establishment of information technology platforms, improve data management system, etc., and gradually promote the transformation work; strengthen the supervision and evaluation of the transformation work, and timely ensure that problems are resolved. Strengthen the supervision and evaluation of the transformation work, identify and solve problems in a timely manner to ensure the smooth progress of the transformation work.

5. Conclusion

The digital transformation of university administration is an important initiative to adapt to the development needs of the new era and improve the quality and efficiency of university administration. However, it is also necessary to pay attention to the challenges of technology updating and data security in the process of transformation and take corresponding countermeasures to deal with them. It is believed that in the future, university administration will realize more efficient, precise and intelligent management and development.

In the process of promoting the digital transformation of university administration, there are still some challenges, such as rapid technological updates and increased data security risks. To deal with these challenges, universities should strengthen technical research and development and innovation, improve the level of data security management, and at the same time, strengthen exchanges and cooperation with other universities and enterprises, to jointly promote the innovative development of university administration.

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