

Research on the Development of Digital Transformation of University Libraries in the New Era

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Abstract: In the digital era, information technology is widely used in all walks of life. At the same time, its advanced technology and vast information resources have brought significant changes to university education, driving the reform of university libraries. Digitalization has become the preferred reading method for teachers and students in universities. The digital transformation of university library can not only promote the development of university library but also meet the different reading needs of teachers and students and reduce the workload of staff. However, in the process of transformation, there are also some problems, such as the lack of digital cognition and the lack of transformation strength in some universities. Based on this, this paper will explore the specific strategies of library transformation in the new era by analyzing the significance and problems of the digital transformation of university libraries.

Keywords: Digital transformation; University library; New era

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1. Introduction

With the rapid development and popularization of computer technology, the direction of People's Daily life gradually tends to be digital and various industries gradually use digital management instead of manual management. In the aspect of university education and future development, university library has always been an indispensable "role" with various kinds of books, magazines, periodicals, and so on. Teachers and students can improve their knowledge reserve by borrowing the books collected in the library, develop good reading habits, and improve their reading interest. In the new era, digital reading methods are accepted by more and more people, and reading is no longer limited to paper and fixed places. The digital transformation of university libraries is a crucial step for colleges and universities in achieving diversified education. It not only promotes the development of university culture but also enhances the quality of talent cultivation. Therefore, under the background of the new era, colleges and universities should actively promote the digital transformation of libraries and realize the new upgrading of libraries.

2. The significance of digital transformation of university libraries in the new era

2.1. It is conducive to promoting the reform of information dissemination mode

The digital transformation of university libraries is not only an important part of cultural construction but also the fundamental goal of completing the comprehensive reform of the education industry. With the support of digital technology, the library's information service ability can be improved efficiently. With the continuous improvement of science and technology, the application range of information technology has gradually expanded and digital communication methods have been disseminated more quickly and effectively.

Some traditional communication media have gradually withdrawn from the stage of information communication, and digital platforms and Internet media have replaced traditional communication forms ^[1]. Therefore, under the background of the new era, libraries can be optimized and upgraded with the assistance of digital technology, which makes libraries more targeted, effective, and authoritative in the dissemination of book resources and scientific research results, to build a more scientific and perfect management system. At the same time, the digital transformation of the library can further improve the speed of information transmission, improve the quality of the book content, and expand the scope of information transmission, so that teachers and students in colleges and universities can apply for borrowing through the library website anytime and anywhere and realize fragmented reading and learning.

2.2. It is conducive to promoting the content production of university libraries

The digital transformation of university libraries is of great significance for promoting the content production of books. From the perspective of university libraries, the digital transformation of university libraries can not only improve the utilization rate of books but also promote the rapid development of libraries ^[2]. From the perspective of teachers and students, the digital transformation of college libraries can meet the different needs of teachers and students, improve reading efficiency, reduce the shortage of books, and solve a series of communication problems in borrowing and returning books. Under the background of information society, the transformation of digital technology has realized diversified forms and carriers of reading.

Due to the wide application of Internet platforms and smart phones, teachers and students have gradually begun to change the traditional reading forms to the use of smart phones, tablet computers, and other communication devices for reading, which not only bring personalized experience to teachers and students but also improve reading efficiency. At the same time, the form of reading is also developing from paper text to audio, video, and other media forms, which makes the production of book content convenient and fast ^[3]. These changes have brought higher requirements for the cultural construction of university libraries. Libraries should keep pace with the development of the times, carry out reforms in content, resources, users, and other aspects, promote the production of library content to become efficient and rapid, enhance the reading experience of teachers and students, and improve the overall service quality.

2.3. It is conducive to building an open and modern society

With the rapid development of information technology and the acceleration of the global digital trend, the digital transformation of libraries is not only an inevitable choice to adapt to the changes of the times but also a key force to promote social progress, knowledge sharing, and cultural exchanges ^[4]. The digital transformation has injected new vitality into university libraries, prompting libraries to make continuous innovations in service mode, resource construction, technology application, and so on. Through the application of advanced technologies such as data analysis and artificial intelligence, libraries can more accurately

understand the needs of teachers and students, provide more personalized and intelligent services, and thus stimulate their thirst for knowledge and creativity. At the same time, digitalization enables libraries to break through the limitation of physical space. Through the Internet and mobile devices, teachers and students can access a wealth of digital resources anytime, anywhere, and enjoy library services regardless of location. This significantly enhances the convenience and efficiency of information access, not only improving library service quality but also contributing to the development of an open and knowledge-driven society.

3. The realistic dilemma of the digital transformation of university libraries in the new era

With the continuous progress of science and technology, university libraries in China have gradually entered a brand new stage^[6]. With the support of digital technology, university libraries gradually begin to introduce some more advanced digital equipment and build a more perfect digital resource management system to provide better quality services for teachers and students in universities. For example, the university library is the main carrier for the development of university education and scientific research, with professional research results, academic journals, and other relevant documents. Teachers and students can quickly borrow and view relevant materials through the digital system or platform, which greatly reduces other tedious procedures^[7]. However, from the point of view of actual management, the current university library still has the problem of lagging behind the concept of digital transformation. To be specific, although some university libraries have gradually changed their original management concepts, some data resources are still difficult to meet the academic research and teaching needs of universities.

4. The specific path of digital transformation and development of university libraries in the new era

4.1. Improve the digital construction and promote the process of library transformation

The digital construction of internal resources is a necessary way for university libraries to complete the digital transformation. As an important place for educational services and academic research, the digital transformation of colleges and universities is not only related to the future direction of development but also affects the quality of education and teaching and the overall level of academic research^[8]. In this regard, university libraries should attach importance to digital construction to lay a solid foundation for cultural construction. On one hand, university libraries must digitize their internal resources to enhance accessibility and efficiency. To be specific, university libraries should combine the academic advantages and research directions of universities and establish characteristic databases to improve the service quality and academic value of libraries. The digitized data should encompass teaching materials, scientific research findings, academic papers, and more, while incorporating advanced retrieval functions such as subject search, keyword search, and full-text search to meet the diverse needs of teachers and students. At the same time, colleges and universities should also use information technology to digitize internal academic journals, reference books, and other resources, then convert them into digital information that can be read and downloaded online^[9]. Additionally, they should develop an efficient search engine to enable researchers to quickly locate the information they need, enhancing overall work efficiency.

On the other hand, university libraries should carry out digital construction of social resources. University

libraries should actively collect and integrate digital information resources from various societal sources, including online databases and open-access materials. By leveraging internet platforms, they can expand their digital resources through information mining, filtering, and classification, incorporating them into the library's digital collection system. This not only enriches the types and quantities of library resources but also improves the efficiency and value of resource use. For example, university libraries can open relevant sites or establish web service platforms according to teaching characteristics and actual needs, to facilitate teachers and students to search and obtain resources online ^[2]. In addition, the government should play an important role in the digital transformation of university libraries and provide legal guarantees and policy support for the digital construction of libraries by formulating relevant policies and regulations.

4.2. Strengthen the construction of talent team and improve the quality of development

The construction of a talent team is the key carrier to ensure the digital transformation of university libraries and an important factor to promote the transformation of libraries. First of all, in the process of library digital transformation, university libraries need to uphold the development concept of being "people-oriented" and train a management team with digital leadership ^[10]. The way of thinking and decision-making ability of managers directly affect the process of organizational change. To build a talent team with digital leadership, it is necessary not only to deeply understand the value of digital technology but also to have keen insight and foresight, to accurately grasp the trend of scientific and technological reform and development, and to lead libraries to the direction of wisdom. At the same time, they should also have good communication and coordination skills to stimulate the enthusiasm and creativity of team members and jointly create a digital culture.

Secondly, the comprehensive literacy and management level of library administrators are directly related to the success or failure of digital transformation. Therefore, college libraries need to organize professional skills training regularly to teach administrators new ideas and technologies of digital construction and transformation, which should cover network technology, information management, system maintenance, and other aspects to ensure that employees can master and apply these skills to deal with the daily management of the library. In addition, college library administrators should strengthen awareness of intellectual property protection, safeguard the legitimate rights and interests of libraries and information providers, and promote the legal and compliant use of digital resources ^[11].

Finally, university libraries need to build a professional team with management ability. Digital transformation requires the collaboration of multiple departments and fields. By building professional teams, university libraries can quickly break down departmental barriers and promote resource sharing and process optimization ^[12]. Under the guidance of a professional digital construction team, the business processes should be streamlined, and the responsibilities and collaboration mechanisms of each department should be clearly defined. This ensures the smooth transmission and execution of construction tasks and transformation directives. At the same time, the team members should have the ability of big data analysis and be able to use data to gain insight into user needs and market trends, to provide strong support for the library's digital transformation.

4.3. Reconstruct infrastructure and improve service efficiency

Under the background of the digital age, universities should focus on strengthening the basic construction of university libraries, expanding the channels of digital resources of university libraries, optimizing and

perfecting the reading environment of university libraries, and improving the overall service efficiency of university libraries^[13]. Reading space and hardware equipment are the necessary infrastructure for the digital service of college libraries and the important cornerstone for the development of digital libraries. They are not only conducive to enhancing the reading experience of teachers and students in colleges and universities but also can promote the comprehensive digital transformation of college libraries and then realize the comprehensive improvement of digital resources, cultural construction, and reading space.

First of all, since teachers and students of colleges and universities have different reading needs, college libraries should consider the diversified forms of infrastructure construction and resources in the process of establishing reading space. College libraries can integrate information technology to establish electronic reading rooms, offering a more convenient and immersive reading environment with enhanced services for teachers and students. For example, libraries can develop intelligent library systems that incorporate diverse reading spaces, such as reading experience rooms and electronic reading rooms, while equipping them with advanced technologies like smart reading chairs, intelligent robots, and VR devices. These immersive reading environments enhance the digital capabilities of library services, offer a diverse reading experience for students and faculty, and improve overall library service efficiency.

Secondly, universities should pay attention to the basic equipment needed for the digital transformation of university libraries. Specifically, colleges and universities can increase capital investment to upgrade outdated hardware and introduce high-performance equipment such as e-book borrowing stations, self-service borrowing and returning machines, and touch-screen readers. These enhancements enable students to access reading materials anytime and anywhere, improving their overall reading experience^[14]. In addition, colleges and universities should also strengthen network equipment, such as network servers, large-capacity storage equipment, etc., to ensure the stable transmission of digital resources. Finally, colleges and universities can introduce intelligent book scanners or automated robots to digitize paper edition books, rare classics, newspapers, and periodicals. This will facilitate the comprehensive transition from traditional print materials to digital formats, advancing the digital transformation of college libraries.

5. Conclusion

To sum up, the university library, as an essential component of university culture construction, serves as a vital platform for educational and scientific research development. It not only houses abundant cultural resources but also embodies the collective wisdom of people. Therefore, in the new era, university libraries should align with the trend of digital development by integrating digital technology into their operations. This requires comprehensive innovation in areas such as digital infrastructure, talent development, and overall library construction. By continuously advancing the digital transformation process, university libraries can provide a strong foundation for educational growth and talent cultivation.

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