

Research on service innovation and transformation development of University Library under the background of "Internet +"

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Abstract: "Internet +" is one of the important development strategies implemented by China in recent years. It can promote the substantial development of the real economy through Internet thinking. This paper will analyze the practical significance of the service innovation and transformation development of University Libraries under the background of "Internet +" according to the current development situation of university library services, analyze the problems of user data and privacy, big data integration and so on in the current university library services, and propose targeted, practical and operable solutions, which have important significance and reference value for the service innovation and transformation development of university libraries.

Keywords: Internet +, Service innovation, University Library, Transformation and development, big data

I. Introduction

With the development of the "Internet +" era, the Internet of things technology and intelligent engineering have been continuously studied. Under the influence of information technology in the new era, China's enterprises and various projects have been greatly improved, and the service work in the library has been constantly transformed into an intelligent and knowledge-based one. Under this background, the library service work of our country should seize the development opportunity, actively change the existing service concept, innovate the overall mode of service, so that the staff of university library can achieve greater progress and improvement, and enhance their comprehensive quality, service awareness, service ability and service level.

With the rapid development of information technology and knowledge innovation, the form of the Internet is also evolving, resulting in "Internet +". The deep integration of "Internet +" and university libraries can provide better reading services and more digital resources for teachers and students, which is of great practical significance to improve the comprehensive ability of university libraries.

II. The Significance of "Internet +" for the Service Innovation and Transformation Development of University Libraries

A. "Internet +" can realize the intelligent service of University Library

Under the background of "Internet +", university libraries pay more attention to the construction of digitalization, informatization and networking, and gradually increase the investment in software platforms and network facilities to achieve intelligent library services. For example, many university libraries use RFID technology, integrated reader management mode and advanced layout mode. Readers can borrow and return books in any reading room and on any platform just by using the one-in-one card to enter the library.

B. "Internet +" and library integration form a new development concept

Under the "Internet +" environment, university libraries should comprehensively guarantee modern management, optimize services and upgrade and transform library software and hardware in a timely manner, gradually supplement and improve service content, broaden service dimensions and space, improve service methods, expand service scope and improve service quality [1].

C. "Internet +" can increase the digital information resources of University Libraries

There are many kinds of digital information resources in university libraries, with large amount of information and strong timeliness of information. University researchers and teachers and students can use the internal database resources of the library to query representative achievements, domestic and foreign development conditions, and construct research directions. "Internet +" has promoted the application of Internet

of things technology, cloud computing, big data and other technologies to university libraries, constantly increasing the digital information resources of university libraries, and realizing their service innovation and gradual development [2].

D. The rapid development of information technology ushered in the era of mobile Internet

In today's mobile Internet era, readers' time is fragmented. Readers can obtain relevant literature through a variety of ways, which significantly improves the scalability of time, space and other dimensions. In the context of "Internet +", the relationship between university libraries and readers is closer. We should constantly explore deep-seated service content, change traditional service mode, and build a new service system of university libraries. University libraries should continue to develop towards smart libraries, closely rely on smart technology, and provide intelligent services.

E. "Internet +" can improve the comprehensive quality of University Librarians

The management of the library should keep pace with the times, use efficient, scientific and modern management methods, and constantly improve the reading level of college students, which is conducive to refining their thinking quality and helping them build a correct ideological system. "Internet +" requires high comprehensive literacy of librarians, requiring them to have rich knowledge structure, high information and data literacy and foreign language ability, so as to realize the in-depth development of information resources.

III. Problems in the Service of University Library under the Environment of "Internet +"

With the advent of the "Internet +" era, the lack of integration awareness, insufficient technical support, and insufficient human resource reserves will become unfavorable factors for the development of University Libraries under the "Internet +".

A. "Internet +" development awareness needs to be improved

At the current stage, transformation and development is the inevitable trend of library development, especially the mode, concept, security and service environment should be changed [3]. From the actual situation of the development of university libraries, some institutions and service personnel only stay in understanding the concept of "Internet +" and know that it is an important national strategy, but they can not fundamentally understand the practical significance of "Internet +". This has caused some institutions and service personnel to pay insufficient attention to the "Internet +" of university libraries, fail to realize the advantages of Internet technology, and even panic that Internet technology will completely subvert the current management and service mode of university libraries, and further completely subvert the existing deployment and organizational structure of university libraries. Due to the lack of in-depth understanding of the new form of "Internet +", the integration of Internet related technologies and library development has not been paid enough attention. The lack of integration consciousness will be unfavorable to the long-term development of the library.

B. Technical risks are widespread

In the context of "Internet +", the characteristics of the Internet itself determine that technical risks are difficult to avoid [4]. Due to the limitation of public welfare and funds, the construction of network infrastructure, supporting infrastructure of software and hardware, and standardized interface and contact facilities in university libraries are inevitably imperfect and unbalanced. In the process of integrated development of libraries, whether it is the management of network information resources or the modern network information service platform provided for users, once attacked by Internet hackers or viruses, library resources and user information will be exposed to risks such as leakage and embezzlement. Therefore, improving librarians' understanding of "Internet +", strengthening the great significance of "Internet + library", increasing capital investment and supporting infrastructure construction, and standardizing relevant interfaces and Internet technologies play a vital role in the integrated development of university libraries.

C. The professional level and overall quality of library staff are not high enough

Under the background of "Internet +", library staff should have professional level and comprehensive quality compatible with the integrated development mode. However, it can be seen from the current situation of university libraries that the ability of library staff still stays in mastering the traditional business aspects such as

the sorting, storage and transmission of books and literature resources, and their cognitive level of cross-border knowledge such as Internet and information technology, information service integration, big data development and Application is still very limited, which makes it difficult to give play to their subjective initiative in practical work, which seriously affects the process of integration of university libraries. Therefore, the lack of cross-border talent reserve is one of the problems that need to be solved urgently in the deep integration development of University Libraries at this stage. High quality talents are an important demand of the development of the times. To adapt to this demand of the new environment, university libraries must increase the introduction of talents, and at the same time, cultivate the comprehensive quality of university library staff to meet the high standard requirements under the "Internet +" environment [5].

D. Readers' acceptance of new services

Under the background of "Internet +", university libraries provide mobile library services. After registration, readers can access the library by using mobile terminals such as mobile phones anytime and anywhere, so as to better read relevant databases and literature. However, from the actual situation, many students do not pay attention to the public wechat of the library, and the service frequency and efficiency of the mobile library are low, which greatly weakens the service effect of the library.

E. User data and privacy protection

In the context of "Internet +", the data collection of University Libraries does not simply use the Internet. In the process of providing services to readers, they can obtain the data of readers and make special topics that readers pay attention to and prefer according to the data of readers. However, the widespread application of computer technology has caused certain infringement on the privacy of users. Cameras can record various states of readers. In this case, the protection of users' data and privacy is also a test of the professional quality of library staff, which is also one of the challenges of new technology to university libraries [6].

F. Big data integration problems and technical challenges

In the context of "Internet +", although information technology has brought deep-seated services to university libraries, it has also brought some confusion to readers and staff. For example, when the collection space of the library reaches saturation, it needs to integrate massive digital resources, and at this time, it faces the problem of intellectual property rights. The regular services of university libraries include mining service subjects, integrating data resources, developing targeted services, and setting up efficient service access points. This process needs to invest a lot of manpower, material resources and financial resources. In order to meet the personalized needs of users, librarians should constantly improve the technology and ability of mining, analyzing and extracting information, continuously track the information that users care about, and provide and customize high-quality knowledge services for users. However, in the "Internet +" environment, the analysis of sea data and potential value requires special data storage equipment and advanced database technology. At present, the service technology of most university libraries can not meet the practical requirements of processing big data.

IV. Service Innovation and Development Strategy of University Library under the Background of "Internet +"

A. University libraries should promote the use of new media under the background of "Internet +"

In the context of "Internet +", the key to the service innovation and development of University Libraries lies in adhering to the user-centered service concept and persisting in this core service concept all the time, so as to meet the needs of the modern development of libraries. University libraries should take the initiative to expand their user groups through various publicity, and develop and promote library services to users.

The service objects of university library are the students and faculty members of the University, so new media can be used according to their habits and needs. In addition to teacher recommendation, school broadcasting, display boards and network platforms, libraries can also use the word-of-mouth effect of Weibo and friends to promote. For example, the use of wechat official account, APP installation, two-dimensional code scanning and other services has gradually increased the interest of users, thus enhancing the influence of the library [7].

B. Micro Services

We chat, we chat movies, we chat books and many other micro things have penetrated into all aspects of daily life. Today's society has entered the micro era. This requires the library service mode to transform and develop in the direction of wide radiation, strong interaction and fast speed. The improvement of the data information base needs to collect the information of readers. However, the mode and hobbies of readers' reading services are the evaluation criteria for building reader information big data [8]. Collecting and processing the behavior data of readers helps to build a personalized service system, and provides personalized mobile terminal interfaces according to different needs. The interests, specialties and browsing habits of the terminal interfaces are completely handled by the readers in a personalized manner, which lays a foundation for the promotion of reading in the "Internet +" era. The "Internet + library" micro service should target every reader, which is an important link for university libraries to enhance their core competitiveness.

C. Create smart services

In the "Internet +" era, university libraries need to establish excellent service teams. Each member of the team must have a strong intellectual mind and innovation ability, and be able to quickly master new methods and technologies, so as to provide users with high-level intelligent services. University libraries should break through the limitations of traditional libraries and provide users with advanced services such as knowledge mining, computer-aided design and cross media; the university library should improve the service content, improve the service means and service level in time, and screen out the personalized demand information needed by users from the massive resources.

D. Provide mobile terminal services

With the development of mobile data communication technology and the popularity of intelligent mobile devices, mobile terminal reading has become the most important way of library reading, and the service space of university libraries has extended from offline to online [9]. Since entering the 4G era, people have been using mobile phones to read more and more, of which we chat reading accounts for a large proportion. Mobile phones and tablets have become the most common way of reading in the "Internet +" environment. Using the reading app breaks through the limitations of resources, time and space required for query and retrieval, and frees readers completely from office equipment. Mobile reading products should gradually eliminate homogenization, constantly improve content quality and user experience, attach importance to user participation and product innovation, so as to develop in the direction of diversification and differentiation.

In the "Internet +" era, readers' reading needs are fragmented [10]. People are more inclined to use fragmented time to read and retrieve the information they need, and seamlessly query a large amount of information with the help of network tools and smart phones. The application of this model in the library can not only bring readers a new experience, but also greatly enrich the way university libraries serve readers, improve the service quality, and make readers feel the reader centered service concept.

E. Protect innovation copyright

Under the background of "Internet +", the network information service of university libraries should pay attention to protecting the copyright of information resources, and formulate practical and feasible corresponding measures to continuously improve the use, sharing and communication effect of library network information.

The security protection of information resources copyright plays a very important role in the service innovation and development of university libraries. University libraries should understand relevant laws, regulations and policies, design corresponding copyright protection schemes, and make use of the network platform to formulate restrictions; In the process of using information resources, corresponding reminder permissions can be set so that users can consciously standardize network behavior. If copyright protection is involved in the dissemination of library information resources, it is necessary to strictly supervise the use, prohibit copying or full-text plagiarism, and avoid affecting the normal sales of original works.

F. Interaction with readers

In the circulation service of university library, staff need to guide and help readers, and readers should actively cooperate, support and understand the work of librarians. Staff should actively communicate and

exchange with readers, constantly understand the wishes and needs of readers from reality and the network, and provide comprehensive help and services for readers. In the process of interaction between university libraries and readers, staff should make use of Internet information to provide personalized services according to readers' personal characteristics, interests and hobbies [11].

Under the background of "Internet +", university libraries can send the bibliographic information of new books, overdue reminder information, book reservation notice, etc. to readers through mobile phone SMS, e-mail, etc., and interact with readers through online consultation. University libraries should vigorously use various computer technologies and develop network reference platforms to better serve readers. Readers can also consult and ask various questions through this platform; Staff can use this platform to answer readers' questions. In addition, they can also use email, telephone and other methods. At present, all kinds of problems faced by university libraries can be solved by using this platform, so as to provide better services for readers.

G. Strengthen the construction of librarians and improve the comprehensive quality of Librarians

At present, due to the relatively low social status of university librarians, the library management posts lack attraction to excellent technical personnel. Under the traditional management mode, filing, registration, statistics and other work are all done by manpower, and paper documents are common. However, after the introduction of computer, Internet of things, Internet and other information technologies into colleges and universities, only by improving the level of information construction can university libraries integrate with the society [12]. Based on this, university libraries must strengthen the construction of talent teams. They should not only help existing staff improve their computer operation level and expand their knowledge horizons, provide them with a variety of education and training opportunities, but also actively introduce professional and technical personnel, and take incentive measures to encourage librarians to play an important role in library management and innovation.

H. Realize the sharing of book resources among Libraries

For each university library, they are unique, and there are differences in the collection of books in each university library. In order to effectively promote the development of digital libraries, truly realize information sharing, make full use of the Internet platform, enable teachers and students to better obtain useful information, and facilitate teachers and students to consult information, it is necessary to establish a platform for resource and information sharing, which not only enriches the types and quantity of books, but also improves the use value of library resources. In addition, each university can also improve the efficiency of information dissemination by sharing information with local libraries and connecting with the Internet. At the same time, it can also accelerate cultural publicity, so that students can benefit from it and readers can have more opportunities to access information [13].

I. Service and space innovation

The service tenet of university library is people-oriented, and it uses all-round and three-dimensional services to meet the needs of readers. It combines virtual space with physical space to provide interactive services for readers. Through online provision of e-library, information push, various professional knowledge, knowledge lecture videos for readers, offline provision of literature materials for readers, and holding of resource library knowledge training lectures, the physical space and virtual space can give play to their advantages, so that the library presents a smart side, develops in multiple dimensions, and makes full use of resources. According to the information interpretation of readers' personalized space, the library provides readers with corresponding hot information and cutting-edge information, so that the library's services are not constrained by time, place, space and so on.

V. Conclusion

Under the background of "Internet +", although advanced network technology makes university libraries face many problems, it also brings many development opportunities. Therefore, university libraries should make great efforts to use advanced computer technology and network technology, establish corresponding Internet platforms, constantly improve the book management mode, and provide better services for readers. This can not only promote the innovation and transformation of university libraries, but also improve the quality of teaching and scientific research in universities.

In the context of "Internet +", connection is the foundation, integration is the core, innovation is the key, and forming innovation drive is the goal. Today, with the rapid development of the Internet, the impact of "Internet +" on traditional university libraries is subversive, and it also provides a good opportunity for the transformation and development of university libraries. It subverts people's cognition of the traditional university library, completely changes the management and service concept of the library, re constructs the organizational structure and service mode of the university library, completely reshapes the business functions of the university library, and broadens the management and service pattern of the university library. University libraries should actively respond to the challenges, and the reform and development of university libraries are still on the way.

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