Problems and solutions of information resource management in university digital library

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Abstract: The rapid development of information technology has made university digital libraries crucial for library construction. However, challenges persist in managing information resources in these libraries, including collection and organization, storage and backup, utilization and sharing, and overall information management. This paper analyzes these challenges and proposes solutions. Solutions include establishing a comprehensive information resource management system and reinforcing digital protection measures. Efficient methods for acquiring and organizing digital resources, such as standardized cataloging and metadata procedures, ensure accurate and accessible information. Robust systems for data preservation and recovery, including reliable backups and appropriate storage technologies, safeguard against data loss or corruption. Seamless access to digital resources is promoted through user-friendly interfaces, search functionalities, and collaborative tools. Compliance with copyright and licensing agreements facilitates legal and ethical information sharing. An effective information resource management system with features like resource tracking and user authentication enhances efficiency. Strengthening digital security measures, such as authentication protocols, encryption techniques, and firewalls, protects against unauthorized access and cyber threats. Implementing these solutions optimizes the management of digital libraries, ensuring efficient acquisition, preservation, utilization, and protection of information resources, fostering knowledge advancement and research within the academic community.

1. Introduction

Information resource management of university digital library is a new library management mode produced with the development of Internet technology, and its importance is self-evident. With the progress of science and technology, the management mode of library is also constantly changing. The establishment of digital library is a major turning point in the history of library development. The information resource management problems and the countermeasures of university digital library are the problems that must be faced and solved in the process of library development.[1]

First, the background and significance of information resource management in university digital library. With the continuous development and popularization of Internet technology, digital library, as a new library form, has gradually become an important part of university library. Secondly, what is the purpose of information resource management in university digital library? Its main purpose is

to realize the digitalization, network and intelligence of library resources, improve the quality and efficiency of library service, and meet the needs of readers. Digitization is the general trend of the development of the library. Through digitalization, it can greatly improve the utilization rate of the library resources. In the meantime, at the same time, it is also convenient for readers to consult anytime and anywhere, which greatly improves the service efficiency of the library. However, there are also some problems in the process of information resource management in university digital library. For example, the information resource management of digital library requires a lot of technical and human input, which brings great economic pressure to the library.[2]

In order to solve these problems, we need to take some effective measures. First of all, we need to strengthen the research and development of the information resource management technology of the digital library, and improve the efficiency of the information resource management of the library. Secondly, we need to strengthen the construction of library human resources and improve the ability of library information resources management. In addition, we also need to strengthen the research and formulation of the library information resource management policy, to provide policy support for the information resource management of libraries. Only in this way, can we realize the digitalization, networking and intelligence of library resources, improve the quality and efficiency of library service, and meet the needs of readers.

2. Information resource management of digital libraries in colleges and universities

2.1 Resource acquisition and integration issues

With the rapid development of digital library, the number and types of library resources are increasing, and how to effectively obtain these resources has become an important problem. The traditional way of obtaining library resources has been unable to meet the needs of modern libraries, so we need to find new and more convenient ways of access. This includes the use of the Internet, databases, e-books, electronic journals and other ways to obtain resources. Secondly, it is the problem of resource integration. After obtaining the resources, how to integrate effectively is also a problem we need to solve. It is necessary to classify and catalog the obtained resources, so that users can find the required resources quickly and accurately, and to realize the connection and integration between resources, and improve the effect of users to obtain information. Although digital library is rich in resources, how to improve the efficiency of resources is also an important problem. On the basis of resource acquisition and integration, we need to provide personalized services, recommendation systems and other ways to help users quickly find the necessary resources they need and improve user satisfaction. Finally, the resource update issue. The resource renewal speed of digital library is fast, so we need to establish a set of perfect resource renewal mechanism to ensure that the library resources can always meet the needs of users. This includes regularly updating resources, tracking the latest research trends, and working with relevant agencies. At the same time, we also need to pay attention to the problem of eliminating resources, avoid redundant construction, and improve the utilization rate of resources.[3]

The problem of information resource management in university digital library involves many aspects, which we need to consider comprehensively and put forward feasible solutions. Only in this way can we better meet the needs of users and promote the development of digital library.

2.2 Resource storage and sharing issues

The resource storage problems of university digital library mainly include insufficient storage space, backward storage equipment, and non-standard storage management. With the continuous growth of library storage, the demand for storage space of library is also increasing. However, the

existing storage space is often difficult to meet the demand, resulting in insufficient resource storage. Secondly, the resource sharing problems of university digital library mainly include the imperfect resource sharing mechanism, the backward resource sharing technology, and the weak consciousness of resource sharing. The imperfect resource sharing mechanism is an important reason for the problem of resource sharing, such as unclear resource sharing agreement, unreasonable setting of resource sharing rights, etc., which may lead to the failure of sharing resources. In addition, the weak awareness of resource sharing is also an important reason for the problem of resource sharing. For example, some librarians lack of awareness of the importance of resource sharing and are unwilling to share resources with others.

Increase the investment in storage space, improve the upgrading speed of storage equipment, standardize the storage management, improve the resource sharing mechanism, improve the level of resource sharing technology, enhance the awareness of resource sharing; establish the resource sharing platform, improve the efficiency of resource sharing, and promote the in-depth development of resource sharing. In short, the resource storage and sharing of university digital library is an important factor affecting the quality of library service. By increasing the investment in storage space, improving the resource sharing mechanism, establishing resource sharing platform and other countermeasures, the problem of resource storage and sharing in universities can be effectively solved and the service quality of library can be improved.[4]

2.3 User service and experience problems

User service and experience are the core problems of digital library service. How to improve users' service experience is an important issue that digital library needs to pay attention to.

The service object of digital library is the majority of students and teachers, who need to quickly and accurately obtain various information resources. Therefore, digital libraries need to provide high-quality services, including fast response, accurate information retrieval, easy to use interface, personalized services, etc. At the same time, the digital library also needs to provide a good user experience, including friendly interface design, easy-to-use search tools, convenient display of search results, timely customer support, etc. However, there are still some problems in user service and experience. For example, the design of the user interface is not friendly enough, the retrieval tools are not easy to use, the retrieval results are not intuitive enough, and the customer support response is not timely enough. In order to solve these problems, digital libraries need to take some measures. First of all, digital libraries need to pay attention to the design of user experience: when designing the display of retrieval results, users' needs and preferences should be taken into account, so that users can quickly understand the retrieval results. Secondly, digital libraries need to provide timely customer support: users may encounter various problems when using digital libraries. Therefore, the digital library needs to provide timely customer support, including online customer service, telephone consultation, email support, etc. Finally, digital libraries need to continuously improve their services. Digital library need to constantly pay attention to the needs and feedback of users, timely adjust and improve services. In this way, the digital library can better meet the needs of users and improve the users' service experience.

2.4 Technical support and security guarantee issues

As an important infrastructure of modern higher education, the information resource management of university digital library not only provides convenient and efficient services for teachers and students, but also faces many challenges. Among them, the technical support and security guarantee are the important factors affecting the library service quality. How to improve the technical support and security guarantee capability of the library is an important issue that the

digital library needs to pay attention to.

Improving the technical support ability is the key to the development of digital library. With the development of digital technology, the form and the way of obtaining library resources have undergone profound changes. Digital libraries need advanced technical equipment and professional technical support team to meet the growing information needs of teachers and students. This includes: hardware equipment, software support, technical support team, strengthening security is the cornerstone of the survival and development of digital library. With the popularization of digital library, libraries are faced with many security threats from inside and outside. How to improve the security ability of library and ensure the security of information resources of digital library is the problem that library managers need to pay attention to. This includes: information security, network security, user information protection, personnel management.[5]

3. Solution

3.1 Establish a sound resource procurement and integration mechanism

Information resource management of university digital library is an important part of modern higher education, which plays an important supporting role in teaching, scientific research and talent training in colleges and universities. However, with the rapid development of digital library, the information resource management is faced with many problems, such as the imperfect resource procurement and integration mechanism, the low quality of information resources, the poor user experience and so on. Therefore, the establishment of a perfect resource procurement and integration mechanism is an important way to solve these problems.

To establish a sound resource procurement and integration mechanism needs to consider the following aspects: the formulation of procurement strategy, the selection of procurement channels, the formulation of procurement standards, the monitoring of procurement process, the evaluation of procurement results, the establishment of integration mechanism, the monitoring of integration process and the evaluation of integration results.

To sum up, establishing a perfect resource procurement and integration mechanism is an important problem in the information resource management of university digital library. It is necessary to comprehensively consider the procurement strategy, procurement channel, procurement standard, procurement process, procurement, procurement results, integration mechanism, integration process and integration results, so as to realize the optimization, integration and management of information resources, so as to improve the efficiency and quality of information resource management in university digital library.[6]

3.2 Optimize the resource storage and sharing mode

In the problem and solution of information resource management in digital library of colleges and universities, optimizing the mode of resource storage and sharing is a crucial part. With the rapid development of digital library, the resource storage and sharing mode of libraries need to be continuously optimized to meet the needs of users and improve the efficiency of the library. This paper will introduce the countermeasures of optimizing resource storage and sharing mode in university digital library in detail. The resource storage mode of digital library needs to be optimized according to the actual situation. At present, the resource storage modes of digital library are mainly as follows: local storage mode, network storage mode and mixed storage mode. Therefore, optimizing the resource storage mode of digital library needs to be selected according to the actual situation. When choosing the resource storage mode of digital library, factors such as storage capacity, access speed and security should be considered to meet the needs of users and

improve the efficiency of the library.

3.3 Improve user service and experience

University digital library is an important part of modern higher education, which provides rich digital resources and services for teachers and students. However, there are still some problems in information resource management, which we need to take effective measures to solve. Among them, improving user service and experience is one of the important directions for the development of digital library. In order to improve the user service and experience, we need to pay attention to the following aspects: strengthening the personalized service of digital library, strengthening the user education of digital library, strengthening the user feedback of digital library, and strengthening the technical support of digital library.[7]

The information resource management of university digital library is a complex system engineering, which needs us to pay attention to many aspects, such as strengthening the personalized service of digital library, strengthening the user education of digital library, strengthening the user feedback of digital library, and strengthening the technical support of digital library. Only by strengthening the service and experience of digital library can we better meet the needs of users and make contributions to the development of higher education.

3.4 Strengthen personnel training and information construction

Under the background of the current information age, as an important carrier of the development of modern library, university digital library faces many challenges in its information resource management. Strengthening personnel training and information construction is the key to solve these problems. Strengthening personnel training can improve the quality of staff, so that they have stronger information literacy, and can make better use of digital resources to provide services for users. In addition, strengthening personnel training can also improve the innovation ability and teamwork ability of the staff, providing continuous impetus for the development of the library. Information construction can realize the modernization of the library internal management and improve the service efficiency of the library. Through the establishment of library information management system, we can realize the unified management and scheduling of library resources, and the utilization rate of resources can be improved.

4. Case analysis

4.1 Status quo and problems of information resource management in a digital library of a university

Information resource management of university digital library is an important part of modern higher education, which is of great significance to university teaching, scientific research and service. However, with the continuous development and improvement of digital library, the information resource management is also faced with some problems. From the current situation, the digital library of a university has established a relatively perfect digital resource management system, including digital resource procurement, cataloging, storage, release, utilization and other links. In addition, the digital library also carries out various forms of digital resource services, such as digital resource retrieval, download, sharing, etc., providing convenient information services for teachers and students. Secondly, there are some problems in the sharing and utilization of digital library. Due to the copyright and intellectual property rights of digital resources, there are certain restrictions in the sharing and utilization of information resources in digital libraries. In addition, the

information service mode and service mode of digital library also have certain simplicity, which cannot meet the diversified information needs of teachers and students. Finally, there are also some problems in the talent team and management system of digital library. Because the construction and management of digital library need certain professional talents, and the talent team and management system of university digital library is not perfect, resulting in talent training, information construction, management innovation and other aspects.[8]

In view of the above problems, this paper puts forward the following solutions: standardizing the procurement and management of digital resources, strengthening the sharing and utilization of digital resources, improving the talent team and management system of digital library, strengthening the innovation of information service of digital library, and meeting the diversified information needs of teachers and students. To sum up, there are also some problems in the development of information resource management of university digital library, which need to strengthen management and improvement. Only by strengthening the information resource management of digital library can it better serve the teaching, scientific research and service of universities.[9]

4.2 Solutions and implementation

The problem and solution of information resource management in university digital library is a very important topic. With the advent of digital age, the information resource management of university digital library is facing many challenges and problems.

In view of the problem of information resource management in the digital library of universities, we can adopt the following solutions: establishing a perfect information resource management system, strengthening the collection and processing of information resources, optimizing the storage and management of information resources, and strengthening the sharing and utilization of information resources. In view of the problem of the information resource management in the university digital library, we need to adopt various solutions and strengthen the management of the information resource, so as to realize the goal of sharing and utilizing the information resource in the university digital library. In view of the problem of information resource management in university digital library, we need to strengthen the management of information resources, including the collection, processing, storage, transmission, utilization and evaluation, and adopt a variety of solutions to realize the goal of sharing and utilization of information resources in university digital library.[10]

5. Conclusion

Information resource management of digital library in universities is an important support for the development of modern higher education. It not only provides rich digital resources for teachers and students in universities, but also provides convenient information services for the public. This paper puts forward a series of solutions to provide a reference for the information resource management of university digital library. University digital library should strengthen the control of resource quality, establish a strict resource audit system, to ensure that the digital resources provided by the library have a high quality. At the same time, we should also strengthen the update and maintenance of digital resources, eliminate the obsolete and outdated resources in time, and ensure that the digital resources of the library are always kept in the latest state. Secondly, the university digital library should strengthen the construction of information resource sharing, promote the co-construction and sharing of resources among the university libraries, and realize the full utilization of information resources. This can be achieved by establishing an information resource sharing platform and carrying out cooperation projects. In addition, the university digital library should also strengthen the cooperation with the government, enterprises and other external

institutions, and further broaden the scope and field of information resource sharing. Finally, university digital libraries should strengthen the investigation of user needs, understand users 'needs and feedback on digital resources, so as to better meet users' needs. This can be achieved by conducting user surveys and setting up user feedback channels. In addition, the university digital library should also strengthen user education and improve users' ability to use digital resources.

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