Research on Library Information Management System Platform under the Background of Big Data

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Abstract: In the era of big data, the integration and sharing of information resources in libraries is an important way to improve the quality of library management. The construction of informatized library management should firstly carry out overall planning and establish scientific goals, according to the characteristics of the unit and the actual situation. Seek truth from facts for analysis and research, take targeted measures, change the management concept of backward library, innovate the management methods and methods of library, and improve work efficiency. Therefore, China should attach great importance to the construction and management of informational libraries, ensure the overall improvement of the library information management system, ensure the overall improvement of the library information management system, and give full play to the role and value of the library.

1. Introduction

In the context of big data, the library must make reasonable use of computer tools, analyze data, reduce data management costs, improve data utilization, and especially build a data sharing platform to deeply analyze the impact of big data on book data management. On this basis, the influencing factors in the management status quo are analyzed. At the same time, the library should build a complete library of books and materials [1], improve the data database, integrate and apply the information, and use the means of service to further process and process the data, so as to truly improve the efficiency of data application.

2. The significance of book data management under the background of big data

2.1 Book data management is an effective way to enrich public knowledge reserves

The public's knowledge needs to be learned through the lectures given by the teachers at various stages, and it can also be achieved through self-study in the spare time. Books provide great convenience for the public to learn. Therefore, books attach importance to the management of library materials and achieve work innovation, which can provide services to the public in a timely and convenient manner, satisfy their self-study desires, and make their knowledge reserves more thick and satisfy their self-study through more authentic and reliable knowledge content. need.

2.2 Book data management is the necessary way to maintain social and cultural atmosphere

Social development also requires a good cultural atmosphere. As a position to teach and educate people, it must build a good cultural atmosphere to provide a good edification to the public at the level of environmental factors. Therefore, the management of book materials is very important, which can make the cultural atmosphere more intense, and stimulate the public's interest in learning, so that the public can actively participate in learning, and under the infection of a good atmosphere, constantly accept new things and develop themselves. The vision, gradually improve the self, and demonstrate self-worth [2].

2.3 Book data management is a feasible means to meet the concept of information development

With the in-depth development of society, the concept of information development has gradually been widely recognized. Therefore, the development of book work undoubtedly requires the timely integration of information management concepts, so that the concept of informatization development is reflected in the management of book materials, and the internalization of information concepts at the educational level is realized. The value of the information concept is gradually presented.
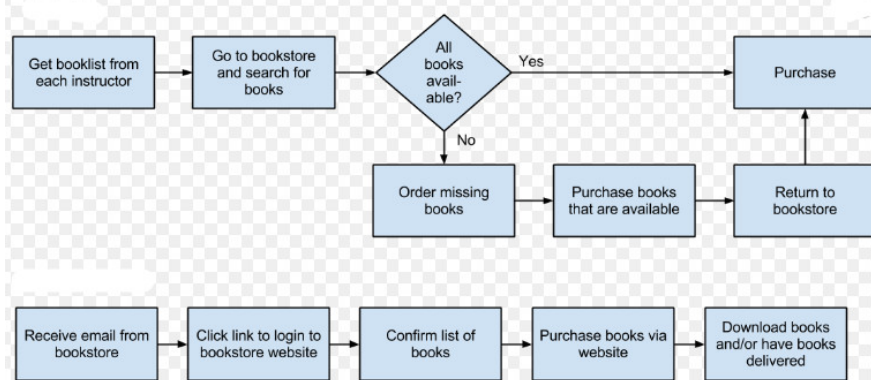

Fig. 1 Book information information management system

3. Problems in the management of books and materials under the background of big data

3.1 Collection of books and materials is not comprehensive

The development of the era of big data benefits from the rapid development of network technology and information technology, making data information appear to be more open and public, and the storage space is relatively large. People only need to control the terminal to obtain relevant data. The information has realized an effective substitution of paper resources, which fully reflects the role and value of the physical library [3]. The amount of information in the book materials itself is very large. In the context of big data, the library management system and management model must be improved and optimized. However, the information management of the book materials at this stage is still in the initial stage of development, and the book materials are missing and duplicated.

3.2 Security risks are prominent

Although the information management of books and materials can provide great convenience for users, the resources of the library are limited, and big data technology is like a link, which connects the island-like libraries together and realizes the library materials. The sharing breaks through the limits of time and space. However, from the current status of digital book management, security risks have become more prominent, and information security has become a major problem in the management of book information, such as business stealing, information theft, malicious attacks and other information security risks [4]. These problems seriously restrict the books. The development of information management.

3.3 Lack of network management technology

In the context of big data, in order to achieve efficient information management of books and materials archives, professional management personnel must be equipped. Compared with the traditional physical library, the management of online library materials requires managers to have strong computer technology and network literacy. However, from the current situation of the management of online library materials, managers generally have the problem of technical defects, which has a negative impact on the development of information management of books and materials.

3.4 Lack of big data infrastructure

In the context of big data, digital libraries have become the main trend in the development of libraries in the future. At present, there are still some restrictive problems in the construction of digital libraries. The most important one is the lack of big data infrastructure. Although most libraries have begun to build digital libraries, the number of infrastructure facilities is not sufficient to meet the actual needs of digital libraries.

4. Library management information strategy under the background of big data

4.1 Deepen the concept of library management information construction

The idea of being open in the context of big data can promote the promotion of library management to information. Therefore, we must first innovate in terms of ideas. In the context of big data, library management workers should deeply understand the importance of information, establish the construction concept of book management information, and actively introduce advanced ideas to make themselves have the "Internet +" thinking. At present, for the management of books, the traditional management model has been difficult to meet the needs of teachers and students. Therefore, library managers should be able to adapt to the modern library management model and transform the management objectives of books to big data, resource utilization and information mining. In order to promote the transformation of libraries into information, we must make full use of high-tech information technologies such as big data and e-commerce to promote the development of library management in the direction of digitization and intelligence. Information management personnel should pay special attention to the establishment of correct concepts, and must be brave in introducing advanced information technology, strengthen library information management, and improve service quality.
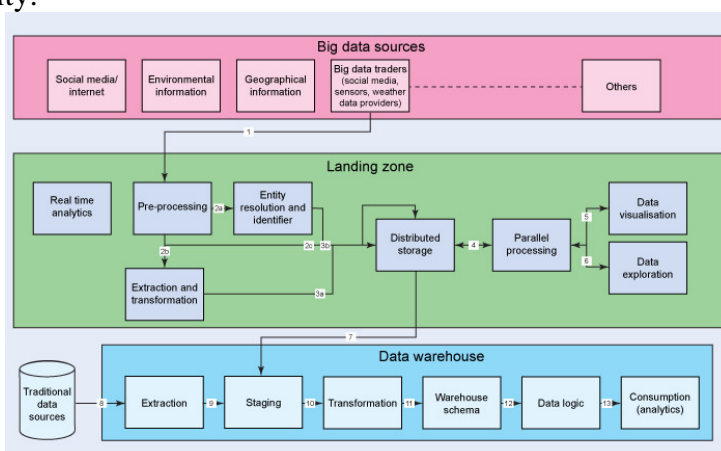

Fig. 2 Analysis of Library Management System under Big Data

4.2 Using Big Data to Integrate Library Information Resources

In the original library management, most of the books in the library belong to paper resources, and the electronic resources that can be utilized are very few. Some of the books purchased have been put on hold in certain corners all the year round and are difficult to use. Some books have more detailed information records and more repetitions, which causes a serious waste of library resources, and the related book resources cannot exert their own value. In the context of big data, libraries can realize the information of book management, integrate and optimize resources, and purchase library resources sharing libraries in different libraries and regions, thus promoting the full dissemination of book resources to a wider range. development of. Based on the background of big data, the use of information technology literature can realize the rapid reference and transmission through the network. The establishment of e-reading promotes the exchange of library resources, so that the value

of book resources can be fully exerted. The informatized library management model also satisfies the individualized needs and greatly enhances the library's service effect.

4.3 Making full use of information technology to optimize library management system

In the context of big data, the library's management of books has gradually changed to information, digitization and networking. However, there are still potential problems in the mutual dissemination of information and the use of a large amount of information, namely the security of the library management information system. . This is a huge challenge for the management of libraries, requiring managers to use advanced technology to optimize the book information management system. Strengthen the investment of library system hardware in specific operations to ensure that the hardware system is sufficiently secure. In addition, a detailed system is set up for the management of information, so that the use of library resources, including access, download, and sharing, has a clear system to guarantee.

4.4 Strengthen data development and data security work

Library materials not only include all kinds of knowledge that people need, but also some content related to national security and personal information. Traditional libraries have fewer information leaks, and even if problems arise, they can respond in time. In the context of big data, libraries are in an environment of information development and sharing, and data security issues are prone to occur. In order to protect data security, libraries need to first control the development and dissemination of information within a secure scope, set access to information, and prevent personal information disclosure and disclosure of national security information. Secondly, it is necessary to strengthen the research and development of security technology, resolutely resist the behavior of deliberately destroying the content of data programs and data, and reasonably plan the data development process and data interface to ensure that the data of the entire library is in a safe environment. Finally, it is necessary to establish corresponding legislation in time to ensure the information security of the library, severely punish the illegal stealing of information, and investigate its legal responsibility when necessary. In order to improve the security of library materials, the state must strictly control the scope of information dissemination and the degree of information openness. It can enhance the security and rigor of user privacy through the permission setting function, and prohibit data theft. According to the national information security system, in accordance with the actual situation, reasonable planning of the open process of books and materials to ensure the security of digital libraries must be strictly disciplined for information theft and information damage.

4.5 Improving the management evaluation system

In the context of big data, the measurement management method is reflected by the evaluation system. Therefore, it is essential to have a complete evaluation system, and by perfecting the evaluation system, we can truly evaluate the level of management. The quality evaluation mainly evaluates the speed and quantity of the readers' access to resources, and evaluates the reader's satisfaction with the service level. The benefits mainly involve economic and social benefits. Social benefits are the positive effects or positive impacts of the library materials on the whole society. The economic benefits are the cost ratios of the input finance and the income of the book data management.

4.6 Improving the construction of borrowing terminals in the library management system

Every day, a large amount of library materials are borrowed and returned. The time, personnel, and data status of the library must be recorded in detail and accurate. Moreover, due to the large number of reading groups faced by the library management system, the stability and accuracy of the system must be guaranteed. In addition, in the operation of multi-layer systems, the operation framework must be clear and clear, the overall efficiency of the system should be high, and many terminals should be connected to the outside of the system as clients. These requirements must be fully considered in the overall structure and design of the system framework. And at the same time, on the

basis of meeting these requirements, we will start to develop the corresponding design tasks, and pay attention to the compatibility of the system, so that the system can be updated to improve the applicability and service life of the system.

4.7 Building a regional library information resource guarantee system

Library management information construction is a complex system engineering, which needs to be gradually developed and improved. With the development of society, the demand for talent resources and financial resources of libraries will continue to increase, and new problems and challenges will be faced in the management process. The library should actively participate in the exchange and sharing of various information resources, optimize all aspects of the management process, and rely on the strength of the whole society and the strong support of the industry to build a regional information resource security with advanced technology, high efficiency and practicability. system. Furthermore, relying on the support of big data technology, the transformation and upgrading of service functions, the improvement of service models, the enrichment of service content, and the improvement of information service capabilities and efficiency will play an important role in the deepening and expansion of library knowledge services.

4.8 Strengthening library hardware and software construction

Lagging, outdated library equipment is no longer suitable for the information management requirements of the big data era. First of all, the library should establish advanced data retrieval system, data distribution system, big data literature statistics system, various terminal equipment, as well as Internet browsing, database retrieval, multimedia electronic publications and other hardware, software equipment and related Equipment technology to accelerate the construction of a comprehensive library platform and information system infrastructure. The introduction of library talents, the promotion of technology, and the training of personnel are all guaranteed by increasing the amount of capital invested. As the storage base of knowledge, the library has the largest amount of knowledge and information storage. Although it does not directly participate in personnel training activities, it has made tremendous contributions to the cultivation of talents in the country. Therefore, strengthening the software and hardware construction of libraries in human knowledge It plays a very important role in acquiring and promoting social progress. Therefore, it is necessary to attach importance to library construction from the perspective of comprehensively implementing the scientific development concept, increase investment in software and hardware construction, and jointly build a library management information system to accelerate the pace of library information management.

4.9 Applying Big Data Technology to Redevelop Library's Existing Collection Resources

The deep mining of library resources is the integration and utilization of information resources. First of all, in the big data environment, the library must keep pace with the times, transform the concept of information resource construction, develop, mine and scientifically expand on the basis of the original information resources, so that the internal resources and external resources of the library are integrated with each other. Quickly promote the construction of library information resources. The library should use big data technology to enable readers to rationally use information resources in the process of information inquiry and scientifically optimize the information technology processing capabilities of the library. In addition, on the basis of the traditional service mode such as paper borrowing, the library complies with the requirements of the information age, creates a diversified information resource system, improves the organizational efficiency of the collection resource information, and further establishes the paper resources and information resources. The combination of traditional management and scientific and technological information services provides a diversified, all-round and fast service for readers to realize book information management and resource sharing.

Fig. 3 Technical analysis under big data

4.10 Improving the overall quality of information technology technicians in the library

The original library management model is relatively weak use of skills, most library management personnel only master the basic knowledge of book management. With the introduction and use of big data, the management of library rooms has become more information-oriented. The management of library rooms has become a more urgent need for composite talents that combine theory and practice. First of all, it is necessary to carry out training and study on existing staff, on the one hand, strengthen the study of library management theory, and on the other hand, strengthen training on information management technology and modern management technology, especially unit leaders and staff, and strengthen study. Secondly, take the lead in taking the lead; secondly, actively introduce talents, look beyond the scope, relax, not be limited to the archives library management professionals, but also choose the combination of talents who understand both books and computer technology and network technology. Create a good working environment for them.

5. Conclusion

The library is an important base for providing access to information and knowledge. In the context of big data, the library's management of books has gradually shifted to information. This not only enhances the convenience of library management, but also integrates resources and improves the efficiency of management, which greatly reduces the pressure on library managers. Because of the big data background, the library is still in the development stage for library management information. To realize a comprehensive information management model, it is necessary to always maintain the concept of information management, make full use of big data to integrate effective resources, and improve information technology. The application level enhances the construction of the library information management system, thus effectively exerting the value of the library.

Acknowledgements

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