RESEARCH ON LIBRARY USER INFORMATION MANAGEMENT AND APPLICATION IN THE ERA OF BIG DATA

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Abstract: In the era of big data, there are many requirements that need to be considered when carrying out library user information management. Effective management should be carried out under the condition of fully implementing various requirements, so that the management of library user information in the era of big data can be efficient and reasonable. to develop. At the same time, research should be carried out on the practical application of library user information management in the era of big data, and try to improve the level of library user information management while showing the practical role of corresponding management, and promote the development of library construction and user satisfaction in the era of big data improve.
Keywords: Big data era; Library; User information; Management

1 INTRODUCTION

Due to the fact that library user information management will encounter some obstacles in the actual development process in the era of big data, this will lead to frequent occurrence of corresponding management problems, and the cooperation between library workers and users and the overall service level of the library will also be affected. big impact. Based on this, from the perspective of the development of the big data era, a standard and complete library user information management strategy should be formulated to effectively improve various management issues. While highlighting the practical role of user information management in the actual development of libraries, expand the application scope of library user information management, and raise the level of library construction and development in the era of big data to a certain level [1-2].

2 REQUIREMENTS FOR LIBRARY USER INFORMATION MANAGEMENT IN THE ERA OF BIG DATA

In recent years, the number of libraries in my country has shown an obvious upward trend (see Table 1) [3-6], which should be combined with the big data model to carry out effective management of libraries to ensure the accuracy and comprehensiveness of library user information, and provide services for books. Provide accurate and reasonable services to library users. For the research on library user information management in the era of big data, it is clear that the corresponding management needs to be considered in the actual development process mainly in the following aspects: First, it should be based on the real needs of library users and the borrowing situation of various books. Do a good job in relevant data collection to ensure the accuracy of various data information, so that the library can effectively manage library user information under the conditions of considering various data, reduce the difficulty of library user information management, and better meet Comprehensive development requirements of the library industry in the era of big data. At the same time, research should also be carried out on the performance of user information in libraries in various periods, so as to provide strong support for the smooth development of library user information management in the era of big data. Second, we should strengthen the application of various innovative technologies in library user information management, and effectively manage library user information with the support of various innovative technologies to reduce the difficulty and emergence of library user information management in the era of big data. The possibility of various problems highlights the innovative connotation of library user information management, and shows the advantages and practical functions of library user information management in the era of big data. Third, effective training should be carried out for staff involved in library user information management, so that relevant personnel can carry out library user information management work in accordance with safety guidelines and standard procedures, and strictly prevent library user information management from being interfered by human factors in the actual development process To ensure efficient and steady development of library user information management in the era of big data [7].

Table 1 The number of libraries in my country in recent years

Year/ Year	amount
2017	3 160
2018	3 177
2019	3 192

2020	3 208
2021	3 230

3 STRATEGIES FOR LIBRARY USER INFORMATION MANAGEMENT IN THE ERA OF BIG DATA

3.1 Define User Information Management Content

For the library, more and more user information is involved in the process of continuous development, so it should determine the complete and reasonable management content according to the form and attribution of various user information, and if necessary, it should be combined with the era of big data Under the development trend of libraries, optimize and adjust the content of user information management and unreasonable management methods to avoid problems in the actual development of library user information management in the era of big data. The rationality of the content and the actual implementation effect of the corresponding management work play an important role. Moreover, there are certain differences in the requirements of different users for library services. This should be combined with various differences to effectively adjust the library user information management defects in the era of big data. Actual borrowing levels. If the library user information is complicated, the big data system and related technologies should be used to effectively process various information, gradually improve the library's service to users, and highlight the existing problems of the library management system and related systems at the same time. Advantages of information management. Promote the steady development of library user information management in the era of big data, and show the role of user information management in library construction and related industry development [8] .

3.2 Do a Good Job in Collecting and Summarizing User Information

Due to the complexity of the data information that needs to be considered in the library user management process, it is necessary to do a good job of summarizing and organizing under the condition of comprehensively grasping various data information, and to determine reasonable management strictly according to the real needs of library users and the actual performance of information in the era of big data. The plan ensures the effect of various information in library user management in the big data era, and minimizes the problems of data information loss and actual management difficulty in library user information management in the big data era. Generally speaking, library user information management is mainly divided into four links: information entry, information collection, information induction, and information analysis. This should ensure the relevance of these four management links, so as to avoid the loss of books in the era of big data. The user information management of the library has problems due to unreasonable basic links and incomplete related information, so as to ensure the overall strength and comprehensive analysis effect of the user information in each period of the library, so as to provide certain convenience and support for the library user information management. Moreover, with the support of the big data system to carry out library user information collection and induction work, it can also control the adverse impact of human operation problems on library user information management, and then prolong the life of library user information in each period, and combine various information specific Analyze the situation to accurately judge the needs of users for various books in the library, and further provide personalized services for library users [9].

3.3 Create User Information Management System

Since the library user information management in the era of big data is easily disturbed by external factors during the actual development process, this will cause the difficulty of library user information management to rise sharply, and the corresponding management will also be difficult to meet the actual development requirements of the book industry. Based on this, a reasonable system should be created in combination with the development of the era of big data and the requirements of library user information management, and the management of library user information should be carried out with the support of relevant systems, so as to effectively improve the effect of library user information management in the era of big data, so as to meet the needs of large The development of the data age puts forward requirements for library user information management. At the same time, it is also necessary to ensure the relevance between the library alliance and related systems, optimize the inherent management model under the conditions of considering the actual needs of users and the relevant information dissemination channels, and ensure the role of a reasonable system in library user information management in the era of big data The effect is to actively improve the problem of library user information management in the era of big data, to ensure that library managers understand the real needs of readers and users and the actual distribution of books in the library, and then provide strong support for promoting the benign development of library user information management[10]. In addition, we should also optimize the hidden problems of related systems, and provide sufficient storage space for library user information with the support of big data systems, so that users can retrieve books in real time and help library users find what they need in a short time. books.

3.4 Guarantee the Security of User Information Management

When the big data model is used to manage library user information, it may be disturbed by some security risks, resulting in great security threats to library user information and related data management (see Table 2). The effect of user management and the actual development of related industries will have a great impact. Therefore, we should conduct research on the common big data security threats in the library user information management process, and then control the problems of library user information management in the era of big data with the support of various security management methods and modern technologies, and gradually improve identity authentication technology, The effect of digital encryption technology and firewall technology in library user information management ensures the effect of library user information and related data management, and realizes the goal of smooth development of library user information management with the support of big data systems and related technologies. At the same time, a reasonable access mechanism should be established in accordance with the requirements of library user information management in the era of big data, and authority settings should be made for library users, so as to provide corresponding services for users at all levels of the library [11]. Under the condition of ensuring the security and rationality of library user information and related data, control the violation of user privacy rights, and while improving the security of library user information management, ensure that libraries and related industries are in the era of big data. developed steadily.

Table 2 Common big data security threats

Common Big Data Security Threats	Proportion/%
data confusion	35.7
Insufficient communication between the two parties	27.1
malicious virus	15.7

4 APPLICATION OF LIBRARY USER INFORMATION MANAGEMENT IN THE BIG DATA ERA

4.1 Understand the Real Needs of Users

For library user information management in the era of big data, the implementation of this management work can effectively manage library user information with the help of big data model, clearly display library user information, and judge the user's request to the library. Service requirements and book retrieval requirements, help library institutions implement various real needs put forward by users in a short time, and gradually improve the actual service level of library users, which is very important for ensuring the comprehensive development level of the book industry in the era of big data and readers and users' expectations for books. Satisfaction with the overall service of the library also plays an important role. Moreover, there are certain differences in the needs of readers of different age groups for books, so the big data system should be used to effectively divide the reading requirements of users of different age groups in the library, so as to provide accurate and reasonable books for readers of different age groups. This can not only improve the borrowing level of various books in the library and the actual management efficiency of readers of different ages.
As a result, it can also strengthen the grasp of the real needs of readers and users by the management of the library organization, effectively expand the application scope of library user information management, and lay a solid foundation for the healthy development of the library in the era of big data.

4.2 Promoting the Development of the Book Industry

Since the development of my country's book industry will be restricted by the development of the new media industry, this will cause the majority of users to pay less attention to library management and actual development, and in the long run will lead to a significant decline in the development level of my country's book industry. According to reasonable requirements, strengthening the application of big data systems and related means in library user information management can not only improve the problems existing in library user information management in modern society, but also improve readers' attention and satisfaction to library management. To further promote the development of the library in a more reasonable direction, highlight the real development advantages of reader user information management and related construction goals in library planning and related industries, and ensure that the actual development level of library construction and related industries has improved. As for the problems that arise in the actual development process of the book industry, it can also be optimized and adjusted through big data means and specific models to ensure the correlation between library user services and the development requirements of related industries, highlighting the reality of big data models It can improve the level of library user information management

and practical application in the era of big data, and implement the requirements of modern social construction for the development of the book industry.

5 CONCLUSION

In order to ensure the actual management effect of the library and the satisfaction of the readers, the user information of the library should be effectively managed in combination with various basic requirements to ensure that the library staff can grasp the real needs of the users in a short time, and then provide the users with More accurate services play an important role in improving users' satisfaction with libraries in the era of big data. At the same time, it is necessary to create a library user information management strategy in combination with the big data model, and improve the library user information management level with the support of reasonable strategies, and show the practical application of library user information management in the era of big data.

COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

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