

On the Application of Big Data in Library Management and Service

Nan Wu*

The Library, Beihua University Teacher's College, Jilin 132013, Jilin, China

E-mail: 690378283@qq.com

*Corresponding author

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Abstract: Library, as an important part of the development of the society, helps to provide people with high-quality data and information services to meet people's study and work requirements. With the continuous development of big data technology in China, in order to improve library management and service level effectively, librarians should give play to the advantages of big data technology to provide important support for practical work. Relevant management staff need to improve their work quality and information technology work level, constantly improve and adjust library management and service mode, and highlight the advantages of big data technology.

In the process of integrating big data technology into library management and service, it is necessary to strengthen the understanding of big data technology, and give full play to the advantages of big data technology based on the actual work needs and requirements, so as to improve the actual work effect. In addition, relevant management staff also need to keep up with the current development direction of big data technology, constantly improve and innovate their own management mode and service consciousness, so as to effectively improve library management and service level and promote the stable development of China's social culture.

1. Role of Big Data Technology in Library Management and Service

1.1 Helping to Store Massive Data

In the context of big data, the ways and modes of information transmission are gradually developing towards diversification. In terms of library management and service, the traditional working mode may bring a lot of troubles to the actual work, which seriously affects the effective improvement of library management and service level. Therefore, it is necessary to give full play to the advantages of big data technology and combine the characteristics of big data to store massive amounts of data, which will not only improve the management efficiency of libraries, but also flexibly deal with problems existing in practical work. [1] Library management staff should make full use of the advantages of big data to adequately combine and sort the book resources in the library and implement digital information storage, so that the library information system can cover all aspects of the library more comprehensively. In this way, readers can get the valuable information they want in the shortest time when they look up relevant information in the library. Thus, the core value of big data can be highlighted. At the same time, the management level and quality of the library can be transformed towards modernization and the management efficiency of the library can be improved.

1.2 Diversified Development of Information

In the current era, with the continuous development of big data technology in China, big

data and all walks of life have been infiltrated and integrated with each other. Correspondingly, big data technology has also played its role in library management and service. As the main site of daily learning and reading, library needs to follow the development direction and characteristics of the time to complete the resources and better meet people's reading needs. [2] However, some books are difficult to be found, which brings many problems to library work. Therefore, library staff can give full play to the advantages of big data technology, strengthen the cooperation and communication with other libraries, effectively connect the books that the library lacks with other libraries, and realize the sharing of resources in the network platform. In this way, the library storage is expanded and is more intuitively shown in front of readers in the digital way. The application of big data technology in the library also has obvious advantages in data storage. It can store quantitative books according to people's reading needs, thus improving the service level of the library. In addition, the big data technology can also make the connection between library and database closer. With the help of big data technology, libraries are able to include both text materials and audio and video content. It can not only improve service efficiency, but also help to expand the amount of library data and realize the modernization transformation and development of library management.

1.3 Strengthening the Dimension and Depth of Management

On the whole, the contents involved in library management and service are of great complexity. Therefore, related management staff need to give full play to the advantages of big data technology to strengthen the depth of management and deal with the problems existing in the actual management. To facilitate library management, users should register their identities when they get relevant information and record in the system when they borrow books and return books. In the existing library development and management model, it is difficult to understand users' interest in reading and browsing, which seriously affects the effectiveness of the library management work. However, with the application of big data technology, management staff can manage the work of the library in a detail manner and analyze readers' interests and hobbies by combining the data of readers. In addition, effective analysis and integration of data and optimization of library materials are also conducive to enabling library management staff to achieve accurate development positioning and improve service level and management according to the needs of users.

To sum up, it is very important to apply big data technology in the current library management and service work. It can not only facilitate daily management and service, but also meet readers' reading needs and requirements in various aspects. Therefore, related management staff need to pay more attention to this issue and improve the efficiency of library management and service.

2. Application Path of Big Data in Library Management and Service

2.1 Personalized Management

In order to make the big data technology useful in the library management and service, related management staff needs to strengthen the interpretation and understanding of big data technology, improve the level of personalized management based on actual job requirements to meet the new requirements raised by readers. With the continuous development of knowledge economy in China, the information of library is gradually developing towards diversification. Some information resources and books in the library are mainly to meet the needs of users in reading and learning. However, there are still some problems to be solved in the current library data management. For example, some users still have some difficulties in searching related data, which makes them unable to fully understand the current data of the

library. In addition, there are some differences between library data management and practice, which seriously affect the effective improvement of library management and service level. In order to solve this problem, the related management staff need to integrate big data technology perfectly in the library management and service work, fully excavate working characteristics of the new technology, and adjust and optimize the library management and service mode, to realize personalized management. [3] First of all, the advantages of big data technology and cloud computing technology can be fully utilized in the actual work process to effectively process library data. In this way, users can search the library data in the network platform and find the required reading materials and books in the shortest time, so as to improve the service level and service effect. In addition, opinion mailbox can also be integrated into the management platform, allowing readers to input their own suggestions on library construction and book resources into the computer platform. After that, the big data technology can automatically process and classify the information, facilitate the library management staff to understand the reading needs of readers, solve the problems existing in the current library service work, and realize the personalized management effect.

2.2 Establishing Knowledge Service Engine

Library is to meet the needs and requirements of users in reading and helps them to obtain the information and knowledge they want. Therefore, related management staff need to establish an engine of knowledge service to solve the drawbacks existing in the traditional service work, so as to effectively improve the management level and quality of the library. Library should make use of big data technology to optimize and adjust library resources constantly. After that, it conducts in-depth analysis and research on users' reading characteristics and demands, and establishes a new prediction system and service recommendation engine, so that the big data technology can improve the deficiencies in the previous working mode. In this way, readers can get the information about the library in the network platform, and can also search relevant information effectively. Secondly, it is necessary to give full play to the advantages of big data analysis technology in the actual work process, so as to know which books users are interested in through massive data analysis. In this way, the new knowledge service engine can be effectively optimized to push the data and book bibliography in line with their preferences more quickly and conveniently, with highlighting the humanized management effect of the library [4-7].

2.3 Fine Management of Book Resources

In the previous library management mode, most of the work is done manually. It not only consumes a lot of time, but also makes the final working effect fail to reach the expected state and standard. In order to solve this problem, in the context of the current development of big data, related management staff need to carry out refined management of book resources to improve the pertinence of library service and management. The management staff of the library can use the big data technology to encode each book and integrate a series of data categorically, so that readers can find the books accurately when searching for relevant books. Some readers would not put books back in the library. In this case, we can use the big data technology to encode books and find them accurately, to lay a solid foundation for further management. Secondly, related management staff can also use big data analysis technology to understand the flow of book coding, master the reading frequency of each book, and conduct targeted management on frequently read books to optimize the book management mode. As a result, readers can shorten the time of searching for these books and improve the work efficiency of management staff. Finally, the related management staff can also to keep a record of lending conditions to study the significance and value behind these data, find the problems in the current management work in a timely manner, and effectively improve the

pertinent and scientific nature of library management.

2.4 Constructing Network Resource Base

In the library management and service work under the background of big data, relevant management staff should construct network resource database, so as to ensure the improvement of the effectiveness of actual work. This is mainly because paper books are easy to be damaged in the previous library management mode, leading to many problems in maintenance. Therefore, it is necessary to build a network resource library to upload some easily damaged book contents to the network platform for the convenience of readers.

3. Conclusion

Under the background of big data, library management and service work should keep up with the development direction and pace of the current era, and effectively improve and innovate the previous management and service mode, so as to provide readers with high-quality service. It not only helps to improve the management level and quality of the library, but also helps to realize personalized and humanized management under the influence of big data, so as to improve users' satisfaction and recognition of the library and promote the stable development of the library in the current era.

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