The Construction of Literature Resources Optimization System in University Library of Traditional Chinese Medicine under the Background of Big Data

Xu Chenxing, Li Yajun

Shaanxi University of Chinese Medicine, Xianyang, Shaanxi, 712046, China

Email: Xu12345awp@163.com

Keywords: Big Data, Library, Literature Resources, Construction Mode

Abstract: with the Rapid Development of Information Technology and the Arrival of the Era of Big Data, the Library Has Also Realized the Innovation of Document Resource Construction Mode in the Transformation and Development. Based on the Era Background of Big Data, the Construction of Library Literature Resources is More Focused on the Innovative Application of Big Data Concept and Technology, with the Help of Big Data to Further Optimize the Service Experience of Readers. This Paper Mainly Discusses the Innovation of Library Literature Resources Construction Mode in the Era of Big Data, and Makes Clear Its Resources System Composition and Promotion Strategy, in Order to Better Promote the Value of Library Culture Construction.

1. Introduction

With the Rapid Development of Network Technology and Big Data Technology, Massive Data is Transformed into Intangible Wealth, Providing Information and Data Support for the Development of All Walks of Life, and Becoming an Important Reference and Basis for Industry Decision-Making. Big Data Advocates Multi-Dimensional Data Thinking and Real Decision Analysis Based on Detailed Information to Improve Information Return Rate. At Present, the Concept of Big Data is Gradually Rooted in the Hearts of the People, More and More Successful Cases of Big Data Application, the Development of Big Data Industry Has Realized the Scale and Clustering, and the Degree of Information Sharing Has Significantly Improved[1]. Big Data Has the Following Four Characteristics: First, the Data is Massive and Diversified. Big Data Covers All Fields of Information, and There Are Many Kinds of Data. Second, the Data Volume is Huge. for Example, the International Social Network Giant Facebook Platform Generates More Than 300tb Logs Per Hour, with Fast Data Update and Flow. Third, High Data Value. Big Data Technology Makes Professional Knowledge Gather in the Professional Field. Experts and Scholars Share and Communicate with Information Platform, Which Improves the Value of Data Invisibly. Fourth, Data Flow is Fast. Nowadays, with the Rapid Development of Science and Technology, Big Data Keeps Pace with the Times, and Also Has Dynamic Changes[2]. Information is in a State of Continuous Replacement and Derivation. Because of These Remarkable Characteristics of Big Data, It Has a Great Impact on the Construction of Traditional Library Literature Resources. Therefore, the Library Must Do a Good Job in the Innovation Analysis of Literature Resources Construction Mode in the Era of Big Data.

2. The Basic Composition of Library Literature Resources in the Era of Big Data

Big data resources include not only reader data but also statistical data, but also library core data resources. The goal of library construction and development is to meet the needs of readers and optimize the experience of readers. Literature resources are the basis of all services and optimization. Without resources, there is no value. In the era of big data, the composition of library literature resources is more diversified[3]: the first is the self built literature of the library, that is, the collection characteristics of the library and the construction of special literature resources. The second is limited by the purchase cost of literature resources, which can not be constructed in large

quantities. The third room and space restriction can also carry out a large number of dissemination and replication, enrich the original collection resources, and become the internal literature resources of the library after a period of time[4]. This kind of literature resources are often linked with big data technology. Under the condition of the shortage of library funds, it can enrich and supplement literature resources and optimize the reader experience, which is also the leading direction of Library Literature Resources Construction in the era of big data.

Table 1 List of the Number of Students and Total Cost of Teaching in a Provincial College of Traditional Chinese Medicine during the Period of the 12th Five Year Plan

Student nature	2010	2015
This specialty	12205	129811
Graduate student	1824	2610
State Education Students	741	564
Adult education students	1907	1737
Student aggregate	16675	17895
Total cost of teaching	RMB 573.44 million	RMB 766.58 million

3. The Construction Value of Library Literature Resources in the Era of Big Data

Document resources are the foundation of library construction and development. Both teaching and research and social development need the guidance of document resources. In essence, document resources can promote the progress and development of human society. The data information of literature resources has a decisive influence on the scientific research results and quality[5]. The key point of the construction of literature resources is to give full play to the technological advantages of big data in the era, to promote the innovation of the construction mode of literature resources in the library, and to focus on the construction of literature resources database and the renewal of resources. The library must attach importance to the construction of literature resources, and after further collection, screening, verification, classification and re compilation of literature resources, help scientific research, teaching and user service.

4. Optimization of Library Literature Resources Construction under the Guidance of Big Data Thinking

4.1 Big Data Provides Decision Guidance for Document Resource Procurement

There are many kinds of big data sources in the library, including business data, literature data, user data and so on. User use data is the behavior data stored by computer in the process of using library information resources or information facilities[6]. These data are the feedback of users' preferences, as well as the feedback of users' reading habits and information demands. There are not only information behavior data in the network, but also information behavior data in the physical space. Big data technology integrates these user behavior data, through optimization analysis, promotes the clarity of the library's document information procurement goal, drives the optimization of the document information procurement process, and provides diversified information assets that can meet the readers' multiple information demands. The library innovates the application of big data, grasps the interactive data of readers' use of resources, such as book browsing, database access, download and evaluation. Through the user's search of logs, the current utilization of library collection resources is made clear, and then the procurement of literature resources is guided[7]. Whether it is the acquisition decision-making of library literature resources, the optimal allocation of resources, or the data transfer of database, it can obtain scientific data support, and provide guarantee for the reconstruction of library literature acquisition mode.

4.2 Big Data Promotes the Development of Readers' Decision-Making Purchasing Mode

The function of library cultural construction is generally limited by the shortage of funds. According to the relevant research, the purchasing power of foreign paper journals and foreign database of the library has declined in varying degrees, and the traditional mode of whole library

purchase or group purchase adopted by the library is obviously not applicable. In the case of shortage of funds, the library began to try to pay per article, which is the most obvious in the aspect of journal paper ordering. Readers buy on demand to avoid the waste of funds and resources. At the same time, it also makes the thinking of readers' decision-making purchasing clearer[8]. The reader's decision-making purchase is the PDA purchase, which takes the reader's reading demand as the analysis index and provides the decision support for the library's literature resources construction.

4.3 Big Data Innovation Library Resource Dynamic Management Mechanism

Big data realizes the dynamic management of library resources[9]. The construction of library literature resources is inseparable from the scientific organization and integration of literature resources. In the past, the construction of library literature resources paid too much attention to the purchase of resources and ignored the effective organization and integration of resources, resulting in the low level of the overall construction of literature resources. In the Internet era, knowledge is updated rapidly, and users are more eager to obtain complete knowledge system services in the face of scattered knowledge points, while big data technology provides technical support for the dynamic construction of knowledge system and the effective presentation of retrieval. For example, the emergence of Google knowledge map, baidu knowledge map and other series of search engines makes the dynamic management of library resources come true. Users input keywords for retrieval, which can not only obtain multi-form and multi knowledge point association results, but also expand the user's knowledge system and enrich their knowledge cognition. In the big data environment, single media information is difficult to attract readers' attention, and it is more popular for readers to receive the information resources of image and text fusion with the help of mobile terminals. The integration of big data technology and library literature resources construction can realize the development, publication, dissemination and distribution of products, promote the integration of audio and video resources, and enhance the attraction of library literature resources.

5. Innovative Measures of Library Literature Resources Construction in the Era of Big Data

5.1 Set Up Big Data Thinking of Library Literature Resources

In the era of big data, the requirements for data in various fields are gradually changing from random to systematic. Compared with the traditional literature resource data, the data in the era of big data is more diverse and complex. The optimization of library literature resource construction requires that it must establish big data thinking, treat different user behaviors equally, understand user needs, pay attention to user demands, take big data as the leading role, and adopt Take the reader's decision-making procurement mode for resource construction. At the same time, the library should pay more attention to the data storage and management, and change the traditional library management mode.

5.2 Strengthen Big Data Training for Librarians

Whether big data technology can be applied in the construction of library literature resources depends on the training of big data for librarians. In the face of complex information, technical personnel need to deal with these information in a unified and centralized way. Therefore, the library should strengthen the training of big data technology for librarians, guide them to use relevant data analysis tools for data analysis and prediction, and use data mining software. And so on. Through the training, librarians can not only know and predict the cutting-edge trends of scientific development in time, but also provide targeted and personalized push services according to different needs of users. In addition to strengthening professional training, the library should also strengthen the guidance of service skills and the innovative publicity of service concepts, so that librarians can realize the value of big data in the era, actively participate in the construction of library literature resources, and realize the optimization of library construction and management under the guidance of big data.

5.3 Optimize and Upgrade the Automation Management System

At present, the library collection accounts for a large proportion of books in Humanities and social sciences. Influenced by many factors, the quality of books is relatively low, and the collection is not properly protected and seriously damaged, which seriously affects the improvement of library borrowing. However, most libraries neglect the collection of users' data and information and cannot provide users with more comprehensive decision support. Strengthening the innovation and upgrading of the library automation management system can help librarians to make strategies for the construction of Library Literature Resources Based on the current data and information feedback. The author's resume, background, the author's writing achievements in related fields, as well as his published works, the number of borrowed works and retrieval frequency can be obtained through the big data automatic management system. After the new book catalog is introduced into the library collection system, it can realize the connection of different works of the same author, reduce the workload of librarians, expand the scope of the library management mode, and promote the construction and development of library literature resources.

6. Conclusion

The development of big data is the general trend. Based on the characteristics of the big data era, it is necessary to give full play to the advantages of big data technology and make a good transformation of the library. It is undeniable that big data technology has an important impact on the evaluation, selection, organization and service of library resources. The library must attach importance to big data technology, establish big data thinking, innovate the construction mode of library literature resources, scientifically and effectively collect, access and manage relevant data, extract effective information on the basis of data integration, and provide suggestions for library management decision-making For data support, to lay a theoretical foundation for reader service optimization. At the same time, the library should also see the limitations of big data. In the innovation of library literature resources construction mode, we must combine the actual situation and do according to our ability.

References

[1] Hou Lijuan, Hao Qun, Zhang Libin. (2018). Research on the Protection of Foreign Literature Resources in University Libraries-- Mathematical Discipline of Fudan University as an Example. Library.

[2] Fei Xu. (2018). Conception and Exploration of Using Data as a Service in Tunnel Construction with the NATM. Engineering, vol. 4, no. 1, pp. 123-130.

[3] Xin Z, Kai W. (2018). The Construction of Evaluation Model of Chinese Traditional Culture Multimedia Teaching Resources Allocation in Big Data Environment.

[4] Osman Taylan. (2017). Contractor Selection for Construction Projects Using Consensus Tools and Big Data. International Journal of Fuzzy Systems, vol. 20, no. 21, pp. 1-15.

[5] Wang Han, Xia Liyu, Wang Youzi. (2018). Construction of Weibo Operation Evaluation System for Energy Enterpris-es under the Background of Big Data.

[6] Hao Liu. (2018). The research of theoretical construction and effect of preschool wisdom education system in the background of big data. Cluster Computing, no. 2, pp. 1-7.

[7] Dr Ibrahim Motawa. (2017). Spoken dialogue BIM systems – an application of Big Data in construction. Facilities, vol. 35, no. 7.

[8] Xin L, Xiang L. (2017). Research on the Application of Cloud Computing Technology in Library Digital Construction.

[9] BingZhang Chi, Hui Meng, KuiXiu Zhai,. (2017). Big Data in Urban Construction Archives and Urban Management: Detected Underground Pipes Alignment with Urban Construction Records. 2017 IEEE International Conference on Big Knowledge (ICBK). IEEE.