

# Research on the Influence of Cultural Voluntary Service on the Utilization of Digital Library Resources in the Era of Big Data

Jing Liu

Yong Zhou Vocational Technical College, Hunan, Yongzhou, 425100, China

Liujinglw@126.com

**Keywords:** Big Data, University Library, Resource Sharing

**Abstract:** in the Face of the New Trend of the Globalization of Higher Education, File Resource Sharing Has Become an Irresistible New Situation. with the Rapid Development of the Era of Big Data, There Are New Opportunities for the Development of University File Resource Sharing, Which Shows a Broader Space for Development. under the Background of Big Data, the Digital Resources of University Library Can Develop Rapidly by Integrating the Data Resources, Service Applications and Users. the Purpose of This Paper is to Make an in-Depth Study and Analysis of It, and on This Basis, to Put Forward the Countermeasures for the Construction of Digital Shared Resources in University Archives.

## 1. Introduction

Great Changes in the University Library Industry Have Benefited a Lot from the Application of Big Data in Many Fields. the Era of Big Data in the University Library Industry is Officially Coming in Line with the Trend of the Times. as Early as 2016, the Number of Academic Literature Resources Integrated by the New Version of the Resource Discovery System of China's Higher Education Literature Support System Has Reached 290 Million [1]. More Convenient Library Data Resource Sharing Technology Can Have a Good Momentum of Development, and Ultimately Benefit from the Advent of the Era of Big Data. Because of the Rapid Development of Technology, Correspondingly, More and More Teachers and Students in Colleges and Universities Need More Intelligent and Faster Information Resources, That is, Digital and Intelligent. to This End, the Staff of University Library Have to Accept the Challenge in Management and Service. in Such a Dilemma, If the Service and Quality of University Library Want to Meet the Higher Requirements of Teachers and Students, We Can Only Make Full Use of Big Data Technology as a Medium and Actively Build an Intelligent University Library Sharing Resources.

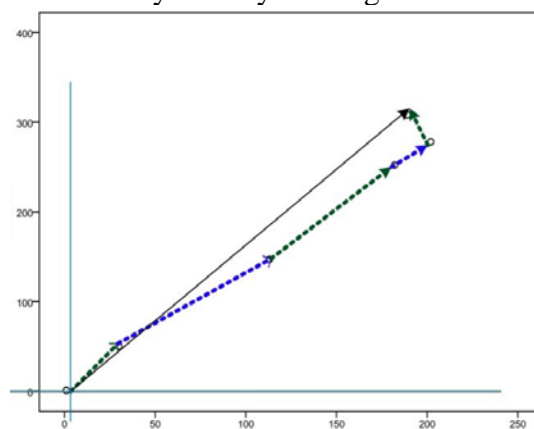


Fig.1 Vector Dynamic Model of Digital Library Research in the Era of Big Data

## 2. High in the Background of Big Data

The current situation of digital resource sharing in university library has no strict requirements

for the library and the public in fact. As long as the number of books in the library is large, it can basically meet the needs of teachers and students in the University. The construction of digital information resources sharing in Colleges and universities has always been a mere formality, without real implementation, and the lack of awareness of Library Cooperation among colleges and universities is the main factor [2]. Because at present, the management of University Library in our country is still in an isolated stage, and has not yet formulated a suitable digital library resource plan according to the actual needs of social development, most of which are just to meet the needs of teachers and students in our school. In the face of this situation, even though colleges and universities have invested a lot of money in the construction of digital library resources, they have also allocated digital library resources in line with their own professional characteristics, but they still fail to solve the problems of low utilization rate and repeated use of quality of university library resources. The lack of communication and cooperation awareness among university libraries should be the biggest obstacle. With the rapid development of Internet technology, the collection mode of university library also realizes technological innovation with the development of Internet. It is obvious that the digital resources and paper books and documents in the traditional library can not meet the needs of teaching and scientific research of contemporary college teachers and students in the Internet era. Under such circumstances, the university library reform to the direction of building digital resources, and also to provide teachers and students with intelligent, virtual university library digital information resources sharing platform.

### **3. The Necessity of Digital Resource Sharing in University Library under the Background of Big Data**

As we all know, the integration and transmission of digital resources by using Internet technology is the sharing of digital resources in university libraries [3]. When the library inherits the function of civilization and serving the society in practice, it has subconsciously transformed the unordered information into the knowledge that is orderly and suitable for wide spread. The wide spread and sharing of literature information resources have contributed to the occurrence of the library. The primary basic data service provided now is provided by the long-standing data processing function of the library. Modern library can support its infrastructure is the accumulation of history, not only can provide rich resources for the society, but also provide support for the realization of data services. Digital resource sharing technology obtains information of all carriers in the form of digitalization, such as electronic magazines, electronic books, audio-visual materials, cartoons, film and television films, multimedia materials, etc., which have the characteristics of large information carrying capacity. It is convenient for people to share resources by using the Internet. These information can be easily copied and spread quickly, which are all advantages that traditional paper libraries do not have. In turn, they promote the construction of Digital Library in Colleges and universities. On the one hand, the sharing construction of digital resources in the library makes use of the process of sharing resources and information to effectively connect the high-quality digital resources in Colleges and universities, and at the same time, it can provide all-round information resource sharing services, which can effectively improve the efficiency of teaching and research by thinking about what the users want and what the users want; on the other hand, it can take advantage of the unbalanced development of teaching resources in technical colleges and universities. With the help of digital resources sharing, the libraries in Colleges and universities have made common progress and development. In general, the construction of digital information resources sharing in university library, first of all, makes readers meet the demand of multi-level information resources, and then the majority of teachers and students are more willing to enter the library to retrieve information, no longer a single landmark building, fundamentally promoting the learning effect of teachers and students.

## **4. Countermeasures of Digital Resource Sharing in University Library under the Background of Big Data**

The development of university library is closely related to science and information technology. As a branch of computer science, the rapid development of digital technology will bring tremendous impact to the library [4]. The university library takes advantage of its own advantages, seizes the opportunity, actively participates in the application research of the digital library, bases on the University Library under the background of the big data era resources, realizes the construction of the university library digital resources sharing, only then can make the readers' diversified needs be met, and the goal of the efficient construction of the university digital resources sharing be further realized.

### **4.1 Concept of Collaborative Sharing**

First of all, in order to lay a good foundation for the construction of digital resource sharing in Colleges and universities, colleges and universities need to establish their own file resources with big data technology as the background, and at the same time firmly establish the important concept of file resource sharing. On this basis, colleges and universities actively take effective measures, formulate strict planning requirements and strictly implement them, and establish, improve and improve the relevant integration system of digital resources in Colleges and universities [5]. In order to achieve this goal, each university must make full use of the advantages of information and network technology, effectively combine big data with its own characteristics, establish its own information archive resource database, and further realize the resource sharing among university groups by using the combination of technology and information, so as to realize the resource sharing of the whole society's archives and make the access of resources unrestricted. Secondly, the overall planning of university information resources, the realization of the sharing of University Archives resources, the scientific and reasonable overall specification and mastery of sharing, the mastery of core advanced technology, including cloud computing platform, distributed computing and other technologies, is the most important and indispensable, which is the core foundation and indispensable technical means of the file resource sharing technology.

### **4.2 Construction and Improvement of System**

Due to the different levels of running schools and limited by funds, there is a big gap in the construction scale and Book funds between colleges and universities. Similarly, there is a big gap in their attention to the purchase quantity and quality of digital resources. Therefore, their role in the process of digital resource sharing and construction and their own needs are relatively different. At the same time, the library digital resources have not realized the unified organization and management [6]. In the big data environment, the huge stock of library data resources makes it more difficult for users to acquire fine-grained knowledge. Different data standards also lead to the existence of data silos. In addition, to a certain extent, libraries tend to pay more attention to static resources, and rarely use real-time and dynamic flow data, but this flow data is often needed to support users' intelligent activities to solve their own problems. As for the existing shortcomings, colleges and universities all over the country need to work together to establish a sound and perfect coordination and sharing mechanism to guarantee the smooth implementation of digital resource sharing, so as to ensure the steady improvement of the efficiency of digital resource sharing and contribute to the smooth construction of high-level colleges and universities.

### **4.3 Build a Sharing System**

First, in the current context of the era of big data, we can properly establish a unified packaging specification to effectively realize the sharing and construction of University Archives resources [7]. In order to ensure the correctness of document information collection, it is necessary to rely on reasonable technical means. In order to improve the efficiency of file information resource sharing, it is necessary to establish certain installation specifications. In addition, the construction of a huge

database provides a firm foundation, so generally used in DWA technology is information resource sharing technology, the construction and management of archiving is applicable, video, audio, text and archiving, and other forms of data, including unified sorting. Secondly, we should choose the right model of file information resource sharing scientifically and reasonably. In real life, sharing in school and sharing in school are two completely different types [8]. Choose the best sharing mode, make full use of the advantages of big data era, and improve the efficiency of file sharing resources. The so-called school sharing is the file information sharing related to the school sharing resources. This mode usually uses big data density to control the content of file information. Sharing between schools uses peer-to-peer technology by establishing peer-to-peer networks. In this model, the arc established by using peer-to-peer relationship is the basis of information resource exchange and sharing. Centralized and decentralized management is one of the best ways for the society to share University Archives resources. The biggest advantage of this control method is to use file sharing collaboration as a service platform to provide a comprehensive and multi angle resource sharing service for the whole society.

#### **4.4 Improve the Legal Protection System**

The foundation and guarantee of digital resource sharing in university library is to establish a sound legal system. Big data is the basic strategic resource of each country, which is the synthesis of new resources, new technologies and new ideas. Now, all countries regard the establishment of “data power” as an important goal, and data services will play an important role in libraries. Building digital resource sharing requires not only the cooperation of universities, but also a lot of time to achieve this goal [9]. At the same time, the rights and interests of each university library will not be lost, and in order to clarify the obligations and rights of each university library, it is necessary to formulate relevant detailed and strict rules and regulations. In addition, in the process of shared construction, it is necessary to carefully consider and analyze the problems in resources, put forward solutions in the process of shared construction, and carefully consider before making appropriate rules.

#### **5. Conclusion**

Facing the big data age, which everyone wants to board, the libraries of colleges and universities have encountered unprecedented challenges and opportunities in their development. Under the background of big data, the development of digital resources provides a forward indicator for University Library under the influence of the times. Through the improvement of technology, in order to achieve the long-term goal of establishing the digital resource sharing platform of university library, each university needs to be practical and realistic, and join in the construction of this platform according to its own needs, so as to fundamentally ensure the long-term and stable development of China's higher education. Storage civilization and communication civilization are the nature of traditional university library, and digital resource sharing technology of university library provides a hand for it.

#### **Acknowledgement**

Scientific Research Project of Hunan Provincial Department of Education. The Research and Practice of Volunteer Service Model under the Library Co-construction by University and Government (14C1147)

#### **References**

- [1] Li, Q., He, Y. (2018). Shangluo University Library. Problems and Countermeasures of Scientific Data Rights Protection in China--Text Analysis Based on Sharing Policies.
- [2] Xiao, G., Yang, B., Wei, L.I. (2018). Big Data Resource Planning for Food Safety: a Preliminary Exploration of the “Environment, Food and Health” Information Chain.

- [3] BIG Data Center Members., Feng, Gao. (2018). Database Resources of the BIG Data Center in 2018. *Nucleic Acids Research*, no. 46(Database issue), pp. D14–D20.
- [4] Xiaofei, Wang., Yuhua, Zhang., Victor, C. M. Leung. (2018). D2D Big Data: Content Deliveries over Wireless Device-to-Device Sharing in Large Scale Mobile Networks. *IEEE Wireless Communications*, vol. 25, no. 1, pp. 32-38.
- [5] Derbez, B. (2018). Big Data Sharing: A Crucial Democratic Issue for Genomic Medicine. *Frontiers in public health*, vol. 6, no. 334.
- [6] Asma, Enayet., Md, Abdur, Razzaque., Mohammad, Mehedi, Hassan. (2018). A Mobility-Aware Optimal Resource Allocation Architecture for Big Data Task Execution on Mobile Cloud in Smart Cities. *IEEE Communications Magazine*, vol. 56, no. 2, pp. 110-117.
- [7] José, García-Arroyo., Amparo, Osca, Segovia. (2019). Big data contributions to human resource management: a systematic review. *The International Journal of Human Resource Management*, no. 10.
- [8] Chenghao, WEI., Zhexue, HUANG., Y, He. (2018). A statistical aware based big data system computing framework. *Shenzhen Daxue Xuebao (Ligong Ban)/Journal of Shenzhen University Science and Engineering*, vol. 35, no. 5, pp. 441-443.
- [9] Chenghao, WEI., Zhexue, HUANG, Y. He. (2018). A statistical aware based big data system computing framework. *Shenzhen Daxue Xuebao (Ligong Ban)/Journal of Shenzhen University Science and Engineering*, vol. 35, no. 5, pp. 441-443.