

## **Analysis of University Archives Information Construction Based on big data environment**

**Wang Chunling**

Heilongjiang University of Finance and Economics, Harbin, Heilongjiang, China

**Keywords:** big data; College archives work; Archives Informatization

**Abstract:** Archival work has a long history. With the advent of the information age, archival work will face great changes, that is, from the traditional paper-based archival work to the modern electronic archival work mode. As an important part of the construction of archival culture, it is also urgent to carry out the construction of archival information in Colleges and universities. Using SWOT analysis method, this paper analyzes the development of archives information construction in Colleges and universities in China under the environment of big data, and puts forward corresponding strategies.

### **1. Introduction**

University archives management is a comprehensive and systematic work. The contents of university archives management mainly include student status archives management, educational administration archives management, administrative document archives management, personnel archives management, teaching and scientific research project archives management, financial archives management, university infrastructure archives management and so on. Thus, the information and materials recorded in University Archives cover all aspects of school talent training, teaching management, human resource management and scientific research. In the era of big data, the change of information transmission carrier also makes some new characteristics of archives management. Traditional paper documents are gradually replaced by electronic documents. More and more archives management information and materials are presented in electronic and digital forms. Based on this, schools should realize the collection and sorting of complex archives information data, To improve the utilization rate of archives information, we must deeply promote the information construction of archives management.

### **2. Significance of archives information construction in Colleges and Universities**

Archives information construction is the inevitable trend of the development of the times. Especially with the gradual popularization and application of cloud computing technology, Internet of things technology and big data technology, the amount of data presents the characteristics of quantification at sea, and the traditional paper archives management mode is gradually eliminated. In order to improve the comprehensive competition level of colleges and universities, we must take the information construction as the main direction and change the archives work mode. In the process of realizing office automation in Colleges and universities, we should take the archives information construction as the basis, make the collection, sorting, archiving and cataloging of information more convenient, and create conditions for the sharing and utilization of information resources<sup>[1]</sup>. Enhance the contact and communication of various departments through the sending and receiving of electronic documents to prevent the negative impact of information island effect on work. The information construction makes the archives work more open and dynamic, eliminates the closed and static disadvantages of the traditional mode, is conducive to the expansion and extension of the service field, and provides convenience for users(Figure 1).



Figure 1 University archives informatization construction

### **3. Problems in college archives information construction based on big data environment**

#### **3.1 The degree of archives informatization recognized by archives management workers in Colleges and universities is relatively low**

Because of the continuous progress of information technology, especially after the application of information technology in Colleges and universities, the level of archives management in Colleges and universities has been greatly improved. The previous single paper archives management mode has gradually changed to electronic archives management mode. However, in the current period, most colleges and universities have a relatively low degree of archives informatization, which does not meet the requirements of social development. They still carry out archives management based on the previous archives management concept and pay attention to the materialization of archives management. Moreover, the archives management department, which is not an important department of colleges and universities, has not received enough attention<sup>[2]</sup>. It is difficult to obtain the support of leaders for archives management. Most colleges and universities do not scientifically understand the value of archives information construction and further clarify the teaching and research significance of modern archives management, Therefore, some colleges and universities have not made reasonable plans for archives information construction, which is not conducive to the improvement of archives information level and work efficiency.

#### **3.2 The software and hardware or funds invested in the construction of archives informatization in Colleges and universities are relatively small**

For the construction of archives informatization in Colleges and universities, it is characterized by complexity, comprehensiveness and systematicness, involving a large amount of equipment and capital investment, especially in a series of software and hardware. Because some colleges and universities have not scientifically recognized the significance of college archives information construction, they invest less software, hardware or funds in work practice, which slows down the pace of college archives information construction and leads to the low efficiency of college archives management. For the construction of archives informatization in Colleges and universities, the investment in software and hardware is not in place, which is mainly reflected in two points: first,

the investment in hardware equipment is not in place<sup>[3]</sup>. Some colleges and universities' archives information construction needs to connect the relevant networks. The users and managers can connect the network, and the transmission of archives information needs the corresponding network speed. However, many computer hardware in today's colleges and universities are difficult to meet the actual needs of high-speed transmission and large-capacity preservation. Second, the investment of software equipment is not in place. The development of archives information construction in Colleges and universities requires archives managers to apply intelligent operation system, video word processing software, and users to log in combined with identity authentication system. However, a series of software equipment technologies applied today are difficult to meet these individual needs.

### **3.3 The security of College Electronic Archives under the big data environment is under great threat**

The previous work of archives management in terms of security focused on light prevention, dust prevention and fire prevention. Under the big data environment, the development of archives informatization is accelerated, and the security of electronic archives is greatly threatened. If the application of network informatization security mechanism is ignored, the archives information data will be lost and leaked in the application, storage and collection of archives<sup>[4]</sup>. Therefore, some colleges and universities deliberately slow down the process of archives information construction, have a strong traditional "insurance" concept, and still implement the previous archives management mode.

### **3.4 The quality of archives management workers in Colleges and universities is low**

Because colleges and universities continue to expand enrollment every year, the number of students is increasing, and the work of colleges and universities in teaching and research, personnel management and other links is becoming more and more complicated. Therefore, the complexity of archives management in some colleges and universities is becoming more and more prominent. Under the influence of increasing workload, the number of archives management workers has not increased significantly. Moreover, most of the file management workers in some colleges and universities belong to non professionals, lack of systematic learning process and professional knowledge of file management, so it is difficult to improve the cognitive level of file information management<sup>[5]</sup>. At the same time, the performance<sup>[5]</sup> of the archives management department is difficult to compare with that of the personnel department and the teaching department, so it is difficult for the archives management department to recruit excellent talents. For archives management, it not only requires rich archives professional knowledge, but also needs to master computer and other technologies, otherwise it is not conducive to the construction and development of archives informatization.

## **4. Measures of college archives information construction based on big data environment**

### **4.1 Enhance the concept of big data and the awareness of archives information construction**

The characteristics of archives management in Colleges and universities are confidentiality and concealment, which leads people to blindly believe that archives management is only providing information retrieval services and reporting a series of materials, and do not pay attention to the value of archives management in the overall management of colleges and universities. For the construction of archives informatization in Colleges and universities, it not only requires relevant workers to scientifically understand the significance of archives informatization construction, but also needs to actively publicize the significance of archives management<sup>[6]</sup>. Specifically, the relevant departments of colleges and universities need to enhance the concept of big data and the awareness of archives information construction in the whole university, comprehensively refer to the needs and actual situation of archives development in Colleges and universities, actively design purposeful publicity schemes and strengthen publicity, so that teachers and students can correctly

understand the value of archives information construction in Colleges and Universities Based on big data environment, Cooperate with the archives management work carried out in daily work and study, so as to greatly promote the construction and development of archives informatization in Colleges and universities(Figure 2).



Figure 2 Big data

#### **4.2 Pay attention to the infrastructure construction of University Archives**

In the big data environment, if you want to strengthen the information construction of university archives, paying attention to the investment in infrastructure is the foundation and premise. In the era of big data, the software and hardware standards of college archives management are relatively high, which requires high-performance computers, high-speed networks, scanners and other perfect infrastructure, which should be supported by funds. Colleges and universities should pay attention to the capital investment of archives information construction. Specifically, colleges and universities should integrate the task of archives information construction in their overall planning and development strategy and improve the supervision strategy. And other departments of colleges and universities should support and understand the construction of archives informatization. For the leaders of the Archives Management Department of colleges and universities, they should actively feed back the significance and urgency of the archives information construction to the higher authorities of colleges and universities, and strive to strive for the human, material and financial resources required by the archives information construction from the competent departments of colleges and universities<sup>[7]</sup>. In the active configuration of software facilities, the Archives Management Department of colleges and universities needs to pay attention to the construction of database, and can implement outsourcing to design software that conforms to the standards of archives information construction in Colleges and universities. In addition, for the paper archives managed and stored in Colleges and universities, it is necessary to actively carry out the archiving processing of the database, that is, to realize the information archiving of the archives of the above traditional media, so as to facilitate the information construction of College Archives in the big data environment.

#### **4.3 Focus on managing network security**

In the big data environment, the requirements for preserving and collecting information are becoming higher and higher, especially the degree of security management information. Paying attention to the security of management network is very key to the information construction of university archives. One is to improve the construction of laws and regulations for archives

information management in Colleges and universities, which is the essential demand to ensure the safety management of archives information. Combined with the formulation of laws and regulations, the unification of information management indicators and norms and the realization of legally mandatory archives information management can greatly improve the application rate of archives information, so as to realize the scientization and modernization of information management. Second, do a good job in data backup. The application of data mining technology can extract valuable users' personal information. If criminals steal personal information through this technology, it will have serious consequences, which not only belongs to the loss of website resources, but also infringe on users' personal privacy, and even threaten the safety of life and property. In view of this, in the application of data mining technology, the information transmitted by users to the client should be backed up in real time. In the case of lost data, the source of lost data can be verified in combination with network monitoring, and even the problem can be solved by alarm. Third, pay attention to the strengthening of management network security awareness. In preventing network security, we should not only pay attention to the application of security protection software, but also strengthen the security awareness of professional workers. Be able to actively carry out meetings or symposiums on network information security, so that information and data managers can carefully listen to China's rules and regulations on network information security management, so as to strengthen security awareness and finally improve the technical level and management level of archives information management in Colleges and universities.

#### **4.4 Build an efficient, organized and disciplined archives information management team in Colleges and universities**

University archives management departments should reasonably locate their own development direction, annual work plan and objectives, and strengthen the construction of university archives information management team. Specifically, the construction of archives information management team in Colleges and universities should be based on the following points: first, pay attention to the cultivation of relevant information management talents, not only improve their operation skills and management level, but also improve their ideological and moral quality and professional cultivation. Second, pay attention to the linkage between the information management department and other series of departments to promote cooperation, so as to promote the development of archives information management into an integrated, open and diversified direction<sup>[8]</sup>. Third, effectively unifying social practice activities and archives information management talents, such as the participation of College Students' volunteer activities, can not only improve their sense of social responsibility and social responsibility, but also promote their enthusiasm in archives information management in Colleges and universities. Fourth, information management personnel should be familiar with a series of computer operating software and computer operating system. Fifth, actively grasp the cutting-edge information of the development of other major colleges and universities, and be familiar with relevant laws and regulations, so as to actively maintain the security of college archives information. In short, only by implementing the above measures can we build an efficient, organized and disciplined archives information management team in Colleges and universities.

## **5. Conclusion**

To sum up, in the context of the big data era, the construction of university archives management should also move towards informatization and sharing. College archives construction should make full use of the favorable conditions of the big data era, innovate the mode and working ideas of archives management, keep up with the progress and development of the times, constantly innovate the concepts, methods and methods of archives informatization construction, closely connect the technological development with the actual needs of work tasks by learning the advanced technology of informatization construction, and strengthen the research on data mining. The relevant technical research of data analysis will continuously improve the information construction level and data utilization rate of University Archives from the technical level. At the same time, archives managers should break through the inherent thinking of archives management, keep pace with the times, use

information technology to efficiently manage college archives, realize resource integration, and establish a college archives information resource sharing platform, so as to realize network sharing. Using the big data thinking mode, integrate the traditional archives resources of colleges and universities, establish the concept of "big archives" in Colleges and universities, change from the traditional closed and static management to intelligent and systematic management, and organically unify the archives construction and comprehensive utilization, so as to facilitate the archives preservation, statistics and search of teachers and students, and provide fast, reliable, convenient Accurate information data support will promote the development of College Archives Construction and management to a higher level.

## References

- [1] Zong Yaju. (2021) Discussion on informatization construction of University Archives Management Based on big data [J] Dossier, 11, 5, 130.
- [2] Li Du. (2021) Discussion on information construction of University Archives Management Based on big data [J] Dossier, 11, 7, 125.
- [3] He Xin. (2021) Exploration on informatization construction of University Archives Management in the era of big data [J] Industry and Technology Forum, 20, 13, 279-280.
- [4] Xu Weiwei. (2020) Problems and Countermeasures of college archives informatization construction under big data environment [J] Journal of Jilin Institute of chemical technology, 37, 10, 61-62,70.
- [5] Song Wenzhe. (2019) Research on the informatization construction of College Teaching Archives in the era of big data [J] Dossier, 9, 21, 121.
- [6] Chen Jun. (2019) Problems and Countermeasures of college archives informatization construction under big data environment [J] Communication world, 26, 7, 9-10.
- [7] Xu Debin. (2019) Research on informatization construction of University Archives Management under the background of big data [J] Journal of Shandong Agricultural Engineering College, 36, 2, 48-49,102.
- [8] Chen Liang, Li Fang, Zhou Yunxu. (2021) Research on information management of overseas students' Archives in Qingdao Universities under the background of big data [J] Journal of Qingdao University (Engineering Technology Edition), 36, 3, 93-98.