

Research on the Optimization Measures of Archives Information Service in Colleges and Universities under the Background of Information Age

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Abstract: With the continuous advancement of educational reform in China, the archives management in colleges and universities has also ushered in new opportunities and challenges. Under the background of information age, university archives management needs to combine information technology to carry out service optimization and innovate service means and contents, so as to meet the needs of all sectors of society for university archives management. Based on this, this paper starts with the importance of optimizing archives information service in colleges and universities, analyzes the difficulties faced by colleges and universities in optimizing archives information service under the background of information age, and puts forward a series of optimization measures, in order to provide some reference for the development of archives management in colleges and universities in China.

1. Introduction

In the tide of digitalization and informationization, archives information service has gradually changed from traditional paper management mode to modern electronic and networked service mode. As a hall of knowledge, the management and service of archives information in colleges and universities play an indispensable role in teaching, research and administration. However, with the technological progress and the change of the times, the archives information service of colleges and universities is also facing a series of challenges. Therefore, how to further optimize the archives information service in colleges and universities under the background of information age, and improve its efficiency and benefit, is an important issue before every archives manager and decision maker.[1]

2. The importance of optimizing archives information services in colleges and universities under the background of information age

2.1. To promote the development of higher education

Under the background of information age, first of all, efficient and advanced archives information service can provide accurate and timely data support for colleges and universities, which plays a positive role in promoting educational decision-making, teaching plan making and

teaching quality evaluation. Colleges and universities are important bases for knowledge innovation, scientific research and development and personnel training, and the demand for archival information is increasing day by day. Only by optimizing and managing archival information can we better serve the educational undertakings of colleges and universities. Secondly, optimizing archives information service can also strengthen the information sharing within colleges and universities, improve the efficiency of collaborative work among departments, and make the school operate more smoothly. Finally, with the trend of internationalization of education, exchanges and cooperation between colleges and universities become increasingly frequent. An advanced and efficient archive information service system can win more cooperation opportunities for colleges and universities, and strengthen ties and cooperation with other colleges and universities at home and abroad. Therefore, under the background of the information age, optimizing the archives information service in colleges and universities is not only the need to improve the archives management level, but also an important support to promote the sustainable and healthy development of higher education.[2]

2.2. To help enhance the social influence of colleges and universities

Under the background of information age, archives information of colleges and universities is not only a medium to record academic achievements, scientific research projects and school history, but also a window to show school culture, values and educational ideas. An efficient and advanced archive information service system can make the public know the core competitiveness and characteristic advantages of the school more intuitively and quickly. Such information transparency can effectively enhance the interaction between schools and society, and further consolidate and enhance the social reputation of schools. With the increasing dependence on data and information in today's society, the optimized archives information service can also provide more accurate strategic decision-making reference for colleges and universities, and help schools gain greater voice in cooperation and interaction in all aspects of society. At the same time, the optimization of archives information service can also promote the cooperation between schools, enterprises and government departments, and provide more powerful support for the development of society through efficient information exchange, thus further enhancing the social value and influence of colleges and universities.[3]

2.3. To help ensure the safety of archives information resources in colleges and universities

Under the background of information age, college archives information resources, including teaching and research data, academic papers, school historical documents, etc., are all precious wealth of colleges and universities, and their security is related to the reputation, intellectual property rights and future academic research direction of colleges and universities. Optimizing archives information service means improving the efficiency of archives storage, retrieval and management, which can reduce the loss or damage of information resources caused by technical defects or management omissions. With the development of technology, information security risks are also increasing. Various network attacks and malicious viruses against archives information resources pose threats to the integrity and security of archives. It is necessary to introduce advanced information security technologies, such as encryption, backup and firewall, so as to provide solid security protection for archival information. At the same time, to optimize services, it is necessary to establish a sound archives information security management system and process to ensure that archives information is effectively protected in all aspects of creation, storage, use and transmission. Colleges and universities need to optimize archives information service in all directions under the background of the information age. This is essential to ensure the security of archives information

resources and maintain the interests and reputation of the school [4].

3. The dilemma faced by colleges and universities in optimizing archives information services under the background of information age

3.1. The lack of archives management concepts in the information age

With the development of technology and information technology, archives management is no longer limited to the archiving and preservation of paper documents, but involves the storage, retrieval, sharing and protection of digital resources. However, many colleges and universities still stay in the traditional management mode in archives management, lacking the management concept adapted to the information age. The lack of this concept leads to the slow response of colleges and universities in archives information service, which cannot capture and adapt to the new needs and changes brought by informationization in time. At the same time, the value and function of archives information resources have not been fully recognized and brought into play, which leads to the waste and redundancy of resources. The new problems of file management brought by informationization, such as data security, privacy protection, cloud storage, etc., have not been paid enough attention and dealt with, which increases the risk of information resources. At the same time, the lack of the concept of archives management in the information age also limits the innovation and expansion of archives services in colleges and universities, such as the application of new technologies and methods such as intelligent retrieval, big data analysis and archives sharing. The lag of this concept not only affects the efficiency and quality of archives information service, but also restricts the in-depth development of academic research and education and teaching in colleges and universities.[5]

3.2. The level of archives management in informationization is backward

Under the background of information age, informationization has profoundly changed all aspects of modern life. As an important means of recording and inheriting knowledge, history and culture, the status and function of archives management have also changed dramatically. However, in the current university environment, many archives management systems are still slow in the process of digitization of archives, which makes a large number of valuable archives resources still unable to be effectively integrated and utilized. Digitalization not only means the change of physical form, but also concerns the retrievability, operability and sustainability of information. At the same time, modern archives management systems and tools have not been widely used in many colleges and universities, which leads to the inefficiency of archives information integration, classification and retrieval. For the application and promotion of information technology, it is necessary to have a complete training and learning system to ensure that file managers can master and use it skillfully, but the investment and attention in this area are still insufficient at present. There are also obstacles in the exchange and sharing of archival resources between colleges and universities, and there is no unified and efficient archival information sharing platform, which makes the value of archival resources not maximize.[6]

3.3. Measures to ensure the safety of archives need to be strengthened

With the rapid development of information technology and the advancement of digital transformation, the problem of archives information security in colleges and universities is becoming increasingly severe. First of all, digital archives are more vulnerable to various network attacks, such as viruses and hackers, which may lead to file data loss or tampering. At the same time,

there may be software and hardware vulnerabilities in the archives information system, which may become potential safety hazards if they are not found and repaired in time. Secondly, there may be defects in the internal file management and operation process of colleges and universities, such as improper authority setting and untimely data backup, which also increases the security risks of file information. Furthermore, the training and awareness formation of archives security in colleges and universities are still insufficient, and many archives managers and users may not know enough about the current security threats and coping strategies. Finally, the technical and financial input of archives security in colleges and universities may not meet the due standards, which leads to the lag in the upgrading of safety protection equipment and systems. The measures to ensure the safety of archives are one of the core issues in the optimization of archives information services in colleges and universities. It is necessary to attach great importance to and take effective measures to ensure the safety and integrity of archives resources, so as to provide strong support for the education, teaching and scientific research activities in colleges and universities.

3.4. Insufficient infrastructure construction in the information age

Infrastructure is the key to support the efficient operation of archives information service, which involves hardware configuration, network layout, storage system and other aspects. However, the investment and layout of many colleges and universities in this area are not perfect. First, compared with the needs of modern file management, the hardware equipment of many colleges and universities is old and cannot meet the needs of big data storage and high-speed retrieval. This limitation makes the storage, backup and transmission of archives information may appear bottlenecks, affecting the efficiency of the use of archives. Secondly, in today's highly mobile information, a stable and high-speed network environment is very important for the transmission and sharing of archival information. However, due to the lack of investment in network facilities in some colleges and universities, the data transmission of archives may be slow or interrupted. In addition, modern archives management also needs to rely on professional archives management software, but many colleges and universities still use outdated software versions, which cannot realize diversified and intelligent archives management functions. Furthermore, the environmental control and disaster recovery design of data center is also an indispensable part of infrastructure construction, which is related to the security and stability of archival data. If colleges and universities have insufficient facilities in this area, they may face the risk of data loss. Facing the shortage of current construction, colleges and universities need to further increase investment to promote the modernization and high efficiency of archives information service.

4. The optimization measures of university archives information service under the background of information age

4.1. To update the concept of archives management and improve the archives information service system

Under the background of the information age, in order to respond to the development needs of the times, colleges and universities must renew their archives management concepts and improve the archives information service system. Colleges and universities should abandon the traditional paper-based file management mode, but actively adopt digital and cloud technology to provide a more convenient way for file storage, retrieval and sharing. At the same time, in order to improve the archive information service system, colleges and universities should integrate archive information service with other information services to form an interoperable and complementary information service network. For example, archives information can be combined with information

resources of libraries, research institutes and other academic departments to provide more comprehensive and in-depth information services for teachers and students. In order to ensure the efficiency and accuracy of archives information service, colleges and universities also need to introduce advanced archives management software and tools. These software and tools can not only improve the efficiency of archival information storage, retrieval and sharing, but also provide protection for the security and integrity of archival information. At the same time, colleges and universities should also strengthen the classification and standardization of archives information to ensure that every file can be accurately filed and retrieved. Finally, colleges and universities need to evaluate and optimize the archives information service system regularly. By collecting feedback from teachers and students, we regularly check the use and effect of archives information service, find out the existing problems and deficiencies, and make timely adjustments and improvements to ensure that archives information service is always in the best state.

4.2. Make full use of information technology, and constantly innovate archives information services

Under the background of the information age, in order to meet the needs of teaching and research in colleges and universities, it is an urgent task to make full use of information technology and constantly innovate archives information services. Firstly, modern file management systems are introduced, which are usually based on cloud computing platform and can provide powerful technical support for file storage, retrieval, analysis and sharing. Secondly, artificial intelligence and big data technology are adopted to deeply mine and analyze archival information. This can not only provide teachers and students with more accurate and personalized information retrieval services, but also find hidden knowledge and laws in archival information, and provide powerful data support for the research work of colleges and universities. At the same time, the use of blockchain technology can ensure the authenticity and immutability of archival information, and improve the trust and authority of information. Furthermore, mobile archives information service is carried out, and applications and tools suitable for various mobile devices are developed. This not only allows teachers and students to access and use archival information anytime and anywhere, but also provides new ways and means for collecting, editing and publishing archival information by using various sensors and functions of mobile devices, such as positioning, camera shooting and recording. Finally, strengthen cooperation and exchange with other universities and research institutions, and form a sharing and intercommunication mechanism of archives information resources. This can not only greatly expand the coverage and depth of archival information, but also promote the standardization and standardization of archival information services. Therefore, in order to provide efficient, accurate and innovative archival information service in the information age, colleges and universities need to actively introduce and apply advanced information technology, carry out various technical and service innovations, and strengthen cooperation and communication with all parties, so as to ensure that archival information service can better meet the needs of teachers and students and provide powerful support for teaching and research work in colleges and universities.

4.3. To promote the integration of archival information and strengthen the security management of archival resources

Under the background of information age, it is particularly important to promote the integration of archives information and strengthen the safety management of archives resources. In order to effectively integrate archival information, it is necessary to establish a unified archival information platform, which should have the ability of data exchange and integration across systems and

platforms to ensure seamless connection and circulation of various archival information. At the same time, the introduction of data mining and analysis tools can deeply analyze archival information, explore its potential value, and provide more accurate and targeted support for teaching, research and management in colleges and universities. In strengthening the security management of archives resources, it is suggested that colleges and universities should classify archives information at multiple levels, set different access rights and confidentiality levels according to its importance and sensitivity, and ensure that key and sensitive information is not accessed or leaked by unauthorized personnel. At the same time, regular backup and disaster recovery drills of archival information are carried out to ensure timely and effective recovery of archival information in the face of emergencies. Moreover, establish a sound archives information security management system and mechanism, such as regular archives information security audit, continuous supervision and evaluation of archives management, and ensure that archives information security management is always at a high level. In order to better serve the teaching, research and management of colleges and universities under the background of information age, it is necessary to effectively integrate archival information and strengthen its security management to ensure that archival information can provide sustained, stable and safe support for colleges and universities.

4.4. Strengthen infrastructure construction and comprehensively optimize archival information services

Under the background of information age, it is particularly critical for colleges and universities to strengthen infrastructure construction in order to comprehensively optimize archives information services. Therefore, colleges and universities can start from the following aspects: First, building a high-speed, stable and safe network environment is the foundation. This requires not only the support of advanced network hardware equipment, but also an efficient network architecture and management system to ensure the rapid transmission and real-time update of archive information. Secondly, the choice of file storage equipment is also very important. Adopting large-capacity and high-stability storage equipment can not only ensure the long-term preservation of archives information, but also improve the efficiency of archives retrieval and access. At the same time, considering the diversity of archival information, it is necessary to introduce various types of storage media, such as CD-ROM and tape, to meet the preservation needs of different archival information. Thirdly, in order to ensure the long-term availability and continuity of archival information, it is necessary to maintain and upgrade the infrastructure regularly. This includes the maintenance and updating of hardware equipment, the upgrading and optimization of software system, and the adjustment and improvement of network environment. Fourthly, from the perspective of human resources, strengthening the training and capacity building of archives managers is also the key. They not only need to have professional archives management knowledge and skills, but also be familiar with advanced information technology and tools to ensure that they can give full play to the functions of infrastructure and provide high-quality and efficient archives information services for colleges and universities. In order to provide better archives information services for colleges and universities in the information age, strengthening infrastructure construction is the cornerstone. Only with perfect infrastructure can we comprehensively optimize archives information services and better meet the teaching, research and management needs of colleges and universities.

5. Conclusion

To sum up, under the background of information age, the optimization of university archives

information service needs the combination of all-round and multi-level strategies and measures. From infrastructure construction to the renewal of management concepts, to the introduction and innovation of technical means, every link is very important. The optimization of this study is expected to provide a strong theoretical support and practical reference for the development of archival information services in colleges and universities. It aims to help colleges and universities better cope with the challenges of the information age and continuously improve the quality and level of archival information services.

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