

Analysis of Problems and Countermeasures in the Digital Transformation of Archives in Colleges and Universities

Xiqiao Liu

Northeast Normal University, Changchun, Jilin, China

Keywords: Colleges and Universities; Archives Digitalization; Problems

Abstract: The main purpose of archives digitization is to facilitate readers' access and utilization, and to promote information dissemination and sharing. College archives are the historical records of the development of higher education, bearing various scientific and technological and cultural achievements, condensing the spiritual beliefs of teachers and students of past dynasties, and playing an important role. Digital construction is a step-by-step process, which can not be accomplished overnight. It is necessary to digitize key archives selectively and pertinently so as to make the work "reasonable" within the visual range. Strengthening the digital construction of archives is an inevitable choice for the archives industry to adapt to the times and social development, and is the only way to improve the level of archives information services. The digital construction of college archives is an innovative work. In the process of changing from the traditional file management mode to the digital file management mode, many problems will inevitably be encountered. This paper analyzes the problems and causes in the current digital construction of college archives, and puts forward corresponding countermeasures.

1. Introduction

Archives in Colleges and universities are historical records of various forms, such as words, charts, audio-visual records, which are of preservative value to teachers, students, schools and society, directly formed in the activities of personnel training, scientific research, social services, cultural heritage and innovation [1]. Face the network technology, make its own adjustments. The direction of digital development is the result of the adjustment and development of archives themselves. In addition, the digitalization of archives is the only way for the development of archives [2]. Archives digitalization construction refers to a form of digital archives, namely digital archives information sharing platform system, which integrates archives information resources through network and provides utilization [3]. Through the digital file management system, the real-time query and utilization of the original text information of the electronic document data is used, which avoids the large amount of time waste and duplication of labor caused by the traditional file utilization method for the multiple conversion of the archive data entity [4]. Therefore, relevant researchers must find out the problems in the digital construction of archives, and actively explore and study their coping strategies to promote the smooth development of digital archiving [5].

With the advent of the information age, many industries and jobs must be separated from the traditional model to adapt to the new digital model. For the construction of archives digitalization, the construction of Archives Digitalization in our country is relatively late [6]. The access and utilization of digital archives will not only be faster and more convenient, but also greatly improve the accuracy rate. The use of digital archives to replace the physical archives also plays the role of maximizing the protection of the Physical Archives of the original history [7]. Because archives are historical witnesses and social wealth, it is necessary and possible to digitalize and share them. At the same time, as a kind of information resources, archives will gradually change their original existing form in the digital environment. Promoting the construction of digital archives has become a hot area of archives work. Indeed, compared with paper archives, electronic archives are more centralized in management, more economical in storage and more convenient in access and utilization. It is an important means for us to realize the informationization and modernization of archives management [8]. The development of digitalization of archives information in colleges and

universities promotes the application of various high-tech in archives management, integrates archives information resources, and exerts its value-added effect, so that the value and effectiveness of archives information resources can be rationally utilized. In order to meet the requirements of social information, college archives vigorously promoted and popularized networked and digital services, greatly improving the level of information services. This paper analyzes the problems and countermeasures in the digital transformation of college archives [9].

2. Approaches to the Construction of Archives Digital Information Resources

2.1. The significance of archives digitalization in colleges and universities

The traditional paper-based archives are transformed into digital format archives with CD, disk, hard disk and network space as the carriers, which makes the forms of University Archives diversified and meets the needs of archives searchers, especially young people. With the help of computer and unimpeded network and full application of various information network technologies, a new mode of archives management and utilization has been established to realize the scientific protection and resource sharing of archives resources. With sufficient financial support and professional technical team. With the support of sufficient funds, it is possible to purchase the corresponding equipment for the digitalization of the collection files, and recruit and train professionals with the digital construction of the archives. Update and maintain data based on changes in file entity management. In the daily use, retrieval and inquiry process, the archives department often finds some inaccuracies in the proofreading or recording work. It should be timely found and corrected in time to ensure the consistency of the archive data and the archive entity information.

2.2. The standard of archives digitalization system in colleges and universities should be perfected

At the present stage, because the archives digital itself is still in the stage of exploration and demonstration, there is still a certain distance from the true full implementation stage, although the archives circle and some archives institutions from their respective perspectives put forward some plans for the development direction of archives digitization and implementation module. Most of the archives work in some colleges and universities only use computers to manage the archives catalogue, such as data storage and compression technology, online archives information organization technology, retrieval technology and so on, which are not familiar with and mastered by the informationization construction workers. Many schools are seriously underfunded in hardware facilities, which makes the basic needs of building a digital system unsatisfactory. A large number of electronic documents are generated by various institutions within the university. In reality, these electronic documents are not managed from collection, management to utilization. This will lead to repeated labor in the digital process. After the archives were put into storage, they did not adhere to the regular inspection system. Especially for some historical archives, due to low utilization rate, few inspections, failure to replenish, unwind or unfold, etc., the data of the catalogues of the original archives were increased. , reduction, and changes. Affected by the traditional concept of file management, the leaders of the archives did not understand the importance of the digital construction of the archives, which affected the accuracy of decision-making and led to the lack of technical talents.

Strengthen the checking of new data, ensure the integrity and accuracy of each new data, and strictly control the quality of data. Usually at the beginning of the establishment of the database, or before the archives (offices) reach the standard upgrade, because they want to achieve computer retrieval and utilization as soon as possible. The digital construction of university archives has just started, which requires the establishment of a communication platform between archives and users, timely communication, continuous adoption of feedback and positive improvement. In the process of archives digitization, when the state promulgates standards and norms, the first step is to implement the national standards and norms. If the state does not have standards and norms, the

local archives digitization norms and standards will be implemented. The construction of Archives Informationization needs compound talents who not only understand archives management, but also master modern information technology. The information management of file management puts forward higher requirements for file management personnel. It must not only be proficient in traditional file business, but also must master automation and network technology to become a navigator of information and knowledge. Through the centralized training, network training, training and other training methods, the existing archival staff will be trained in professional quality to ensure that the archives have the technical conditions for digital construction.

3. Optimizing the Development Strategy of Archives Digitalization

3.1. Improving the attention to the digitalization of archives in colleges and universities

University leaders fully realize the necessity of digitalization of archives information resources, realize that digitalization of archives can facilitate retrieval and utilization, better integrate resources, improve the level of archives management, in order to give strong support in human, material and financial resources. While satisfying the utilization and management of archives, we should also pay attention to the perfection and construction of database. First of all, it is necessary to reflect the contents of the archives well, fill in and update them in time, and make the contents of the database rich and informative, so as to meet the diversified needs of users. Strictly standardize the work content of staff to ensure that security risks will not arise because of the loopholes in the work flow. The archives office should organize staff familiar with the requirements of archives data quality to check the database data regularly, feedback the existing problems to the collators in time, and correct the irregular data in time. Whether it is from the ideological or the action, we must establish the idea of safety and no small matter. We must build a protective wall for the digital information of the archives and conscientiously implement the safety work.

3.2. Strengthening information technology training for archives managers

Reasonable and strict security and secrecy system of archives informationization, and constantly cultivate and strengthen the security and secrecy awareness and security prevention skills of practitioners. We should adopt mature archives management system and logically rigorous processing mechanism. According to the actual situation, strict data quality assessment indicators should be formulated and people should be responsible for it. After the completion of a project and a category of archives, it is necessary to proofread them comprehensively to ensure that every data is entered into the database completely and correctly, so that the work of data addition can be completed. By applying for funds and collecting funds from the society, archives can make all-round efforts to raise all the funds they need so as to ensure that archives can purchase the necessary digital equipment and train professional talents. Do a good job in the whole process of supervision and management, timely response to changes in engineering needs, strict acceptance. In the network environment, an electronic document management system is established, and links between archives and various business management information systems are established to realize integrated document management to ensure the authenticity, accuracy and availability of electronic documents. Exploring the potential of internal personnel and mastering key core technologies to ensure the smooth construction of the digital construction and operation and maintenance of the archives.

The digital construction of archives is the trend of the times and the direction of the development of archives. Digital construction is to create a mode of archives management and utilization that meets the needs of the times, society and the people. Only by genuinely recognizing and understanding the positive significance of digitalization, can the practitioners at the front line of archives work in Colleges and universities face the difficulties and challenges in the process of digitalization, actively analyze the new situation and solve the new problems. Attention should be paid to strengthening the construction of digital archives. This requires human, material and technical support, so that the advantages of digital archives management can be fully exploited. It is

guaranteed that some units have confidentiality of the core machine secret file information and contradictions that are only read within a certain scope of rights. Effective information security technologies are not well popularized or are not updated in time even if they are applied. To solve the problem of long-term access and network utilization and sharing of digital files, it is necessary to ensure timely software upgrades and implement effective conversion methods to convert digital information from one technical environment to another.

4. Conclusion

This paper studies the problems and countermeasures in the digital transformation of university archives. In the construction of digitalization of archives, archivists should be familiar with various policies, regulations, systems and standards of digitalization of archives, be skilled in the management and processing of archives information by using information technology, and provide users with accurate and fast archives information services. File managers must take the initiative to grasp the trend of digital development of university files, change the traditional management mode, conform to people's working and living styles, improve the social influence of file work, and speed up the process of digitalization of files. The archives of cultural values can be digitized first, and the digitalization of files can be carried out in an easy and difficult, batch-by-batch, step-by-step manner, and the experience can be continuously summed up so that the digital construction of the archives can be carried out in an orderly manner. Managers must have a high level of knowledge and advanced technology, and should not be satisfied with general computer operations. The training of archivists should be strengthened, continuing education should be strengthened, and the quality of the archives management team should be improved. To successfully complete the digital construction of archives, we must face up to the problems in the digital construction and find a coping strategy, so as to steadily advance the development and progress of the digital construction of archives.

Acknowledgement

Jilin provincial department of education "13th five-year plan" social science research project Research on the Digital Construction Path of College Audio-visual Archives (JJKH20190318SK) and the project aided by special funds for basic scientific research expenses of central colleges and universities Research on the Repository Management Pattern and Integrated Services of College Audio-visual Archives Based on DSPACE (18XQ007).

References

- [1] Delfanti, A. Beams of particles and papers: How digital preprint archives shape authorship and credit. *Social Studies of Science*, 2016, 46(4):629-645.
- [2] Stackebrandt E, Smith D. Expanding the 'Digital Protologue' database (DPD) to 'Archives of Microbiology': an offer to scientists and science. *Archives of Microbiology*, 2017, 199(4):519-520.
- [3] Hart, Bradley W. The Eugenics Society digital archive, part of 'Codebreakers: makers of modern genetics', The Wellcome Library, London.. *Medical History*, 2014, 58(01):140-142.
- [4] Papworth H, Ford A, Welham K, et al. Assessing 3D metric data of digital surface models for extracting archaeological data from archive stereo-aerial photographs. *Journal of Archaeological Science*, 2016, 72:85-104.
- [5] Cerf, Vinton G. The role of archives in digital preservation. *Communications of the ACM*, 2017, 61(1):7-7.
- [6] Majore S A, Yoo H, Shon T. Secure and reliable electronic record management system using digital forensic technologies. *The Journal of Supercomputing*, 2014, 70(1):149-165.

- [7] Mitchell, Andrea L. Supporting The SALIS Collection: an ATOD digital archive. *Addiction*, 2017, 112(11):2070-2070.
- [8] Smith, Kevin G. Negotiating Community Literacy Practice: Public Memory Work and the Boston Marathon Bombing Digital Archive. *Computers and Composition*, 2016, 40:115-130.
- [9] Kreitz, Kelley. Toward a Latinx digital humanities pedagogy: remixing, reassembling, and reimagining the archive. *Educational Media International*, 2017, 54(4):304-316.