

# Research on File Management Mode under the Background of Digital Campus

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**Abstract**—This article is based on a detailed understanding of theoretical research on the archives management models of universities both at home and abroad. With the definition of archives management model as the starting point, it outlines related concepts of the archives management model in universities and analyzes in detail the types of traditional archives management models, namely, centralized, decentralized and centralized decentralized combination, detailed analysis and description of the connotation, organization, rules and regulations, talent allocation and advantages and disadvantages of the three management models. This leads to the analysis of the archival management model under the background of digital campus. This article introduces the connotation and architecture of the digital campus, analyzes the relationship between the construction of digital campus and the archival work, and discusses the archival management model and traditional archival management model under the background of digital campus. Similarities and differences, based on this, introduced in detail the three types of file management models in the context of digital campus, namely, the file generation organization, the storage organization, or both. By investigating the status quo of archives management in colleges and universities and digitizing the construction of campuses, we explored the archives management model under the background of digital campuses. This model is mainly aimed at electronic document management. Therefore, taking the electronic document life cycle theory as a guide and document integration as a construction principle, a detailed file management model construction chart is proposed. In this model, three major blocks are divided according to the role permissions: school archives, document generation agencies, and general users. This model establishes a privilege management system, a standards system, and a security system. It establishes privilege control and standardization to ensure that electronic documents are authentic, effective, and complete, enhances the credibility of electronic documents, and improves the efficiency of archival work. The trend of development has enabled archival work to be integrated into the construction of a digital campus.

**Keywords**—University Archives, Management model, Digital Campus

## I. UNIVERSITY TRADITIONAL ARCHIVES MANAGEMENT MODEL

The traditional archives management mode of colleges and universities is usually directed at the management of paper files. There are mainly three types of modes: centralized management mode, decentralized management mode, and centralized decentralized combination management mode.

### A. Centralized management model

The centralized management mode of archives in colleges and universities is through a file management institution (usually an archives archive or a comprehensive archives room) that manages all types of archives such as construction, teaching, and scientific research. In terms of institution setting, the centralized file management model usually adopts an independent file management organization. This type of file management organization is independent, does not depend on any department, and is directly under the management of the school [1].

### B. Decentralized management model

The decentralized management model of archives is that colleges and universities keep files of various categories according to departments or departments. For example, student files are kept at the student office, scientific research files are kept at the scientific research office, and files of various categories are kept in various related business management departments.

### C. Decentralized and combined

Because of the pros and cons of centralized management and decentralized management of records, some universities adopt a combination of two models to establish a centralized, decentralized and integrated file management model. This model refers to the overall management of archival work by the archival management organization, and the archiving department is responsible for the actual management process. Each archiving department will classify the archives resources of the department for classification, and submit the statistically well-filed archives to the school archives administration for backup. The archiving department and the archival management agency will conduct directory exchanges [2]. However, the formation department can only keep a certain number of years. If it exceeds a certain period of time, it will need to transfer the department's file resources to the file management agency.

## II. ANALYSIS OF ARCHIVE MANAGEMENT MODE UNDER THE BACKGROUND OF DIGITAL CAMPUS

### A. Digital Campus Overview

(1) Network infrastructure: The network is the foundation for the construction of a digital campus. Without network

support, the digital space cannot be realized and the digital campus cannot be built. Therefore, the primary task of construction is to establish a sound campus network system.

(2) Network basic service layer: This layer is the information flow layer, which is mainly used for the transmission of information files. On the basis of information transmission, various types of information resource databases are established.

(3) Application support system layer: This layer is the key content of the construction. The application support system includes various management systems such as OA system, digital library, digital archives, and teaching management system.

(4) Information service system layer: It is the main user interface of campus users and provides various inquiry services.

(5) Virtual University Level: The top level is the construction of the digital campus of the virtual university. Finally, based on the top layers of the campus, it truly breaks the limit and builds a university network that can cover borderless universities.

## *B. The relationship between digital campus construction and archival work*

### *1) Inclusions*

The construction of a digital campus covers all departments and resources of colleges and universities, including teaching, scientific research, management, and service, including the construction of digital archives. Digital Archives is the realization of digitization, networking, and intelligence of archives to achieve real-time management of digital information. Digital archives are part of the construction of digital campuses and are a subsystem of the application system layer. They belong to a containment relationship. Therefore, the school archives work must be taken into account when formulating a digital campus construction plan.

### *2) Promote relationships*

Archival work is the foundation for the development of the school and it is related to the development of various departments. In the context of a digital campus, all departments of colleges and universities tend to work almost online. Online office breaks the barriers between departments, connects all departments of colleges and universities, and establishes the most convenient working platform to achieve maximum resource sharing in resource sharing. At the same time, it will inevitably produce a large number of electronic documents. How to promptly identify and file important electronic documents is an important task for the archival department in the context of digital campuses. To achieve this goal, the archives department must establish a digital and networked working model and establish a unified file management system to ensure the linkage of archives work with other departments and achieve the real-time preservation of important information resources [3]. Therefore, the construction of a digital campus has promoted the digitization, information, and networking of archives and promoted the development of archives.

## *C. Comparative Analysis of File Management Mode and Traditional File Management Mode in the Background of Digital Campus*

### *1) Same point*

#### *a) Management contents*

Whether it is the archival management mode in the digital background or the archival management mode in the traditional sense, the management content is the archives resources of colleges and universities. The archives resources involve all aspects of colleges and universities. Although these archives resources are different in the form of carriers, they are either paper files or Electronic documents are essentially the same, all of which are precious historical records. They all have vouchers and intelligence values. Therefore, management content is one of the common points in the file management mode and the traditional file management mode in the context of digital campuses.

#### *b) Business Process*

The archives business process in universities includes six links: collection, identification, archiving, storage, statistics, and utilization. The traditional file management model is more for the storage of paper files. It has very obvious stage characteristics for the management of paper files. The business process is very clear [4]. In the background of digital campuses, there will be a large number of electronic documents. Although the phased characteristics of electronic documents are not as clear as the paper files, the management process still follows these six links. In the context of digital campuses, archives work still needs to be based on business. The sequence of the process is well documented.

#### *c) Management ideas*

The traditional file management model is usually centralized, decentralized, and centralized and decentralized. That is, the file resources are kept by the archives organization or kept by the file formation department, or they can be combined. In the context of the digital campus, the archives management model still follows this management philosophy. The digital resources formed can be kept by archives, can be kept by document generation agencies, and can also be kept by generation agencies and archives. The management ideas are essentially the same.

### *2) Differences*

#### *a) Guiding theory*

Due to the large number of paper files under the traditional file management model, it follows the document life cycle theory. Under the background of digital campus, due to the rapid increase in the number of electronic documents and the difference in management methods, the traditional guiding theory cannot fully adapt to the management of documents in the information age, thus resulting in the electronic file life cycle theory [5]. This paper is mainly based on the theory put forward by the Electronic Files Committee of the International Archives Council. The electronic document management process is divided into three phases. The first is the concept phase, which refers to the design, development and installation phase of the system. The differences from the traditional theory are: The integrated management of electronic documents has

been extended to the design stage of the document management system. The second is the production phase, which refers to the electronic documents generated in this environment. The third is the maintenance phase, which refers to the entire document management process, from the generation to the preservation or destruction process. This theory serves as the guiding theory of the archival management model under the digital background and is the biggest difference between the digital management and the traditional management model.

#### *b) Management method*

The traditional file management mode is usually manual management. From the collection of the archives of colleges and universities to the identification, archiving, sorting and statistics are basically manual operations. Information construction requires improving the level of file management. More and more universities and colleges have begun to use technological means to improve the quality and efficiency of management, use the campus network, establish a file management system, and realize the digitization of resources [6]. Especially under the background of digital campus construction, the archives department needs to establish a perfect management system to interface with other management application systems of the school, link the various departments of the school together, and establish a virtual mesh-like office mode, in which the various departments communicate with each other. Therefore, there is a big difference between archive management and traditional file management in the digital environment.

#### *c) Service method*

In the traditional file management mode, the archival institutions are usually in a passive state. The archival institutions formulate relevant management methods. Each department transfers archival documents to archival institutions on time according to prescribed requirements. Archival organizations are identified and consolidated after archiving, and the archival use is usually User requests, archival agencies provide the corresponding file resources, so under the traditional file management model, the archival work is in a passive state, and the archival resources are still waiting for being exploited. The archival institutions lack active services. In this case, the value of archives and the role of archival agencies are often overlooked, which is detrimental to future development. In the context of a digital campus, the archival department must change its past working ideas, build an open platform, link archival work with other school work, make archival resources into users, proactively provide valuable archival resources, develop archival value, and improve The status of archival institutions and the importance of archival work promote the development of archives.

### *D. Analysis of Three Types of File Management Patterns in the Background of Digital Campus*

Under the background of digital campuses, colleges and universities usually use the following three file management modes: the generated electronic files are kept by the generating agency, or kept by the archive agency, or the generating agency

is responsible for file archiving, and the archive organization enjoys the management mode of file control.

#### *1) Documents generation organization storage model*

This model refers to the electronic documents kept by the document generating agency, and the generating agency will need to archive the data files. According to the records management organization's standard for recording information, the data information is saved in real time and archived into the archive database. In the course of custody, the generating agency has the right to collect, authenticate, archive, custody, and destroy electronic documents, and does not transfer archive resources to the archival authority. With this type of file management model, for document generation agencies, since document generation agencies have greater control over information materials, in terms of staffing, the production organization needs to deploy full-time file management personnel to account for file information. Appraisal, filing and management work, and strictly abide by the rules and regulations stipulated by the archival management organization [7]. In terms of access control, the generating agency has greater control over the archives resources of the department, that is, it can have the right to archive, keep, review, use, and destroy. The document generating agency is responsible for the reliability, authenticity, and integrity of electronic documents, but Digital resources for other generation agencies have only the right to review and use.

#### *2) File management agency storage model*

This type of file management model means that the document generating agency hands over the electronic files that need to be archived to the archival authority. After the records management agency has been certified, recorded, filed, classified, counted, saved, or destroyed, The archived electronic files are stored in the archive database. The archive management agency is responsible for the implementation and maintenance of the database and ensures the security of the database. In this mode, the file management authority has greater authority and has absolute control over the generated electronic file information, on the one hand, it is reflected in the business process responsible for the entire management of resources, ensuring the authenticity, validity and completeness of the archived electronic files, and is responsible for the archives work of the whole school. On the other hand, the file management agency needs to establish a unified file system, management methods and related documents, formulate the development plan for the archives work of the whole school, and strictly manage all aspects involved in school archives work [8]. At the same time, in terms of staffing, file management agencies need to allocate enough professional file management personnel to maintain the daily file management.

#### *3) Joint Management Model*

This model refers to the establishment of a unified file management approach and related rules and regulations by the archival authorities, The document generating agency strictly abides by the various management methods and relevant working regulations formulated by the archives management agency, According to the archival requirements, the electronic files that need to be archived are entered into the file database. After the files are archived, the file management agency is responsible for managing and maintaining the file database. In

this mode, the document generating agency has relatively small authority. That is, the right to collect authenticates, archive, and use, however, once the document generating agency archives the digital resources, it loses control over the documents and only has the right to review and use them. However, for the electronic documents generated by this department, its generating agency has the right to provide users with access to archive services, but it has no authority to modify or destroy them.

### III. CONCLUSION

(1) The traditional manual management model can no longer meet the needs of archive work, with the development of information technology and the popularization of digital campuses, under the modern management model, the archives management model of universities should be constantly reformed to adapt to modern management trends.

(2) Analyze the connotation, leadership mechanism, staffing, establishment of rules and regulations, and the advantages and disadvantages of the three file management models that combine concentration, classification, and concentration and classification, three management modes are proposed to be more suitable for the management of paper files, for electronic document management in a digital context, file management models need to be innovative.

(3) Analyze and summarize the operation flow of the three file management modes under the background of digital campus, that is, the document generation organization management model, the archive management organization management model, and the joint management model. The first type of document generation organization management model means that the organization is responsible for the integrity and validity of the created documents, and is responsible for document archiving and storage. The second type of file management organization management model refers to the absolute control over the generated digital resources by the file management agency, It is necessary not only to ensure the

integrity of electronic documents, but also to formulate regulations and related standards for archival work to ensure the smooth progress of archival work. The third kind of joint management model means that the document generating agency has the right to record, authenticate and archive, however, once the archival work is completed, the file resources will be controlled by the file management agency, and the file management agency will have the right to keep and destroy electronic files, system recording and archiving standards, real-time supervision of archiving of generating agencies, and full management of archival databases to ensure the integrity and security of electronic documents.

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