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## Primary Study on Application of Computer Network Technology in Chinese Enterprise's Archives Management

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### Abstract

The rapid development and widespread use of modern information technology in which computer technology and network technology as the main body created an unprecedented opportunity for scientific management and effective development and utilization of file information resources, and raised new questions about how to manage and utilize archives. Using modern technology to manage archives is the requirement that the information society for archives work as well as the inevitable trend of archives work development. In addition, we should also consider how to use archives to promote economic development of enterprises. This article mainly illustrates the application of computer network technology in archives management and problems should be paid attention to, and the author puts forward opinions and advices on the advantages of this technology.

**Key words:** Network technology; Archives management; Information utilization

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### INTRODUCTION

With the development of computer network technology and information technology, and the development of Archives management contributing to economic growth of enterprises, archives management in Chinese enterprise

certainly develops in the direction of networking. After 30 years' rapid development, the types of enterprises transformed from exclusive state-owned enterprises in 1970s to privately-owned, joint-ventured and wholly foreign-owned enterprises, etc. Meanwhile, as the globalization and economic information developed, the quantities and categories of Chinese enterprise archives become increasingly more and China's various types of enterprise archives management is accordingly becoming more and more difficult. Also, the cost of the original archives management pattern is becoming higher and higher. However, it does not make any obvious economic benefit and contribution to enterprises.

Thus, a serious problem is brought about by those changes: how to deal with the increasingly more archive information? How to make archives management realize the modernization of collecting, sorting and utilizing.

### 1. THE NECESSITY OF COMPUTER NETWORK TECHNOLOGY MANAGEMENT OF CHINESE ENTERPRISE ARCHIVES

Chinese enterprises are used to manage enterprises' various kinds of files by traditional manual operation, a set of more mature collecting, filing and retrieving methods which uses paper and files as its carrier has been come into being after years of practice and improvement. However, with the progress of society and coming of the era of knowledge-driven economy, enterprises is the same as the whole society, their handling capacity to files and information substantially increase, which is been shown in three aspects: files generated and information gathered become increasingly more; The demand to use archives information is higher and higher; demand for archives development is accordingly higher and higher. Traditional archive management methods can not yet adapt to the

requirements of fast pace and high capacity of modern society. Problems such as poor information flow, paper stacking, query cumbersome and big work load in filing work existing in the traditional archives management emerge, and there should be a large distance between the depth and breadth of file information processing and the needs of making decision in production management. Archives management must take effective measures to adapt to and meet the needs of production and management, collect archives with high quality, clear up archives with high effectiveness and provide information services in time. And to achieve this, it is necessary to develop and utilize the computer network technology. Currently, the existing archives management pattern of Chinese enterprises is conducting archive management and economic production separately. Although there is no obvious economic benefit brought in by archives, in economic society, information is equal to benefit. One of the reasons to realize computer network management is to make archives into available information.

## **2. THE ADVANTAGES OF COMPUTER NETWORK TECHNOLOGY IN CHINESE ENTERPRISE ARCHIVES MANAGEMENT**

### **2.1 It is Conducive to Timely File Archives Information**

The application of computer network technology provides a great convenience for collection of archives information. Archives personnel can collect and check through the network, that is to say, each department can send important electronic files of its department to archives management through network at any time, or input the data information directly to the database of archives management; Archives management department can also regularly collect data from the specialized file folder of each department. So it is convenient and energy saving, ensuring that the archive information is complete. In China, the government has special archives bureau for enterprise business guidance, archives administration has specification and requirements with Chinese characteristics. For instance, traditional filing mode of Chinese enterprises is to collect last year's archival data at the beginning of the second years by archive management department, so the latest archive kept by enterprise's archive management department is of the last year, while the latest files of this year are scattered in each department, which lead to archives information provided by the archive management department is always lagging behind. While utilizing network technology can make the archive administration receive latest information timely through network, making sure that enterprise archive administration can provide the archive information effectively. As the completeness and timeliness of the archive information

kept by archive administration have been improved and the utilization of archives information are increasingly growing, archive management plays a significant role in enterprise management working group, which creates a good environment for further development of enterprise archives work. For example, according to the statistics made by China Huaxi construction group who has already changed its archives management into computer network management that the original archives management pattern needs at least five steps ---- collecting, classifying, systemizing, filing, and paper constructing, to file a single archive of key projects. It will take Archives staff an hour to make a 1000 words text file. And, before submitting it to archive-managing department, it should be systemized by archive-making department. But now, related worker can type-in a 1000 word test file within 5 minutes and the number of archives staff will also reduce.

### **2.2 It is Conducive to Share Resource Informatio**

Chinese enterprises commonly have the problems of weak confidentiality, negotiability and applicability. Utilizing the computer network technology, enterprise archive administration can provide archives information database and archives information catalog and other archives information sources that have been opened in its database or network, and establish special archives information retrieval entrance, for easy query and utilization of archives information. The convenience of data storage and extraction is one of the advantages of computer in archives management, and the involvement of computer network technology makes these data can be available to enterprise related department with faster speed and less procedures, saving the amount of manpower and material resources as well as the precious time to retrieve archive in different departments and improving the working efficiency and management level. Chengdu Hongxing restaurant group limited company is an obvious example of those companies that have adopted computer network technology to manage their archives. The company has ranked its materials and archives. And staff can retrieve the archival data they need in accordance with their own level of position. In the past, stuffs always retrieve the important materials manually. For example, if they want to find out the recipe of a dish which has been removed from the menu, the process of finding out the recipe will involve three people and three departments, and it will take them about 40 minutes. But now, it only takes a person a second to find out the same material and archive. Due to computer database can manage data automatically, staff who has no contact with the dish can find it out by fuzzy search. Meanwhile, he can also use it to investigate the course leading to the removing of the dish and to create new dishes. Thus, it will largely improve the utilization rate of the existing archives. In addition, by exact query, staff can collect the information about the utilization rate of dish archives and the achievement

made by using archives. Also, staff can have a precise acknowledge of the utilization of archives. By network management, information about the company can be shared by the staff completely, which will lead the staff to give full play of the information and create new economic benefit.

### **2.3 It is Conductive to Realize the Socialization Service of Archives Information**

Under the traditional archive management mode, in a certain period of time, some archive sources can only offer to one user and can't meet the requirements of other demander using files at the same time. This greatly reduces the utilization rate of archive. But with computer net work, on the premise of security and confidentiality, enterprise can put the rich archives resources on the network, employees can conveniently retrieve information to their needs through network at any time and any place, at the same time, making the flow of information between enterprises, enterprises and social organization, personnel inside and outside enterprises more convenient. In China, enterprise archives management can be an open and interactive network information platform, need not only to communicate with other Chinese enterprises on business and archives information, but also to communicate with foreign counterparts to enrich archive resources and provide comprehensive archives information for users. Therefore, using computer network technology can greatly make archives information serves for the enterprise development. For example: some of those enterprises (especially those listed companies) that have adopted computer network technology to manage archives have shared their information on the internet, which provides other people with an access to utilize the archives. It is absolutely impossible for traditional archives management pattern. Zoomlion Heavy Industry Science and Technology Co.Ltd is one of those listed companies. The company have shared its archival data on the internet and also released its supplier list, its Product lot number, the data of quality monitoring and its monthly financial status. Thus, their clients and competitors, government regulator and the small and medium-sized shareholders in the market can query and utilize the information according to their own needs.

## **3. APPLICATION OF NETWORK TECHNOLOGY IN THE CHINESE ENTERPRISE ARCHIVES MANAGEMENT**

### **3.1 Realizing Automation of Archives Management**

Computer network technology is the core of the advanced information technology, which is the basis of other technologies. In recent years, computer network

technology has been developed very fast, it has efficient information processing ability, can input, storage and output information at breakneck speed, can conduct logical reasoning and judging to modernly manage the characters, icons, images with preservation value formed during the course of China's enterprise management, making it has the function that traditional archives management does not have. The application of computer network technology in the automation management of archives information resources is of a wide range, from the general business management to archives retrieval, cataloging, editing and publication, etc., thus greatly improving the efficiency of archives management and development and utilization of archives information.

### **3.2 Realizing information Transmission Networking**

Modern computer network communication technology makes advantage of computer technology yield well. In the archives information computer retrieval system, adopting Modern computer network communication technology will be able to turn the methods of archives information retrieval from off-line and on-line retrieval into intelligent and network retrieval, realizing networked archives information transfer to resource sharing. Realization of networked computer archives is the high level of computer retrieval methods. It is a combination of computer technology and Internet technology. With the development of computer network technology, each business department of Chinese enterprises requires much more information and higher quality. Each department hopes to provide integrated information which has been processed and even involve knowledge value-added information. Through computer management, to classify, extract, analyze, and process archives information resources, it not only improves the efficiency of each department using archives, and also improves the social and economy efficiency of archives work.

### **3.3 Realizing Digital Archives Information**

Digital archives information use computer technology, communication technology and Internet technology to process, develop, and create a new information product by software and hardware devices. To develop and utilize traditional paper files depends on handwork. With the help of computer technology, it develops towards a faster and higher aspect; after it is digitalized, it can develop into information product and electronic file information to coordinate development and utilization. Compared with traditional file information, digital archives are easier to save, query, modify, and quickly transfer via network. It can make Chinese enterprise archives work become convenient, fast and efficient. As processing department puts information into computer, anyone can search and take advantage of information according to their requirements. They can also upload a preparation of useful

documents, in which archives staffers reduce file data entry work, and turn archives-saved work into information processing. In many archives of enterprises, many archives information have been processed by computer. Archives staffers only require shelving and compiling the corresponding file numbers. However, in computer management it only needs to process data, and no longer require quantity of entered data, which is a “bottleneck” to affect computer archives management.

#### **4. THE ADVANTAGES AND DIFFICULTIES OF APPLYING COMPUTER NETWORKING TECHNOLOGY TO MANAGE FILES**

The author thinks that the application of computer networking technology provides great convenience for the collection and utilization of archive information, almost all the words, images, voices and other information can be put into Internet. Each department can send important electronic files of its department to archives management through network at any time, or input the data information directly to the database of archives management; Archives management department can also regularly collect data from the specialized file folder of each department. So it is convenient and energy saving, ensuring that the archive information is safe. While the traditional archive management, from the form of files to filing, it takes a long time. The application of computer networking technology make the files be used at the beginning of the filing, thus the cycle of files filing into archive is greatly shortened.

The application of computer networking technology improves the efficiency and work quality of archive work by a large margin. File processing and archive management in traditional archive management mode are separated with each other. Files are filed only after being processed, it takes a long work cycle to transfer to archive department with all kinds of carrier. While in the application of computer network technology, the processes of making draft, checking, finalizing, issuing, and formation of files materials can be done on the computer, and archive department can classify and file the files as soon as the files are generated, realizing the integrative management of file and archives, which not only changes the manual work, manual way of archives management mode and reduced repeated work, but greatly improves the efficiency and quality of work.

The application of computer network technology can save a lot of manpower and material resources as well as job costs. While the traditional archive work needs to use a lot of manpower and work process is also complicated. But the application of computer network technology reduces the job costs and releases people from

multifarious manual labor; it not only improves the work efficiency but also saves a lot of job costs. Computer network management on archives may replace the full-time file management persons and departments some day. It's only a matter of time.

The application of computer network technology realizes a social share of the archive information resources, which can serve for the improvement of enterprise's economic efficiency. Enterprise archives can be overt to enterprise and department as well as the society by internal Local Area Network (LAN) and external Internet, this kind of service transfers the archive work from passive service to positive service, from the inner-enterprise to society and from an enclosed space to an open area. Users can search the Internet to look for the archive information they need, they can also download and print the information. This convenient and shortcut method not only provides convenience for customers but also increases the use ratio of archive information and realizes social share for the archive information resources, thus better serving for the enterprise's economic production. Meanwhile, users can also use the Internet to know the utilization efficiency of the archives that have been kept, discuss with other people or company on some archive information to mine business opportunity and improve the development of enterprise's other business, finally serve for the economic efficiency.

It is inevitable for Chinese enterprises to realize the computer networking on archive management, but there are practical difficulties in current China. Now countries all over the world have specific requirements to archives, and each country has introduced different guiding rules in accordance with their national conditions, so not all archives can be published for public to communicate in each country, which certainly will affect the communication between archives, for example, the famous WikiLeaks website publishes archives of national governments. Besides, the application of archives in the network must rely on the support and development of computer software and hardware, but it needs a big input, if there is no fund to guarantee, the practical application will probably be discounted. Archive networking must be constructed on the basis of man; only the application with man can embody the advantages of archive network management, which is the most important part, and this also must be done step by step, should first instruct and train the users and appliers can they meet the application requirements.

#### **5. OUTLOOK**

Computer network technology is the foundation of modern information transmission and its development and exploitation of networked system represents the new direction of computer network technology development,



and it spreads and springs up in all kinds of industry with powerful functions and prompt speed, bringing the world into an age of network information. Now, informatization has become a development tendency, social development will become much more relied on information, and the traditional archive management mode will be certainly replaced by a new mode, using the computer network technology to manage the archives will also become nationwide in Chinese enterprises.

In summary, using computer network technology to manage archives is the inevitable trend of the development of Chinese enterprise archives management work, and it is the only way for Chinese enterprises to change from archive simply deposit type management to information processing, and also, it is a channel for Chinese enterprises to improve their economy, it stands for a new information environment and management method as well as a new thinking for archives utilization. Using computer network technology to manage archives will give full play its advantages with the improvement of computer network, hardware, software and realize the true sense of archives management networking, informatization and economization, so that the archives information can play a more important role in enterprise work and make contributions to enterprise's economic development.

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