The Function of the Establishment of Digital Archives in Colleges and Universities to the Optimization of Resources

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Abstract. Now it has entered the era of big data information, with a large number and various types of information resources. The same situation exists in colleges and universities, and the traditional information resource optimization method is difficult to deal with massive data, and the cost is very high. The optimization of information resources can help schools and other units to develop better. In view of the above problems, this paper proposes to optimize the resources through the establishment of university digital archives. This paper first analyzes the basic connotation of digital archives in the new era, and then puts forward the effective path of the establishment of digital archives in colleges and universities under the big data environment. Finally, the paper analyzes the function of digital archives in resource optimization. The results show that the establishment of digital archives in colleges and universities has been widely praised by teachers and students, and the utilization rate of resources has been significantly improved, with an increase of 38.2%.

Keywords: Establishment of University Digital Archives, Big Data, Resource Optimization

1. Introduction
The Internet is developing rapidly, no matter it is various social institutions or colleges and universities, there is a huge amount of information. If this information cannot be effectively managed, then these resources are wasted to a certain extent, and it may even be caused by the failure to organize the data information resources in a timely manner [1-2]. In terms of information resource optimization, universities can manage resources by establishing digital archives [3]. The current information resources have basically realized electronic management. By constructing digital archives, the effect of optimizing resources can be strengthened.

In terms of digital resource optimization, many experts and scholars have conducted research and achieved fruitful results. In [4], the author aimed at the problem of the aggregation quality of digital resources in libraries. Based on the improved genetic algorithm and BP neural network, through the continuous adjustment of weights and thresholds, the authors quickly converged to the fitness set value, enabling better resource evaluation. In [5], in order to classify large amounts of text resource management, the authors propose selection techniques for unsupervised text-based hybrid genetic algorithm and genetic operators of features, text clustering algorithm performance by improving...
resource optimization to achieve results. In [6], the author proposes multiple rounds of private information retrieval to optimize the query of information resources, which optimizes the capacity and storage overhead of the database to a certain extent. The above methods have more or less played a certain effect on the optimization of digital resources, but the software and hardware costs of these methods are very high, and it is difficult to achieve satisfactory results in the processing of massive data.

Digital archive is a digital information warehouse, which stores a large amount of information. These information have different forms and types are very complex. Digital archives integrate these different types of information, integrate them for digital processing and preservation, and provide and use them through the Internet. Users can get information without time and space constraints, so they can maximize the value of information. In [7], the author points out that the construction of national archives resources is the foundation of archives work and archives work, and private archives information resources are an important part of national archives resources. In [8], the author explores and analyzes the digital newspaper collection in the National Library of Sweden, focusing on the cultural heritage as digital noise, so as to find the value of resources. In [9], the author explored the style of urban architectural information change by establishing digital archives, and achieved the expected effect. In [10], the author solves the confusion of metadata by building digital files, which makes information management more scientific. People can find effective resources in time and reuse them many times.

In view of the high cost of traditional methods in resource optimization and the lack of dealing with massive data information, and from the perspective of the current situation of resource management in colleges and universities, this paper proposes an effective way to establish digital archives in colleges and universities, and explores the role of digital archives in resource optimization, in order to provide reference for colleges and universities in the establishment of digital archives in resource optimization.

2. The Basic Connotation of Digital Archives

Under the digital environment in the new era, digital archives are endowed with new connotations, which are mainly reflected in the following points:

2.1. Electronization of Archive Arrangement

With the rapid development of Internet, the evolution of archives work is promoted. The establishment of archives is also in the direction of electronization. Before the electronic development, the traditional file arrangement was basically done by hand, which added a lot of physical activities to the staff. With the help of computer network, the related processes of file arrangement, such as generation, collection, filing, classification and transmission, all of which realize electronic operation. The directory of files can also be automatically compiled.

2.2. Digitalization of Archives Resources

All kinds of resources in colleges and universities are huge and complex. Most colleges and universities have a history of several decades. With a long accumulation, various resources occupy a huge space and are inconvenient to access. After the digitalization of archives resources, through the compilation and integration of electronic catalogue of archives resources and the establishment of index structure, it can achieve the effect of fast searching resources. In addition, turning paper resources into digital information that can be stored in the database is also one of the trends of file resources digitization.

2.3. Service Operation Networking

After digital storage of archives resources, they can be sorted and transmitted through network media. With the help of network media, digital archives can be transferred quickly, which promotes the construction of digital transmission network system. When the all-round transmission system is completed, the archives management staff can use their own network to log in the platform interface to
sort out and archive the digital archives resources. At the same time, people who need to use the file resources can also access the platform through the network anywhere, download and view the relevant file resources by themselves.

2.4. File Utilization Facilitation
Before the introduction of digital archives utilization mode, that is to say, the traditional archives utilization mainly relies on citizens entering the archives to submit requests, and then the archives staff conduct manual query and index through keywords submitted by residents. This workload is huge, complicated and complex, and the available value of archives is greatly reduced. However, the digitalized file management mechanism enables all the files to be digitized and filed, which is conducive to the realization of the quantitative management of the file resources and the fixation of the file resources. The emergence of this form of digital archives makes the original heavy and hard to check archives become electronic resources that can be quickly and easily retrieved, which is convenient for dissemination and utilization, so as to truly play the due value of archives resources.

3. The Effective Path of University Digital Archives Construction in Big Data Environment

3.1 Expand Data Capacity
Now it has entered the era of big data. Resources and data often refer to the same concept. The management personnel of digital archives resources in colleges and universities should renew the concept of resources and pay more attention to the accumulation and application of data. Under this premise, the data file resource managers in colleges and universities should actively carry out the construction of data resources to expand the data capacity and increase the inventory of digital file resources. Broaden data channels, be good at collecting data resources on various social media platforms, and establish a database of digital archives resources with larger capacity.

3.2 Integrate Data Resources
In order to support the effective development of each file management link, colleges and universities need to establish a comprehensive file resource management system. In the era of big data, the management of university digital archives resources must still follow this principle. In the specific process of data resource integration, integrators must first unify the standards of digital resource integration. The integration of modern information resources can break the information island in the process of traditional archives management. Based on the integration of data resources, a shared data resource library can be built. Archive resource integration is the means, and archive resource sharing is the goal.

3.3 Pay Attention to Development and Utilization
In the university archives management, because the managers have the digital consciousness, they have been building and improving the management system to urge the managers to actively apply the big data technology to the archives construction. Resource integration is an important prerequisite for effective utilization of resources. Managers need to collect and integrate resources from multiple perspectives. In the development and application process of specific file resources, managers need to study data resources more deeply to mine the potential value of data. Data processing personnel must analyze and process the data according to the steps and requirements of data algorithm.
4. The Role and Effect of the Establishment of University Digital Archives in Resource Optimization

4.1 The Role of the Establishment of University Digital Archives in Resource Optimization

4.1.1. It is Conducive to Reflect the Macro Value of University Information Resources With the rapid development of information technology, the amount of data produced by colleges and universities increases exponentially every year. The establishment of digital archives in colleges and universities can effectively apply information resources. The traditional archives resources are the product of historical activities, and their own value and function also need to be reflected by providing services for people's social activities. Through the establishment of digital archives in colleges and universities, resources can be better used for various activities of the school, and help the school to make better use of various resources, which makes the macro value of information resources appear.

4.1.2. It is Conducive to the Sharing of Information Resources in Colleges and Universities The establishment of digital archives can allow information sharing between schools and departments within schools. Through knowledge management, data mining and other information technology, collect and organize a large number of scattered explicit knowledge resources, mine and extract tacit knowledge, and promote knowledge resource sharing. Many times, in the information island environment, resources are redundant. If in the environment of resource sharing, it can not only promote the optimization and upgrading of resources, but also improve the quality of resources faster and better.

4.1.3. It is Conducive to Promoting the Innovation of Service Mode with the Construction of Personalized Resources With the development of the times, the demand of users in the network environment presents an increasingly diversified development trend, and the demand for personalized and diversified users is increasing. In the past, due to low integration efficiency and unreasonable organization, digital resources could not meet the needs of users. Through the establishment of digital archives, customized personalized services can be provided according to the dynamic needs of users. In this way, the utilization rate of resources can also be greatly improved.

4.2 The Effect of the Establishment of Digital Archives in Colleges and Universities on Resource Optimization

Through the method proposed in this paper, the users of resources in colleges and universities are visited by 200 people, including 100 teachers and 100 students. After establishing the digital file, the experience of the access object to the resource usage is shown in Figure 1. It can be seen from the figure that teachers and students have a high proportion of good will in resource optimization. Among the teachers interviewed, 83.7% were highly praised. Among the students interviewed, the proportion also reached 81.6%. It shows that from the perspective of users, this method works well.
In addition, in this study, the statistics of resource utilization are also carried out in the background. Compare the resource utilization after the implementation of the scheme with that before the implementation, and see Figure 2 for the resource utilization ratio. It can be seen from Figure 2 that after the implementation of the scheme proposed in this paper, the utilization rate of resources has been significantly improved by 38.2%. This also means that dream resources have been further optimized.

Figure 2. Comparison of resource utilization before and after implementation

5. Conclusion
Digital archives are important memories of colleges and universities. When establishing digital archives, colleges and universities can not only promote the development of information technology, but also optimize resources and make the value of information resources play a better role. So far, the development of colleges and universities is the result of gradual inheritance and continuous development and innovation. Through the formation of digital archives network and other forms, we can make better use of resources.
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