Study on the Trend of University Library

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Abstract. In the background of the big data and large change of the information environment, for meeting these challenges, such as network search engines, digital development institutions and the changed user demand, the university library has to make transformation and more changes. The hybrid library integrating the computing Centre, archives, TV station, and print center will be the main existence pattern of university library. The mobile reading and digitalized integrated information service will be the development direction of university library. The access to literatures, information education, technical service, subject novelty retrieval, rare books collection and Multi-cultural education will be the main functions of the library. The paper firstly introduced the development trend of digital library development situation in China, and then expounded the existing problems in university digital library development in China. At last, the paper put forward suggestions to strengthen the university digital libraries in China in the future.

Keywords: University library; Transformation development; Digitalized integrated information service.

1. Introduction

As the representative of the knowledge, the university is the biggest customer of information use and demand, which has causing the great attention of every government all over the world. The development of the computer technology, digital technology and network technology has completely changed the human information environment, which has promoted the development of the library, at the same time, made the direction of library development become more and more confused and uncertain. It can be said that the library is experiencing a profound change in the experience of a thousand years. In this reform, the university library can grasp the opportunity of the times, and meet the environmental challenges, and find a sustainable development path, which needs the library people's study, practice, and exploration.

With the change of reading mode and the popularization of electronic equipment, the high speed of network operation, the readers of university library reading paper books are declining, and the reading group of loving electronic reading room is increasing. The readers' demand for mobile reading is increasingly strong, so the university library should comply with the development of the times, and constantly innovate service modes, and explore new development direction. The mobile reading and digitalized integrated information service will be the development direction of university library [1]. The hybrid library integrating the computing centre, archives, TV station and print center will be the main existence pattern of university library. Digital library construction has been an important part of the overall construction of the library. Western countries in Europe and the United States, pay great attention to the construction of university digital library research and investment, in recent years, the construction of digital library in China has also been at the forefront, has achieved great success.

Therefore, the paper firstly introduced the research and development of digital library, and analyzed the problems existing in the development of digital library, discussed the transformation theory of digital library, and then put forward some suggestions to strengthen the development of digital library in China.

2. Research and Development of Digital Library in China

2.1 Category of Digital Library.

Hundreds of digital libraries in China has been opened and these with relatively large reputation including, Peking University digital library, superstar digital library, Shanghai Library, Chinese Academy of Sciences Library, etc[2]. These libraries can be divided into 3 categories:

(1)The first category is the digital library, which is basically independent organization or enterprise, which achieves all kinds of traditional knowledge resources (including books, periodicals, etc.) to collect digital by the purchase, exchange and other means, so as to provide paid service to the public on the internet. For example, superstar digital library, who's main purpose is making profit, and which goes to the society early, and develops rapidly;

(2)The second category is the digital library, which is built on the basis of the traditional library, including the University libraries and local libraries. This kind of digital library is responsible for both the research and service;

(3)The third category is the digital library, whose characteristics is a number of agencies to work together to strive for financial support, unified standards, and emphasize the rational layout and sharing of resources, pay attention to the implementation of complementary advantages via cooperation. Most of them are the government investment projects, such as the Chinese digital library, China's higher education literature support system, etc.

2.2 Projects of Major Digital Library.

The main construction projects of digital library in China include four aspects: the Chinese Digital Library Project, National Science Digital Library of Chinese Academy of Sciences, National Science and Technology Library (NSTL) and the High Education Resources Security System. The basic situation of each project is briefly introduced as follows:

(1) China Digital Library Project started in July 1998, which is characterized by cross department, cross industry, a long building period of large systems engineering. Its goal is to build a large scale, high qualities distributed Chinese digital resource pool, and provide a variety of services on the Internet, and jointly introduce a number of domestic and foreign resource library and realize the sharing of resources. At last, it needs to development the intelligent application system of digital library with Chinese characteristics and train a group of high level professional team.

(2) The goal of National Science Digital Library of Chinese Academy of Sciences is to aim at the network and digital development trend of the international library, and to build the scientific literature information support system, which is based on Chinese science and technology network. It will form a digital and networked document information platform to support scientific and technological innovation, service economy construction and sustainable development.

(3) The National Science and Technology Library (NSTL) is a virtual science and technology information resources organization, whose development goal is to build an important science and technology literature information resources service website with rich resources, perfect functions, and convenient use.

(4) The overall goal of the High Education Resources Security System is to build an online information resource sharing system based on the Chinese education and research computer network (CERNET), which makes the information resource network and communication network have coordinate development. It will really create a network environment with the international standard for the University's teaching and scientific research personnel.

2.3 Main Problems of University Digital Library.

At present, Chinese information infrastructure has begun to take shape, and the Chinese education research network, and so on a number of major resource network is gradually improving. As for China Science and Technology Network (CSTNET), the electronic part of China Jinqiao information network and cable television network, and other five major backbone network with hundreds of colleges and universities in our country, has provided a good transmission channel for the construction of digital library. On the whole, we have carried out a series of digital library

construction plan, but there are some problems in the construction of the database and literature information resources.

The construction of Digital Library in Colleges is facing many problems[3], which mainly include the following aspects:

(1).Management system. The overall construction of digital library in universities is short of unified planning, and built separately, resulting in great difference in the digital library user retrieval interface and retrieval language, etc. Museum of various databases cannot be compatible, and it waste manpower, material resources and financial resources.

(2) Intellectual property protection. The core of digital library construction is the construction of digital resources, and the protection of intellectual property rights is also an important issue. The number of copyright in China is numerous, so it is very difficult for the library to obtain the mass of the original owner.

(3) Financial issues. Digital library construction is a large, systematic and long-term project, the purchase of hardware and software, network cabling engineering, etc. need adequate funding, but the lack of funding is a key issue.

(4)Talent problem. With the development of digital libraries, real problems such as professional personnel and technical personnel, lack of enthusiasm for work and age, etc. The cultivation and introduction of high quality talents in the library is an important problem.

(5)Construction of information resources. The construction of information resources in universities is obviously lagging behind the construction of the information infrastructure. And, the construction of the information resources is an important task.

(6) Issue of information security. The key technologies of supporting digital library are information processing, information storage and information transmission, but there are many network hidden dangers in the form of digital form and network transmission.

3.   Theory of Digital Library Transformation and Future Development

The development of libraries needs the social identification, which is the basic reason for the libraries to make the development. The study of library science theory proves that organizational development, social identity and library science are the theoretical sources of the transformation and development of university libraries.

3.1 Theory of Organization Development.

Any social organization has its own specific, clear functions and responsibilities. University library as an important basic facility and function organization of the university, its main function is the personnel training and scientific research service. Warren G.Bennis believes that the internal coordination and adaptation to the external environment, is the two interrelated tasks it must deal with, which shows that the challenge from the outside environment ask for the organization to have a strong ability to adapt to the environment. All the changes in university libraries are actually made by the library director and those in the leading position[4]. It requires that the reform of the university libraries in recent years is a kind of conscious action, which is both the requirement of the times and the adaptive capacity of the organization development.

3.2 Theory of Social Identity.

Tajfel, defined the concept of social identity, which is that the individual recognizes that one belongs to a specific social group, but also being recognized as a group member brings his feelings and value[5]. University Library as a relatively independent institution in the university, it is necessary to get the management's identity, the reader's trust and social recognition, and it must adapt to the development of the society. Although the university libraries have improved their service level, the lack of content and depth of service result in the library's being still far away from school teaching and research. The university libraries should match its own output with the university, department and students' activities, proving their role in promoting students' learning and the teaching and research.

3.3 Theory of Library Science.

The theory of library science also proved that the development of university library is an organism. India library scientist Rangana praised the"Five Law of Library Science",and the fifth expression is: the library is the growth of the organism[6]. This shows that the university libraries are the same with the biological organism, and can continue to learn new things and abandon the old things, to adjust the state to adapt to the changes of the external environment and social environment, and update its own function. It can be said that the reform, transformation and transcendence of university library, is not only the trend of the times, but also is the only choice for the library and the library profession to seek survival and development.

3.4 Future Development of Digital Library.

Comprehensive information service and digital resources will be the development direction of the future library, which mainly has the following aspects.

Firstly, digitalization is the characteristic of the times and also the way of the development of library. For example, university libraries are actively buying electronic data resources, and developing self-built digital video, library, etc. Secondly, large information service centre is the development direction. University library, computing centre, archives and other information service organizations should merge and restructure, and form a school's large information service canter, to provide services for all readers. And the hybrid library is a living organism, which is complementary to the traditional library and the reasonable existence form of the university library at present. Fully function of cloud computing is the trend. Cloud computing is to use a large number of network connected computing resources to realize unified management and scheduling, to provide service for readers.

4. Summary

With the rapid development of electronic technology, information technology and mobile communication technology, the university library should actively explore new development model. Computing center, archives, television, and library should cooperate with each other to be an information service center, which is an effective attempt. Accelerating the process of digital library construction is also a good choice. And the mode of compound library will still play a positive role in a certain period of time exist and. The mobile reading and digitalized integrated information service will be the development direction of university library. The paper summarized the development of digital library, and analyzed the problems in the development of digital library, and puts forward suggestions for the future development of digital library in China. The library will continue to fulfil its mission. The library is due to the need to pass on knowledge and inherit the cultural heritage, and for its history and social responsibility, no matter how the times change, so no matter what, the real library will play its due role.

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