A Perspective on the Development of Digital Libraries in Taiwan

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Abstract

In the past few years, the Taiwan government has devoted a lot of effort towards developing digital libraries. Currently, we can easily retrieve various kinds of resources from libraries through the Internet. In this paper, we introduce the status of our National Library, Public Libraries and University Libraries, and state their future prospects and objectives.

1 Introduction

Recent advances in Internet and on-line web access has made the retrieval of various kinds of data easier. Putting information and knowledge on the Internet, making it universally accessible to all people surely is an important revolution, which has become part of daily life of today's society. To enhance the knowledge and culture spread through the Internet, many countries have launched big projects for the construction of digital libraries. Nowadays, people from different countries can access documents from digital libraries to some extent. The libraries in Taiwan are converting their data management style from traditional ones to digital ones. They aim to provide their customers with the best service in the future. Through the utilization of new information technology, traditional libraries can make their services more efficient. In Section 2, we will introduce the status of different libraries in Taiwan. In Section 3, we will discuss future prospects on the development of digital libraries. Finally, conclusions will be made in Section 4.

2 Status of Libraries in Taiwan

In Taiwan, we have three different types of libraries: the National Library, Public Libraries and libraries maintained by the universities.

(1). The National Library

The National Library launched its library information network system in Oct. 1994. People can request various information through the Internet. This system mainly consists of six subsystems, such as: a government periodicals indexing subsystem, a periodical paper indexing subsystem, a contemporary literature/historical materials image subsystem, etc. Besides, with the development of the worldwide web, this library has constructed a remote library service system, and made all of the literature indices and content images in the Database available for remote access.

(2). Public Libraries

The development of electronic public libraries is going very smoothly. The library resources have grown very rapidly due to the strong support from the Ministry of Education, the National Science Council, the Institute for Information Industries and provincial/city governments. Recently, the public libraries have provided versions of computerized book information, government information, children's information, old men's information, literature/art information, periodical/magazine exchanges, references, and consultation, etc. The services have concerned people's lives, research and education.

(3). University Libraries

Almost all of the university libraries have their own library home pages on the Net. The contents of their home pages consist of: the guide to the library, inquiry about library resources, on-line electronic databases, library Gopher, news, CD-ROM on-line, cooperation with other libraries, etc.

Furthermore, in last fiscal years, our Ministry of Education has allocated 1.5 million US dollars to all the universities for using several popular on-line databases. Nowadays, many university professors and students can use IEL, Web of Science, SDOS, IDEAL, Ovid databases efficiently and freely in their own campuses. It is worth mentioning that for the encouragement to use these on-line databases and for not wasting money, each university was requested to pay 70 percent matching funds for this project.

3 The Future Perspective

In the future, the libraries in Taiwan have set the following goals to enhance the development of digital libraries.
(1). The Overall Planning of Digital Libraries

Although our government has devoted a large budget to the development of the digital libraries in Taiwan, there is still a lack of overall coordination. Most of the systems are developed by the libraries independently. The establishment of protocols and standards of information storage, indexing, retrieval and transmission should be explored more deeply.

(2). More Attention by Our Government

In the past few years, the Taiwan government has paid a large sum towards the construction of a National Information Infrastructure. Although our government has devoted much effort to increase the hardware and network equipment for libraries, it has only paid limited money for software and content development. Nowadays, we see that almost all the periodicals tend to be published electronically. Thus, an increasing support for software and content development is necessary and urgent.

(3). The Cooperation among Libraries, Information Technological Units and Publishing Companies

The establishment of digital libraries mainly depends on the construction of on-line databases, computer hardware/software technologies, network protocols, the licenses of electronic periodicals and books, human interfaces, etc. These all highly depend on cooperation between libraries, information technological units and publishing companies.

(4). The Establishment of an Electronic Copyright Consortium

The copyright problem is the major problem that every library must face when trying to increase its on-line database. If each library deals with the electronic publishers individually, the licensing price will be very expensive. Furthermore, it might waste a lot of time in making the licensing agreement. Therefore, we have to form a consortium to handle this matter for all the libraries.

(5). Enhancing the Training of Computer Courses for the Library Science

In Taiwan, there are departments of library science in some universities. Traditionally, the students in these departments do not need to take many courses related to computer science. However, the concept of digital libraries is becoming more and more important in the next decade. To address new challenges will be an important issue for these future librarians. Thus, the departments of library science have to offer more courses related to the web, databases, networking, and Internet applications for their students.

(6). The Unification of the Internal Codes of Chinese Characters across the Strait

In the foreseeable future, there will be many digital media exchanges between Taiwan and Mainland China. Currently, Taiwan has its own codes for the Chinese characters while Mainland China has another code system for its brief version of Chinese characters. In this situation, the exchanging of Chinese materials will become rather time-consuming due to the different code systems. Thus, modifying the different code systems between those two regions seems to be a must-be-solved problem.

(7). Digitizing Past Historical Documents

Taiwan owns many volumes of ancient documents, and many of them are stored in archives. It is necessary to speed-up the digitization of the past historical documents so that people will have a better chance to browse the beautiful ancient culture. An important issue is how to utilize advanced information technology to store these ancient paintings and calligraphy into computer storage, and how to manage these precious documents on the Internet.

4 Conclusions

Digital libraries are inherently not tied to any particular location. Thus, the services offered by them should not be limited to working styles and traditional thinking to accommodate the future needs. Since the methods for shared access to knowledge were designed by technical researchers, for the establishment of a state-of-art library, the librarian and technical researchers have to work together to draw up a perfect digitization plan.

Although the PC industry in Taiwan has had a brilliant record, in the past few years, so far, the information technicians have not seemed to send much help to librarians. In the future, they should more tightly cooperate in their work. We have strong confidence that the integration of the manpower of our researchers, technicians and librarians will make our digital libraries very exciting.