The Construction and Development of Jiangsu Academic Library &Information System

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Abstract — **In order to implement project "211", Jiangsu province started Jiangsu Academic Library &Information System (also known as JALIS) during "95"period, accelerating the construction of the Chinese Information System in Academic Public Service Infrastructure. JALIS is not only the first information service center in China on provincial level, but also an important part of CALIS.JALIS guides and coordinates sharing academic information resources among universities in Jiangsu Province which greatly promotes the development of automation and digitization in Jiangsu academic libraries.**
Since 1997, we have passed two stages of the "Ninth Five-Year Plan" and "15 plan", nearly ten years, and JALIS has become most successful academic library &information service system with regional characteristics.

I.   TO ESTABLISH JALIS PROJECT

During the period of the ninth five-year plan, in order to carry out the strategies of "Vitalizing Jiangsu Province through Science and Education", Jiangsu Province Government and Jiangsu Education Committee (also known as JEC) put high education prior to other parts. Existing of "211 Project" leadership and the demand of economic development, Jiangsu high education is in a wonderful development period. In 1995, JEC made a survey of JALIS Establishment feasibility. In June 1995, Jiangsu High Education Library Committee (also known as JHELC) held the special conference to discuss the main points of JALIS with 18 universities of first group member in Jiangsu education network.

In September 1995, with the approval of JALIS plan in JEC, Jiangsu Education Library Committee (also known as JELC) prepared it immediately. In Feb.1996, JELC submitted a proposal to JEC the details of development the JALIS. This proposal pointed that we should bring several top university libraries in Jiangsu into a multifunction and multi-level information consortium to share materials within JALIS with advanced information technology methods during the period of the ninth-five-year plan, and JALIS would become one of the most important parts of CALIS. The system not only guaranteed the construction of Jiangsu "211 project", but also made the positive effect to the Jiangsu economic development and the social progress.

In March 1996,following JEC document 28,JEC held the preparatory meeting to study the feasibility of JALIS again. In December 1996,JEC and Jiangsu Financial Office announced that Jiangsu government would allocate RMB2.5 million to start the library automation management software component project. In September 1997,JEC document 50 announced the establishment of JALIS leadership group. Thereby, JALIS project was born and the management center was set up in Nanjing University. During the period of the ninth five-year, JEC planed to provide about RMB 20 million for it.

II.   MAJOR TASKS OF JALIS DURING "95"PERIOD

A. Library Automation system research, development, implementation and deployment

In September 1996, JELC established the Automation Study Committee, which carried out the analysis and comparison among several domestic and abroad management systems. They concluded in their research:if Jiangsu academic libraries wanted to reach the goal of total information sharing, they would need the development of a set new automation software which could run as good as the imported software even better. Jiangsu academic libraries adopted this new software and gradually promoted to other libraries in China. The software would be developed by several departments, such as Nanjing University Library, the Computer Department of Nanjing University the Library of Southeast University and the Multimedia Technology Research Institute of Nanjing University. JELC organized the experts from Jiangsu academic libraries to establish several research committees.

After two years work, they successfully developed "Huiwen Library and Information Management System"(also known as Huiwen).In July 1998,Huiwen received high praise on the exhibition of Chinese Library &Information Management Software Products.Huiwen was considered as one of the most advanced library software systems in China. There are more than 300 library users in China until now. The system has made great contribution in library automation development.

B. Service organization and network construction

JALIS set up eight disciplines and one local centers network. The network formed three level information

centers connection in Jiangsu: "the province center—city center—academic library". The service network is partly established in JALIS.

C. JALIS provide MARC records and other service for China universities.

About 80%-90% MARC records are provided by the center of Consortium acquisition and union cataloging JALIS established four centers to carry out the tasks of consortium acquisition and unit catalog, which accomplished the goal of acquisition data and MARC data in real time allocation, simultaneously creating acquisition data online. It also provided the service of catalog data downloads, improving the cataloging quality, in order to achieve the unified catalog standard. JALIS established the solid foundation for the whole provincial resources sharing.

D. Retrospective conversion of old records and construction of union catalog

JALIS purchased the National Library's Chinese catalog data that covered the records from 1976-2000 and provided these retrospect catalogs to JALIS member libraries. They provide Z39.50 download service. Forty-four academic libraries completed the union catalog, including more than 6000 serial records from 1990 to 1999.By the end of 1999,several academic libraries developed the OPAC.

E. The construction of information resource databases

JALIS organized and built more than 60 databases, which covered the following disciplines: social study, science, engineering, agriculture, medicine, education, legal and other areas. JALIS greatly rose the demand rate of information needs in Jiangsu universities.

F. To develop the service of sharing resources

Each service center carried out free patron training services periodically. During the period, each center held training, workshops and seminars to promote the service and patron awareness of the service. After this service promotion, the literature inquires and document delivery service became each library's everyday work. Each library has a librarian, at least, in charge of this job. Document delivery and resources sharing expanded the center function and led the readers' service to a new stage. After 2002,JALIS proceed to the second stage of construction, the goal is to establish the

framework of JALIS Digital Library according to the highly integration of service resources & management to. At the same time, JALIS enhanced the cooperation with CALIS to be the most important part of CALIS.JALIS built a more open environment for the documentation services for scholars and made up a more rational, scientific information resources system for all Jiangsu academic universities, especially for small and medium college libraries, providing the support for the economic development of Jiangsu Province. JALIS Digital Library construction framework is made of JALIS digital library gateway, digital, libraries resources service website, the local library system. All the services are issued by the portal integration.
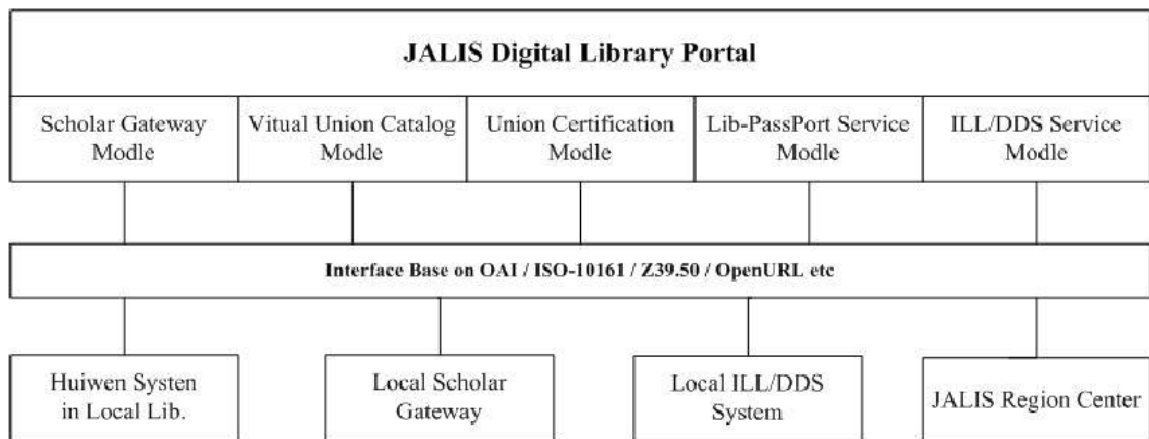

Fig.1. JALIS Digital Library Portal

The structure chart of Jiangsu Provincial Higher Education Digital Library JALIS Digital Library's first level takes charge of Interlibrary Loan, document Delivery System, the regional circulation management

system, the Joint Virtual Reference and so on. The levels construction is the key project of JALIS II. The second level has consortium database and self-developed database. The databases include dissertations database, Subject Navigation, bibliographic data resources database and so on. These resources can be added CALIS federal by JALIS uniform resources platform. By the end of 2005, consortium acquisition has related to 100 universities, and more than one million people benefit from it. It has reached 500,000 kinds of electronic books,13,000 electronic journals,8000 kinds of Western language electronic journals. The web service is provided by five universities through 8 mirror sites in 24-hour.

The third level has two sides. One is the basic platform which all services and resources entities relies on. The other is HuiWen system which is local management system relying on eight major subjects, regional center and members of JALIS management system. With reason mentioned above, it constructs a complete service infrastructure layer. Local management system providing daily services, Internet resources and special database for public services to Jiangsu province, all the three levels formed a complete system of service. ILL, document delivery system and the regional circulation management system based on wide area network. Regional circulation(Lib-PassPort services), Interlibrary Loan and document delivery service face to readers.Lib-PassPort services started in 1994.In the past 10 years, the service way is mainly manual. From 2004,the service carried out through network. The target of service are graduate students, teachers and researchers, at the same time, and the service covered the research institutes and military academies readers in Jiangsu. If readers take Lib-PassPort, they will able to read and borrow books in any library in Jiangsu province. By the end of 2006,JALIS has distributed over 60000 Lib-PassPorts, and lent more than 16 million copy-times, covering 124 universities and research institutions of Jiangsu Province. The service chain provides different services for readers, according to their various needs, which ensures full use of documents in library.

III. THE SUCCESSFUL REASON OF JALIS

The construction of JALIS I and JALIS II are successful projects. Government attention and give funding is the key.JALIS borrowed several similar schemes from CALIS. But JALIS has developed its own characteristic. JALIS moved quickly into development phase with the strong leadership support and funding. It was impossible to carry out JALIS project of building a information sharing system including material sharing, automation and databases without the strong commitment from leadership and ready funding.

Second, Top Universities play a leading role, JALIS has strengthened the universities cooperation and solidarity .Top universities play an important role model, correctly handle the relationship between the different levels university libraries, the regional center library and the general library. The regional center library is the backbone of JALIS, it is also the library that create most effective service. Jiangsu has more than 115 academic schools. It has 11 "211"project and "985"project universities, and 75%polytechnic schools. During the construction of JALIS, the province's key college library, willing to offer as a tribute and play a leading role. They undertake the responsibility of foreign service and the most of funding for infrastructure services.

IV. CONCLUSION

To conclude, JALIS has started from zero and after a decade of development, it has grown into an integrated information service system with regional characteristics and has produced an advanced digital library service environment for readers. JALIS sets up a good example for China academic libraries. Based on systematic, digital academic resources, and with the help of advanced technology of the digital library, JALIS provides a channel for universities in Jiangsu to access to resources. It not only becomes an important gateway for universities in China to acquire information, but provides information services for Jiangsu socio-economic development as well.

JALIS has formed a digital library information system in leading domestic position, including complete function, abundant resources, and wide coverage of the "service-oriented" digital library service system.