

Developing a Borderless Hybrid Library: Shanghai Experience

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Abstract:

Since the new building opened in 1996, the Shanghai Library has strived to create a borderless hybrid library. Taking advantage of the consolidation of the Shanghai Library and the Institute of Scientific and Technical Information of Shanghai (ISTIS), the new institution has developed a knowledge service system in an all-round way for the general public, for the research and business community, and for the policy-makers and legislators, and also a digital library system to integrate all the conventional and electronic resources and to extend the hybrid services to all the libraries in Shanghai. The presentation will focus on the library's innovative, integrative and interactive hybrid services as well as some technical development including Chinese metadata and cataloguing programs.

Introductory

The Shanghai Library is the second largest library in China, with a total collection of 48.5 million. Since its establishment in 1952, the Library has grown rapidly through some historical mergers. In 1958 the city government combined four municipal libraries (Municipal Historical Document Library, Municipal Periodicals Library, Municipal Science and Technology Library and the Shanghai Library) and some other collections including the Bibliotheca Xujiahui and SMC (Shanghai Municipal Council) Library. In 1995, the Institute of Scientific and Technical Information of Shanghai (known as ISTIS), one of the country's leading information institutions, was merged with the Shanghai Library, resulting in the first combination of a library and an information institution in the country. This was an epoch-making event in Chinese librarianship.

The city government aimed to share information and human resources and to complement each other's professional superiority by means of putting two organizations together. The two organizations are in many ways quite similar, for instance, information collection, reader service and reference work, etc., but also in many ways quite different. The Library lays stress on serving the general public while ISTIS serves mainly for industrial and technical community. The most striking difference is that the former provides basically the free services while the latter the fee services.

To strive for a world-class institution, the Shanghai Library has developed a strategy in 2002 with assistance of a group of experts from the Fudan University, a top-ten university in China. The working group spent one year and worked out some reports including a strategic blue print for the Library:

The Library's Mission:

To pursue excellent services through developing an accumulated knowledge base

The Library's Core Value:

To provide excellent service, to encourage sincere cooperation, to guide learning and to inspire intelligence

The Library's Target:

To establish a world-class metropolitan library

A knowledge service model

The merger between library and information institute has provided a significant chance for the Shanghai Library to restructure itself towards a new direction: the Library as a center of information resources, an information clearinghouse, a knowledge repository, a school of life-long literacy and a meeting place for recreation. After a period of reorganization, a new model of three-dimensional services, namely, for the general public, for the research community and for the government and the legislature, has been gradually taking shape.

1. Service for the general public

Since the new building opened in 1996, the people of Shanghai have enjoyed its modern facilities and convenient services. The Library receives an average of 9,000 people every day and it is regarded to be the most frequently visited place in the city of Shanghai.^[1]

The Shanghai Library's public services include reading and lending, reference service, public lectures, exhibitions and cultural meetings. The Library adheres to open policy ever since the opening of the new building: *open to everybody and open everyday*. People outside the city can also get a temporary pass if he or she shows an ID card. It opens 12 hours a day from normally 8:30 to 20:30 (in some national holidays from 9:00 to 16:00) and opens 365 days a year (the Library never close even in the Chinese New Year). The Library has a total collection of 48.5 million records and as many as one million books are displayed in its 25 open-stacked reading rooms. Four copies can be taken out for 28 days. The Library also takes care of lending activity for its 20 local public libraries (they share the same circulation system and the overall resources, but have no direct administrative link to the main library).

As a social meeting center, the Library is equipped with two large auditoriums, two exhibition halls and eight seminar rooms. Seminars, lectures, art exhibitions, photo shows and other cultural and academic events are regularly held in the Library. Because the Library is located in the research and diplomatic area and also not far from the city's busiest shopping areas such as *Huai Hai Lu* and *Xu Jia Hui*, its cultural activities often succeed one another in quick succession. For instance, when *Celebrate Australia 2002* was held in Shanghai, some of its programs including the Australian Indigenous Arts Exhibition and A Season of Australian Documentary Film were held in the Library's exhibition hall and auditorium respectively. Due to such situation, the library becomes very busy and its name frequently appears on the local mass media, showing that the Library becomes a center of local cultural and social events.

The Shanghai Library has a municipal network of four-level public libraries: 33 district/county libraries, 215 community/township public libraries, and thousands of residential area/village reading rooms.^[2] They play an important role in reaching the library service out to the people. The Shanghai Library also serves as a coordinator among all kinds of libraries and information services in the city. Now there is a consortium of 60 libraries led by the Shanghai Library.

2. Service for the research community

Both the Shanghai Library and ISTIS have reputations for providing reference services for the city's social and industrial development. The Shanghai Library has participated in many of the city's major industrial projects by providing information services. For instance, the Library assisted with the construction of the tunnels across the Huangpu River by providing information from its old newspaper collection. ISTIS has a group of specialists covering various scientific and technical subjects. Every employee has his or her own specialty of one or two areas, and is trained to be a subject information specialist. Having rich human resources, ISTIS often organizes information research or "think tank" projects for the industrial and technical community. Taking an example, a research project on Inner Mongolia's veterinary medicine production base was highly appreciated by the government officials of the Inner-Mongolian Autonomous Region. For many years, ISTIS has developed a counseling service system, assisting the corporations and business community to improve their economic returns and policy-making levels. After the merger, the new Library decided to exploit the considerable strengths of information counseling to the fullest and further developed the value-added fee services. In 2002, the Library processed 5,730 search requests, 372 counseling requests, 28 patent requests and 15 market reports. Shanghai Library has the vision of building itself as information agorae and clearinghouse. We can see that the value-added information service on a cost-recovery basis is warmly welcome by the researchers and there is no reason to disregard such a growing social demand and a gradually maturing market.

3. Service for the city government and the Legislature

The Library has specific responsibilities to serve the city government and the Legislature. Before the merger, ISTIS had a regular bulletin service to the government, reporting mainly the trend of world technology. In 2001, the new Library readjusted its bulleting service and began to include social and economic contents and distribute the bulletins widely to the government agencies and research institutions concerned. In 2002, 180 issues were produced on various topics in two series: General and Technology. The service is well received because of its enriched information including the feedback information on the city development, advices from various experts and new trend of world economy and technology, etc. Because of its successful efforts, the government assigned the Library many research projects in the past years. In 2002, the Library completed 25 research projects. One of them received the first prize of The Science and Technology Advancement Award (on the municipal level) on the subject of computer security.

A hybrid service model

In 1996, when the new library building was opened, the library shifted its goal to cope with the global networking environment. After several years' consecutive efforts, the Shanghai Library has made much progress in the infrastructure construction, office automation, document digitalization and online services. There are 600 computers connected to the library's intranet, among which more than 300 are located in the reading areas. The library's daily online visits have increased from 1,000 in 1997 to the current 20,000.

The Shanghai Library has recently developed a 3-I policy (innovation, integration and inter-library collaboration) for its hybrid library strategy.

1. Innovation

In a traditional library, the reading of electronic resources and print resources are separate. The resources are disseminated at different corners, which adds to the readers' difficulty in finding these materials in a short time. In order to integrating the traditional function of a physical library with the information service of a virtual library at a unified interface, the Shanghai Library has made a great step forward in overcoming these disadvantages. By making use of the information infrastructure and broadband library intranet, the Shanghai Library has established an omnipresent digital information remote access that covers all the service areas, and this remote access integrates online reading, downloading and printing of the library's digital resources, whether they are documents, full-text books, ancient texts, pictures, manuscripts, videos or tapes. In addition, all the reading rooms have computers that are connected to the library intranet. The Shanghai Library, by reshuffling its services, has the capacity for providing the public with rich, swift, and all-around digital information services whenever and wherever possible.

The Library's Newspaper Reading Room displays about 1,000 titles of the current Chinese newspapers. To integrate all the sources of news, and also to overcome the space problem, the Library has changed its Newspaper Room to Multimedia News Room, putting all the newspapers in printed or electronic forms in one room. Now readers can search the electronic newspapers on the net or by CD-Roms through 10 desktop computers, watch TV with earphones and also read the printed papers as usual in one place. In future, the Library is going to make most of the reading rooms hybrid, providing easier access to the different forms of the same subject.

In 2001, the Library started a “one card through” system for circulation among 20 public libraries in the city of Shanghai. The Shanghai Library has developed a Central Library System since 2001, trying to unite all the local public libraries and to share resources with all the university and research libraries. It is so successful that the first target of “one card through” system in the twenty district or county libraries has been realized. Books can be borrowed and returned in any member library by using the same card. Readers can enjoy the same public library service in both the urban areas and in the counties.

2. Integration

2003 is the year of integration for the Library. The annual plan called for integrating resources, services and marketing, the so-called *Three Integrations*. The Library’s five-year (2001-2005) Strategic Plan indicates that all the hardware and software performances should be integrated. The 2003 target is to put all the electronic resources and services in the “one interface” and the future target of the following years, “one search”.

Now people can have access to various digital resources of the Shanghai Library through the Document Supply Center’s resource page both in Chinese:

<http://eservice.digilib.sh.cn/wxtg/resource/resource.htm> and in English:

http://eservice.digilib.sh.cn/ewxtg/service/docu_search.asp.

The Chinese E-book and the *NetLibrary* are the two distinctive online services that are well received by the local users. The former has a collection of 30,000 and the latter about 5,000. The registered readers can have direct access to the database at home or anywhere on the web. For the swiftness and convenience of E-book services and its adoption of advanced online intellectual property right protection system, more and more readers have come to visit the Shanghai Library website and register online. The Chinese E-book is so popular that the access rate once reached 12 million in one week. At the same time, Shanghai Library, on the basis of the central library network, has integrated the specialty resources and services of its branch libraries, and actively provided service for the public to improve their information accomplishment.

The Document Supply Center was established in May 2003 in answer to the new strategy for integration. The Shanghai Library started developing digital resources in 1997 and the homemade databases had totalled 200GB by 2002. People needed to go to various pages before, because the resources were developed or purchased by the different departments of the Library. With the backing of a group of experts, computer technology and network facilitates, the Shanghai Library integrated its collections. Now the users can either search or acquire information from one page. When the computer integration project is accomplished in 2004, people will have easier access to all the electronic resources with just “one search”.

In the past 25 years the Shanghai Library has organized over 800 lectures, and over 700,000 listeners attended the lectures. To keep pace with the times, the Shanghai Library has formed a lecture system that integrates lecture organizing, editing, viewing on demand and online broadcasting. The Lecture Center not only integrates lectures organized by the different departments of the Library but also coordinates the social lectures. In 2002, 170 lectures were held in the Shanghai Library. All the lectures are publicized in “one window” including those organized by the social organizations. People can view the lectures through the A/V lecture database on the website or come to the Library to watch the videos on demand or read the lecture texts or books themselves. The Lecture Center has published 17 lecture books. The Library’s lecture becomes well known in the city’s cultural life and people intimately call it a “city classroom”.

3. Inter-Library Cooperation

The city's information environment has seen great progress and is now of leading position in China. However, digital divide still exists. As one of the largest city libraries in the world and an information hub of the area, the Shanghai Library has been actively involved in the information cooperation project, and has done its share in pushing the information construction of and cooperation between libraries in the city of Shanghai. So far, all the urban areas and most of the satellite towns enjoy the service of the central library system. Through the municipal public network platform of the community libraries, readers can also receive the special digital information services provided by the member libraries (website: <http://eservice.digilib.sh.cn/tszy/>) to enrich their lives. These services are about education, entertainment, traveling, law, agricultural technology, medical treatment and health care, folk custom and culture, and about flowers and plants. All this helps radiate the Shanghai Library's resources and services to every corner of the city, and builds up the importance and influence of the Shanghai Library.

According to a survey, in 2001 there were 896 personal computers for public use in the local public libraries. Most of them were equipped in the district/county libraries.^[3] The figure shows that one library computer is shared by 14,500 people; while in the developed countries the figure is lower than 5,000. In September 2003, a new survey was conducted and the statistics showed that there were 2,208 PCs in the local public libraries and of which, 1,328 were for the public use.^[4] The last two years saw a big leap in the information development of the city. To further promote the level to close to that of the developed world, the Shanghai Library calls for a new target of 3,200 PCs in the entire public libraries of the city in 2005. To achieve this, the Shanghai Library will, for example, develop 100 model service points in the community/township libraries. Every model service point should have at least 10 computers for the public use.

There are two online library services worth mentioning here. They are the "United Knowledge Navigation Station", and the "Online Cataloguing Service".

With the arrival of knowledge economy, a librarian is not only a person who preserves and delivers documents, but also a researcher of information and a propeller of knowledge, helping the users seek and disseminate knowledge. On May 28, 2001, the Shanghai Library collaborated with the senior reference librarians from the local universities and research institutions, to establish the "United Knowledge Navigation Station" (four libraries in Hong Kong, Macao and Singapore later joined in). The twenty reference librarians working at the station provide specialized research institutions and corporations with digitalized reference services on subjects such as social sciences, linguistics, religion, biology, medicine, agriculture, computer, engineering, chemistry and industry, education, psychology, etc. So far, the Station has been well received by people from all walks of life, especially by those from specialized fields. There are about 10 answers every day in average. During the SARS period more people preferred library use on the net. In April and May 2003, 16 questions were answered every day. The Q/A Database based on the selected questions and answers has been developed and there are about 2,000 examples on the Station's homepage, becoming a good source for reference information.

The Library's Online Cataloguing Center was established in 1999, aiming initially at improving the efficiency of cataloguing and helping compile the union catalogue among the local libraries. The Center grows quickly in the past years. In August 2003 the membership reached 191 (185 libraries and six bookshops). The bibliographic database reached to 1,650,000 titles, including 890,000 titles of Chinese books and 650,000 titles of foreign

books. With an annual increase of 150,000 titles, the Center is attracting more and more libraries and book dealers to join in.

Some digital library research programs

Interworking. In the past years the Shanghai Library has introduced the various software and hardware facilities for the different functions and has accumulated a mass of purchased or homemade digital resources for the different services. What the Library should do now is to combine the resources and to perform tasks among the different facilities. The Library is contracting out the computer integration project to a local company and the completion is scheduled at the end of 2004. The interworking program is a joint venture between the company and the Library, with the former bearing responsibility for reorganizing and integrating and the latter for the professional and standard matters.

Metadata application. The Shanghai Digital Library Initiative (SDLI) was launched in 1997. By 1999, seven digitization programs, including the Library's rare books, pictures of Shanghai, "Chinese opera" sound records and "science stories" video collection, with XML encoding metadata had been completed. The second phase started from 1999 on, aiming to integrate all the relevant electronic resources and make them readily available to citizens and scholars innovatively and interactively through its web portal. Metadata research and application is one of the key studies in the second phase.

The Shanghai Library is one of the pioneers that introduced new metadata standards and means into the Mainland China. Publishing the first book entitled *Dublin Core* in Chinese and hosting the first international seminar on metadata, the Shanghai Library has made continuing efforts to promote metadata research and application in the past years. By implementing Dublin Core as core metadata set in the second phase of SDLI, the Shanghai Library has conducted some pilot projects. One of them is the UCCOR (Union Catalog of Chinese Online Resources) system, a test bed on cataloging network resources. By combining International metadata standard with characteristics of Chinese literature, Shanghai Library makes its own unique contributions on developing some metadata profile of special Chinese literature. The on-going application programs include Chinese genealogy and manuscripts. The Library also actively participated in the national digital library research projects and some staff members are taking the leading role in the sub programs of "The Chinese Metadata Standards Research Project", a cooperative national project conducted by a group of institutions in China.

Conclusion

In the past few years, great changes have taken place in the Shanghai Library, especially in the reorganization of its resources and services. Taking advantage of the consolidation between the Shanghai Library and ISTIS, the new institution works to combine the function of a traditional library with a virtual system, making progress in the application of new technology and service methods in aspects such as integrating and developing information resources, and providing reference services, thus extending the library service to the whole society. Adhering to its core values (to provide excellent service, to encourage sincere cooperation, to guide learning and to inspire intelligence), the Library works diligently to pursue after the advanced libraries and to strive for the establishment of a world-class metropolitan library.

Notes

¹ Xu Haifeng. Where will be the most frequently visited places in next three years? Youth Daily, 11 October 2002, 5. (in Chinese)

² Xiaozhou [anonym], Public libraries of Shanghai in the 1990s. Tushuguan Zazhi [library journal], 98(2), 37-38. (in Chinese)

³ Wu Jianzhong, Jin Xiaoming, Xu Qiang, Bridging the digital divide: case study of the Shanghai community libraries. Library Journal, 2002 (11): 23~28. (in Chinese)

⁴ The figures come from the survey by the Shanghai Society for Library Science in September 2003.