



THE APPLICATION OF INFORMATION TECHNOLOGY IN THE LIBRARY SYSTEM

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ABSTRACT

With the development of society and science technology, information technology has been rapidly developed, network technology has undergone a change from emerging to mature. In today's highly information-oriented era, network technology has throughout every aspect of our daily lives, affecting our live, learn, work and recreation. Also, the major library system has also undergone a lot of changes, both from resource gathering, the structural adjustment has undergone tremendous changes in all aspects. In the case of the full integration of information technology and the library system, the library service has undergone tremendous changes. In this regard, we have carried out in-depth research, hope information technology can better integrated with library system, so as to serve the public better.

Keywords: *Information Technology Applications; Library Management; Network Environment; Information Service*

1. INTRODUCTION

The application of information technology play an important impact on all aspects of library management and operations in library management. Information technology continue to influence the library management and operation, at the same time, the special needs of the library management operations promote the development of information technology, IT and library management and operation of both relationship is mutual promotion and mutual influence. In this paper, through the influence of library network technology on the library, current information technology in the library application encountered difficulties and bottlenecks, watching the development of information technology in library applications and IT recommendations library application services views several fronts, and hope that our study can provide certain reference for scholars of library management application problem to study information technology[1-4].

2. INFLUENCE OF NETWORK TECHNOLOGY ON LIBRARY

Since the 1990s, the network technology has been rapid development in the world, network technology change the world while also greatly changed people's daily lives. The global information technology, network development has brought great change and challenge to the library's information services.

2.1. Network Technology Lead to Library Information Resources Change

Firstly, with the application of network technology and information technology in library service management system, the structure and layout of the data resources of the libraries has changed dramatically. This change makes the data repository of the major libraries continue to expand and improve the situation of network information digitized publications, electronic literature basis covering the previous library data resources. This allows large libraries no longer need to invest huge funds to purchase, collection the entity of books, publications, literature, and also do not have to pay a huge human, financial and material resources to organize and save on these entities, books, publications, literature. Expand the size of the library and improve library operations of efficiency while saving financial.

Secondly, network technology and information technology use in the operations of the library, so that the major libraries effective communication and contact, and get rid of the exchange poorly closed mode. Exchanges through the network connection between the major library service management system, the practical realization of a network of information resources sharing. In this case, it is a good solution to the problem of incomplete major library resources, resources can be shared between the various library formed between complementary resources.

Finally, data sharing through information technology and network technology, the resources of major libraries will get rid of the geographical and time constraints. The majority of users to be able to cross-regional, cross-time full access to information resources, and to the wider masses of the people to enjoy the service of the network information sharing.

2.2. Information Technology Redefine Library Service Concept

Firstly, in the information background, the major libraries should continue to expand their range of services and service objects to fully tap the potential value of the information technology literature and play an important role and significance. The library should be based on the actual situation, expand the library inclusiveness and openness properly, so that different industries, different sectors of the population can enjoy the right to access to information in the library. The development of human services for the museum crowd, the library's information resources to be able to serve the public libraries in social service.

Secondly, library should burden the task that construct the public cultural basis to improve the culture quality, the major libraries should take full advantage of the rich information and held a variety of activities, so that more people in the general public can enjoy the information, improve their cultural quality of services in building a socialist civilization and moral cultivation, thus, making the rich information can actually be transformed into the material foundation conducive to social construction.

2.3. The Transformation of Library Service Mode

Firstly, we must see the network technology and information technology in library service management system, making the major library services and work a great change. Under the influence of information technology and network technology major libraries realize digital and information technology, get rid of the management model of the entity borrowed in the past, not only greatly improve the management efficiency of the entire data repository, but also improves the information resource borrowing capacity and the dissemination of information resources circulation rate. In order to achieve a transformation of the library, provide basic services to some of the people, providing services to more people.

Secondly, the use of information technology and network technology in library service management system has changed the information single circulation pattern in the past, the majority of users have more right to choose. Through the respective major library information service platform, users can self-retrieval, filtering, collecting useful data, information, publications and literature and so on. In this process, the user is also able to effective communication and information feedback with librarian when encounter problems in using the library service management system, and realize the information users and information providers on both sides of the interactive communication.

Finally, the vast number of users can even enjoy more humanized personalized service, and puts forward new requirements, make the library management staff to assist in the search, search, collection of effective information, finally sent effective information to yourself and enjoy the characteristics of library information service.

2.4. Improve the Efficiency of Library Service

Firstly, the data information age is characterized by full, new, fast, and the operations of major libraries also have this full, new, fast information service functions based on the integration of digital technology and information technology. The information age library service management system has realized the library database dynamic digital management. The library staff in acquisition included alteration information more fast and convenient. Major libraries to improve information collection, a collection of changes timeliness, through the library's information platform in the shortest possible time to provide the latest and most comprehensive information services for library users.

Secondly, a new information service platform improves the efficiency of user. Because of the use of information technology and network technology, major libraries have their own network information platform, library users can use a wide range of information retrieval, information navigation, information screening services on this platform. In the rapid expansion of the information, the library information service platform, greatly improving the efficiency of library users.

Finally, another feature is the use of information technology in library service management system quickly. The use of library information service platform, making the people themselves to the library era has gone, users at home or unit can be connected through the network to the library's

information service platform, enjoy the infinitely convenient brought by information shared and greatly improve efficiency of access of information. In addition, with the development of the information, continue to produce a large number of invalid redundant information, library management staff regularly clear invalid redundant information, and the user will exclude invalid redundancy interference of information to find the accurate effective information to meet their own requirements[5-7].

The domestic information library information service management system ideograph is shown as Figure 1.

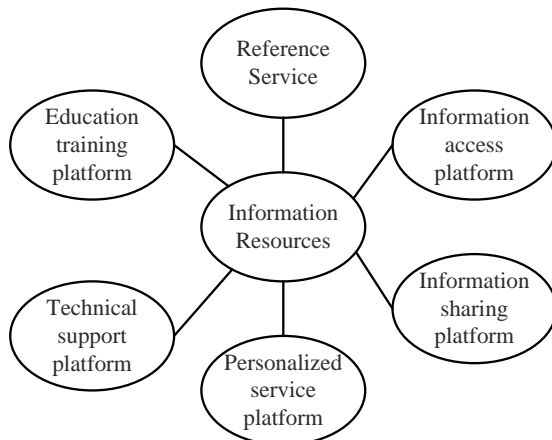


Figure 1: A Domestic Information Library Information Service Management System Ideograph

3. THE LIBRARY INFORMATION CONSTRUCTION OF DIFFICULTIES AND BOTTLENECK

Information technology and network technology and library services management system integration process is the use of computer terminals, digital network communication technology and data storage carrier contact, to realize the information storage of information exchange and sharing, and for the vast number of users with fast and convenient services. Although, in recent years, information technology and network technology rapid development, but in the process of building information digital network library, still meet many problems and bottlenecks, which was the most prominent is the library information service management system safety and efficiency problems.

3.1. The Security of Library Information Service Management System

Mention library information service system security problem, maybe a lot of people will immediately think of virus, hacker attacks, trojans and so on the outside network security factors, here we consider not only limited to this, we should consider the library information service management system itself safety.

Firstly, the basic security of the library information service management system is the library information service management system information service platform and information database operation stability and security. Library information services management system in their daily work, books, newspapers, literature and other data collection, screening, assembly, included a series of process after the formation of a library information database to store information. In this series of work process, the outside world through the network can be implanted viruses, trojans, and other hackers behavior.

In addition to the destruction of the attacks of the external network environment, library information services management system safe and stable operation of the database of information for a long time, uninterrupted information collection, storage, information services management system's own ability to repair itself, the information database data update, backup capabilities, the defense of the entire system, anti-virus, alerting all library information management system security factors. Only constantly improve their own information services management system can fend off attacks and ensure the entire information management system safe and smooth running.

Secondly, the library information service management system security and information service management system database operation platform closely related. Information technology and network technology makes the library information service management system database continuously rapid development, in this case the information service management system database operation platform development is relatively lagging couldn't keep up with the requirements of the development of information database. For example, many libraries use Dan Cheng systems, this Chinese data editing system exist a lot of loopholes and shortcomings, when collect large amounts of information at once, the system is very unstable, often occurs data point disorder, and even data lost. In addition, Dan Cheng Chinese Editing

System data also has the problem of error correction and error correction capabilities, the management staff will waste a lot of time and manpower to human error correction.

Finally, the compatibility between the operation of the library information service management system platform and information service system database will also affect the security of the entire information management system. For example, a large number libraries use Superstar book database, which in the case of long time access, or the user too much, the database will occur service failure suspend, then asked to restart the IIS service, even need to restart the server if the problem is serious. In addition, due to the bad compatibility of Superstar Book database running platform (windows server 2003), when using the database, the user often missing pages, garbled phenomenon.

3.2. The Efficiency Library Information Service Management System

We integrate information technology and network technology, and library information management services to the system's fundamental purpose is to enable users to get fast and efficient service, high efficiency lies on the construction and development of digital library. Focusing on improving the library information service management system security, and how to ensure the library information service management system efficient operation becomes a difficult problem.

Now, the library information service management system operation often arise the information service of the congestion, lag, slow, interrupt, when these problems arise, the library information service management system lost it advantages of fast and efficient compared to traditional lending model. Go into the moment of library information service management system is running slow, stagnant and inefficient work behind, you can find two reasons:

On the one hand is the current network technology and hardware storage equipment problems, these problems is the technical level, only the improvement of science and technology can get the end.(1) The library information service management system network service terminal and users in the client information data storage, exchange, transfer process due to the problems caused by the disk medium.(2) The library information service management system of various connections and all the work of the software and hardware of the data transmission between information caused by the network problems.

On the other hand, each library information service management system database itself, because the database and operating system compatibility, database own quality difference and other things will be the influence of different level to the library information service management system efficiency. In the current case, the libraries are not test product comprehensive when introduce of an electronic database, and with some vendors lag after-sales service, information Server is the lack of timely maintenance updates, a series of problems accumulated tend to form more serious consequences and problems[8].

The information library operation ideograph is shown as Figure 2.

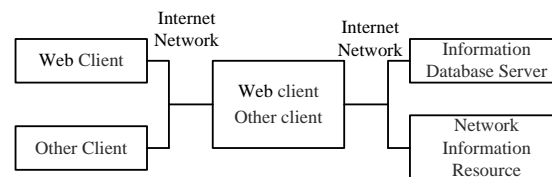


Figure 2: The Information Library Operation Ideograph

4. CHANGES IN IT DEVELOPMENT IN LIBRARY APPLICATIONS

4.1. The Library Functions of Social Services will be Improved to Strengthen.

The biggest feature of the Internet is its openness, such an information platform, we get a window through which we can better understand the world and enjoy the convenience brought by information sharing. Network technology can meet the people's information exchange, transfer, share the needs of the library's information resources, which require a wide range of social, in order to better achieve the social sharing of library information resources.

Firstly, service to improve the cultural level. With the rapid development of the information, it is only to continue learning, continue absorbing new to enrich themselves, in order to ensure not abandoned by society torrent. As many scholars said, the society is a learning society, in this form of learning is no longer individual behavior, but a popular acts, the main library services also expanded as a universal public. Therefore, the combination of information technology and library should focus on meeting the demand for the broad masses of the people, provide social service, and improve the level of universal spiritual and cultural problem.



Secondly, service the compilation of economic development. Today's society is a knowledge-based society, knowledge is power, knowledge is productivity, and high quality comprehensive type knowledge talent become the national economy can last for long development of the power of the team. In building information technology library requires fully consider how to serve the public, provide knowledge resources for the majority people and provide a firm knowledge of information protection for sophisticated talent people, knowledge effectively transformed into productive better contribute to the rapid and smooth development of the national economy.

4.2. Library Service Characteristic and Humanize Transition

After the library complete the construction of information technology and providing the most extensive social services, facing the user is bound to be a significant growth, the user needs breadth and quantity of information is also very large. Such large user groups search for their own needs on the platform of library information services management system, this to the service of library puts forward new requirements. Such a large group of users are vastly different in the knowledge between people, the level of education, professional needs and personal preferences. Facing such a wide range of user needs, it will be difficult to meet the needs of users if the library information service management system only to take a single service. In this case, it is required library information service management system to provide users with the characteristics of human service.

Firstly, the individuation of library service content. Libraries should proceed from the needs of users while providing users with the information service, , in limited circumstances, give the different needs of the user population to provide more professional and more targeted information services. In this process, the library should change the past mode of service, the traditional library services is to use their own existing resources to provide users with services, the new type of library service should provide information services based on the needs of users, from the previous passive query retrieves the initiative to mention the service instead.

Secondly, provide diversified select. Development of network technology enables users to cross-time, cross-space to obtain the information, literature, books they need, the user have a variety of choices to their own needs. In this case, the

library information service management system should continue to upgrade their own systems, introduce a variety of information retrieval methods to improve the intelligent system itself and provide diversified services to meet user requirements.

4.3. Strengthen the Library Social Education Function

Traditional library services mainly for community support services, books, newspapers, literature, and other information data, information technology get full use in library services management, libraries play the advantages of information technology and contribute to associal education.

The emergence of the network break the limitations of time and space for the general public learning, the library should make full use of its own network technology advantage, provide a wide range of network education services for the community. For example, and the distance learning classes offered major universities, provide virtual classrooms and virtual laboratory, such a wide range of educational services will improve the community's cultural qualities.

From the above aspects, we are able to be seen in this mode of education of the future of online education has great prospects for development, in the learning knowledge-based society, the demand for online education will gradually increase. Therefore, the library should see the situation, use their own advantages, well in advance of the work, and to deal with the huge demand for online education[9].

5. SUGGESTIONS AND OPINIONS OF APPLICATIONS IN THE LIBRARY INFORMATION TECHNOLOGY

The influence of information technology on library application services, building a information technology library of difficulties and bottlenecks and research on the development of information technology Library shifts, we propose the following suggestions and comments, hope to provide some help in the library for information technology application problems

5.1. Concept and Technology Innovation

Firstly, set up the innovation idea. on the one hand, make full use characteristics of the interconnection and sharing of the network and play the advantage of network. Strengthen the exchange of information between the libraries and break the narrow limit of geographical time, fully realize the



exchange and sharing of resources between the various libraries, to form a covering of a huge network of information resources. This can not only make the library itself improved, but also provide customers with more comprehensive information services. On the other hand, build is people-oriented service social institutions. The library itself is the public agency to provide services for the community, after establish information technology library, the library should use their own system of information management services provide users with a variety of personalized services to meet community information different needs.

Secondly, the innovation of management system. Each library should strengthen construction and maintenance of information security system, library information security system is directly related to the security of the Library of confidence in the information database. In the process of transition to information library from the traditional type, because of all the problems left over from the traditional management mode, for example, related institution-building of the library is not perfect, the shortfall in the funding of the construction. This requires the information in the construction of the library, at the same time using a new service management system, only new systems and new management models to match, information technology library can construct and operate normally.

Finally, the information service innovation. Information Library information resources can be divided into two parts, one part is the virtual network information resources, the other part is the non-network physical information resources. In the process of building a library of information technology, pay attention to the effective combination between the effective combination. In this case, the user's information needs are not only limited to network or non-network information, so should focus on the exchange of information. Another thing is to establish the information brand awareness, in a highly competitive market society, the various industries are required to establish their own brands, the library industry business no exception.

5.2. Improve the Service Content and Level

The establishment of the information library, full use of the information technology and network technology and propose higher level requirements for library management staff. Library management staff is not only engaged to borrow storage and management books, newspapers and literature, and

add electronic information data collation, classification for library information service management system. This makes library management staff to provide more varied and flexible services to the user, library management staff must be effective screening information, comprehensive processing and storage, the stored information is more concise and efficient.

The service content expansion of library management staff focus on the deep level of information services. In professional fields, establish a longitudinal professional information data aggregated and sorted out all the contents of the information within an industry for quite some time, to provide users with a deep level of professional services.

Library management staff should make good use of the library information service management system, expanding the scope of services, and continue to provide a deep level of specialized information services, only in this way can play the real advantage of a library of information and network.

5.3. Constructing Talent Team

The references of information technology in library service management system put forward higher requirements for the management staff of the library, so the library must train professional talent with knowledge. The competency of library management staff direct impact the quality of library information services, and relate to the success of building a library of information technology. Strengthen the cultivation of professional talents, to match the professional quality of library management staff and library information service management system.

Enhance the professional skills training and do professional skills training for the job library management staff. The training content contained computer technology, information database knowledge, the ability of software applications, software maintenance capacity, the hardware works, professional foreign languages. Only train the library management staff with professional knowledge in all aspects can turn out high-quality management staff suit for information technology.

Formulate correct talent training and talent introduction system. Develop a reasonable employee professional skills training for the management of the library staff, reasonable adjustments the knowledge distribution structure of the management staff, bold use young with the high



level of knowledge. Actively introduce management talent from the outside, take eclectic talent, as long as the talent should be given the right opportunity, allowed to play their own strong points for library services to build information technology, and strive to build high-quality personnel[10].

The library management staff operational capacity is shown as Table 1.

Relevant Portion		Specific Rules
The library tube bedding work people member professional can force	Inner part	Personal knowledge reserve
		Personal ability
		Working enthusiasm
	Diagnosis-related group	Adaptive capacity
		Executive capacity
		learning ability
	Related Content	Good information organization ability
		The modern high-tech technology application ability
		The ability of the reader service
		Knowledge upgrading

6. CONCLUSION

Library as a public service organization for the community to provide knowledge services, shoulder the major responsibility to cultivate talents and improve the quality of people's popular culture. In the continuous development of information technology and network technology, it is the inevitable requirement for the development of the times to build new information library. Therefore, we put forward some suggestions to the research of information technology applications in the library, library must always strive to build information technology library, in order to provide better service to the community.

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