### The Research on University Library Services Based on Information Technology Environment

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#### ABSTRACT

With all kinds of modern high-speed development of the information technology, the Internet has been sweeping the globe. Social process of digitization, networking, information technology progresses, a new, highly effective, efficient IT environment has been formed, many advanced technologies and means are applied to the information service of the College Library. Based on the university library services to analyze and discuss problems and put forward in the information technology environment, the university library service measures and recommendations.

**Keywords:** information technology, university libraries, library services

#### 1. Introduction

Web database technology, for example, web pages dynamically generated technology, data push technology, process tracking technology, secure identity authentication technology, data encryption technology, intelligent agent technology. The application of information technology in the university library, not only fundamentally changed the way users access to information and use of information, but also for the service of the University Library broader prospect.

#### 2. University Library Services

#### 2.1 The old concept of service

Along with the social development and the improvement of living standards of people's material, the masses pay more and more attention to their own health. With the development of information technology, more and more various types of health-related website, but the service they provide news reporting class, a simple self-diagnosis and expert out-patient, from which the user can not be against their disease situation and appropriate treatment options to obtain more detailed system information, and at the same time, due to the highly specialized knowledge, people cannot really draw into something useful. University Library has a wealth of information resources,

but has long been just to the faculty and staff of the school, the students as a target, do not open to the community, and does not give full play to its value.

## 2.2 Library information resources and services of propaganda is not enough

University Library has a wealth of professional information resources, and to provide information services, but these are not known to the outside world. The survey shows that the vast majority of China University Library service work publicity it is not enough, but its promotional efforts. In my library, for example, a lot of students, teachers, clinicians and school personnel do not know I Museum collection of those resources to carry out services. Although Internet technology. communications technology development speed quickly, but, most of the domestic library is just stay in the way of publicity through the library home page, newspaper, literature retrieval course, readers training courses, seminars.

#### 2.3The information service quality is relatively weak

The service of the University Library staff should have, not only in the knowledge structure of library science, foreign languages, and expertise, in other respects, should also have a high information literacy, and the only way, in order to give full play to readers initiative. Due to various reasons, in our existing service of the University Library staff knowledge structure is relatively simple; the service concept is relatively backward, poor awareness of services, lack of service innovation spirit, service ways and means to keep up with the development of information technology pace. Although basically be able to complete the work of the existing service of the University Library, but is only confined to the lower level of information services, most university library failed to fully develop the deep-level resource utilization, and cannot provide the appropriate high-level boutique information services, thereby constraining development of information services.



#### 2.4 Characteristic Information Service

Through research, University Library of Medicine carried out a lot of characteristics of information services in China, but there are many problems in the actual service. Characteristics of information services in general to carry out smaller and fewer in number, relatively simple way of service, are obsolete; service system design is too simple, low level of service, the service module's function is not perfect, service the effect is not very satisfactory. Gave these problems exist in reality Library Features information services has brought a lot of inconvenience and difficulty; we must overcome in the process of implementation of the specialty services.

### 2.5The reader's information literacy restricts the use of information resources

With the rapid development of computer, network, communications and information technology, the digitization of information resources increasing number of traditional information retrieval methods are no longer applicable, and a variety of new databases, networks and other electronic resources retrieval approach, retrieval method, there are a lot of obstacles, resulting in the use of low readers information literacy and the ability to obtain information, and cannot take full advantage of digital information resources. The same time, due to the language barrier, resulting in many important professional foreign language information resources are not effective, limiting the use of information resources.

# **3.** University Library Services Development Strategies and recommendations

#### 3.1 College Library Services Development Strategies

Change their ideas, broaden the range of services. In recent years, more and more attention is paid to the University Library socialization. 2002 issued by the Ministry of Education, "University Library Regulation (Amendment)" clearly states "conditional for University Libraries should be as open to the community of readers and community readers. Socially oriented literature information and technical advisory services, appropriate fee may be charged based on the actual effectiveness of the results of the consumption of materials and labor or services. "2007," International Herald Tribune said, "Sine university library to the public if the full liberalization" to hold a joint investigation, a total of almost two thousand people participated in the survey. "You think whether the university library should be fully open to the public?" Survey, 75.99% of people choose to "should". Universities do not monopolize the information resources of power, the public should benefit widely from the University Library. [1] This set of data shows the strong demand and the desire of the public University Library, and more than 95% of our university library information service only for our students and teachers, and the public Close. [2]

Should emancipate our minds, as a University Library of the University in changing concepts, to broaden the scope of services? To strengthen the study of user information needs, we need to carry out the foreign information service. Carry out literature to borrow the whole of society, the delivery service is a university library to fulfill their social responsibilities for social services is the most common, the most widely used form of a.

Public information services, libraries in developed countries to carry out better of Hawaii Library of Medicine, for example, the museum set up a special user health information service department, provides health information services to the community, the public. [3] These services can let the general public, patients and their families more comprehensive understanding of the health status and relatives, in order to choose a more wholesome way of life; also allows professionals access to the latest information to assist them teaching and research work

Adhere to the "people-oriented", to strengthen the personalized information service. University Library of information services, professional personalized characteristics according to the user's interests as well as the unique requirements carry information services, the demand for a service to meet the user's personal information, it is clear based on user requirements provide information services, or information services through the analysis of user personalization, usage habits own initiative user may need to shift from the traditional "people find information for information to find someone. [4] For the different needs of the teachers and students of colleges in teaching, research and learning and a corresponding service.

Its core is people-oriented, audience for the center. University Library to the characteristics of user needs as the starting point, the full integration of a variety of information resources. Attract users to the content of the information, in order to the information inquiry ease as important evaluation indicators of user satisfaction, attention to construction of disciplines vertical portal, emphasis on the "one-stop" information retrieval, saving the user time to improve query efficiency.

Something as to the use of personalized discipline service system, which is called my library. My Library personalized service from all collections of digital information resources provided by the University Library



website, select the information they need to help the reader in my library system and its organization, access to my library later able to obtain the latest information related to this. [5] My Library Subject Service personalization innovative concept is the development trend of Libraries under Network Environment. Museum in the future direction of the service system is to develop personalized disciplines.

To provide personalized information push services: (1) the situation of the users to retrieve and use information, the statistics of the disciplines of interest to the user, profession or category of information, when libraries receive books, newspapers, or CD-ROM to E-mail notify the user, mobile phone text messages and other forms; (2) In accordance with the basic user information professional information to push their professional the latest and academic information to the user; (3) in accordance with the needs of the key disciplines, building characteristics repository so readily available to the specific information needs of the user.

Strengthen the evidence-based information service. First, the construction of the navigation page is of evidence-based medicine. is rich in information resources on the Internet, so that the majority of clinical medicine to make full use of existing evidence-based medicine resources at home and abroad, from the ways and means of access to information, reduce or avoid duplication of effort, University Library should be established as soon as possible to follow Certificate of Information navigation pages. [6] To collect network information resources evaluation, classification, organization, evidence-based medicine resources from dispersed to concentrated, from disorder into order. To this end, the College Library service personnel should be regularly culled from the Internet Website and reveal its necessary content. This is both a library information services deep-level intelligence products, is also an important part of the university library network resource development and virtual collections building.

Secondly, a good analysis of the evidence-based information, and screening Is well known that the large number of pharmaceutical literature, and a wide variety of very wide range of distribution, and the quality is good and bad, the authenticity of the enemy. University Library staff is not only to find information, and must retrieve information content citation analysis, data compilation, to identify the quality of the literature, Quweicunzhen filter out irrelevant suitable literature for clinicians and health policy makers.

Strengthen the quality training of librarians, the introduction of high-level personnel. American Library

expert Michael Gorman argued: "The library has three resources, a team of well-trained and knowledgeable librarians and other library workers; library resources; for the use of retrieval collections the number of control systems. In the role played by the United States there is a saying: Library, 5% of the buildings from the library, 20% from the information, and 75% from the quality of the librarians. [7]

It can be seen to do library information services, talent is the key. IT environment, the College Library Information Service is a high-tech librarian to master a new technology to expand the horizons of knowledge, not only to have a computer, network, foreign language and knowledge of information services, but also have to accept the excessive disciplinary expertise background in education, especially the education of expertise. To this end, the library must attach great importance to training and the introduction of senior personnel with comprehensive quality, the development of the introduction of the measures of the shortage of qualified personnel, training outside lead one to adapt to the needs of the times, professional, high-quality information services personnel.

Features strengthen collections to create special services. University Library should be the key disciplines of their schools, the emerging discipline original collection supported structure embodies the characteristics of schools security system of the core collection of literature, and to have schools on the basis of its development and integration of characteristics, to adapt to the needs of teaching, research, bibliography, abstracts, full-text databases, such as: the establishment of Anatomy, Histology and Embryology, Professional Teaching Photography, and provide online services to meet the needs of the readers of the bibliographic information retrieval and full-text literature Request research library management system, to increase investment in the construction of the virtual library resources, give full play to the advantages of the network platform, to meet the demands of readers, and the promotion of integrated library management system effectiveness greater play.

University Library Information Service effective information queries to the in-depth development an important element is how to help users meet the information needs of various characteristics of the service that is provided to the user. University Library to extend and expand the conventional information services, to carry out some of the characteristics of information services, such as: network collaboration consulting services, the museum cannot answer, can, according to the regional collaboration group transferred to the collaborative The group cooperation Pavilion answer this service domestic only CALIS Group to carry out. [8]



Strengthen readers information about the quality of education. improve the quality of readers' information.Charle William Eliot, president of Harvard University, has an analogy: "If teachers are university minds, the library is the heart of the university. Reader training is an important task of the reader service work in the university library network environment." Readers will use library, from one side to affect the play of library functions; readers to take advantage of the ability of the size of the library, directly affect readers learn the progress of the study and the ability to access to information resources. Therefore, we should pay attention to strengthening the reader's information literacy education, some university libraries have now conducted the training, just not really included in the day-to-day work. If we really want to improve the quality of information for the reader's necessary in the day-to-day service work each and every day and readers communicate, educate, it is best to form a mechanism, which can improve the level of information services.

#### 3.2 College Library Services development proposals

Intensify propaganda to guide the reader to use the library.Library Document Retrieval Course publicity of library information resources and services through the preparation of the "Reader's Handbook," Library User Guide ", to carry out a variety of training courses, you can also use the library newsletters, school newspaper, school newsletter, communication with the user, as well as posters, flyers, bookmarks and other forms of publicity, as well as the "Do Not Disturb" note, coffee is not and should not let go. Also should make full use of various information technology tools such as: the use of the campus network, the library homepage, SMS and other modern means of communication to publish all kinds of information in a timely manner, the creation of New Books for reader recommendations and reports Library Literature Resource Construction dynamic other services to enable the reader to keep abreast of new library resources with new resources and improve the utilization of resources in the literature.

Strengthen the cooperation of resources, the realization of service to the community. university library to provide social services, the demand of both the development of market economy, but also at this stage library self-improvement, self-development needs, the university library must have a free hand, seize the opportunity to strengthen the integration and use of library resources, social services while on school readers should be toward the implementation of the public service, to realize the sharing of resources. Highly developed IT, University Library, and among other university library or public

library can cooperate to achieve a wider range of services socialization. Serve the community, through three ways: First, interlibrary cooperation between developed network; between the University Library and social user network share; around the University Library, public libraries, special libraries, other information services together, division of labor, a comprehensive social service network. Also by the social services network (Social Networking Services, SNS); to achieve information services to the community, it is primarily designed to help people build a social network Internet application service. The main manifestations of SNS applications in the library are the library community (BBS). [9]

Change the service concept, to create a new service model. With the rapid development of web2.0 and Internet technology, the information mode of transmission has undergone tremendous changes, various school groups, the various roles of literature needs are also diverse, different access to information skills, and a single tradition library service model can no longer meet the information needs of a wide range of readers. University Library must change the service concept, give full consideration to the information the user types, demand characteristics, distribution of information resources, the development of science, the model of change factors to create a colorful, dynamic, one-stop for seamless link knowledge transfer and information service model.

#### 3.2.1Create a new discipline service model

University Library can borrow the activities of the "Living Library" mode, direct contacts and find related disciplines, professors, experts and scholars, is to establish contact between the user and subject experts, to create a new type of disciplinary service model, which is based on the librarian and subject experts as the main mode of service, the service model is a teamwork. This mode at the same time improves the effect of service disciplines, and also increases the influence of the participation of users and services. This mode of service so tilted to the subject area of expertise, and continues to move to a knowledge-based, professional type.

#### 3.2.2. Establish disciplinary information portal

The subject information gateway SIG (Subject Information Gateway) is a new network information service model, subject information gateway for the information needs of different users, in accordance with the disciplinary needs of users to reveal the information resources of the relevant disciplines, to provide users with high-quality information resources navigation inquiry service. [10] In order to effectively carry out disciplinary information services, University Library to broaden the sources of information resources. Filter optimization,



process integration, and internal and external information resources available to make it more in line with the needs of users

#### 3.2.3. Teaching aids to support service

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Teaching aids are also changed with the development of information technology, college teaching by traditional handwritten, wall charts multimedia, development, which requires teachers to be proficient in the use of computers, communication tools and teaching design software. However, the reality is that a lot of college teachers in the use of these tools do not get too specialized guidance and training. Therefore, the university library should be on the basis of in-depth understanding of our teaching work, for teachers to provide graphics and digital image production, video and video production, teaching ratings, and distance learning services to help teachers to develop the form of vivid and rich content courseware, the one-stop service for teachers teaching technology. At the same time, you can also open training seminars to guide teachers in the use of teaching

### 3.2.4 To create a new type of information shared space

Information sharing space is scattered all kinds of resources and service integration in a space, the user can query the museum database, network information resources or send and receive e-mail or chat on the Internet, but also access to reference books and professional publications. Need to print, scan or copy the corresponding self-service library. In encounter of problems, people can take reference to librarians, technical experts, multimedia workers through the network, and they can even get face-to-face help. [11] This mode of service as the main target in order to adapt to a variety of teaching and learning needs of the college teaching, scientific research and health care, teachers, doctors, students, to support the user open learning and teaching, and to meet the one-stop access to resources service requirements, the same time, it is possible to provide users with a mutual exchange of learning space and place, play to the functions of the library's information sharing platform. This "one-stop" service model fully meets the information needs of a modern society, people.

### 3.2.5. Establish off-campus access resources in service mode

Off-campus access to electronic resources services should be strengthened on the basis of the existing service model to meet the reading needs of users anywhere on electronic resources, in order to improve the utilization of the Library electronic resources to maximize benefit users of electronic resources, [12] this is a new model of the modern college library network services. It's more conducive to the establishment of the students meet college, faculty and staff its own teaching hospital staff demand for information resources, and at the same time, the professional resources to meet public demand.

6. Establish a cooperative relationship with Badu, Google, collection resources and the sharing of network resources. The rapid development of information technology and network technology, library services with new breakthroughs, as many libraries to establish integrated information retrieval platform. However, non-library network information services increasingly attractive, it has a simple, easy-to-use; sharing, interaction; integration, integration; rich, diverse, and other characteristics. While its service model is also diverse, Google, Google Scholar, Google Book, Google Talk; Skiros (Elsevier Science Press development); online bookstore; book review sites; video site; online community. University Library is no longer the center of the information universe is no longer the only treasure-house of access to knowledge.

#### 4. Conclusions

In order to improve the rate of utilization of resources to meet the information needs, the library should establish a cooperative relationship with Badu, Google and other well-known search engine, to achieve the collection resources and the sharing of network resources.

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