

# The Application of Network Information Service in University Library

Jinli Chen

Shandong University of art, Jinnan, China

345295753@qq.com

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**Abstract:** With the growth of the Internet, the relationship between supply and demand of information service market has changed dramatically. From digital library to virtual library, university libraries are in a new round of development and transformation period. It is of great significance to explore the application of network information service in University libraries. Firstly, this paper summarizes the relevant theories, introduces the general situation of the development of key university libraries in China, and draws out the main contents and methods of network information service in Universities from the perspective of user satisfaction survey. Secondly, it probes into the network carried out by key university libraries in China at the present stage by means of network survey and questionnaire survey. The current situation of network information service involves the comparative analysis of the subject of network information resources retrieval service, interlibrary loan and document delivery service, virtual reference service, personalized service, network-based subject service, network user training and mobile library information service. And put forward some suggestions, hoping to provide useful suggestions for future development.

## 1. Introduction

In the era of big data, both information quantity and information demand are growing at a high speed. However, the contradiction between mass information and effective use of information has become increasingly serious. People are no longer satisfied with the ability to only have a large amount of information, but need to acquire the required information quickly and accurately. Numerous people are making unremitting efforts to obtain the required information efficiently from the huge and complex information. Good information service can improve the information literacy ability of the audience to alleviate this contradiction. With the maturity of the data age, network information service has been widely accepted by people. And network information service refers to all activities of information collection, processing, storage, transmission and utilization in information institutions and industries under the network environment by using modern technologies such as computers, communications and networks. The purpose is to provide users with the network information data, products and fast services they need so that people can get rid of the complexity. Emancipating from heavy physical labor and enjoying the savings, worries and labors brought by the network, the library, especially the network information service of University libraries, should provide convenient and fast services for readers. It has always been the eternal belief of librarians that librarians strive to improve their working methods to serve readers more quickly[1].

In recent years, with the rapid development of network information resources, the most representative Internet has penetrated into almost all countries and regions, and network information services have penetrated almost all areas of society. The research of library network information service first appeared in the field of American libraries, while the literature research of network information service in China started in 1998. In 1998, Momeqi and Xu-xin, libraries of Shanghai Medical University, published "Research on User Education Model in the Network Environment" in Library Magazine, discussed the user education model in the network environment, and pointed out that the network environment has changed the traditional way users access information. The author searched the Chinese HowNet database with the keyword "network

information service of University library" as the key word, and the time limit was 2005-2015. A total of 84867 results were retrieved. Among them, 6023 were retrieved in 2005, 7025 in 2006, 7983 in 2007, 8736 in 2008, 9058 in 2009, 9327 in 2010, 8823 in 2011, 8860 in 2012, 8978 in 2013, 8267 in 2014 and 1787 in 2015. They come from the general database of online publishing of Chinese academic journals, characteristic journals, the full-text database of Chinese doctoral dissertations, the full-text database of Chinese excellent master's dissertations, the full-text database of Chinese important conference papers, the full-text database of international conference papers and the full-text database of Chinese newspapers[2]

From the above data, it can be seen that the total amount of literature in the study of network information service of University Libraries in China has not obviously declined from 2010 to 2014, that is, the total amount of literature has remained basically unchanged. From the point of view of the amount of literature, the theoretical research of network information service of University libraries in China has moved towards a mature stage of development. 。 At present, foreign scholars have made a lot of efforts in theoretical and practical research on the network information service of University libraries. Some of them focus on the concept of network information service, have gone deep into the significance and role of network information service, and have touched on the service methods of network information service. The theoretical results are fruitful. In the survey of library professional associations in the United States and other countries, it is found that library professional associations in the United States and other countries have conducted several surveys on their own library websites and accumulated a large amount of original data. The book *Library Website: Building Online Documents and Services*, published by the American Library Association (ALA) in 2004, gives specific instructions on how to provide network information services, virtual reference services, databases and copyright of e-books. "The book consists mainly of four parts. The first part is site planning and design, which explains the importance of site planning, the whole process of site construction, provides guidance to site style, stipulates site standards, and how to equip library network information service personnel, etc. The second part is the construction of information warehouse, and chooses information sources through corresponding strategies. The third part is to publicize the library website through the Internet, and put forward how to design the trademark and library image, how to publicize the library website, etc. The fourth part is the reference of digital literature collection and service, and how to collect digital information. Resources, reference services can be provided through online chat or e-mail.

## **2. Method**

Document survey method: By using literature survey method, through the collection, collation and analysis of relevant literature on the subject of network information service in University libraries, the development and changes of the research object in a period of time are studied. Based on the real situation of the original literature, referring to the research achievements and experiences of predecessors and others, through reasoning and analysis, we can further understand the hot spots and academic dynamic frontiers of foreign research, deeply understand the connotation of network information service in University libraries, and complete literature review and theoretical summary [4].

Network Survey Method: Data collection and survey statistics are conducted on websites of key universities and related websites in China. Based on the content presented by the websites of universities and libraries, information is collected, recorded, collated and analyzed. Use the Internet to understand and master the current situation of network information service of University Libraries in China. Provide basic data for the study of this paper.

Comparative analysis method: comparative analysis method, also known as comparative analysis method, is to compare objective things in order to understand the nature and laws of things and make correct evaluation. This paper mainly carries out statistics on the results of different survey methods, compares the service topics of network information services, summarizes their similarities and differences, and analyses their advantages and disadvantages. To carry out a comparative study

on the contents, characteristics and modes of network information services; to compare and analyze the existing problems and causes of network information services in university libraries by studying the current situation of network information services in University Libraries in China, and to learn from the network information service workers of University Libraries in other countries. What is worth learning from in the work [5].

Case study method: In the process of investigating the current situation of network information service in University libraries, not only the network service systems of University Libraries at all levels are investigated extensively, but also the most typical cases are taken as representatives, combined with the actual situation, through specific analysis and dissection, the solutions to the problems are sought [6].

Questionnaire survey. The paper questionnaires are distributed randomly to the self-study areas of libraries, the self-study classrooms of colleges, teachers' offices and students' dormitories in Colleges and universities. The electronic questionnaires are published on the professional survey platform "Questionnaire Star", and the questionnaire links are pushed through micro-mail, QQ platform and group e-mail.

### 3. Experiments

Up to December 31, 2016, the author has selected advanced retrieval in CNKI series databases, carried out accurate retrieval with keywords KY= (university library + University library)\* (network information service + network information service), selected library information and digital library fields in the field of information science and technology, and retrieved 925 document records. In addition, in the "Read Show" e-book system, the title search field contains "network information service" and "library information service". The adjusted search results are 27, eliminating duplication and obtaining 25 records.

(1) Statistics of literature sources. Among 925 records retrieved from CNKI series databases, 906 journals were published in the database, accounting for 97.95% of the total: 867 records, accounting for 93.73% of the total, 39 records of characteristic journals, 4.22% of the total, and 7 full-text databases of excellent master's degree theses, accounting for 7. The total is 0.76%; conference papers are 10 records; newspapers are 2 records [7].

In addition, there are 100 records of computer software and computer application disciplines and 25 disciplines of higher education in the retrieval results. It can be seen that the subject of "network information service of University library" involves more disciplines such as computer and education, which also reflects that the subject should pay attention to the intersection of disciplines in the research process. .

(2) Annual statistics of the number of documents published. The chronological distribution of the number of journal papers reflects the hot and cold trend of scholars on topic research in different periods.

Periodicals have a strong timeliness, which can reflect the trend of experts in a certain field for a certain period of time to study specific subject areas. In this paper, CNKI literature on "network information service of University libraries" is counted according to the year, as shown in Table 1.

Table 1 CNKI Statistical Table of Annual Publications on "Network Information Service of University Library" (Unit: Chapter)

Particular year	1995	1996	1997	1998	1999	2000	2001	2002
Number of documents	2	2	3	7	5	31	31	47
Particular year	2003	2004	2005	2006	2007	2008	2009	2010
Number of documents	59	51	47	65	81	93	79	75
Particular year	2011	2012	2013	2014	2015	2016	合计:	
Number of documents	81	53	55	33	17	26	961	

It can be seen that there are fewer than 10 papers on the subject of "Network Information Service of University Library" from 1995 to 1999, and the number of papers has increased since 2000. From 2003 to 2013 (except 47 in 2005), the annual number of papers is not less than 50, and in 2008 it reached a peak of 93, which is in a relatively stable period. It shows a tortuous downward trend, reducing to 17 in 2015, and increasing to 26 in 2016. It can be more intuitive to see the development trend from the schematic Figure 1 of the relevant literature year.

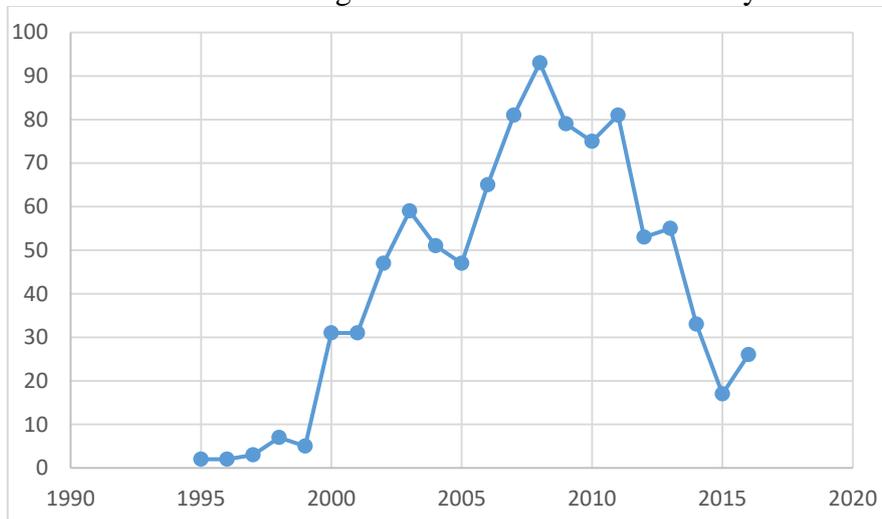


Figure 1: CNKI Statistical Chart of the Annual Publication Quantity of "Network Information Service of University Library"

It can be seen that the research on this topic is relatively mature and has a certain theoretical basis, but the research heat has shown a significant decline, such as breaking through the research bottleneck, looking for new entry is the key to choose this topic.

#### 4. Results and Analysis

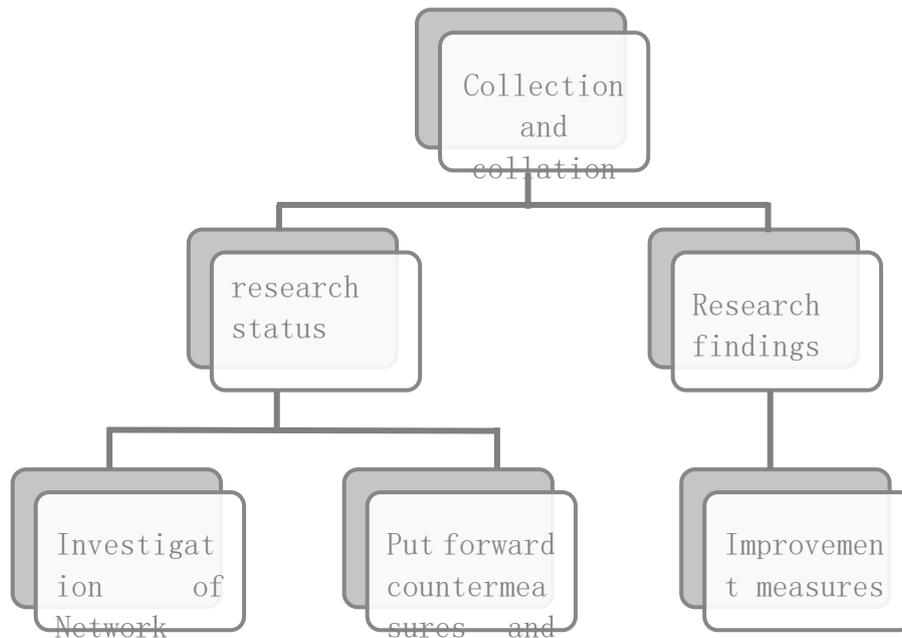
In the era of big data, great changes have taken place in the scope, means, depth of information services and readers'information needs. The proportion of network readers is gradually increasing. University libraries must adapt to the development of the times, change their concepts, actively participate in the competition in the information market, seek technological advancement and service development.

(1) Improve the quality of librarians; the quality of librarians is related to the quality and level of information services. There is a saying in the United States that library buildings account for 5%, information materials 20% and librarians 75% of the functions of Library services. This shows that the role of Librarians in library services is very important. In the era of big data, librarians should use library science and information science freely in computers and networks, study the types, levels, starting points, behaviors and methods of readers'information needs, and strengthen the cultivation of readers' information awareness and ability to acquire information. Only in this way can readers be provided with high-quality information. Service.

(2) The ways to improve the quality of University Librarians are: to ask for talents or policies from schools. Because of many factors, colleges and universities in Jiangxi can only introduce teaching and scientific research talents, and there is little hope for libraries to acquire talents. However, libraries can strive for relevant incentive policies from schools, create an atmosphere of active learning of professional knowledge, constantly improve librarians'professional skills, promote librarians' service innovation and academic innovation, and strengthen inter-library cooperation and cooperation with other departments of the school. Use the "send out, please come in" way to send the librarians with technical potential to study and communicate, and invite relevant professionals to guide the librarians to improve their professional level [8-9].

(3)Renewing concepts and enhancing service awareness are the starting point and fundamental

point of library information service. American scholars S. S. Andaleeb and P. L. Simmonds put forward five criteria to measure the satisfaction of Library users: the quality of Library resources; the responsiveness of librarians; the ability of librarians; the moral behavior of librarians; the facilities of libraries. Thus, the comprehensive behavior ability of librarians is an important factor affecting user satisfaction. People think that "being respected and recognized is done by oneself". "Doing" does not necessarily mean doing "high, big and top" things, but reflects the service level of librarians bit by bit. At the same time, "do" not only need to serve users well, but also need us to work hard to tap hidden users and provide scientific services for them. We should also change our concepts, set up people-oriented thinking, and actively and actively provide users with high-quality services [10].



## 5. Conclusion

The network information service of modern university libraries should adhere to the service concept characterized by simplification, intellectualization, individualization and diversification, so as to realize the construction of network information service of University libraries. Among them, "simplification" aims to improve the usability of the network information system; "intellectualization" aims to automatically analyze the needs of users; "individualization" aims to provide different characteristic retrieval services for different users; "diversification" aims at multi-angle and multi-information carrier information resources. In order to enrich the network information service system of University libraries, we should constantly improve and perfect a series of problems, such as the excessive tendency towards traditional information service mode, the serious "marginal effect" of retrieval mode and the unsatisfactory quality of user training. We should innovate a new two-way combination model of "tradition + initiative" and grasp the construction of "quality" of retrieval mode. Point-to-point and face-to-face training and guidance for users with face-to-face, so as to improve the management level of the library and meet the real needs of modern readers.

## References

- [1] Liu Tingting. Research on Mobile Information Service of University Library Based on Wechat Public Number [D]. Heilongjiang University, 2018.
- [2] Xue Peifeng. A new mode of University Library Service under the network information environment [J]. Inner Mongolia Science and Technology and Economy, 2017 (22): 157-158.
- [3] Ma Zhuo. Research on Situational Interaction Function Assessment of Micro-service in Digital

Library [D]. Jilin University, 2017.

[4] Anita Wu. Maximizing the value of network resources--the application and practice of network resources in University libraries[J]. Journal of Hubei Correspondence University, 2017,30(09): 51-52+57.

[5] Zhao Yujie. On the Application of Social Network in Information Service of University Library [J]. Science and Education Educational Journal, 2017 (01): 176-177.

[6] Zhang Lina. Research on the present situation and trend of network information service in University Libraries [J]. Style of science and technology, 2016 (24): 173.

[7] Zhang Lingyun. A brief analysis of the influence of MOOC on the transformation of network information service in University Libraries [J]. New West (theoretical edition), 2016 (22): 104+120.

[8] Pan Xiaowen. Application of Social Networking Tools in Information Services of University Libraries [J]. Changjiang Series, 2017 (21): 248-248.

[9] Wei Lihuan. Exploration on the Development of University Library Service Model [J]. Science and Technology Prospect, 2016, 26 (13): 243.

[10] Ren Chunmei. Necessity of building a network information service platform between university libraries and Department Libraries [J]. Journal of Inner Mongolia Normal University (Philosophy and Social Sciences Edition), 2016,45 (01): 165-167.