

# Library and Information Science in the Era of Network: Challenge, Reform and Innovation

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**Abstract:** *With the continuous development of network technology, network technology has been applied to various fields of social life and production. The development of Library and information industry is advancing with the progress of technology and has brought about great changes. How to face the challenge of the progress of network technology for Library and information science, and how to promote the reform and innovation of Library and information science is an important problem at present. This paper aims to study the challenges faced by library and Information Science in the era of network, and look forward to the future reform and innovation direction and path of Library and information science through the current situation. In this paper, qualitative and quantitative research methods combined with CO word analysis are used to sort out the interdisciplinary research topics of Library and information science, as well as the changes and comparison of Library and information science research methods in the era of network, so as to get the development trend and direction of Library and Information Science in China. Research and analysis show that the main research of Library and information science focuses on "computer and computer application". With the continuous progress of network technology, there are more and more network technologies involved in Library and information institutions, which will produce more and more research topics. At the same time, the research methods of Library and Information Science in China are also out of date. Only by applying computer technology Only by applying it to the research and enriching the existing researchers to construct the network of information resources, can the data statistics and analysis be carried out with the highest efficiency, so as to realize the positive promotion for the discipline and other disciplines. In the network era, the future development of Library and information science requires us to make steady progress and comply with the new requirements and changes of the network era, so as to make the development of Library and information science more complete and adapt to the higher requirements of the network era.*

**Keywords:** *Library and Information, Network Age, Information Science Reform, Information Resources Construction*

## 1. Introduction

With the development and popularization of computer technology, the society has gradually entered the era of "network" and "information", and the information environment affects all aspects of human society. The application of switching network technology, ATM and Gigabit Ethernet technology has promoted the rapid development of the Internet. The research and development results of palmtop computer have greatly improved the production efficiency of computer manufacturing industry, gradually reduced the price of computer and made it more portable, making Internet users double every year. The rapid increase of users and the new demand of social development for Internet have promoted the establishment of the second generation Internet. The second generation Internet is able to exchange real-time information, virtual reality and other characteristics, which makes people more and more inseparable from computers in the process of production and life in the development of modern society. Professor Anna Maria tamaro, chairman of IFLA's education and Training Committee, believes that changes in the technological environment have had a huge impact on the library and information industry. The information tide will transform the library and information science from the basic document management to the statistics and big data analysis of the library and information. Facing the new opportunities and challenges brought by the new situation, it is necessary to carry out the empirical analysis of the library and information science through the empirical analysis, and draw the law and direction of its development and change through the research, so as to adapt to the higher

era of network Requirement.

Under the background that library and information science will be transformed from document based management to statistics and big data analysis of Library and information, the Discipline Paradigm of Library and information science will also be transformed from library and information management [1]. Therefore, it is necessary to use modern tools and methods to study the development challenges faced by the current library and information science, find out the feasible suggestions to solve the existing problems through the development track of Library and information science, and explore the development opportunities and prospects of Library and Information Science in the future after solving the existing problems. Nowadays, with the rapid development of society, only if we put forward higher requirements for Library and information science and carry out the development of Library and information science innovatively, can we make the system achieve a breakthrough, so as to meet the needs of the network society.

Researchers and scholars such as Cristina Gomes de Souza have studied the changes of research methods in the development of disciplines. After comparison and analysis, they found that the research methods of Library and information science are mostly qualitative research, and they attach great importance to the research of policies and response methods [2]. According to Cristina Gomes de Souza and other scholars, in the context of today's network era, in the face of the development and popularization of digital technology, books, for the research methods of Library and information science, these technologies are also changing the research methods of Library and information science. In terms of information storage and transmission, new technology provides a new way of storage and transmission, and its speed and quality have made a qualitative leap. These new technologies make library and information science enter the digital era. In the face of the development and popularization of digital intelligence, library and information science also follows the pace of the times, making full use of digital information technology to promote the development and expansion of Library and Information Science [3-4]. ANA dubnjakovic is the main representative of visual analysis, and has published a large number of academic papers on the technology of coinage analysis in international authoritative journals. According to ANA dubnjakovic and other scholars, the co word analysis technology plays an important role in the analysis of the discipline development law of library information science. The results show that using the co word analysis technology to analyze the sample data, they first select the papers and documents of 27 journals related to library information as the research samples, and then set the region, the author, the amount of papers, the frequency of articles cited and so on. Finally, through the analysis of sample data, they found that by combining and summarizing the development trend of Library Information Science, they can provide reliable data reference for the analysis and prediction of the future development prospects of the discipline [5-8].

This paper aims to study the challenges faced by library and Information Science in the era of network, and look forward to the future reform and innovation direction and path of Library and information science through the current situation. In this paper, qualitative and quantitative research methods combined with CO word analysis are used to sort out the interdisciplinary research topics of Library and information science, as well as the changes and comparison of Library and information science research methods in the era of network, so as to get the development trend and direction of Library and Information Science in China.

## **2. Proposed Method**

### **2.1. Characteristics of Network Era**

#### (1) Network era and its characteristics

We define the current era as the era of network, because the development of Internet technology affects the world and all aspects of social life. The network era has the following characteristics: interactivity, resource sharing, openness and diversity [12].

In the era of network, there is interactivity. With the popularity of computers, the access network computers can realize the mutual transmission of information and data. The interactivity in the era of network is different from that of traditional radio and television. First of all, the information exchange in the era of network can realize the information exchange between individuals and computers, which is mainly reflected in that people can input information to computers, so that computers can provide various information and services according to the corresponding instructions of users. In addition, people can realize information transmission through computer, so as to achieve the purpose of

information exchange between people. In the era of network, resources are shared. Because of the openness of the network and the non connectivity of IP protocol, people can share data, information, software and hardware to freely access the rich resources on the network. The network era is open, which weakens the control of the state and organizations over information, making it impossible for any individual or country to control the information on the Internet. Anyone can get all the information published on the Internet, which provides the possibility for the equal ability of individual and organization in information acquisition. Openness is embodied in time, space, objects, information, etc., that is, anyone can download and store the content published on the Internet in the area covered by the Internet at any time, and can freely publish information [9-11].

#### (2) The influence of network era on other disciplines

With the rapid development of computer network, computer technology can meet the development requirements of more disciplines. The revolution of digitalization, networking and informatization has greatly changed the way of human production, storage, transmission and utilization of information, which has greatly affected the upgrading of industrial structure, the transformation of agriculture, industry and Commerce and other fields. Facing the new requirements of the network era, library and information science also needs to change the original development mode into computer technology [13-15].

### **2.2. Library and Information Science**

(1) Information science is a science that studies the generation, transmission and utilization of information. As the main achievement of the application of computer and communication technology in the field of Human Sciences, information science enables people to deeply analyze information and understand the law of information dissemination through the use of modern information technology and means, so as to improve the efficiency of information utilization. The close connection also means that the progress and development of information technology will also be reflected in Information Science, thus enriching the further improvement and promotion of information science theory [16].

#### (2) Library and Information Science

Library and information science originated from library science, which originally refers to recording historical events by writing. After continuous development, library and information science has developed into libraries, reference rooms, various information centers and information centers. In recent years, due to the continuous progress of technology, the research content, methods and technology of Library and information science have also improved to meet the social development and social needs. The scholars of Library and information science constantly adjust their research methods and directions to cooperate with the library and information departments and other scientific research institutions in Colleges and universities so as to continuously improve and develop, and provide library and information for various disciplines.

#### (3) Research direction and theme of Library and Information Science

Many new requirements have also been put forward in the research and development of library information science. From the simple Literature Information Science in the past to the comprehensive discipline of high-tech Library Information Science in the present, electronic, network and information technology have replaced the past manual operation and semi mechanization, filled the gap between disciplines, and made the research between similar disciplines, or even very different disciplines. Science involves many related disciplines, which can be used as supporting disciplines of computer, Internet, big data, management, economy, environment, biology, chemistry and other disciplines. We should use network information technology to select key interdisciplinary research directions, so as to predict the future development theme of Library and information science, and make the research direction of Library and information science more targeted and scientific research decisive. The policy is more effective.

#### (4) General research methods of Library and Information Science

Traditional research methods of information science generally include social investigation, document measurement, statistical analysis, co-occurrence analysis, link analysis, content analysis, technical route analysis, etc., that is to say, traditional qualitative and quantitative analysis is the main trend, which is data integration and analysis. It should also be realized that in the process of network era, research methods of Library and information science should also conform to the development of disciplines. The general rule is that while continuing the previous research methods, the research

methods continue to be innovated, and advance synchronously with the development requirements of the network era [17].

### ***2.3. The Problems and Challenges of Library and Information Science in the Age of Network***

#### **(1) Library and Information Science in the era of network**

In the 21st century, with the wide application of Internet and computer in the field of Library and information science, it has a profound impact on the development of Library and information science. Many countries are exploring the construction of Digital Library and Information Science in the traditional library and information science. Some countries with more advanced technology, through the full application of computer technology in Library and information science, have given targeted opinions and suggestions in library management, academic education, discipline development trend prediction and other fields. It helps library and information science scholars to improve their work efficiency, and also provides valuable research reports for researchers in other fields [18].

At present, in the era of network, it is necessary for Library and information science scholars to obtain valuable information from complex and massive data by using analysis tools and visualization platform. At the same time, it must be realized that the library and information science scholars not only need to pay attention to the traditional research fields and research methods, but also need to realize the rapid increase of data quantity and the increasingly strict requirements for data analysis quality. They should carry out big data analysis and data mining analysis to form visual data analysis results, which requires scholars to cultivate data Analyzing ability and applying this ability to scientific research practice, so that library and information science can follow up the times, meet the needs of practical research, and promote the further development of Library and information science.

#### **(2) Interdisciplinary development trend of Library and Information Science**

The cross integration of Library and information science and other disciplines is a major development trend in the future. In order to better adapt to the development of Library and Information Science in the new digital environment, and to play a positive role in promoting this discipline and other disciplines, it is necessary to expand the research scope of Library and information science, deepen the research depth of Library and information science, and pay attention to the Information Science in various disciplines. The use of science and technology, more use of network and open data, from the original concern and data collection, search and storage, retrieval further expanded to a new theoretical research method. It integrates with various disciplines to carry out big data description, analysis, in-depth mining and visualization research, so as to deepen the content of Library and information science research and deepen various disciplines of information science. To provide information analysis and in-depth information analysis for the library and information science in-depth understanding of various disciplines, so as to help the related disciplines to test the development trend of disciplines and provide theoretical support for academic development [19-21].

It should also be emphasized that the library and information science has always been an interdisciplinary subject, but the emergence of the Internet strengthens this feature. Because of the Internet, many problems related to the Internet have entered the public's vision, and many knowledge and methods have crossed our disciplines. This is beneficial to the society. We can understand the subject noumenon from a new angle and vision, and inject vitality into this ancient subject in the new era. In this process, there will be no problem of "crossing the boundary", that is to say, library and information science will not enter into other disciplines from the field of this discipline. Therefore, scholars with interdisciplinary vision should be encouraged to actively explore practical problems according to their own research interests and find the combination point of this discipline and other disciplines.

#### **(3) Research methods of Library and Information Science in the era of network**

In the era of network, data is characterized by a large number and rapid data update, which means that the traditional methods and techniques of information analysis in Library and information science have not kept up with the needs of the times. The traditional research methods pay more attention to the processing of data samples and the analysis of structured data, but these methods only focus on the clustering analysis of a limited number of keywords, co-occurrence analysis, etc. [22]. Now the academic research needs more visual analysis for the fact data and personalized data analysis, which also shows that the existing research methods for big data, semi-structured, unstructured data analysis capabilities show limitations, unable to meet the requirements of integration and analysis of these data.

Due to the aging of research and analysis process, it is impossible to realize the information processing mechanism of the whole data, coupled with the unclear grasp of the characteristics of the existing data, resulting in the final analysis results without pertinence, which can not be applied to the current final needs of digital scientific research. The analysis of data is inseparable from the support of technology, and the quality of research results is inseparable from the guarantee of technology. Therefore, in the future development of Library and information science, it is inseparable from the innovation of research methods.

#### (4) Direction of development and transformation of Library and Information Science

1) Internet has great influence on every subject, especially on Library and information science. For a long time, the development of Library and information science has been very slow. This subject has a very big characteristic, that is, it is in a very stable and slow development, mainly including the collection, preservation, processing and classification of all kinds of knowledge, providing services to the readers. The change of regime and the change of society can not change his essential characteristics. But the emergence of digitalization is a revolutionary change in Library and information science, which has a great impact. First, when these advanced technologies are applied to document information service and management, the original theories and models are no longer applicable, or even behind the development of technology, which requires us to use new perspectives and methods to respond to the existing problems; second, these technologies and tools themselves have become the research objects of scholars, such as database technology, competitive intelligence management software, e-commerce Business, cloud computing, etc., so the scope of this subject has been expanded invisibly, and the connotation has actually changed, that is, the number of subjects and contents that library and information science scholars need to study has become more [23-24].

2) As we all know, now information management and information sharing sublimate into knowledge management and knowledge sharing. In the past, library and information science was to provide better literature information services to readers, and promote the progress of human society through the effective use of information and knowledge. However, if only providing services is not enough, because the overall information environment has changed a lot, to fully understand the characteristics of knowledge dissemination in the new technology environment, the existing scholars' research of decentralization is a very significant feature. Now the knowledge dissemination is a network structure, and knowledge sharing has broken through the restrictions of technology and social status to some extent. When you find out these characteristics, you will understand that the purpose of Library and information science is to create a good knowledge sharing environment for those users in the Internet era, so that information and knowledge can flow freely and orderly between a certain individual node.

3) In terms of research perspective, for example, to meet the needs of literature to meet the needs of knowledge, from simply providing information to providing a digital resource system with complex connections, from providing a physical access to information to building an intelligent access to knowledge, from paying attention to the development of technological environment to the all-round information ecological environment, from paying attention to the development of physical factors to pay attention to human factors, we should shift the focus from how to make people acquire knowledge to how to make people and knowledge produce chemical reactions. Library and information science has never been a hot subject, or even almost forgotten by people. But in the process of building information society and knowledge society, library and information science shoulder important responsibility, which is related to the application of advanced information technology to promote social development and benefit the people. In the future, it should be more biased in the management, service, development and utilization of information resources, knowledge management, etc Continuous deep ploughing in the direction of application.

4) At this stage, from the perspective of network library and information science, we still need to improve in some places. On a large scale, in addition to the unbalanced allocation of information infrastructure resources, there is also the widespread "digital divide", and there is a lack of unified planning. Different departments do their own work and waste resources. What's more, there is a phenomenon that hardware is more important than software in actual work. A lot of resources have been invested in hardware, but the deep development and utilization of information resources are obviously insufficient. The degree of network, standardization, marketization and industrialization of database is relatively low, and the management and maintenance at the end of work are not kept up with each other, resulting in a large amount of information on the internet no matter where it comes from At any level, it presents a disordered state, without a high-quality navigation system, and the utilization effect is not as good as expected. All of these need our library and information science

scholars to explore their own theory and practice, and contribute valuable research results. Specifically, there are privacy related issues. In the era of self media, although the popularization of information and knowledge is much easier and more convenient, the issue of privacy protection still needs to be put in the first place. If privacy cannot be fully protected, there will always be concerns about the healthy development of the so-called Internet, so I think this aspect still needs the concerted efforts of the state, society, enterprises and other forces [25-26].

### 3. Experiments

#### 3.1. Experimental Setup

(1) Interdisciplinary research direction of Library and Information Science in the network era. Based on the statistics of 5872 papers cited, research fields, number of first author's papers, core papers, paper topics, affiliated units and other data of Library and information science related scholars, this paper introduces them into excel, and uses self-made programs to process and count them. On the basis of these data, this paper attempts to look forward to the development of interdisciplinary research directions and frequency of different scholars in the network era the future development direction of the subject of Library and information science provides guidance for the development and transformation of Library and information science. The analysis results are shown in Table 1. There are 162 interdisciplinary research fields of Library and information scholars. Only five areas of the highest concern are selected here, namely, computer and computer application, news media, higher education and publishing, and business economy. Among them, computer software and computer application have become the most popular interdisciplinary research direction of Library and information scholars, which also reflects the library and information scholars' interest in computer and Internet subjects in the era of network High attention.

Table 1: Subject areas among library and information scholars

Research Area	Frequency
Computer software and computer applications	3000
Journalism and media	289
Higher education	207
Publishing	188
Business economy	170

(2) Research methods of Library and information science application in the network era

In the era of network, scholars can collect a large amount of information in time and effectively. With the continuous innovation of technology, the research methods and methods of Library and information science are also constantly updated. In traditional library and information science, questionnaire survey or historical research is a more commonly used research method, but with the continuous progress of the times, researchers will better understand and choose the right one. In other words, with the in-depth development of the network era, the research ideas and methods of Library and information science will be further expanded. In the research of Library and information science, we should fully grasp the information tide and technology tide brought about by the network era, conform to the laws of the times, break the original ideas, and expand the research methods of Library and information science, which is beneficial to the future books and information science. Library information science can play a positive role in research method training and practical application. In order to compare the changes in the diversity of Library and information science research methods in the Internet era from a time perspective, three representative library and information science journals are specially selected, from which two groups of data are extracted for comparison, one is 2008-2009, the other is 2018-2019. Table 2 list the changes in the number of research methods of three journals in each time period Ratio.

Table 2: Number of research methods used in three journals

Study volume change	A Journal		B Journal		C Journal	
	2008-2009	2018-2019	2008-2009	2018-2019	2008-2009	2018-2019
A kind	89	70	72	89	79	82
Both	12	22	15	10	10	13
Three kinds	3	5	2	6	4	5
Four kinds	0	2	1	1.5	2	3

## 4. Discussion

### 4.1. Internet and Library and Information Science

(1) The experiment shows that computer and computer application field is the most studied field in the interdisciplinary research direction of Library and information science scholars, as shown in the figure1, which also fully proves that in the network era, library and information science scholars pay more attention to the influence of the Internet field on the production of Library and information science, and through the study of the deep connection between the new Internet technology and Library and information science It can guide the future research direction of Library and information science. Therefore, the authors in the field of computer and computer application carry out secondary retrieval. According to the frequency of citations in the experiment, the top 20 library and information science scholars who pay most attention in the field of computer are selected. The research topics of these scholars are analyzed in common terms, and all the documents of these 20 scholars in the field of computer are collected one by one 397 records were obtained, including 990 keywords. The keywords were manually combined with synonyms to remove the general and ambiguous keywords, and 153 effective keywords were obtained. The ranking was based on the word frequency, and the top ten keywords were listed here, as shown in Table 3.

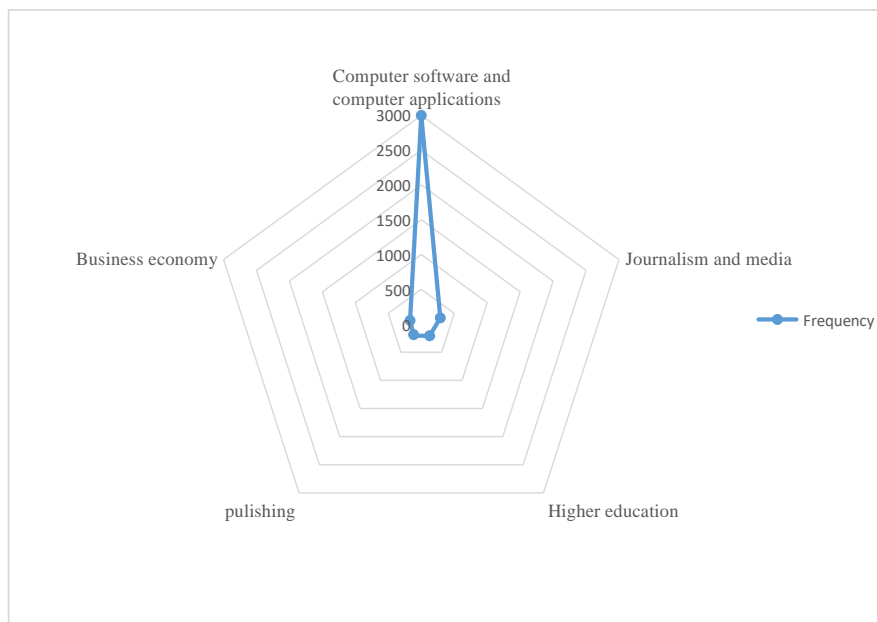


Figure 2: Interdisciplinary research trends

Table 3: Keywords of library and information science related research

Ranking	Keywords Word	Frequency
1	digital library	120
2	Meta data	18
3	Digital resources	17
4	Database	16
5	Resource Sharing	12
6	The internet	10
7	Personalized service	8
8	Big data	7
9	Data mining	5
10	Digital resource integratio	5

(2) As shown in Figure 2, The research of Library and information scholars on computer software and computer application mainly focuses on "digital graph". In the library, the frequency of simultaneous interpreting of the digital library is as high as 120. This is because the digital library can store books information without any damage, and the digital library can break through the limitations of time and space, and has the characteristics of convenient access and fast data transmission. In the networked age, the digital library is expected to become an important carrier of library information

management along with the traditional library. The word frequency of "meta data" ranks the second place, which needs to be traced back to the earliest application of computer in the field of Library and information science. Computer was first applied to library and Information Science in order to deal with the meta data of bibliography. In the future development, it is more necessary to make full use of the Internet for the coding and management of books to help the library realize the demand for database architecture. The word frequency of "database" and "database" is 17 and 16, ranking the third and fourth respectively, which fully shows that in the era of network, knowledge acquisition is more scattered. In order to guarantee the systematic analysis, scholars need to apply the achievements of data base in the field of computer to library and information science, and establish the characteristic database related to library and information science. In addition, the frequency of key words such as resource sharing, network, personalized service, big data, data mining, and digital resource integration is also very high, which also reflects that library and information science scholars are committed to meeting the needs of the times, as well as the information characteristics and specific requirements of the network era, and carry out interdisciplinary research in the field of computer.

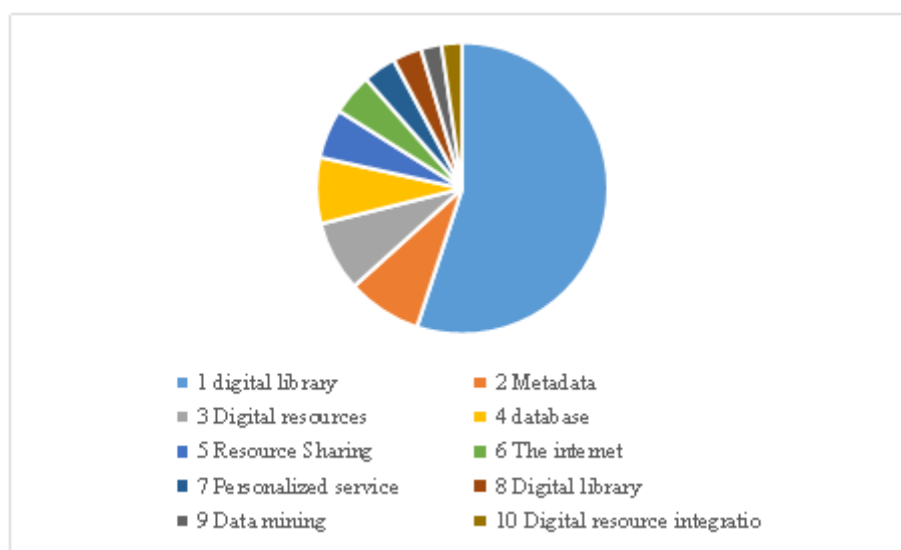


Figure 3. Keywords of library and information science related research

#### 4.2. The Expansion of the Research Content of Library and Information Science in the Era of Network

(1) After research, we know that the most concerned interdisciplinary field of Library and information science scholars is the computer field. In the era of network, library and information science should also comply with the requirements of the times to carry out content reform and innovation. In this paper, we select three representative library and information science journals in 2008-2009 and 2018-2019 for statistics. The results are shown in the figure3, which can be published at present, in the era of network, the research methods of Library and information science are gradually increasing. More and more scholars use three or more methods to study. This trend is expected to be more significant in the future.

(2) In terms of the organization and retrieval of Library and information, due to the rapid increase of the amount of data available and the rapid update of data in the current network era, new technologies and tools are needed to process various data from different data sources, which requires the evolution from the original collection, storage and retrieval of Library and information to the big data collection, storage and retrieval that should be vigorously developed Storage and retrieval of data and network description and recognition. In terms of research methods, traditional methods such as social survey, literature measurement, statistical analysis, co-occurrence analysis, link analysis, content analysis and technical route analysis cannot meet the needs of reality. It is necessary to integrate the technical achievements formed in the era of network into the research of Library and information science, and use big data analysis tools and research methods to carry out big data algorithm and mining. Therefore, library and information science can follow up the times, meet the needs of practical research, and promote the further development of Library and information science. As shown in Table 4, the basic theoretical system of Library and information science should be further improved. The basic



theories of Library and information dissemination, utilization theory, library and information document distribution theory, and Library and information economic benefit theory change into big data strategic research, network benefit research, and network process research.

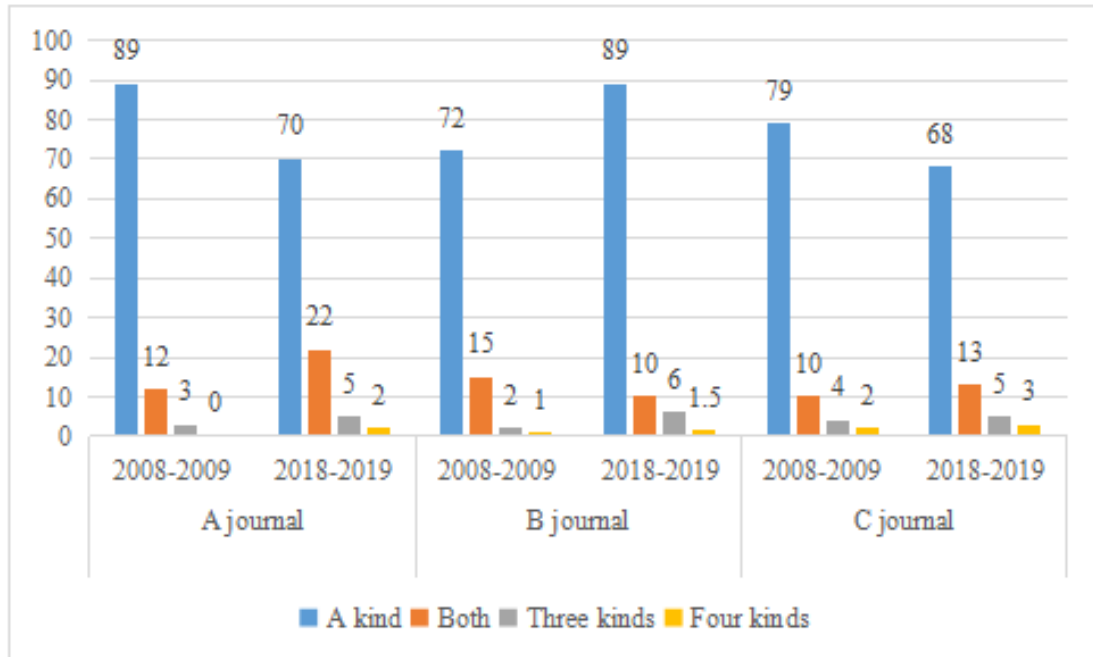


Figure 3: Number of research methods used in three journals

Table 4: Expansion of library and information science research contents in the network age

Research category	Research content	Content development
Basic Theory of Library and Information Science	Library and information dissemination, utilization theory, library and information literature distribution theory, library and information economic benefit theory	Big data strategy research, networked benefit research, networked process research
Library and Information Organization and Retrieval	Collection, storage and retrieval of library information	Big data collection, storage and retrieval Networked description and identification
Library and Information Science Research Technology	Social survey, biblio metrics, statistical analysis, co-occurrence analysis, link analysis, content analysis, technical route analysis	Big data analysis tools and research methods, big data algorithms and mining calculations

(3) The influence of network era on data collection efficiency of Library and Information Science. In order to verify the impact of the network era on the efficiency of Library and information science data collection, 6000 questionnaires are prepared for online and offline collection in a week, and the number of questionnaires collected every day in a week is counted, so as to verify the impact of the network era on the efficiency of Library and information science volume collection. As shown in Figure 4, for the same 6000 questionnaires, the recovery rate of the questionnaire in the first three days before using online resources is as high as 64%, and faster than that of the manual data collection on the ground. 140 of the manual data collection on the ground still fail to be collected by the deadline, while the online data collection can accomplish 100% of the task. The survey results also reflect that the network era can improve the collection of Library and information science data Efficiency.

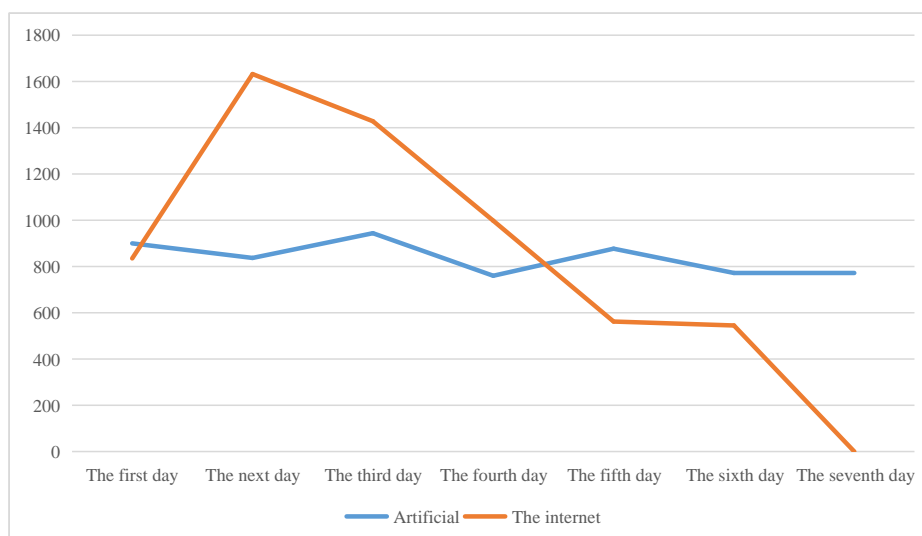


Figure 4. Questionnaire recall within one week

## 5. Conclusions

(1) The research shows that as an interdisciplinary applied discipline, library and information science is in a mature stage of discipline development. Scholars in the field of Library and information science have paid attention to the future trend of interdisciplinary integration of Library and information science and other disciplines. Therefore, in the background of the network era, in order to better adapt to the new digital environment, library and information science can adapt to the times. With the development of Library and information science, scholars need to expand the research scope of Library and information science and deepen the research depth of Library and information science. In terms of the selection of future research topics of Library and information science, scholars should focus on the research and application of computer technology to library and information science, improve the theoretical system construction of Library and information science, and innovate the organization and retrieval methods of Library and information science, so as to achieve the goal of The positive role in promoting the discipline and other disciplines.

(2) On the other hand, the research shows that there are outdated research methods in the field of Library and information science, and the questionnaire survey method and historical research method are no longer the main methods of Library and information science research, while the big data analysis tools and research methods, big data algorithm and mining calculation methods are gradually becoming the research methods often chosen by the library and information science circle. Therefore, we must also realize that in the process of the network era, the research methods of Library and information science should also conform to the general laws of discipline development. While continuing the previous research methods, we should constantly innovate the research methods and move forward with the development requirements of the network era.

(3) In this paper, qualitative and quantitative research methods combined with CO word analysis are used to sort out the interdisciplinary research topics of Library and information science, as well as the changes and comparison of Library and information science research methods in the era of network, so as to get the development trend and direction of Library and Information Science in China. Research and analysis show that the main research of Library and information science focuses on "computer and computer application". With the continuous progress of network technology, the network technology involved in Library and information institutions is more and more diverse, which will produce more and more topics for inquiry. At the same time, there are also outdated phenomena in the research methods of Library and Information Science in China, and the requirements of the network era. For the development, utilization and integration of information resources, the era background of digital information, hydraulic pressure demands that more high-tech research tools should be gradually used in Library and information science, and a variety of research methods should be used, so as to improve the core knowledge system of Library and information science. Only by applying computer technology to research, enrich existing research parties and build information Only when the resources are networked, can the data statistics and analysis be carried out with the highest efficiency, so as to realize

the positive promotion for the discipline and other disciplines. In the network era, the future development of Library and information science requires us to make steady progress and comply with the new requirements and changes of the network era, so as to make the development of Library and information science more complete and adapt to the higher requirements of the network era.

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