

# The brief analyzation of library management model in the era of big data

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## Abstract

With the rapid development of computer technology, information technology is slowly replacing the traditional management. Library information management system is becoming a effective method to improve work efficiency and scientific managing books. To promote the development of the network resources and digital construction, establish the network sharing and interactive development mode of management, is conducive to breaking the isolation of library management, changing the inefficient literature using of all over the country. Create online digital library, the literature managing ability of librarian can be improved via virtual information platform, to achieve the automation and electronic library management, provide the accurate, rapid, fine library management information to readers.

## Keywords

big data, information technology, library management.

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## 1. Introduction

With the development of science and, driven by cloud computing and internet technology, the world has entered the era of big data. More and more people are choosing a more convenient digital books, digital reading bring people into the new information space. library resource management how to deal with the challenge and seize the opportunities for development, is a studied and solved problem.

## 2. The content of big data

Big data is a huge multi-source data set. For some time, our society's digital, network, information process continue to accelerate, people's production and life has brought extensive and profound influence, in this process, due to human interaction, human-computer interaction with increasing frequency, often explosive immeasurable mass of information, and the role of the Internet and mobile communications tools such as instant data between broken the barriers of space, a large amount of the intersection between the fields of data collection, the depth of cross-domain data association is stronger, is a breakthrough strong economic and technological strength. The emergence of big data is not a sudden, it is the inevitable result of the development of information science and technology, it is mainly based on the following driving force: the Internet, mobile Internet and Internet of things.

At present, how to define big data, diverse yet formed consensus in academic, but the general idea is the same, are the basic characteristics of large data described inductive definition. One of the most famous representative is 3V definition in academic, needs to meet three characteristics which is the size, diversity and high speed.

In addition, from a practical level, it is the whole data, kinds of data types, the value of low density, the processing speed of a series of features. In short, big data is the product of progress in the IT industry, with the huge surge in the amount of data and data derived from a social trend, it is not only a huge amount of data on a large collection, sorting, further data analysis, summary. Businesses can gain instant

useful information based on their own need, and thus the formation of traditional data management different operating modes.

### **3. Current situation analysis of library management**

Currently, both the major universities, or the provincial library, using computer to manage library information, which can improve the efficiency of management and be convenient to borrowing and reading. However, the information management of some libraries during still had some problems, mainly in the following aspects:

#### **3.1 The design of database needs to be optimized**

In the information age, the library can effectively preserve and extract of the kinds of data, not only effectively overcome the defect of the traditional library management methods, but also correspondingly enhance the service level of the library. However, in the actual application operation, a few library staff because of the limited level of the computer, are not familiar with the application related books and search tools, which made it difficult to optimize the database program. Especially with the modern information technology increasing, which are causing pressure in the library database update and upgrades.

#### **3.2 Library information resource optimization level needs to be improved**

The concept of traditional library management is mainly collection, seldom using as a general idea and traditional ways of library service is single, mainly to borrow the books and reference materials, provide lending site for the readers, just only established the carrier of knowledge dissemination which using book, provide the most primitive the low level service to the readers. This can't keep abreast of the large data network era footsteps, is difficult to understand the reader's real needs, can not sort out and gather big data information resources, also does not have the individuality and the characteristic service, can not meet the information needs of readers in a higher level and diversified, to guide the reader to use library resources in deep level.

At the same time, the lack of unified standards and planning of the digital mode in some libraries, so that the development of library management database is hindered. Many library's old book resources need to be improved and new published books high price bring certain pressure to the library collections. Therefore, how to improve the information resources optimization of the library is an important way to improve the level of library management.

#### **3.3 Librarians' quality is low, lack of compound talents**

With the advent of the internet of things, the library which is based on book can not meet the needs of social development whether the traditional library management philosophy or in the way of service, because more and more readers are need of new knowledge and deep excavation in certain areas. But for now, most libraries are lack of insufficient attention to enhance the comprehensive quality of the librarian, especially the part of managers are still using the traditional manual operation and management experience managing the library resources. A serious lack of knowledge and training of large data, learning and communication opportunities, study abroad, etc., leading to be a lack of talents. So it is very important how the librarians from traditional management turn to network management.

### **4. Opportunity to library management in big data**

Some people believe that the big data form a great impact to the management of the library information. Because along with the network technology' changing and the diversification of reading terminal, people's reading habit has the quietly changed, no longer rely on books, obtain data and information from the network which is almost zero cost, meet the reading needs of most people. The survey shows that the number of people reading traditional publications decreased year by year, while the number of people reading needs of the new media to increase by more than 15% per year. This also shows that the

scope of the book information is not limited to the traditional paper literature, because in the paper book materials, while the decline in the amount of reading, we can see that the amount of digital book data is rising.

That's being said, the traditional library management business seems to have great impact, but they are not, entering an new development opportunity. If you can change ideas, make good use of new Internet technology, satisfy the reader's reading habits, will reshape the traditional book brilliant. For example, the original way of searching data is run to every library and bookstore, now searching in a computer or mobile phone, will be able to find the most suitable books and reference materials in the vast amounts of data, which can be described as a piece of cake. Big data can also tell you in which bookstore or library to find the information you need, and even provide electronic version on the Internet, which greatly improv the efficiency of work. The original construction of a library need spend huge sums of money to collect all kinds of books, in a certain extent caused cost consumption and waste of resources, now multi channel for the spread of electronic books, newspapers and periodicals, thousands of libraries and bookstores' voluminous literature moved to the Internet for readers to access, saved a large number of cost.

## **5. Countermeasures of library management in big data**

### **5.1 Establishment of library management information system**

The basic management of library is collection and reading, so the network information management system must be establishment, the first to do borrow books, return books and classify books. First of all, the library' books must be collated and classified in details, and make good use of the library management system and applications software which has been exploited on mobile phone. Through the software, the readers can independently query book name, the date of borrowing book, the date of returning books ,book recognition stripes, and other loan information, can also know whether a book to find in recent; the third step, transact personal electronic library card for the readers, remind readers is due; the fourth step, through the books query searching system search book which did not return, remind readers to return the books in time; the fifth step, we need to develop a library borrowing time segment query system, which can analysis information demand, and strengthen the management work.

### **5.2 Strengthen the using of network information resources**

Traditional libraries have pay more attention to the supporting literature data collection, collation, ignore the timeliness and historic of the information, which often turn out to be with a low using of literature resources and even a waste of large of resources, so it is necessary to use the power of the network information resources, develop a variety of precious library resources. To analyze the various needs of readers, to provide targeted information resources. All libraries should adhere the principle of resource sharing, participate in the library alliance, enjoy the various free resources provided by the league, and group purchase the foreign digital resources.

### **5.3 Improve the quality of librarians**

In order to effectively realize digital library management, provide readers with a full range of information services based on network, talent is the key. The librarians must expand the knowledge level, improve the professional skills, enhance the consciousness of active service, master the word processing skill, database retrieval technology and network technology, all of librarians must master the using of computer and other information carrier, quickly and accurately complete the acquisitioning and cataloguing, retrieval, query of book and so on.

## 6. Conclusion

In summary, the library management system is the information management system, which uses the information technology to carry on the electronic management to the library. the library management system based on the big data, compared with the traditional manual management mode, which can provide convenient retrieval, fast retrieval, accurate retrieval results, a large of data storage, low cost, save resources, and has good man-machine interface and other convenient functions, so as to give full play the function of library in people' learning, provide accurate, rapid, fine library management information for vast readers.

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