

## Management and Information Collection System for Small and Medium-sized Books in Remote Areas

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### Abstract

**A book is the crystallization of human wisdom and the ladder of human progress. Opening a good book is a profound dialogue with the wise. However, some children have never even seen extracurricular books. The only thing they can read is textbooks. As we all know, reading is the basis of learning, and childhood is the key period to develop reading ability. Reading is crucial to the growth of young people, especially for children in need. Reading is not only an important way to broaden their horizons, but also an important way to change their destiny. Next, this article will discuss in detail the modernization of education in remote areas, equal rights in education and the nature of public welfare under the condition of popularizing remote areas.**

### Keywords

**Small and Medium-sized Book Management and Information Collection System; Library Mode; Remote Area.**

### 1. Current Situation of Book Resources in Remote Areas of China

Due to some differences in China's development, there are also differences in library resources. Although many big cities in China have rich library resources, they are located in remote areas. Library resources in these areas are often very scarce. In some remote or third and fourth tier cities, libraries have little or no information technology. Considering the cost, it is unlikely to deploy a more comprehensive book management and information collection system in a short time. These differences will seriously affect social education. Therefore, we need to combine the new media with the positioning of the library to improve the richness and quality of books in remote areas.

According to the "Investigation Report on Book Borrowing of Some Urban Residents", the average annual book borrowing volume of residents from 2000 to 2010 was 3.5 books per person; From 2010 to 2020, the average number of books borrowed by residents is 7.3 per person. With the continuous development of society and the expansion of cultural atmosphere, the opportunities for contemporary people to read have increased and their desire to read has improved. More and more residents have started to borrow books, creating a good market environment. At the same time, according to the survey, more than 80% of the residents use the traditional way - library to borrow books, and less than 20% of the residents use other ways to borrow books. Therefore, our project has huge market potential. In some urban libraries, the book management and collection system is not perfect, resulting in that when you go to the library to borrow books, you find that you cannot find the location of the book or there is no such book. In response to the above phenomenon, we deploy remote servers to enable users to

upload, index and download books and file information of the local library using mobile phones as the carrier, When users want to read a book, they can find out whether the book exists in the local library and its specific location through the retrieval system at any time, thus saving the cost of the library and the time of the borrower. According to the results of the questionnaire released for this content, 90% of the respondents said they agreed with the development of such projects, which has great potential. On the other hand, during the market survey, it was also found that a small number of people chose electronic reading, newspaper reading and bookstores in recent years. Therefore, in the process of developing server and APP software, we should learn from the advantages and disadvantages of other reading methods, select the essence and discard the dross.

## **2. Necessity of Applying Small and Medium-Sized Book Management and Information Collection System**

### **2.1. It is Conducive to the Cultivation of Social Talents**

By popularizing the management and information collection system of small and medium-sized books in remote areas, we can realize the modernization of education in remote areas, equal rights in education and the nature of public welfare. The modernization of education in remote areas can help cultivate social talents. It is well known that the remote areas are extremely short of books, the number of books in their libraries cannot be compared with that in cities, and the quality of books is also very different, so that the lack of rich library resources will make the remote areas unable to cultivate the human resources needed by society. In order to solve this problem, we have established a small and medium-sized book management and information collection system in remote areas to collect information in remote areas, reasonably manage and distribute books in remote areas, so as to enrich the knowledge of local students, develop human resources and promote social development.

### **2.2. It is Conducive to Improving the Utilization Rate of Book Resources**

In addition, by popularizing the management and information collection system for small and medium-sized books in remote areas, we can realize the modernization of education in remote areas, equal rights in education and the nature of public welfare. Books in remote areas also help to effectively use library resources. Some books in urban libraries will not be available for a long time. If they are stored in the library for a long time, it will lead to waste of library resources. The establishment of small, medium and small library management and information collection systems in remote areas can effectively distribute untranslatable books, thereby improving access to library resources.

## **3. Feasibility of Popularizing the Idea of Small and Medium-Sized Book Management and Information Collection System in Remote Areas**

### **3.1. Industry Feasibility**

At present, most of the book management systems on the market are locally deployed servers. The advantage of such servers is that the information exists locally and is less subject to external conditions, but the disadvantages are also obvious. They occupy land, cost money and maintenance time. With the development of the network, all walks of life increasingly tend to adopt cloud computing to reduce local economic, time, space and other pressures. At the same time, there are also many enterprises providing network storage services in the industry, but none of them have set foot in the field of book management. Therefore, with the support of cloud storage, cloud computing and new generation network coverage, the project can gain a

place in the cross field of network services and book management at the initial stage of its establishment.

### **3.2. Market Feasibility**

At present, small and medium-sized libraries in remote areas and libraries in some schools are lack of information management ability. Considering the cost problem, it is unlikely to deploy a more comprehensive book management and information collection system in a short time, so this project can solve users' demands for cost and experience. At present, there are basically no manufacturers providing such services in the domestic market, so when this product is put into market, there will be no competitive products in the short term, which will also help us polish the product in the long run.

At present, under the fierce competition among the businesses providing cloud storage services in the domestic market, only Tencent WeCloud, Baidu Netdisk, Alibaba Cloud, Huawei Cloud and other top enterprises are left. They provide high-speed downloads and 6-8T large space storage through a monthly membership fee of 25-30 yuan/month. For server leasing, refer to Alibaba Cloud and Huawei Cloud Processor 1 core 2G, 1 core 4G, bandwidth 10-30M, and 40-100GB storage space for 200-600 yuan per year. As this project is similar to the latter, the annual payment model will be adopted, and the lowest price is expected to be 200-300 yuan per year. Considering the price competition and product competition in the subsequent market, the price may be adjusted appropriately.

### **3.3. Feasibility of Rural Development Trend**

In October 2020, the Propaganda Department of the CPC Central Committee issued the Opinions on Promoting the Work of Reading for All to further promote reading for all. This project is corresponding to the call of "reading for all" activity, aiming to improve the reading experience of township residents, improve the reading volume of the whole people, and build a learning and cultural power. Secondly, provide convenient and cheap book management system for small and medium-sized and remote school libraries to improve the reading experience and interest of the masses.

In order to promote the implementation of the strategy of agricultural modernization and rural revitalization, China has put forward a series of proposals for building a new countryside and rural modernization. According to the system of popularizing the management of books in primary and secondary schools and collecting information in remote areas, the macro trends of education modernization, education equality and rural modernization in remote areas are fully consistent. The promotion of books in remote areas through small-scale book management and information collection systems in remote areas can effectively increase the resources of local libraries, thus promoting local development.

### **3.4. IT Feasibility**

This project mainly requires fast network services and high popularity of user terminals. The key and difficult points are the preparation of web pages and software on the server and client. First of all, with the popularization of the national network, the problem of network services has been solved. Moreover, smart phones and computers at user terminals have also been popularized in villages and towns. For the key and difficult points of the project and the preparation of the program, in the process of promoting the project, teachers who are proficient in this aspect will also be invited to help the team solve this problem.

In addition, with the development of science and technology in China, new media has also made some progress. At present, China's new media can not only provide multi terminal viewing, but also be simple and fast. With the support of modern information technology, library staff can distribute and distribute free books, and manage and register books used by local residents.

Therefore, library staff can use small and medium-sized library management and remote area information collection system to share books in remote areas.

#### **4. The Goal and Content of Popularizing Small and Medium-Sized Books Management and Information Collection System in Remote Areas**

##### **4.1. Construction Objectives**

With the establishment of public libraries, various types of libraries have begun to be established and popular in China. Based on this background, it is more and more urgent to solve the problems of books and archives management and information collection in libraries. This project will solve the problem of space and economic cost of establishing servers locally for users, and make better book borrowing and returning experience and reading experience for readers as the first task of the enterprise. It will implement the concept of learning to become a powerful country in remote areas, provide more convenient operation and management of the library, and provide better service for readers' reading experience.

##### **4.2. Products and Services**

With the development of the network, all walks of life tend to adopt cloud computing to reduce the local economic, time, space and other pressures. At the same time, there are also many enterprises providing network storage services in the industry, but none of them have set foot in the field of book management.

The innovation of the small and medium-sized book management and information collection system project in remote areas lies in the organic integration of network services and book management through cloud storage, cloud computing and the new generation of network covered remote servers, forming a new cross domain, This paper puts forward a new solution to the problem of low informatization of books and archives management and information collection in remote area libraries.

The existing local deployment servers that can solve library management exist and are being put into use, but most of the local deployment servers have the problem of high cost. For small and medium-sized libraries and libraries in remote areas, the volume of books and information is not as large as that of large libraries, so it is overqualified to use local deployment servers. At the same time, it is a big problem whether you can afford to use local deployment servers. By deploying remote servers, the book management and information collection system can not only meet the needs of small and medium-sized and remote area libraries for information processing, but also reduce the costs they have to bear.

#### **5. Principles of Popularizing Small and Medium-Sized Books Management and Information Collection System in Remote Areas**

##### **5.1. Principle of Comprehensiveness**

When we share books in remote areas, we must first follow the principle of integrity. We should not only read books in a professional way, which will seriously affect the free and comprehensive development of the population. Therefore, we must respect the principle of good faith and protect the richness of library resources.

##### **5.2. Systematic Principle**

At the same time, books must follow the system principle. Library staff must maintain a strict database containing debit books, clocks, and consignee details. The system principle can effectively prevent the library from losing books in the process of books.

### 5.3. Cooperative Principle

In addition, book exchange should follow the principle of cooperation. As mentioned above, many people in the school and society actively support book exchange activities. Therefore, when we share books, we must cooperate with people from all walks of life to reasonably allocate work and improve book exchange.

## 6. Conclusion

In general, by popularizing the modernization of education in remote areas, the equal rights of education and the nature of public welfare, the book exchange in remote mountainous areas not only helps to improve the skills of professionals in all areas of life, but also helps to make more use of library resources. The book exchange in remote areas is not only in line with the current trend of rural development, but also supported by schools, all sectors of society and modern information technology. Therefore, with the popularization of small-scale book management and information collection systems in remote areas, books in remote areas are crucial and feasible. But in book exchange, we should also adhere to the principles of integrity, system and cooperation. It is believed that book exchange in remote mountainous areas can effectively improve the learning efficiency of students in remote areas, thus making significant contributions to the development of China.

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