Online Information System Resource Control Mechanism Based on Network Resource Directory

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Abstract: The resource control mechanism of online information systems has two main types of structures. One is a system module that is independent of data, and describes, stores, and manages related resources in the network and how they are associated in a manner similar to a data dictionary. The other is to integrate the resource control mechanism into the system data, and realize the dynamic control of resources through the connection of data and data. Here we focus on the former situation, which we call the resource control mechanism based on the network resource directory. We will explore the latter type of structure in detail later. The information network-based library intelligence system serves as the interface between the user and the entire information environment, and needs to dynamically link and utilize databases and systems distributed throughout the network. This paper describes the basic structure and operating mechanism of this type of system. The core part of this type of system, the specific tasks, and the composition and implementation techniques of the network resource control mechanism will be discussed in detail.

1. Introduction

Nowadays, with the rapid development of science and technology, the Internet era is quietly coming. This has not only greatly improved the people's life and production quality, but also subtly changed the people's real life. More and more Internet industries are emerging, and people are gradually improving their awareness and use of information networks. However, practical problems have arisen in the course of its development and have hindered the long-term development of the Internet industry. Under the social network environment, with the continuous expansion of user needs, the construction mode of library digital information resources has also been innovated and developed, which has pointed out the direction for the digital development of libraries. Under the social network environment, the library can continuously expand the scope and scale of digital information resources construction by using the network media in combination with the needs of users, and the digital resources construction has achieved good results. The library uses digital technology, resources and policies to interact deeply with the social network environment and provides users with better quality knowledge services based on optimizing their own resources, providing more space and possibilities for the construction of digital information resources.

2. Principles of Information Network Optimization and Resource Management Strategies

Different strategies will have different effects in the choice of the information network optimization and resource management and control strategies of university libraries, But from its essence, the choice of resource management strategy is always inseparable from several principles. A sensible university library will make reasonable choices based on its own needs and its own characteristics, based on the following principles.

(1) Resource management strategies must be appropriate, not so-called optimal or the best. Every university library has its own characteristics. If the library blindly copies the resource management strategies of other university libraries, it seems to be learning advanced experience, but the results are often not necessarily the best.

(2) The choice of resource management strategy needs to be strategic. University libraries have

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their own strategic plans. The choice of resource management strategy needs to meet the strategic planning of the university library itself, at least to ensure that there will be no conflict between the two. In addition, if the resource management strategy of the university library involves the development plan of the subsidiary. Then university libraries need to repeatedly demonstrate their operability under the premise of strategic selection of resource management and control strategies to ensure that resource management and control strategies provide reasonable control over subsidiaries.

(3) When a university library chooses a resource management and control strategy, it needs to be classified, but it cannot be generalized. Even within the university library, the resource management and control strategy cannot be exactly the same, but needs to be flexibly transformed and adjusted according to the different business characteristics of the subsidiaries of the university library. On the basis of the main resource management and control strategies, plus the resource management and control strategies that are suitable for the actual situation of different subsidiaries. This can ensure that the resource management and control strategy of the university library is the most appropriate and reasonable, so that it is truly applicable to the development of each subsidiary.

(4) The resource management and control strategy of university libraries is not static, but it is continuously iterated and updated with the changes of the current economy and market environment, as well as the continuous development and growth of university libraries. On the one hand, the resource management and control strategy needs to be changed accordingly with the development of university libraries, but the resource management and control strategy also needs to conform to the overall development direction of the society, to ensure that it keeps pace with the times and does not reverse the trend. In addition, when the internal conditions of the university library's business change, the corresponding resource management and control strategy also needs to change accordingly. All in all, when selecting the optimization of information network and resource management and control strategy, university libraries must always keep in mind the above four principle information as shown in Figure 1.

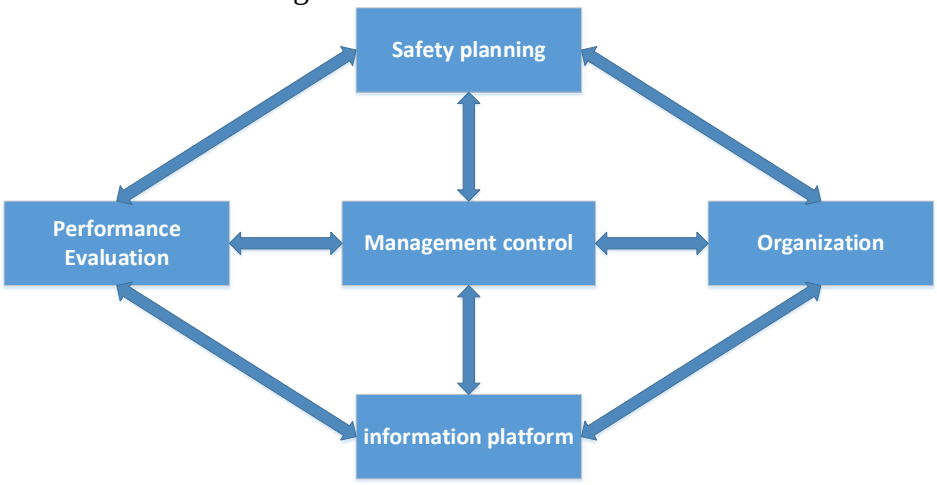

Figure 1. Security Management / Internal Control Model

3. Information Network Optimization and Resource Management Strategy Related Models

3.1. General Paradigm of Service.

Because cloud computing itself has a certain degree of sharing, it can integrate the data information of scientific research institutes, universities and science and technology management departments on the basis of orderly sharing. This can truly achieve an overall improvement in resource utilization efficiency, and improve and optimize sharing. In the process of construction management system, it is necessary to combine regional realities and adopt normative as the basic principle to better optimize and improve service capabilities and service levels, and achieve orderly integration of data information.

3.2. Service Model.

As the needs of users continue to increase, the technology cloud system is gradually improved and optimized. The overall structure can be divided into the following four categories, and each has different service characteristics. ① Knowledge service model. Under the knowledge model, we will lay a good foundation for the orderly development of scientific research by improving the scientific level and technical level. At the same time, knowledge services can be refined, mainly for the two modules of expert services and document services. By improving the degree of integration between the two, a better benign guidance model can be formed.② Administrative management model. In the process of administrative business processing, its main management department works to assist research organizations in project management and service management. And carry out orderly follow-up on specific project processes, continuously improve its professionalism, better optimize scientific research management, and form a good development model.③ Research resource service model. In the specific scientific research service, equipment service and data service together form a good sharing system. Among them, data service is the foundation of the overall data mining work. The formation of a complete information network through orderly statistics and data integration has laid a good foundation for improving scientific judgment. ④ Service promotion and circulation models. In order to build a good management system, it is necessary to scientifically and rationally combine resources, and to better form a new model of R&D, circulation and use through sound and optimized promotion mechanisms. This can make technology and product conversion more reasonable and comprehensive, and accelerate the process of transforming technological achievements into economic benefits, and better enhance the promotion ability.

3.3. Storage Model.

In the cloud storage field, the capacity and speed of the storage resource pool are reasonably improved by decentralized management and collection of specific storage resources, thereby forming a new service model, better meeting user needs and laying a good foundation for its service system. Regarding technical differences, it is necessary to properly classify and back up to ensure that the data can be more complete and orderly.

4. Thoughts to Design the Resources Management and Control Model

4.1. Unified Planning of Network Resource Management and Information Security Strategy.

Coordinating management and planning, and improving resource utilization are the focus of current university library resource management and control work. Only by continuously strengthening overall planning and management can we improve the effectiveness of management and control, and better optimize and enhance the security and confidentiality of data information.

4.2. Establish and Improve the Performance Evaluation System.

It plays an important role in the resource management strategy, and its content is resource review, result review and system evaluation. The resource review emphasizes the implementation of specific resource management strategies and optimizes management policies to better conduct network supervision. The results of the review focused on the practicality and effectiveness of the actual performance evaluation system, and feedback the implementation of the system through the effect, which improved the intuitiveness and reliability.

4.3. Strengthen Security Organization Structure and Management Network Construction's Security Organization Structure.

According to the actual situation of the university library, it can be divided into two parts, the headquarters and the branch. The EHS organization is set up at the headquarters, and the management and supervision of its duties and authorities are rationally controlled to optimize the reporting mechanism.

4.4. Improve Unified Network Resources and Information Security Management System.

In the specific management system process, it is necessary to continuously optimize the EHS management framework and improve the EHS objectives, EHS resources and related management systems. By strengthening management and optimization systems to establish a sound management system, we can truly rely on laws and laws.

5. Conclusion

The networked information resource control mechanism based on network resource directory and centralized control provides an effective way for network users to search and retrieve network resources. However, they have certain problems with the dynamic transparency of resource control and association. In the flexible organization and connection of network resources according to specific user needs, there are more limitations, and the scope of utilization is limited to data files. The rapidly developing network resource control mechanism represented by cloud computing and the like, organically integrates resource association with various data descriptions, thus forming a network-based hypermedia retrieval environment, and effectively incorporating the above various systems. They will be a very meaningful area of research and development.

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