Research on the Integration Service of Digital Resources in Libraries and Archives

Jia Ying, Xue Mei
Shandong Institute of Commerce and Technology, Jinan, Shandong, China

Keywords: Libraries, Archives, Digital resources, Integrated services

Abstract: With the continuous progress of science and technology, network informatization is also gradually developing, and the relationship between people’s daily life and the network is becoming closer and closer. On this basis, libraries and archives also tend to integrate and develop, so as to facilitate the use of users. This paper focuses on the integration service mode and safeguard measures of digital resources of books and archives, so as to strengthen the protection of cultural resources in China.

1. Introduction

Libraries, museums and archives are important public cultural service organizations in current society, but they all belong to collection institutions in ancient history. With the increasingly detailed division of labor in human society and the establishment of modern society, the three institutions have become independent cultural service systems. Among them, libraries and archives have made some achievements in digital services relying on their unique resource characteristics, especially the development of digital resources in libraries. Therefore, the digital integration services of libraries and archives can achieve better cultural inheritance and further promote the contribution of cultural resources.

2. Integration Service Mode of Digital Resources in Libraries and Archives

2.1. Cooperation Mode

At present, this cooperation mode has achieved certain results in the practice of some institutions, including community-based information management institutions and TEDA Library Archives. The government oriented cooperation mode is a kind of cooperation mode favored by the domestic government at present. Among them, the national cultural information resource sharing project is representative. The project is mainly promoted by the local government and has achieved certain results. During the development period, the scope of participating member units has gradually expanded, and the amount of information obtained is also gradually enriched.

2.2. Knowledge Service Mode

The effect of the knowledge service model based on the content of library library and archives
resources is closely related to the following two points. The first is the integration of books and archives resources, and the second is the intellectualization of manual services. Through effective integration, the purpose of books and archives resources is to improve the comprehensiveness and knowledge of a single resource provided to users. The core element of the integration of books and archives resources is to store different topics separately, store them in different systems, and then sequence and reconstruct the stored resources, so as to realize the knowledge base for a certain topic. With the application of content retrieval and knowledge service mode, users will get richer information when retrieving information, which is no longer the previous item information, but a knowledge set, which is an important step in the development of information service to knowledge service.

2.3. Three-level Service Mode of Information Service, Knowledge Service and Knowledge Redevelopment Service

The integration service of books and archives resources should correspond to the resource integration layer, which can be divided into three levels. First, based on external characteristics, we should realize the effective integration of digital resources and promote the realization of unified retrieval, unified browsing and other services. Second, realize the relevant knowledge services of the knowledge level integration of the three digital resources, such as the in-depth mining of different digital collection resources, and then classify and store them to provide users with relevant knowledge services. Third, we should fully mobilize the creativity of librarians and users, fully integrate digital resources, and carry out innovative R & D activities to realize resource service innovation. On this basis, the three-level service mode of information service, knowledge service and knowledge redevelopment service of books and archives resources integration service is formed.

2.4. Cross Media Service Mode

The realization of cross media knowledge integration service of digital cultural resources requires the development of intelligent push information services, which can enable users to obtain more information resources services and gain higher value experience. Digital cultural resources mainly focus on language, and then provide users with cross media services, so that users can obtain more diversified demand information on the platform. After the user applies for retrieval, the system will carry out corresponding analysis, extract feature words in this field, then retrieve keywords in the data network, obtain the final integrated data results through the cross media retrieval system, and provide users with retrieval data resources based on the principle of logical order.

2.5. Personalized Service Mode

Personalized service mode can be understood that based on Internet technology and artificial intelligence, it analyzes users’ actual needs and preferences, and pushes relevant services to users based on this, so as to make the service more personalized. There are three main components of the personalized service system. Firstly, the user model part, which mainly includes user behavior characteristics and demand prediction. In terms of user behavior characteristics information data collection, it can be based on the user’s login information, retrieval information and other information data in the platform. The latter needs to be analyzed by the former to understand the user’s interest. Secondly, the generation of user database needs to extract features, then classify and cluster. In this process, the user database is gradually formed to push the required information data for users. Thirdly, the push engine can not only get user needs through user model analysis, and then push relevant information, but also push relevant information to users according to user customized service needs.

2.6. One-stop Integrated Service Mode

The practice projects in Europe and the United States and other developed countries have built online utilization systems of books and archives resources. Through the application of online platform, users can better gather the website information data of cooperative members by means of
links and so on. At this time, all resources can be effectively integrated to realize one-stop service to meet the diversified needs of users.

3. Safeguard Measures for the Integration Service of Digital Resources in Libraries and Archives

3.1. Strengthening Strategic Policy Guidance to Improve the Level of Archival Technology

The strategic planning policy guidance of digital integration service of books and archives includes two aspects: government legal policy drive and strategic planning guidance. Strategic planning refers to the decision-making process in which an organization determines its future development strategy and uses various available resources to realize the formulated strategy. Its important contents include the determination of the organization's mission, the formulation of strategic guidelines, the establishment of short-term and long-term goals, and the final determination of the direction of action according to the goals. It can be said that the strategic plan publicizes the value and significance of organizational culture to the public, and also explores the future development trend for book and archives institutions. Therefore, the development of the digital integration service of books and archives should take the strategic planning as the starting point, provide effective policy and practical guidance for the digital integration service of books and archives from the strategic level of social service institutions, and lay a solid foundation for the digital integration service of books and archives.

The digital service of books and archives in Colleges and universities should be based on digital information technology. Therefore, compared with the physical space service of traditional physical buildings, the digital virtual service of books and archives has a certain dependence on digital information technology. If we lose the support of digital information technology, we can only float in the illusion of digital resource services. Without common interoperability standards, metadata description and unified and open compliance, the digital integration service of books and archives cannot realize the seamless connection and deep-seated sharing of digital resources. Therefore, standard formulation and technology development have become an indispensable part of the digital integration service of books and archives. Among them, the digital resource storage technology provides important background management for the digital service of books and archives, but if it is not well used, it will make this service fall into an awkward situation of sudden stop.

3.2. Strengthening Integrated Resource Reserve to Establish Management Coordination Mechanism

As we all know, the collection resources in archives and libraries are very rich. When they are digitally integrated and provide relevant integration services, they should be based on sufficient digital resources to ensure the service quality of digital integration of books and archives. The most essential feature of the digital integration service of books and archives is to achieve fast access to virtual space and reduce the difficulty for users to obtain information in physical space. However, the premise to achieve this function is that the main bodies such as libraries and archives can actively participate together, especially in financial, human and resource investment. It can be said that without the investment of libraries and archives, integration cannot be achieved. However, libraries and archives belong to different cultural resource collection systems in history. It is this divided management system that will affect the development of integrated services between systems. In view of this situation, we should first break the traditional mindset of divide and rule, and carry out theoretical discussion led by relevant societies under the organization of the state and the government, or by the cooperation of local archives and libraries, so as to improve the enthusiasm of book and archives institutions to participate in services. After that, on the basis of coordinating interests, the two sides will realize division of labor and cooperation according to their respective collection characteristics and development purposes, and jointly promote the digital integration service of books and archives.
3.3. Strengthening Risk Safety Control and Building Organic Interactive Services

The digital service of books and archives needs to invest huge financial resources and organizations, and this activity is sustainable. Therefore, it is a systematic project involving many factors, so the cooperative development will not only produce benefits, but also have corresponding risks, such as intellectual property rights, information security, strategy, organization and so on. Among them, intellectual property risk, that is, the archives and book resources provided by the digital integration service of books and archives, will have intellectual property infringement risk, which is mostly manifested in the online dissemination of books and archives and the digital property rights of books and archives. Therefore, this risk is more common in the digital resources of books and archives. Information security risk refers to the risk of file information content caused by hidden dangers of computer communication and network security in the digital integration service of books and archives. It can be said that this special information carrier has higher confidentiality than books, and has higher security risks in the process of digital storage, conversion and utilization. The strategic risk is that the design project cannot be completed according to the pre-designed strategic plan. This risk still exists in the digital integration service of books and archives participated by multiple organizations. Although the organizers analyzed the technical difficulties and feasibility when formulating the strategy, they still could not predict some emergencies. Organizational risk means that due to the failure of both parties to coordinate work arrangements and collective interests in the cooperation, it is very likely that there will be mutual prevarication when assuming responsibilities, or one party will choose to withdraw halfway due to factors such as technology and resources. Therefore, in the digital integration service of books and archives, we should formulate security risk control strategies, set up a separate management organization in the start-up project, and ensure the responsibilities and obligations of both parties through legal responsibility. If one party shirks its responsibilities, it can rely on legal assistance.

4. Conclusion

In the era of networking, with the popularization of the Internet, people are also very different from before in seeking information, which makes it possible for the digital integration service mode of books and archives resources. The integration guarantee measures can also effectively promote the cross cooperation between disciplines, provide users with a broader knowledge and information space, avoid the repeated construction of books and archives, and give play to the advantages of integration. The exploration of this integration guarantee measure can strengthen the collaborative construction of national culture, provide faster and convenient technology for the process of knowledge sharing, and promote the development of knowledge civilization in China.

References
