Research on the Construction and Service of Intangible Cultural Heritage Resources Based on “Internet +”

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Abstract

This paper firstly introduces the construction status of Intangible Cultural Heritage Resources, and discusses the importance in combination with “Internet +”. Mainly analyzes the platform’s construction and Service of Intangible Cultural Heritage Resources. Finally discusses the main problems that to be paid attention to and solved.

Keywords: “Internet +”; Intangible Cultural Heritage Resource; Resources Integration; Embedded Service; Information Push

1. INTRODUCTION

The competent department of culture shall comprehensively understand the relevant situation of the intangible cultural heritage and establish a database of intangible cultural heritage and relevant databases. In addition to the law should be kept confidential, the intangible cultural heritage files and related data should be open to public access. This is on June 1, 2011 gets up the execution "the People's Republic of China Non-Material Cultural heritage Law" the 13th content. Digitized, the informationization development has brought the new way for the non-material cultural heritage protection that carries on the protection through the network platform to the non-material cultural heritage resources namely to record and to preserve the non-material cultural heritage the writing, the picture, the audio frequency, the video frequency and so on the multimedia contents, and carries on these data resources the standardization to input and to transform, the realization classification specialization, the memory informationization, completes systematized the unified conformity platform, achieves digitized the management, the service and the use goal. The digital protection platform of intangible cultural heritage should not only be a warehouse for storing and managing related data, but also an information management system which undertakes tasks such as data collection and coding, transmission and storage, statistics and analysis, retrieval and service. To provide an open and unified user-centered intangible cultural heritage resource service is its main function.

In March 2015, the state council premier Li Keqiang in his government work report clearly pointed out "Internet +" action plan work deployment. Its core meaning is the Internet as a source of national strategy of "innovation driven development", make Internet thinking mode in all walks of life innovation and development of the main engine. "+" is not a simple combination, but the traditional industry and the Internet through the large data, cloud

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computing, Internet of things, and a variety of terminal equipment to support each other, interact with each other, mutual connection, in order to realize the drive pattern restructuring, business restructuring and innovation. In the process of in-depth integration of Internet and continuously explore and practice, create new development. "Cross-border integration, innovation drive, reshaping, respect for human nature, open ecological structure and connect everything" is the main characteristic of "Internet +". In the whole society, all walks of life are actively involved in the "Internet +" research and layout of the environment, the intangible cultural heritage of digital resources should also be integrated into the future development of a huge space for the environment.

2. Research Status Analysis and Discussion

At present the library, the scientific research association and the administrative machinery and so on have all developed some about the non-material cultural heritage resources conservation correlation work. For instance the Chinese non-material cultural heritage network, each correlation organization establishment non-material cultural heritage digitization protects the platform and so on. After the preliminary examination statistics, the author discovered these digital platform resources type is unitary, only pauses in to the non-material cultural heritage resources simple introduction stratification plane, some investigative resources are very difficult to gain, moreover the database construction form, the field and so on are not unified, the resources description is not standard, the data renews slowly. The service and the retrieval way are unitary that do not have user's participation and so on. In view of this a series of questions, this article “the Internet +” the idea will integrate to the non-material cultural heritage resources digitization protection work in, will transform for the non-material cultural heritage resources construction development power that will analyze the user demand, the transformation service idea, the reorganization construction flow, the change manages and serves the pattern, the attention opening fusion which will provide the intellectualized service, “+ the technology will transform from the traditional information technology to the Internet”, thus will cause it to glow the new vigor.

3. Perspectives of the Construction

Breaking the tradition of intangible cultural heritage digital construction ideas, the use of the Internet, large data, cloud computing and other new technologies to build large data analysis platform for systematic rationalization of the classification of resources, organization and integration. From the user needs point of view, take the initiative to push users to the intangible cultural heritage resources, to provide customized services and one-stop search. Change passive to active, enhanced user and non-left platform of the interaction and exchange.

3.1 Platform construction mode

First use of big data calculation programming procedures, application framework model to integrate data resources of intangible cultural heritage, interdisciplinary, interdisciplinary, many data have merged across systems. By expert domain model aggregation of various kinds
of intangible cultural heritage resources, the depth of the fusion of colleges and universities, libraries, cultural centers, enterprises and institutions, relevant administrative organs and other kinds of resources, and using standard joint cataloging, establish a unified, the union catalog, and related resources of traceability and relationship of interconnection, the real-time collection, classification, resource integration, monitoring, analysis and management. Meanwhile proposes the supplier data to the resources the change to carry on the real-time monitoring and the management that carry on the dynamic excavation, the precise analysis using the cloud computation mass memory and the computation pattern to the interdependence and the fusion data resources with control.

The union mobile interned position sensation and the interaction, the opening, the convenient characteristic, facilitate satisfy the user the demand and the resources gain, and provides personalized the push and the feedback service. Through the integration of resources to form the intangible cultural heritage platform, breaking the traditional model of building blocks, a variety of physical resources and network resources for system integration. So to achieve a solid collection and database cross-regional, cross-sectoral interconnection between the extensive and integration with this together with the user to the people Museum, the library and the Internet of all people and the formation of the user, librarians, data experts, subject experts, resource providers, platform managers and other interconnected group integration.

3.2 Platform architecture analysis

Based on the "Internet +" intangible cultural heritage resource integration platform consists of three parts. Data layer: provides the specific data required for the platform, including user data, resource data, structured and unstructured data. Technology layer: collecting, classifying and organizing the data through large data distributed storage system and collection system, and then storing, mining and computing these data by using the key technologies such as visualization analysis, so as to realize the aggregation of interconnected data. Analysis of other regions provides a central scheduling engine. Service layer: system management and maintenance of aggregated data resources, comprehensive evaluation, analysis of user needs with the analysis of conclusions, to provide decision support. To carry out one-stop search, interaction with the user interaction, to provide personalized push service.

4. The Characteristics of the Service

Intangible cultural heritage resource platform service based on "Internet +" is an active service ecosystem based on cross-border integration. It is a new model of assisting service with multi-direction support, multi-coexistence, interactive and win-win situation. It emphasizes the dissemination and innovation of knowledge and always from the user needs point of view, the use of open thinking, user thinking and other innovation and management, based on Internet thinking to form a new mode of thinking and problem solving which can be organized as follows.
The use of "Internet +" thinking reconstruction service model, the depth embedded into the user, to understand the users of intangible cultural heritage resources, click-through rate and utilization. Through interaction with users, communication, analysis of user needs, to meet the user's knowledge of service needs. Through data mining technology, according to the user search behavior habits, analysis of the user's professional and knowledge level, to ensure the accuracy of the search.

Using WeChat, microblogging platforms such as propaganda and non-material cultural heritage resources, to provide users with interconnected network of new media services. Through mobile phones and other mobile intelligent device to interact with customers one-on-one online exchanges with zero distance communication, deep understanding to the user's feelings and needs, collect more effectively to the user's feedback information. Users in any place, any time as long as access to mobile devices can receive non-material cultural heritage resources, enjoy extensive in independent service.

Interconnection resources conformity including entity unit's interconnection, data resources interconnection and between user's interconnection. Namely resources tenderer, for instance resources tenderers and resources receive entity environment and so on library, institution unit, cultural building interconnection. This kind of interconnection is the cross region, the cross occupational lines interconnection. The data resources interconnection is the collection resources, non-material resources and so on cultural heritage website, management system management system, characteristic database interconnections and the conformity. User's interconnection is the service side and user's interconnection, interconnection between the service side personnel's, thus forms the resources to provide with the gain good relations, has guaranteed data sharing and the endurance that has manifested “the Internet +” straddling of zones fusion characteristic.

Through the interaction with the user, the analysis of the user's knowledge of the application process, to push intelligent, situational, personalized knowledge services. To help them innovate knowledge. This is based on data-driven and user-driven combination of deep knowledge mining services, is a high-quality, high value, high-level development of high-level wisdom services.

5. The Key Problems Need to be Solved

Based on "Internet +" intangible cultural heritage resources platform using advanced Internet technology, the formation of the Internet thinking of the service and management model. But there are also a series of problems. Accurate, unification description standard data resources right and wrong material cultural heritage resources platform realization intellectualization, interconnection service foundation and safeguard. This platform establishment in above magnanimous diverse data resources, including different resources and so on level non-structured data, audio frequency, video frequency, image, therefore carries on the standard regarding these different content resources the conformity is an arduous systems engineering.
Some intelligent sensation technology, the mobile termination technology, how do the visualization technology carry on the real-time collection, the organization, the gain, the analysis, the management and the maintenance to the so huge data are the main solution questions. Some resource providers have some difficult problems in coordination, communication and management because of their own historical characteristics and different resource platform forms. How to balance the interests of the parties, complement each other to provide fast and unified resource sharing services, platform managers must consider and solve the problem. Therefore, it is the best way to establish a cooperative mechanism for intangible cultural heritage protection, which is led and responsible by the major departments of the country and formed a unified plan, coordination and management.

6. Conclusion

The user and the interconnection of service personnel is necessarily involved in the analysis, the application of the basic information of the user and sharing, so platform managers should strengthen the comprehensive supervision and management of user information. In the embedded service and notification service, to further understand the user requirements, analysis of user behavior, so users are difficult to fully protect the privacy of information security. In an intelligent service is sensitive to the user's information security for reasonable protection and control is an extremely important task. The integration of data resources, the introduction of new Internet technologies, the innovation of service and management, the new experience and satisfaction of users broke the traditional idea of intangible cultural heritage resources construction, and carried out the deep integration of resources, technology, users and services. And efficient interconnection that formed a unified wisdom of the ecosystem and ecological services alliance and thus greatly enhancing the service capacity of intangible cultural heritage resources, so that it is widely disseminated, use and protection, the construction of knowledge integration platform for intangible cultural heritage resources is still in the theoretical discussion level, at present, many basic work is still actively exploring. Building such a large knowledge collection platform requires multi-party cooperation, involving the balance of interests, protection and service concepts and other issues, so to put into practice requires more efforts and exploration.

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