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REVIEW ARTICLE

RESEARCH AND APPLICATION OF FOLK SPORTS HERITAGE BASED ON BIG DATA

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ARTICLE DETAILS

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ABSTRACT

In order to study the challenges faced by folk sports inheritance in the context of big data and explore the scientific and rational ways of inheritance, this article started with the development status of folk sports and the characteristics of big data, and analyzed the issues of insufficient digital resources, serious data barriers, and lack of comprehensive talents in the inheritance of folk sports in the context of big data, and then attempted to build a legacy of folk sports in the age of big data. The results showed that building a folk sports database, constructing a folk sports data platform, integrating data resources, and cultivating big data talents were all reasonable approaches for the inheritance and development of folk sports. In the context of the era of big data, folk sports want survival and development must be combined with the times to achieve the scientific integration of tradition and modernization.

KEYWORDS

Big data, folk sports, opportunities and challenges, inheritance.

1. INTRODUCTION

Folk sports have various forms and distinctive features. Its existence not only adds a lot to folk festivals, but also enriches people's daily cultural life and shows unique cultural charm. Due to the rapid changes in the social age, the development of folk sports projects has been extremely uneven [1]. The inheritance of folk sports has shown a state of unevenness, and even individual projects are facing embarrassing situations of loss. The popularization of the Internet and the development of informatization have brought people into a new era. This is an era of informatization explosion. The vast amount of data that is constantly being generated is quietly changing people's way of life and ways of thinking [2]. Humanity enters the era of big data. Under the background of this era, it is of great theoretical value and practical significance to study how to use the characteristics and advantages of the era to promote the inheritance and development of folk sports.

2. LITERATURE REVIEW

Foreign scholars have focused their research perspectives on big data in large data storage, big data processing, big data analysis, and big data management technologies and software applications [3]. As early as 2008, the academic journal *Nature* launched special editions of big data on Internet technology, super-computing, and bio medicine. In March 2012, the United States announced the "big data R&D program" aimed at improving and improving people's ability to obtain information from massive information data [4]. In April 2012, the special issue on "big data" was also published by the European Association of Informatics and Mathematical Studies. The special issue was studied from the data management in the era of big data, and innovative technologies such as data-intensive research [5]. In July 2012, Japan focused its attention on the application of big data and launched the "New ICT Strategic Research Program". The "New ICT Strategic Research Program" positions the field of big data as one of the strategic areas [6]. And big data has begun to show value in applications.

3. CHALLENGES TO THE INHERITANCE OF FOLK SPORTS IN THE ERA OF BIG DATA

3.1 Incomplete information on folk sports

Due to the "grassroots nature" of folk sports, the inheritors of most folk sports projects are not well-educated, and it is impossible to record the folk sports with other records such as writing, and more depends on oral transmission [7]. With the passing away of the old generation of inheritors, projects lacking inheritors will disappear in the long river of history. Loss of folk sports will be a great loss for our folk sports culture. China is a multi-ethnic country, and the diversity of national culture has created a rich and colourful folk sports culture. The imbalance in the development of ethnic culture led to the incomplete record data of folk sports. Due to the existence of such "congenital" factors, the folk sports database could not sort out and preserve the complete folk sports data, which This will definitely affect the use experience of the folk sports database. The lack of data will also affect the analysis of folk sports, and even affect the research results of future folk sports research.

3.2 Serious data barriers

The more data that can be analyzed in the actual application of big data, the more complete, and the greater the value of big data analysis. With the social networking applications represented by Tencent, Facebook, and Weibo, the behavior data of generally associated folk sports enthusiasts was constructed. The data generated by folk sports enthusiasts, such as browsing the web on the Internet, purchasing goods, leisure sports, etc., is a state that is not related to each other. With the rapid popularity of smart phones, sports enthusiasts tend to be more fragmented in their online behavioral records. Simply taking an item or type of data for analysis may not be able to draw any useful information at all, making it more difficult to use the data. In the presence of data barriers, it is difficult to realize the value contained in big data, and it also brings greater difficulties to the sharing of folk sports resources and the use of data. How to break down various "data barriers" and how to integrate the data resources of individuals, governments, and enterprises, and effectively play the role of data, rather than putting various data in various databases is a big problem.

3.3 Lack of comprehensive talent

Since the era of big data has the characteristics of large amounts of data, low value density, and diverse types, and there are still time constraints on data. How can we quickly find out the needed data from such large and complex data is really difficult for current talents. For the application of folk sports big data, it is currently in an embarrassing situation. Folk sports researchers who know about big data related technologies are scarce, and the lack of comprehensive talents is one of the challenges of folk sports using big data technology. Folk sports related knowledge is fundamental. Folk sports data talents use data technology to solve the problems of folk sports. Therefore, a qualified folk sports analyst must possess multiple skills to meet the needs of talents in the era of big data.

4. Inheritance of folk sports in the era of big data

4.1 Establishing a folk sports database

The 2016 Internet statistics report showed that by the end of 2015, the number of Internet users in China reached 688 million, and the penetration rate of the Internet has reached 50.3%, of which the proportion of rural Internet users has reached 28.4%, and people using mobile phones to access the Internet have reached 6.2 billion in China. 90% of Chinese netizens choose mobile phones as internet devices. It can be seen from the data that the Internet penetration rate in China is already very high. The rural Internet has developed rapidly. The mobile phone is used as the main Internet terminal. See Figure 1 for details. The popularization of smart terminals such as smart phones and other intelligent terminals has provided hardware support for the production of images and video recordings of folk sports data.

Folk sports projects have a natural connection with the countryside. The development and popularization of the rural internet provides the network conditions for the establishment of the folk sports database. China's rural areas have rich and varied folk sports resources. Most of the folk sports exist in rural areas. The rise of the Internet in rural areas has provided the network conditions for the establishment of folk sports databases, making it possible for folk sports fans in rural areas to participate in the establishment of folk sports databases.

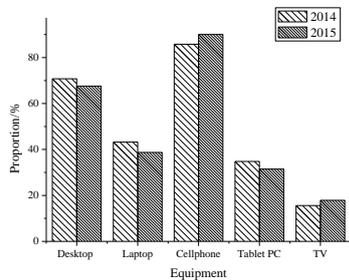


Figure 1: Use of Internet access equipment

The application of folk sports database can fully mobilize the enthusiasm of all fans of folk sports interest, and meet the needs of sports fans for information resources from different levels. Each folk sports enthusiast is not only a user of a folk sports database but also a builder of a folk sports database. Folk sports enthusiasts can search the database for interesting content, and they can also share folk sports materials collected from other books and media to other folk sports enthusiasts through the folk sports data platform. The folk sports database is mainly composed of folk sports entries, folk sports enthusiast units and website operators. See Figure 2

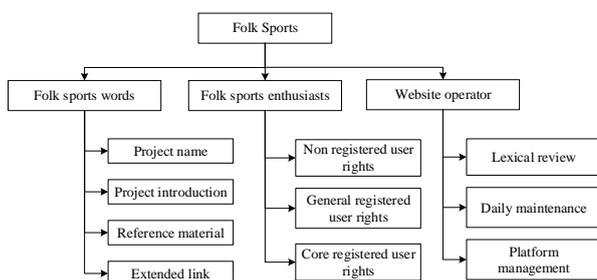


Figure 2: Functional map of each unit of folk sports database

4.2 Integrate data resources to create a folk sports platform

As shown in Figure 3, the folk sports big data platform is divided into four parts, namely service platform, data scheduling platform, computing platform and storage platform. The folk sports database is fully integrated into the storage platform and is used to store various types of folk sports data. The platform also provides an expansion interface for the future, and other storage modules can also be placed under this platform. The computing platform is mainly set up for all types of people who need to analyze certain types of data. The data scheduling platform is mainly a module set up to coordinate processing of various external data. The module calculates the external data into the big data platform through the communication inquiry protocol. The service platform is the portal of the big data platform and is mainly composed of three modules: an exchange section, a promotion section, and a query section.

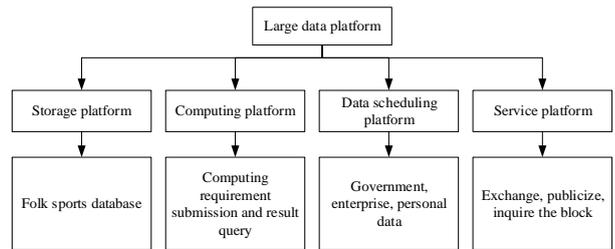


Figure 3: Schematic diagram of large data platform architecture

4.3 Developing comprehensive talents

For the inheritance of folk sports, it is possible to quickly collect and extract useful data, and to process, integrate, and analyze it, so that we can quickly grasp inheritance characteristics, current conditions, disadvantages, and causes, thus providing a strong data support for its research. In view of the long-term professional characteristics of folk sports heritage, it is necessary to establish a scientific personnel training management system and gradually promote the professionalization and professional development of folk sports talents. At the same time, universities and research institutes should also explore innovative models such as "expert group" to promote the inheritance and development of folk sports in the era of big data.

To establish a long-term talent training system, a talent training plan should be formulated based on the development status of China's national sports. To improve the evaluation system for talent cultivation of folk sports, excellent folk sports personnel should have a solid foundation of professional knowledge, excellent management capabilities and practical capabilities. Due to the rapid development of the times, it is necessary to establish a training institution for folk sports talents to solve the problem of backward updating of knowledge of folk sports talents. National and regional training institutions can be established. For the cultivation of folk sports talents, the training content should be determined in conjunction with the current practice of folk sports, focusing on cultivating the data analysis and management capabilities of the local staff. For the inheritance of folk sports, comprehensive management talents with big data thinking and the advantages of using big data can be delivered.

5. CONCLUSION

With the development of Internet and Internet of Things technologies, a large number of multi-source data has exploded. The analysis of the relationship between massive data has enormous potential application value. The application of big data also brings new challenges for the inheritance of folk sports. For example, insufficient digital resources for folk sports, serious data barriers, and lack of comprehensive talents limit the development of folk sports in the era of big data. Based on the characteristics and development trend of the current development of big data, this article considers and reconstructs the path of inheritance and development of folk sports, in order to meet the dual needs of cultural heritage and progress of the times. Under the background of the era of big data, we can comprehensively improve the inheritance effect of folk sports by recommending the establishment of folk sports database, the proposal of establishing a folk sports database, cultivating a group of comprehensive talents with professional sports literacy and mastering big data technology.

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