

Research on Digital Application of Cultural Heritage Under the Background of AI

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Abstract: Intangible cultural heritage has very precious historical value, it represents the existence of a period of history, and it is worthy of our protection and study. Therefore, we should pay attention to the protection and utilization of intangible cultural heritage. This article will study the protection and utilization of intangible cultural heritage under the background of digitalization. Compared with the tangible cultural heritage with a certain form, the protection of intangible cultural heritage is more difficult. In addition, intangible cultural heritage is a non-renewable resource, which adds difficulty to the protection of intangible cultural heritage. In the context of digitalization, it provides a way for the protection and use of intangible cultural heritage. This article is to explore how to protect and utilize intangible cultural heritage under the background of digitalization.

Keywords: digital application, cultural heritage, AI

1. INTRODUCTION

With the continuous development of my country's economy, digital technology has gradually been widely used. We discuss the protection and utilization of intangible cultural heritage under the background of digitalization, and put forward some suggestions, hoping to better protect and inherit my country's excellent historical culture. The main method of intangible cultural heritage inheritance is "oral teaching", which means that the new inheritors are trained mainly through the oral teaching and precepts of the older generation to the next generation. However, the biggest problem brought about by this inheritance method is the shortage of inheritors. It is precisely because of this inheritance method that the inheritance of many intangible cultural heritage items is facing the threat of extinction.

In the context of economic globalization, the integration of Eastern and Western cultures, especially the introduction of Japanese and Korean cultures, has attracted the attention of many young people, who spend more energy on star chasing and fast-paced life. The fact that led to their interest in traditional culture. Coupled with the heavy burden of life, it is difficult to guarantee the quality of life if one lives purely on traditional skills.

The basis of the protection of intangible cultural heritage is to collect and preserve it. Due to the characteristics of intangible cultural heritage in various forms, intangible forms, and huge amount of information, it is difficult to collect, encode, and store intangible cultural heritage for a long time completely and effectively. Due to the rich and diverse forms of intangible cultural heritage and the huge amount of information, there are some problems in obtaining text, image, video and audio information through traditional graphic scanning, video recording, audio recording and other technologies. For example, in the collection and preservation of traditional dances in the above-mentioned methods, it is difficult to carry out accurate and comprehensive collection, let alone complete reproduction and modification.

For the protection of intangible cultural heritage, the most important point is to keep it original "taste". However, in the process of our country's continuous development, many intangible cultural heritage cultures in our country have suffered from the impact of many foreign cultures, and subtle changes have taken place in the impact. For those intangible cultural heritage cultures that have not been affected by foreign cultures, most of them are in rural areas, even in

sparsely populated mountainous areas. Although they are not easy to be affected by outsiders, they are also little known, let alone protected.

For many intangible cultural heritage items, most of them exist in a certain family or in a certain small area. If people in this small group cannot correctly understand the intangible cultural heritage items, in view of the large number of intangible cultural heritage that needs to be protected, in the reality that it is impossible to fully realize digital protection in the short term, we can carry out protection in a planned way, distinguish which cultures are more eager to protect, and which cultures can be put behind, and highlight the key points for protection.

We can first focus on establishing a database of characteristic resources of local intangible cultural heritage to promote the protection and inheritance of characteristic resources of intangible cultural heritage in different regions, eras, and nationalities. First, it is necessary to do a good job in preliminary preparations, formulate practical plans, and avoid unnecessary troubles when carrying out formal work. Secondly, digital technology can be used to build an information sharing platform for intangible cultural heritage in the field of intangible cultural heritage, calling on the whole people to participate in it. The broad masses of the people can share and communicate their intangible cultural heritage through the cloud platform. And digital technology can count and analyze the information fed back by the people, screen out the items that meet the content of intangible cultural heritage, and carry out the entry of intangible cultural heritage.

2. THE PROPOSED METHODOLOGY

2.1 The advantages of protecting intangible cultural heritage under the background of AI digitalization

Finally, relevant technical personnel should combine intangible cultural heritage content and digital technology to develop a platform with simpler operation and more convenient search, to improve the operation efficiency of the people, so that they can understand more comprehensive information through the simplest operation method. Intangible cultural heritage information, to further deepen the people's understanding of intangible cultural heritage items. The development of civilization for thousands of years has made my country's intangible cultural heritage not only diverse, but

also distinctive. In the face of many intangible cultural heritages that need to be protected, relevant departments should realize the digital protection of intangible cultural heritage to the greatest extent according to the actual situation of different places. One of the most effective ways is to establish a database of digital resources of local characteristic intangible cultural heritage. To promote the protection and inheritance of intangible cultural heritage resources from different regions, times, and nationalities. One of the most effective measures based on digital technology is to establish a genetic information bank of intangible cultural heritage.

The collection and storage of intangible cultural heritage materials is the first prerequisite for the protection and utilization of intangible cultural heritage culture. As far as the intangible cultural heritage materials themselves are concerned, they are in various forms, coupled with the huge quantity, it is more difficult to collect and store them. In the context of digitalization, digital technology can be used to collect and store intangible cultural heritage materials, and it has good application effects. These effects have become even more pronounced in recent years with the rise and rapid development of digital technologies such as 3D scanning, motion capture and virtual reality. The digitization of intangible cultural heritage enables long-term preservation and makes management more convenient. In addition, storage under modern technology has also realized distributed, disk array storage, and with the development of retrieval technology and database technology, intangible cultural heritage data has become more structured, which is more beneficial to the sustainable development of intangible cultural heritage. We can first focus on establishing a database of local intangible cultural heritage characteristic resources to promote the protection and inheritance of intangible cultural heritage characteristic resources of different regions, different eras, and different nationalities.

We should do a good job of preparatory work, formulate feasible plans, and avoid unnecessary troubles in the process of formal work. Second, to carry out rigorous demonstration and research, the staff is required to analyze more accurate data through meticulous research. These data information include the preservation period, development area, and research background of many intangible cultural heritages. Third, we should be good at observing life, learn more from other people's successful experience, avoid roughness, and strive for excellence. The dissemination of intangible cultural heritage is one of the main purposes of protecting intangible cultural heritage, and the realization of this purpose must rely on certain means of communication. The existence of the digital background provides a powerful communication tool for the purpose of communication, and the most widely used one is new media technology.

2.2 Using digital technology to enhance the dissemination of intangible culture

With the support of new media technology, and then use TV, websites, the Internet, etc. to promote, so that most users can accurately understand the information of intangible cultural heritage. For example, the broadcast of the program "Chinese Riddle Conference" has made everyone understand the folk custom of guessing riddles better. The expression and dissemination of culture must rely on certain tools and carriers, and the emergence of modern digital technology provides more means and methods for the dissemination of intangible culture. Among them, new media is the most important and widely used tool. New media refers to the information carrier that records, processes, disseminates, and

acquires in the form of binary numbers. The development of modern new media communication technology has created new conditions for the dissemination of intangible cultural heritage.

The application of new media is mainly to make full use of advanced technologies such as images, audio, video, geographic information systems, and 3D animations to digitize intangible cultural heritage, make full use of the characteristics and advantages of digital media, build interactive and three-dimensional communication channels, and reuse platforms such as digital TV, websites, and mobile Internet realize the interactive dissemination of intangible cultural heritage, and at the same time present the intangible cultural heritage in front of the people in an all-round way, so that the precious cultural heritage of mankind can be learned, researched and inherited on a larger scale. Faced with so many intangible cultural heritages that need to be protected, we must first selectively focus on protection to prevent the loss of intangible cultural heritage, which is conducive to stopping the loss in time.

Secondly, classify, scientifically demonstrate, and refine my country's rich and colorful intangible cultural heritage. In this way, the core elements of cultural heritage genetic information can be permanently inherited and adhered to, and the geographical attributes, era characteristics, spiritual connotations, value systems, discourse systems, etc. of cultural heritage can be scientifically and objectively evaluated and classified. Inheritance of heritage is of great significance. Finally, use your own professionalism and advanced technologies you are familiar with to promote the protection and utilization of intangible cultural heritage. my country's civilization has developed for thousands of years, and its manifestations are naturally more colorful.

In the digital age, to protect and utilize intangible cultural heritage in a true sense, in addition to protecting and utilizing individual intangible cultural heritage items, it is also necessary to establish a unique resource library. Realize the maximum protection and utilization of intangible cultural heritage and promote its sustainable development. First, refine the core elements of intangible cultural heritage items, find out information that can be passed on permanently, and complete analysis and demonstration to ensure the accuracy of intangible cultural heritage inheritance. Second, give full play to the functions of digital technologies such as artificial intelligence and pattern recognition, and use them to collect and identify information characteristics of intangible cultural heritage in terms of color, texture, and graphic symbols in a timely and effective manner.

3. CONCLUSION

In the context of the rapid development of contemporary digital technology, the pace of life is accelerating, and the pressure of life is increasing. While people are constantly working hard to cope with life, they must not forget to inherit and learn history and culture and pay special attention to the protection and inheritance of my country's intangible cultural heritage. We should make full use of modern resources, protect, and inherit our country's intangible cultural heritage with the help of advanced digital technology, and make corresponding efforts for our country's cultural construction. Relevant departments should make full use of digital technology to realize the collection and storage of intangible culture, and use virtual museums, new media and other forms supported by digital technology to realize the

efficient use of intangible cultural heritage, to realize the prosperity and development of Chinese culture.

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