Research on the Relationship between “Intangible Cultural Heritage” Digital Technology and the Development of Cultural Industry

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Abstract: With the progress and development of my country's economy and society, and the development and progress of science and technology, the inheritance and protection of intangible cultural heritage has gradually become neglected. As a valuable historical, cultural and artistic resource of society and the country, intangible cultural heritage needs to be deeply Arouse the society and the state to attach great importance to its importance and increase protection. 近 In recent years, the protection and development of intangible cultural heritage has set off an upsurge in China. Under the impetus of laws and policies issued by the state, it has become a major trend to protect and develop intangible cultural heritage and build its industrialization road. In the communication process of modern life, intangible culture gradually transforms from a single mode to a diversified mode. The change of this information transformation mode reflects the use of modern new technology all the time. The use of this technology can not only help the information of intangible cultural heritage spread more widely, but also indirectly improve the soft power of Chinese culture and promote the construction of a public digital platform.

1. Introduction

Now people have entered an information age. The wide use of the Internet has gradually become the mainstream of the times[1]. Computers have been widely used in daily life and work. Although from the perspective of necessity, digitization has brought more possibilities to the protection, inheritance and development of intangible cultural heritage, there are still many debates about the protection of the rights and interests of intangible cultural heritage inheritors, the field change of intangible cultural heritage performance, the technical replication of intangible cultural heritage, the development and utilization of intangible cultural resources and so on[2]. Intangible cultural heritage comes from the people and is passed down among the people. It truly shows the wisdom and spirit of ancient Chinese ancestors, and it is a stimulant in the inheritance of Chinese culture. With the constant acceleration of economic and political integration, various foreign cultures are frantically flooding into China, which has brought great impact to our traditional culture, especially intangible culture. Under the existing social background, there are more or less deficiencies in the dissemination of intangible cultural heritage all over the country, which makes the knowledge dissemination of intangible cultural heritage relatively backward, and the ability of digital protection and inheritance is not enough, resulting in the lack of public education function in China[3]. The introduction of digital information technology can better preserve the pictures and video of intangible cultural heritage, and further promote the protection of intangible cultural heritage.

Chinese culture is extensive and profound. This is because it comes from the people and is passed down among them. It truly shows the wisdom and spirit of ancient Chinese ancestors, and it is a stimulant in the inheritance of Chinese culture now[4]. With the continuous improvement of information technology, the utilization rate of the Internet is also constantly improving. Multimedia technology is gradually deepening research to deeper technology. The concept of digital display has been updated, and its content has become richer and effectively expanded. Intangible cultural heritage is different from the visibility characteristics of material heritage, but an ideology with
material as the medium[5]. It is a traditional culture that exists in real life in a mobile, inherited and developed place. The so-called digitization of intangible cultural heritage is to “use digital technologies such as digital collection, digital storage, digital processing, digital display and digital communication to convert, reproduce and restore cultural heritage into a shareable and renewable digital form, interpret it from a new perspective, preserve it in a new way and make use of it with new needs[6].” Among them, there are defects in inheritance, communication and other aspects. With the constantly updated new technology, the use of new media technology has become a brand-new communication way of intangible cultural heritage. Strengthening the digital display form of intangible cultural heritage is also an inevitable condition to improve the level of intangible culture in China.

2. The Combination of New Media Technology and Digital Display

2.1 The Initial Demonstration of the Combination of New Media Technology and Digitalization

In the early development of new media technology, the more widely used areas belonged to the dissemination of film art. The media of this kind of dissemination is now called projection and the display of information dissemination technology. Through this kind of information dissemination, people discover new media technologies. It has a very wide range of usability and is relatively fast in terms of dissemination of content. With the development of emerging industries such as the Internet, digital display has been given a deeper meaning. For newspapers, radio is a new medium, and for radio, television has become a new medium. Similarly, the Internet has become a new medium and so on. There is no obvious boundary between new media and old media[7]. On the contrary, the new media and the old media influence each other and integrate with each other. Although the emergence of the new media has affected the development of the old media, on the other hand, it has also promoted the continuous upgrading and progress of the old media, allowing them to find their own development orientation[8]. The constant changes and developments of the old and new media have changed the breadth and depth of our understanding of the world around us. With the wide application of many new technologies such as Internet technology, multimedia technology and virtual reality technology, the concept of digital display has been endowed with richer connotation and extension[9]. Using various digital technologies, in the mode of information classification and storage of intangible cultural heritage, various new media technologies will be used to realize the digital display of intangible cultural heritage. In the process of dissemination of this form of information, it can not only fully mobilize the viewer's sensory organs, It can also enable viewers to have a more comprehensive and systematic understanding of the whole displayed content, so as to realize the extensive and in-depth content. Digitization technology is an information processing technology, that is, a lot of complicated and changeable information is transformed into measurable numbers and data, and then an appropriate digital model is established with these numbers and data, and then they are transformed into a series of binary codes that can enter the computer. This way of using Internet digital technology to transmit information has become a new communication environment different from traditional media communication.

2.2 The Significance of Using Digital Technology to Protect

Generally, intangible cultural heritages are generally preserved in national museums or local historical and cultural memorials around the world. If you visit the national museums, the contents and types of many intangible cultural heritages may not be accepted and understood by more people. Traditional skills emphasize practical experience, and are highly skillful. It is necessary to accurately spread predecessors' technological processes and skills in various fields through interactive communication. From the perspective of the rapid development of digital technology and its related big data analysis technology, virtual reproduction technology, somatosensory technology and intelligent technology, and from the deepening demand for intangible cultural heritage protection, intangible cultural heritage digital protection will show the following
development trends. For newspapers, radio is a new media, while for radio, TV has become a new media. Similarly, the Internet has become a new media and so on. There is no obvious boundary between new media and old media. With the development of new media technology, the way of digital display has changed accordingly, and it has been endowed with new connotations. Digital technology can fully restore the reasons and process of intangible cultural heritage formation, the geomorphic environment at that time, and its own appearance and structure. At the same time, digital technology spreads rapidly and widely, so it is more conducive to the spread and development of intangible cultural heritage by using it to build a communication platform and integrating it into digital materials that are easy for people to accept[10].

2.3 It Can Be Updated and Repaired in Time.

The traditional way of obtaining cultural heritage is nothing more than photography, video and video interview, but neither traditional photography nor video is necessarily conducive to the collection and preservation of intangible cultural heritage, because they will be distorted due to their age, and intangible cultural heritage is not invariable. If one day in the future, it is suddenly found that some photographic and video interview materials have errors or new data changes on the network, the data and things once collected and saved are incomplete or even wrong. The protection level of digital cultural heritage is shown in Figure 1.

In the mode of information classification and storage of intangible cultural heritage by using various digital technologies, various new media technologies will be used to realize the digital display of intangible cultural heritage. In the process of spreading this information form, not only can the sensory organs of the viewer be fully mobilized, but also the viewer can have a more comprehensive and systematic understanding of the whole displayed content, so as to achieve extensive and in-depth content. The inheritance of intangible cultural heritage is mostly carried out in the form of words, the mode of communication is very single, and the audience is very narrow. At the same time, the traditional preservation methods will distort the data with the extension of time, and making full use of digital data management technology can greatly improve the management efficiency and preservation quality of data and prevent these preservation problems from happening again.

3. Use Digital Technology to Protect and Promote the Development of Cultural Industries

3.1 Cultivate More Digital Talents.
Cultivating more digital professionals is the premise of cultural protection of intangible cultural heritage projects with digital technology. The digital protection of regional intangible cultural heritage is being vigorously carried out in accordance with the intangible cultural heritage protection law formulated by the state and local authorities, which mainly includes digital census, collection and filing of regional intangible cultural heritage resources, recording of oral history and materials of non-genetic inheritors by means of images, and establishment of digital intangible cultural heritage museums, including website construction of related resources, WeChat platform, mobile client, etc. This requires relevant professionals to understand the technical knowledge of intangible information, and also to have a certain understanding of the work of intangible cultural heritage protection, otherwise, the data loss of cultural heritage will be caused in the actual protection work, resulting in irreparable consequences of cultural heritage. Some clients also set up intangible cultural heritage courses for online teaching, breaking the time and space constraints of traditional intangible cultural heritage protection, and online social networking allows inheritors to obtain more communication channels, which coincides with the multi-media communication and network activity mode of IP content. Finally, through the resources related to cultural protection, everyone can successfully establish their own intangible digital technology protection methods, and innovate in the protection and management of intangible cultural heritage. It provides a better protection and inheritance environment for the development of intangible cultural heritage itself and its successors, and avoids the loss of talents.

3.2 Build a Digital Information Database

Build a digital information base. A large number of digital data can be collected and stored in the digital information base, and the newly discovered intangible cultural heritage data can be quickly put into storage. At the same time, when some digital data that already exist in the library have problems or need to be repaired and maintained, the data can also be quickly searched out and repaired through data retrieval and query technologies in the digital information base. In modern traditional culture, ceramic technology and papermaking technology are more prominent. Although this skill culture is widely used in today's life, people do not understand the operation process and manufacturing process of these two technologies. The database design process is shown in Figure 2.

![Fig.2 Database Design Process](image)

Using digital innovation technology, professionals can record and explore, and input them into the digital information database, so that the operation flow and production process of these two skills can have relatively perfect information dissemination. Describe the scene in the form of
digital painting, and use the digital interactive mode to allow viewers to try the process of technological operation. This innovative application can convey and acquire intangible cultural heritage information in the combination of vision and touch. The abstract information is transformed into a more concrete form of color, shape and style for cultural communication. In the process of cultural output, the data is also transformed in the mode of picture, sound and video. The communication of this intangible cultural heritage can fully mobilize the enthusiasm of viewers. It also has prominent advantages in the overall sensory display. Therefore, building an intangible cultural heritage database can not only improve the efficiency of data change and maintenance, but also improve the quality of data protection. It is the quickest method of data management.

3.3 Introduce Social Forces and Government Policy and Financial Support.

Culture is very important for the survival and development of a country. The inheritance of culture is the inheritance of spirit, and the protection of culture is the protection of history. Under the leadership of the government, formulate laws and policies on the development of local intangible cultural heritage protection, and establish a digital management system suitable for Zaozhuang intangible cultural heritage protection. On the basis of government-led, fully develop social human, financial and material resources, build equal resource allocation and promote equal services. Improve the quality and efficiency of data protection, and at the same time make up for some shortcomings in the past protection work, which is more conducive to people's acceptance and understanding of ancient civilization, and also more conducive to the extensive dissemination of intangible cultural heritage. In terms of financial support, while improving the construction of national special funds for intangible cultural heritage, we can also actively introduce social forces. We can learn about the relevant history from the local original villagers, encourage the development of non-governmental intangible cultural heritage protection companies, or set up intangible cultural heritage protection categories to expand the channels for people to participate in intangible cultural heritage protection and support. Better describe our “intangible cultural heritage”, protect our “intangible cultural heritage”, and display the digital database more perfectly to promote the development of cultural industry.

4. Conclusions

Intangible cultural heritage, as an important cultural wealth affecting human development, is the crystallization of wisdom obtained through thousands of hardships. With the change of people's lifestyle and habits, people need to keep pace with the times, use modern science and technology, explore the innovative application of intangible cultural heritage digital display and inheritance, improve the scientficity, knowledge and appreciation of intangible cultural heritage display, and enhance the soft power of Chinese culture. With the advantages of intelligence and networking, it helps viewers to better experience the intangible content and enhance their sense of experience through vision, touch, hearing and smell, which not only effectively enhances the participation consciousness of the masses, but also maximizes the social benefits. The development of the times promotes the construction of intangible cultural heritage digital display platform with the help of Internet, new mobile media, intelligent mobile terminals and other technical means, continuously improves China's cultural soft power, and promotes the continuous inheritance of China's intangible cultural heritage.

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References


