Study on the Application of Digital Display of Zigong Colored Lamp

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Abstract

New media is a new form of digital media under the development of digital technology and Internet. In comparison with traditional media, the new media has such characteristics as wide spread, fast spread as well as strong interactivity. Combined with the development of Internet, the digital display and protection and inheritance of intangible culture through the form of new media can change the development mode of inheritance from master to apprentice of the traditional colored lamp, expand its spread and development, also open up the way and channel for the display and application of colored lamp, and provide the new direction and space for the inheritance and development of the colored lamp culture of Zigong.

Keywords

Zigong colored lamp; Digitization; Display application.

1. Introduction

New media is a new form of digital media under the development of digital technology and Internet. The United Nations defined it as "the media for information communication by taking the digital technology as basis and the Internet as the carrier". In comparison with traditional media, the new media has such characteristics as wide spread, fast spread as well as strong interactivity. In 2008, "Zigong Lantern Association" into the second batch of intangible cultural heritage list. Currently, the inheritance and future development of Zigong's colored lamp culture can't achieve the best effect if only depending on the efforts of the government and enterprises as well as the inheritors. The inheritance of traditional "oral imparting with physical instruction" skills is bound to lead to the gradual extinction of Zigong's colored lamp art in the long future history or to be replaced by other living similar cultures. In this case, it is necessary to analyze the reasons in detail and seek solutions for the insufficient and single protection and development of Zigong's colored lamp cultural resources. The new media technology, however, provides the possibility for the digital display of Zigong colored lamp, and plays a significant role in the spread and development of Zigong colored lamp culture.

2. Problems existed in the digital display of colored lamps

Zigong colored lamp display research shows that the current digital display mainly aims at the digital documentary video, photography and other ways of the colored lamp, but has deficiencies in the public-oriented auxiliary display and research. The special intangible cultural heritage based on interactive communication, such as Zigong colored lamp, must break through the traditional way of digital display. Thinking from the perspective of new media, considering the practical and effective way under the existing traditional display mode of "Zigong Lantern Show", and combining with the digital information technology method, this paper explores a new path for the inheritance and development of Zigong colored lamp culture, constructs a complete information platform and management platform for Zigong colored lamp, and helps Zigong colored lamp technology display and digital performance of the finished products, and in the end, it hopes to achieve the role of promoting the inheritance of the traditional intangible cultural heritage of Zigong colored lamp.

Combined with the traditional inheritance and development mode of Zigong colored lamp art, its deficiencies are mainly manifested in the following aspects:

(I) There is no perfect digital information platform of Zigong colored lamp to support the public to participate in the interaction, so that the display of Zigong colored lamp culture only has a temporary peak during the annual Lantern Shown in each Spring Festival. Also it lacks the unified display standard thus causes the poor experience effect, without the effective practice value to the culture inheritance of Zigong colored lamp.

(II) It lacks of independent digital information platform to display Zigong colored lamp's gorgeous visual effects, resulting in the situation of shouldering the responsibility of inheriting the intangible culture only by the unique colored lamp enterprises and the government, and moreover, there is no perfect digital display mode to strengthen the interactive experience between the viewers and colored lamp groups, forming the static inherent form of lamp groups independently displaying, which is both monotonous and easy to form visual fatigue.

(III) There is no perfect mobile digital display of the multi-angle effect of Zigong colored lamp, and there is no multi-chain new media platform combined with auxiliary digital information display such as lamp ticketing and lamp watching map display. As a result, the viewers need to spend a lot of time in the whole process, but also, it leads to that the original planning lamp route can not get the best experience effect.

(IV) The current display mode of Zigong colored lamp focuses on the pursuit of both efficiency and benefits, lacking of the transfer effect of colored lamp intangible cultural information, and from the long-term overall effect, it is very unfavorable to the future cultural heritage of colored lamp, being short of the cultural charm.

3. Innovation in the application of digital display of new colored lamp

With the attention paid to the data-based protection and inheritance of intangible cultural heritage throughout the country, it is not impossible to find a place in the domestic and international tourism market for sustained development if the display and the mode of inheritance of Zigong colored lamp are restricted from itself and the traditional documentary film is adopted, but also, it is more likely that in the future cultural tourism development and the long wave of intangible cultural heritage protection, it will be eliminated by other domestic traditional lamp brand tourism of the same kind, then turning back to consider problems of today's Zigong colored lamp culture display and seek solutions will be futile. With the integrated development mode of new media and digital technology, the advantages of each link can be combined to solve the problems of single display or weak interactivity, lack of culture and so on in Zigong colored lamp. Therefore, we should realize that Zigong colored lamp, as a kind of very crucial intangible cultural heritage resource in Zigong, its cultural inheritance and display reform is not only the foundation stone of local culture development, but also the pass of long-term development at home and abroad in the later period. By means of the comprehensive development path of new media, we can set up a perfect digital information platform for Zigong colored lamp technology inheritance. By propagandizing Zigong's colored lamp culture knowledge through a wide range of new media channels, we can promote the spread and promotion of the intangible cultural heritage. In addition, the present new media technology and Internet technologies such as AR and VR shall be used to enhance the interaction between viewers and Zigong colored lamp in the process of inheritance. Hence, the inheritance of the intangible cultural heritage can be promoted and the awareness of the whole society to protect the intangible cultural heritage in accordance with the law can be enhanced. However, the unique intangible cultural heritage resources of Zigong colored lamp is extremely unmatched with its image and market influence. Therefore, a complete and innovative development path based on new media promotion mode is urgently needed to lead the international development of Zigong colored lamp.

3.1 Digital animation display application

Under the digital display mode of Zigong colored lamp, the process of making colored lamp can be displayed through various means, such as animation, 3D and modeling, so that the viewer's interest can be fully aroused and the cultural information of colored lamp can also be received through vision during the process of viewing the colored lamp. According to Zigong's history and technique, we can carry on the double senses of sight and hearing in an all-round way. We can make the viewers understand and interpret the craft and process of different colored lamp groups with brand-new angle and form, achieve the best effect of inheriting colored lamp culture, and enrich the original monotonous light process. Over the past two years, this kind of display model enriched by depending on new media developing techniques has been gradually tried to be applied to some domestic exhibitions and museum collections, but it has not been applied in the display with great interactivity such as Zigong colored lamp. It is a pity to say.

3.2 Interactive display application

As the new media technology develops, AR and VR, which came into being in recent years, can also try to combine with the traditional colored lamp display mode of Zigong. In the past, the traditional display effect lamp group and the viewer's interaction are single, for example, enhancing the lamp group and the viewer's interactive user experience through the new digital media technology or the virtual projection is also the way that people are willing to accept the traditional cultural knowledge. In the display of colored lamp technique, it is the result that the designers of colored lantern strive to achieve in the practical stage of designing works for realizing the interaction between the lamp groups and the viewers. In the production process, unlike other domestic colored lamps made of traditional paper or cloth, Zigong colored lamp has been exploring innovative forms of material, such as early ceramic dishes spoon or glass bottles. Therefore, in the spread of the typical Zigong colored lamp intangible cultural heritages, more attention should be paid to the interactive design with the viewers, so that the viewers can personally experience Zigong colored lamp from the whole process of "design - layout - sampling - modeling - cloth electricity -separation - decoration - beautification", can further deepen the different understanding of the colored lamp groups, deepen the understanding of the colored lamp culture, so as to achieve the effect of shortening the distance between Zigong's colored lamp culture and human beings. The display of similar museums abroad has been popularized in the application of this technology, and the display of colored lamp can be borrowed from its pattern (as shown in Figure 1).

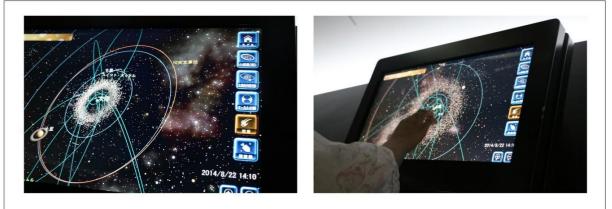


Figure 1: Galaxy Interactive Display at Nagoya Museum of Science and Technology, Nagoya, Japan **3.3 Virtual simulation and display application**

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Figure 2: Zigong Glass Bottle Colored Lamp Kylin Lamp Set

3.4 Mobile-end colored lamp display application

As the economy develops rapidly in today, the use of mobile end is gradually integrated into every aspect of life, becoming an indispensable part, and the popularity of mobile end is also the display of colored lamp and the spread of colored lamp culture, so that the viewers can watch the colored lamp's 3D modeling and other information anytime and anywhere. Moreover, the annual Zigong international colored lamp show sales and viewing guide and the surrounding attractions can be used to form a complete set of standard system in virtue of the mobile end, so as to help the viewers complete the steps from the purchase of tickets to viewing and shelter and means of traveling with the quickest way. On the basis of the modern digital technology and in the display mode of Zigong colored lamp, we should constantly transform the cultural information of Zigong colored lamp into touchable and appreciable data, provide convenience for the contacts between the viewers and colored lamp culture, establish an unobstructed channel between the viewers and cultural information, and realize the intelligent push and display of Zigong colored lamp culture.

4. Conclusions

Zigong colored lamp is not only an important representative of local tourism resources and culture, but also a treasure of intangible cultural heritage. It needs to be inherited and developed continuously, while the present traditional display mode can't achieve the purpose of colored lamp culture inheritance. It needs to constantly innovate the exhibition mode and integrate more scientific and technological factors and times factors with the development of new media. According to the characteristics of new media, from the angle of protecting and inheriting the display of Zigong colored lamp, this paper analyzes the difficulties and limitations in the inheritance and display of Zigong

colored lamp at present, seeking for the digital display form of Zigong colored lamp in the new situation according to the existing digital technology, and discovering the design scheme of digital colored lamp for the viewers or the person who are interested in Zigong colored lamp to take an active part in the process of experience, and making the audiences participate in the traditional Zigong colored lamp production process and the finished colored lamp digital display platform from the perspective of the user experience. This kind of innovative exploration not only plays an active role in the protection of the cultural inheritance of Zigong's colored lamp, but also serves as a reference for the digital display research of the intangible cultural heritage of Zigong or other regions, so as to jointly promote the protection and inheritance of the intangible cultural heritage.

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