The Digitalized Development Approach of Creative Product Design in Internet+

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Abstract: In the Internet + era, cultural and creative products have been more and more widely used in social life, permeating all aspects of people's lives. Cultural and creative products are the combination of developed commercial culture and excellent traditional culture. They are the comprehensive manifestation of the progress and cultural self-confidence of the Chinese nation in the era. Museum, food and tourism are the most prominent areas in the application of cultural innovative products. There are some problems in cultural creative products, such as the lack of cultural connotation, the lack of digital concept, the non-standard packaging design and the lack of practicability of cultural creative products. In the Internet + era, people can try to digitalize the design of creative products through advanced science and technology, including the following ways: the development of web products related to cultural and creative products, the establishment of interactive digital platform, the development of online 3D display platform of creative products, etc.

1. Introduction

With the issues mentioned in the speeches of country's leaders, such as "Let Culture Live", "Promote National Excellent Culture" and "Enhance National Cultural Confidence", the topic of how to carry forward traditional culture has been widely known. Therefore, the issue of culture and innovation has been targeted by people, and try to carry forward excellent traditional culture through the way of products. Literary products are the aggregation of cultural and creative products. They can also become cultural innovative products. This cultural conformity is an important added value of creative products, which adds unique advantages to the products themselves. Every commodity has its basic utility, that is, the utility of solving the real needs, but also some added value, such as the brand value and characteristic value of the commodity.

In real life, when many people talk about creative products, the most commonly used word should be "telling stories". The so-called "storytelling" is a kind of narration of the historical stories behind the creative products. This ability plays an important role in the ultimate transaction value of creative products. A story-telling ability with historical depth can double or even more the value of creative products. Of course, although the ability to tell stories is important, it is not the only one. It would be a great mistake to misinterpret the product of literary creation as telling stories, while neglecting the essential property of the product of literary creation. Nowadays, many designers of literary products ignore this point, focusing only on making "cultural products" and forgetting the "basic utility" attribute of the commodity itself. For example, some creative products only have culture, but they have no practical value at all.

The birth of an excellent creative product is never a single aspect. The basic attributes of the commodity itself, such as utility, quality, brand, appearance and image, together with richer cultural and artistic sense than other commodities, together with the marketing method of "telling stories", can be regarded as an excellent literary and creative product. There are tens of millions of kinds of creative products, and the following is one of the ways to divide them: 1. art collections; 2. practical articles for daily use; 3. tourist souvenirs. In short, cultural innovation products have covered all aspects of our lives.

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2. The Practical Application of Creative Product Design

With the increasing attention of the country to traditional culture, more and more creative products appear in various fields.

First, the application of creative product design in Museum field. Famous museums, such as the Palace Museum and the British Museum, have begun to focus on the combination of culture and modern commodities in museums, creating a number of Museum elements related products, such as shoulder bags with the design concept of the Palace Museum Gate. Museum has a lot of related elements, such as various kinds of treasured ceramic devices, ancient iron, sculpture, painting and so on. The exterior elements and cultural connotations of these collections can be tried to combine with modern products to create new products with various cultural connotations.

Second, the application of cultural and creative products in the field of food. In the chafing dish restaurant of the Palace Museum in Beijing in 2019, people were sensationalized by the "imperial edict" menu and came to enjoy it by car. The so-called "imperial edict menu" is the "imperial edict" used by ancient emperors when announcing orders to write the hotpot shop menu when marketing. This way, aroused people's curiosity, but also let the hot pot shop business become extremely hot. In addition, some manufacturers take advantage of the opportunity of Mid-Autumn Festival to produce moon cakes with ancient cultural flavor based on the design concept of the shape and graphics of ancient bronze coins in China. This has also led to a surge in sales of mooncakes.

Thirdly, the application of literary products in the field of tourism. At present, China's tourism industry has become an important driving force to promote economic development, and creative products have gradually developed in the trend of tourism. For example, in Chengdu panda theme tourism, there are many panda theme stationery products: dolls, bookmarks, pencils and other panda theme stationery. And the most popular panda doll, in the range of tens to hundreds of yuan, meets the needs of many tourists. And this is also the integration of panda doll and panda tourism, so that after the end of the journey, tourists still have a practical thing to remind him of this wonderful memory.

3. Problems in the Design and Development of Literary Creation Products

In the digital age, many cultural and creative products have been introduced continuously, but at the same time, it also reflects the shortcomings in the process of cultural and creative design. To sum up, there are mainly the following questions.

3.1 Cultural Creative Products Lack Cultural Connotation

Although people are responding to the call of the state and striving to launch industrial creative products with Chinese cultural characteristics, from the overall quality, most of the products are lack of cultural connotation, only for the production of creative products, without too much consideration of the cultural significance behind creative products. For example, in a city library, the design of a map-based products, but this kind of flat-type creative products, can not reflect the aesthetic sense of design. Another example is a bookmark made of butterfly specimens. Although there are many kinds of butterfly specimens and they are very aesthetic, there are exactly the same poems printed on the top of the specimens. They neither integrate perfectly with different butterfly specimens in artistic conception nor embody the uniqueness of text design. Such butterfly specimens are monotonous and have no cultural connotations. It would be much better if the designer could combine the actual species of butterfly specimens, match the corresponding subject name, and add the biological knowledge related to this kind of butterfly in the bookmark of the design.

3.2 Cultural Creative Products Lack of Digital Ideas

Now there are many cultural and creative products on the market, which can be said to be extremely rich. However, there is a disadvantage of these cultural and creative products, that is, the lack of integration with digital products. From many creative products, we can see that these

products do not combine the latest technology into the simplest two-dimensional code, bar code technology, or 3D printing technology, but just stay in the stage of pure manual products. In some products, people can combine two-dimensional code or bar code to link the product information of cultural originality through two-dimensional code, so that once consumers buy cultural originality products, they can scan the code independently and obtain the relevant information in two-dimensional code. The information stored in the two-dimensional code is abundant, including the introduction of the function and use of the cultural creative products, the introduction of design ideas, especially the introduction of the cultural connotation contained in the cultural creative products, and so on.

3.3 The Packaging Design of Cultural and Creative Products is Not Standardized and Practical.

A good cultural and creative product needs good product packaging to reflect the connotation of the product. But in real life, many cultural and creative products do not have a standardized packaging form. For example, a gift box. Many product gift boxes are designed without considering whether they have a practical role in protecting the product, but only spend time and energy on how to design cultural and creative patterns. Therefore, the focus has been deviated, resulting in the packaging of some cultural and creative products is very non-standard, and does not have the function of preventing product damage at all. Most of the cultural and creative products now on the market are on the high side, which is inconsistent with the value of the products themselves. Moreover, the practical value of these expensive cultural products themselves is not high, or even can only be used for viewing, not having too much practical value. Of course, there are also some products, although expensive, but also have a certain degree of practicality. For example, some small vases are worth thousands of yuan on the market, but the function of vases is not very strong. Such cultural and creative products sell value similar to that of antiques, but their practicality and value do not match, see Figure 1.

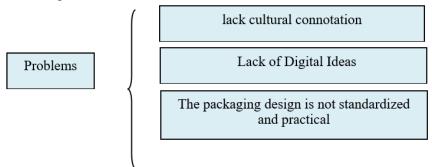


Fig.1 Problems in the Design of Cultural Creative Products

4. Digitalized Development Approaches for Product Design of Literary Creation

With the development of science and technology, the digital development of cultural and creative products has been paid more and more attention. At this stage, the achievements in the development of cultural and creative products are more remarkable, such as the Beijing Palace Museum, the British Museum and so on. But on the whole, there are still many problems in the process of exploring how to carry out the digital development of creative product design. The following ways are about how to carry out digital development.

4.1 Developing Web Products of Cultural Creativity

Now is the Internet era, people are very accustomed to using mobile phones, computers to query the relevant information on the Internet. In the field of cultural and creative products, we should also learn to follow the trend of the Internet and develop web products suitable for the long-term development of cultural and creative products. At present, there is a phenomenon on the web pages of products related to cultural and creative industries: the images pointed to by the web pages are

easy to be lost. There are many reasons for this, such as the reasons for the self-update of the web page, the reasons for the browser, or the reasons for the server. If people can combine web technology with cultural and creative products, they can play a positive role in promoting cultural and creative products.

4.2 Building an Interactive Digital Platform

Now people's material life has become increasingly developed, people pay more and more attention to interactive and experiential play experience. For the development of cultural and creative products, we should also fully consider the use of interactive platform for digital development. Taking the Forbidden City Museum as an example, it has built a variety of interactive and experiential platforms, such as various games, so that visitors to the museum to visit cultural and creative products can experience the cultural connotation of the Forbidden City Museum through small games. In small games, game developers have designed relevant Q&A links, allowing participants to participate in answering questions, learning in play, learning in play. For those who do not know the relevant culture, it is still difficult to pass through the game. Take the game "Emperor's Day" as an example, players need to match the composition, arithmetic and other courses with Zi Uyinmao's time one by one. This means that players need to accumulate certain knowledge of the twelve hours of Chinese traditional culture. Through the experience of games, people can understand the corresponding relationship between the ancients'life and time, and make people understand the traditional cultural knowledge more deeply. Game platform is a very interactive platform with participation, and can arouse people's interest in learning and understanding cultural knowledge. It is one of the important products of cultural creativity.

4.3 On-Line 3d Display Platform for Developing Cultural Creative Products

In a society where digital technology is so developed, designers and developers of cultural and creative products can actively adopt new digital technologies to digitally model ancient Chinese products with cultural characteristics, and then display them on the network platform. Digital development approach, through scanning technology, will have cultural characteristics of objects such as antiques for model collection, in computer software to generate the same prototypes as objects, and then upload these prototypes to the designated website. Through such a digital development model, we can digitize many valuable articles, and also enable the public to observe the fine Chinese traditional culture at any time, anywhere and in many ways. Through the 3D mode display platform, we can achieve the "never ending" of the exhibition hall. Now, the "Daily Palace Museum" platform launched by the Palace Museum can display different collections for users every day. The "Palace Museum of Ceramics" is a mobile phone application specially designed for ceramic enthusiasts. It is an excellent example of the application of 3D and VR technology.

5. Conclusion

With the national attention to traditional culture, cultural and creative products have been more and more widely used in social life, permeating all aspects of people's lives. Cultural and creative products are the combination of developed commercial culture and excellent traditional culture. They are the comprehensive manifestation of the progress and cultural self-confidence of the Chinese nation in the era. Museum, food and tourism are the most prominent areas in the application of cultural innovative products. Although cultural and creative products have been developed for some time, there are still some problems, including: cultural and creative products lack cultural connotation, lack of digital concept, and cultural and creative products packaging design is not standardized, practicality is not strong, and so on. In the Internet + era, people can try to digitalize the design of creative products through advanced science and technology, including the following ways: the development of web products related to cultural and creative products, the establishment of interactive digital platform, the development of online 3D display platform of creative products, etc. I believe that through these ways, people can make cultural and creative products better and better.

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