Design System of Stationery and Creative Products Based on Information Technology

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Abstract. With the continuous progress of society and the continuous improvement of economic level, although there are more and more urban cultural and creative supplies, but the form is single, people are not satisfied with the product experience under the ordinary mode. Informatization brings value recognition in the aesthetics and emotional resonance of cultural and creative supplies design. At the same time, under the information ecology, consumers have produced new consumption concepts and consumption experience concepts. Cultural and creative supplies design requires more experience, so exploring the interactive experience of cultural and creative product design is crucial. Information technology, creative design and social innovation have also developed rapidly, and have become an important driving force of socialist innovation and sustainable development with the characteristics of the new era. This paper studies the construction of the following article design system for information technology. This paper uses theoretical research methods such as literature research and social network analysis to combine theory and practice to further enrich and improve the design and construction of information technology cultural and creative supplies.

Keywords: Information Technology, Cultural And Creative Supplies, Cultural And Creative Design, User Experience

1. Introduction

With the continuous development of the knowledge economy, the cultural and creative industries have become an emerging industry with creativity as the core. In other words, the cultural and creative industries are people-oriented, and the core lies in human creativity and maximization [1,2]. After the European and American developed countries completed a series of industrialization, economic policies encouraged more privatization and free competition. Enterprises and individuals must innovate, and differentiation must have a market [3,4]. The cultural and creative industry is an emerging industry with
creativity as its core. It emphasizes that the main culture or cultural factors depend on people, and the industry develops and sells intellectual property through technology, creativity and industrialization \cite{56}. Cultural and creative products are a specific form of product output in the industry. From the traditional industrial design category, including physical product modeling design, product service content visual design, etc.

The cultural and creative industries promote the transformation of the economic structure through supply and demand \cite{7}. The cultural and creative industries are highly permeable and can bring high added value. Cultural and creative industries rely less on natural resources and are the first choice for economic development in areas where natural resources are scarce \cite{8,9}. In view of this, countries around the world have formulated corresponding cultural and creative industry development policies. In the past 20 years, the development of cultural and creative industries in developed countries has increased people’s employment rate, promoted social stability, racial integration and the development of education, and can provide a reference for the current development of cultural and creative industries in China \cite{10}.

How to use human creativity to form these intangible cultural heritages into industries, inherit and carry forward, is the problem we are facing today. According to the characteristics of cultural and creative supplies, the use of information technology to build cultural and creative platforms and cultural and creative promotion platforms, on the one hand, can stimulate people's interest, on the other hand, it can integrate various disciplinary resources and promote further development. Cultural and creative supplies. In particular, in-depth exploration in the direction of the design of cultural and creative supplies based on informatization.

2. Method

2.1. Cultural and creative design features

How to achieve innovation on the basis of tradition is the goal pursued by the British design community. Modern British culture blends many contradictory qualities. After experiencing the baptism of various design styles and design ideas, its cultural and creative design features include tradition, freedom, rebellion and pluralism. Cultural and creative supplies are short for cultural and creative products, and are the result of designers' understanding of a certain culture and its productization. Cultural and creative supplies are also mostly related to regional culture, such as the royal series of cultural and creative supplies in the Palace Museum in Beijing and the terracotta series of creative supplies in the Xi’an Museum. The design combining cultural and creative supplies with local culture not only provides opportunities for innovation and development of regional culture, but also provides opportunities for informatized cultural and creative supplies and creation of new products.

2.2. Significance of information technology research and development of cultural and creative products

In the information age, China's economy is in a stage of rapid development, and people's material lives are improving year by year. However, compared with the rapid development of material life, the development of cultural life and the understanding and demand for its own culture have been
expanded. The mismatch between cultural life and material life has caused new social contradictions. People's desire for spiritual and cultural life is also getting stronger. Information technology The design of creative supplies is the source of cultural spirit. Consumers can not only appreciate the essence of regional culture when designing cultural and creative products, but also satisfy their desire to eliminate regional culture in other regions. Cultural and creative supplies can also become a place of trust for people's spirits. The design and creation of cultural and creative supplies with their own advantages and regional culture can greatly improve the status quo and make a certain contribution to the promotion of economic development. Under the dual role of capital and cultural communication, cultural and creative supplies can also be greatly improved, thereby promoting their own development and reform. At the same time, in order to create a "informatization + cultural and creative design" lifestyle, and effectively promote cultural and creative design to fully participate in social production and life-oriented services.

3. Experiment

This article combines theoretical analysis research and case practice research, trying to comprehensively use literature research methods, case analysis methods, type research methods, comparative analysis methods, system analysis methods and social network analysis methods. Through theoretical, research, interview, collation, practice, feedback, construction, testing and improvement, we will carry out in-depth theoretical innovation. The main research method is the literature research method. By searching and retrieving classic literature, works, periodicals and reports on information-based culture and creativity, design and social innovation related topics at home and abroad. In addition to literature research methods, this research also uses social network analysis methods, qualitative and quantitative research methods, and practice-level root cause analysis methods, process analysis methods and questionnaire survey methods to integrate multidisciplinary knowledge through coherent research methods.

4. Discuss

4.1. Development trend of information-based cultural and creative supplies design

For China's modern design has experienced more than 100 years of vicissitudes, after 40 years of reform and opening up and economic transformation. On the one hand, China's cultural industry is booming driven by the global economy and information industry. What really made substantial progress in the reform of cultural undertakings was that the Ministry of Culture established the Department of Cultural Industry in 1998. At the same time, it also began to play the dual benefits of culture. Social and economic benefits always emphasize the priority of social benefits. On this point, some industry researchers discussed the development stage of Chinese cultural creation and put forward the theoretical concept of the stage of "Informatization Cultural Creation 3.0" in Table 1.

| Table 1. The development process of informatized cultural and creative 3.0 |
|------------------|-----------------|-----------------|
| Stage            | Cultural Creation 1.0 | Creative 2.0    | Cultural Creation 3.0 |
| Time             | 1998-2008        | 2009-2013       | Beginning in 2014     |
Aims

Reforming the cultural system to release cultural vitality
Cultural establishment increases GDP output value
Promote industrial upgrading and create a better life

Development Concerns

Focus on cultural projects
Focus on industry chain
Focus on information industry ecology

Relationship With Capital

Culture and capital split
Explore the combination of finance and industry
Capital and industrial integration, especially industrial capital increase, outstanding mergers and reorganizations

As can be seen from Table 1, the process of cultural and creative development is the general trend. This also happens to represent the status quo of Chinese cultural creation. Under the intervention of capital and technology, social and cultural changes, and cultural and creative design, due to its own broadness, integration and inclusiveness, or the democratic spirit of design, after a certain stage of development, it has begun to form the expression and resistance of cultural awareness Social development and system reform under information technology have formed a diverse and prosperous cultural and creative social ecology.

In the current development of information technology, how to solve a series of contradictions in the transition period through information technology innovation, how to improve the quality of life of the community through information technology innovation, and how to let the community express its voice and individuals through information technology innovation is better The way of expression will be an important entry point for building a harmonious society in the future. If you carefully study the projects of Chinese social organizations and the China Informatization Innovation Award. We will find that information technology service projects in the design of cultural and creative supplies account for 5%, 7.5%, 14.2%, 16% and 19.5%, respectively, showing a trend of increasing year by year. The specific application trend of information technology in the design of cultural and creative supplies is shown in Figure 1. Most of the individual ‘s value in social innovation is reflected in the individual’s own influence and the influence of external tools surrounding events initiated by specific companies.
In the information industry, cultural and creative product design and innovative forms that use cultural communication as content and services constitute an emerging application area for traditional product design. The design of cultural and creative supplies and information technology is an interdisciplinary field, in which the integration of culture, art, engineering and business becomes more and more important. The main content of design and information technology is how to conceive, design and information products to meet the needs of users, improve people's living standards, and bring social and economic benefits. Factors such as cultural and creative, user interface and marketing must be considered in product design. Therefore, it integrates innovative elements such as cultural creativity, product design intelligence theories and methods, user experience, user interface and human factors, business models and analysis. Promote a problem-oriented innovative design model and build an information design innovation platform with thinking ability, integration ability and implementation ability. The research and design of cultural and creative products has become a new research direction in the field of design.

4.2. Information technology, cultural and creative supplies design and application

With the advancement of science and technology, the development and application of informatization and Internet technology, the use of information interaction design methods, information technology and digital technology means to design cultural and creative products and service experience design. The innovation of the development experience economic model is to enhance the competitiveness of the cultural industry market. Different from traditional cultural and creative products and services, its competitiveness is reflected in the spread of information. Design intangible cultural content and connotation through information means, and adopt interactive experience methods to enable users to fully immerse and satisfy the interaction with the connotation provided by cultural and creative products in this process. And participate in the whole process.

Unlike traditional cultural and creative products that focus on the redesign of the visual cultural symbols of the product itself, interactive experience in the context of information technology Cultural and creative product innovation focuses more on digital services and content experience information and level behavior plans in the network environment and A comprehensive experience design method,
which takes into account the essential characteristics of the experience behavior carrier, and can establish a good interactive experience during user use. Specific product development practice areas of the cultural and creative industries include cross-platform application software design practice under the network ecological environment. Involve the definition of demand functions and service content factors, and integrate them into application software products, at the same time integrate unified image functions, while considering the graphical user interface, user behavior habits and cognitive differences. The product range includes under the Internet and mobile Internet and its business ecological model, it will provide cultural and creative content to users in the form of application products (App) products that use various physical terminal products as carriers. This is an interactive experience software product with cultural and creative features, with Internet functions, such as location location services, online social networks and social collaboration. Environmental space communication interaction systems and equipment are based on information technology or network services and operations. Product areas include interactive experience services and control design for museums, exhibition halls and other cultural exhibition spaces. The innovative design of interactive experience physical products is based on the design of traditional industrial products, but it is defined as an innovative product with the interface characteristics between the physical world and the virtual world, including cultural and creative souvenirs with interactive experience.

5. Conclusion

Cultural and creative supplies themselves are relatively niche markets, but the market prospects are very broad, and it is necessary to establish consumers without consumers. In order to create consumers, we need to use interactive design to innovate the design of cultural and creative products, highlighting the interactive experience between products and consumers. Under this concept, cultural and creative product design must determine the user's use needs based on demand analysis, clarify the functions and characteristics of the product according to the needs, and formulate a conceptual design plan. Users evaluate plans and provide effective feedback to promote design improvements. In product design, it is necessary to analyze consumer needs and the psychological motivation of consumers who purchase cultural and creative products. Based on this, creativity is used to meet the individual needs of consumers. Therefore, cultural and creative products should be practical and give consumers a sense of high quality to satisfy consumers' artistic pursuits.

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