



Research on Creative Design and Brand Building Based on Technology Empowerment

Take the Chinese Character Intellectual Property as an Example

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Abstract. Chinese characters have a long and rich cultural connotation, and the unique artistic charm of Chinese characters symbols is deeply loved by people. Chinese character symbols have been widely used in many fields, but the design of many cultural and creative products is just a simple combination of some cultural elements and then typesetting. Although the output and sales are very high, they cannot show the cultural charm and lack of brand symbols and brand protection awareness. By analyzing the scientific technology which enables IP cultural and creative products of Chinese characters, this paper creates a unique cultural ecological model, studies how to make the cultural content of Chinese characters glow with new vitality combines the concept of IP to further promote the cultural and creative industry and achieves a win-win situation.

Keywords: Chinese character IP · cultural and creative products · visual design · brand building · science and technology empowerment

1 Introduction

One of the parts of Chinese modernization is the modernization of material civilization and spiritual civilization in harmony. The key to the construction of spiritual civilization is to develop the cultural industry. To develop of our cultural education undertakings and cultural industries, we need to improve the influence and visibility of Chinese culture, adhere to the national position, and promote Chinese culture to better step into the world. Chinese characters are the genes of Chinese culture. The integration of Chinese characters and cultural and creative products is not only the integration of characters and modern technology, but also the integration of cultural significance and products represented by Chinese characters. Chinese culture has a long history and is extensive and profound. Chinese characters have profound cultural deposits, and different Chinese characters also have different meanings. By penetrating the cultural meanings behind Chinese characters into cultural and creative products, we can not only increase the historical value of cultural and creative products, but also increase the humanistic attributes of cultural goods.

Under the digital economy, the form of “Internet+ intangible cultural heritage”, with Chinese characters as symbols, integrates traditional cultural elements with the current

trend, and puts forward the design concept of IP cultural creative products with Chinese characters. By creating a unique cultural ecological model, the cultural content will be full of vitality, Chinese characters IP cultural and creative products will be enabled by means of science and technology, so as to further penetrate the concept of IP into the development of cultural and creative industry and achieve a win-win situation.

2 The Importance of Chinese IP in Cultural and Creative Design

2.1 The Concept and Possibility of Chinese IP

IP is a new-age cross-border symbolic content with the main features of multi-level, diversified, cross-industry and cross-business. “New cultural creation” is a new way of “cultural reproduction” with IP construction as the core in the current new era, in order to cultivate more widely influential Chinese cultural symbols [1].

Chinese characters are rich in traditional culture. People say, “A Chinese character is a story.” From form to content, Chinese characters are not only unique artistic symbols, but also vivid images. The spiritual elements contained in Chinese characters, such as cultural background, life consciousness, ethnic ideas, life wisdom and culture, deserve to further research. “Chinese characters” keeps pace with The Times. It is necessary to dig deeply into the spiritual and cultural content of Chinese characters, and enrich its connotation continuously in the digital age. On the basis of the aesthetic value of Chinese character symbols, combined with rich design methods, the characteristics and cultural characteristics of Chinese character symbols in contemporary products are highlighted, so as to make the cultural content full of new vitality, and further promote the development of Chinese character creative industry with the concept of IP.

2.2 Development Status of Chinese Characters IP Creative Products

In general, graphic design is the main creative element, but font design is rarely implemented. The reason for this phenomenon is that the designer misinterprets the images during the learning process. Much of the design knowledge they receive in schools, on the Internet and elsewhere emphasizes designing with graphics as the main body. Due to the lack of scientific planning and careful design by designers, there are very few cultural and creative products with Chinese characters as the main design elements, and they do not show their cultural charm, brand symbols or brand protection consciousness.

China has a long history of Chinese characters and unique cultural advantages. The Chinese characters are symbolic, artistic and epoch-making. In the design of Chinese characters fonts, designers can choose and apply rich design elements, and make visual effects more vivid through the formal innovation of Chinese characters in cultural and creative design. Users can quickly obtain as much information as possible in it. IP cultural design of Chinese characters caters to the contemporary mass consumer psychology, and may become the next big trend of cultural design [2].

3 Chinese Character IP and Cultural Innovation to Integrate Design and Build Brand Systems

3.1 The Visual Design and Innovative Development of Chinese Characters IP Cultural Products

3.1.1 Chinese Character Cultural Design Elements into Cultural and Tourism Creative Products

The country and the region have jointly stressed the need to accelerate the development of deeply integrated culture and tourism. In integrating and innovating Chinese character creative design with historical and regional cultures, Chinese characters should be used as the main body of creative culture, and different design forms should be used to achieve their distinctive integration and innovation.

By choosing the time line of traditional Chinese culture and the form of regional culture, history and regional culture are presented through pictures or illustrations, rather than fragmented and boring text. It is not simply pieced together, but directly makes the characters figurative and symbolic, using a word to describe the characteristics of its historical point of time, and loading them into the typeface of that period of the word.

According to the figure above, the “Han” series shown in Fig. 1 is shown in the IP creative design of Chinese characters. Take IP creative design products of Chinese characters in Wuhan as an example. “Han” can be selected as cultural elements and designed. Stories such as the Yellow Crane Tower have been injected into Chinese character carriers for artistic extraction, and representative Chinese IP cultural products have been designed and produced, which can be sold not only as Chinese IP design brands, but also as souvenirs for local cultural tourism in Wuhan.



Fig. 1. “Han” Series: Chinese Character IP Creative Design (author demonstration)



Fig. 2. NetEase: The combination of ancient Chinese characters and fashion

3.1.2 Combine Chinese Characters Cultural Products with Modern Fashion Design Elements

At present, the extension of cultural value, the spread of social media and the popularity of “fan economy” make cross-border co-branding become a fashion. The emergence of cross-border co-branding of national tide sets off a “national tide fever”, which makes Generation Z more passionate about home and country [3]. The emergence of cross-border co-branding of national tide sets off a “national tide fever”, which makes Generation Z more passionate about home and country. Cultural and creative products are designed by creators to meet current trends by innovating and refining historical inheritance, regional culture, national characteristics and other elements with their own wisdom, ability and talent, combined with modern scientific and technological means. Outdated and redundant concepts and perspectives must be discarded in the creative process of Chinese character IP creative products, and more novel elements should be incorporated to design Chinese character IP creative products that are more in line with the aesthetics of Generation Z.

According to the following figure, the products combining ancient Chinese characters and fashion displayed by NetEase are shown in Fig. 2. The Oracle Silver Tag Necklace is a simple necklace with ancient Chinese character art. The design is classical but elegant, showing no signs of age or heaviness. The collision of traditional culture and fashion trends has created this chic necklace, which is no longer just a simple ornament, but also gives ancient cultural designs and collectible value without being banal.

3.1.3 Adhering to the “Traditional + Modern” Creative Concept, Both Aesthetic and Practical

Take, for instance, the case of Huaxizi. In today’s traffic-driven era, Huaxizi is one of the most popular makeup brands in China, attracting consumers with its highly Chinese-style designs. But it is underpowered, underdeveloped and too dependent on traffic,

and its huge product packaging is extremely inconvenient to carry and easily damaged by engraving. Although Huaxizi has achieved some development due to some industry insights and advantages, in the long run, only by focusing on product research and development and improving the consumer experience can Huaxizi become a brand with real core competitiveness.

Inherit the past and embrace the future. The combination of cultural and creative products and traditional cultural industries will, on the one hand, provide more abundant materials for cultural and creative industries, and, on the other hand, promote the innovative development of traditional culture and open it up to the public in a new attitude. If the two are to combine perfectly, the key is to find a breakthrough, make a creative shift, develop innovation, and capture attention and win over consumers. In the process of creating IP cultural and creative products, we should always adhere to the creative idea of “traditional + modern”. Cultural and creative products are based on everyday products or souvenirs, and practicality is particularly important for entry into public life. Blindly pursuing a sense of design while ignoring the practicality of the product, the aesthetic feeling that culture imparts is always a dream.

3.2 Create Chinese IP Text Creation and Build a Brand System

With the rapid development of the market, the brand has undoubtedly become an important symbol to distinguish similar products in today's surplus material production. Having a brand, especially a strong one, will have more attention and more competition. Nowadays, the homogenized competition of cultural and creative products is intense, with products designed in the same way and with little difference in the quality level of products. Cultural and creative product design must focus on brand building, which can promote user understanding of the brand.

Characteristic IP is an important element in forming the brand image of individuals, companies and even countries, and an important source of inspiration and content cornerstone for creating high-quality cultural and creative products. It is very important to focus on the values of IP and the bearer of IP cultural values. A survey of the world's prevailing cultural symbols shows that they not only share people's common positive values, but are also rooted in their own national ethos. Chinese characters, as the endless traditional characters of the Chinese nation, have been the cultural essence of the Chinese nation for thousands of years.

As an example, a series of Chinese character IP visual design products will be created based on Chinese character IP, giving full play to the integrated driving role of IP, combining apparel, makeup, cultural tourism and other industries to form a complete cultural and creative product system. Through the analysis of characteristic industries, the Chinese character IP is applied to the cultural tourism industry and peripheral products, and the history and regional culture are combined with science and technology to form an integrated visual image, create a characteristic industrial culture, and form a systematic cultural and creative industry chain including packaging, makeup, clothing, etc. The development of the Internet, clothing, stationery, cosmetics, tourism and other fields.

Establish the Chinese character IP cultural creative brand, adjust the brand mix, improve the brand image, expand the brand awareness, cope with the brand crisis, continuously and steadily build the brand characteristics, towards the brand vision, not only

to meet the needs of contemporary society, but also to spread Chinese culture during the student period, cultivate the ideal, capable and responsible youth of The Times. And, under the conditions of the continuous operation of domestic brands and companies, it is the common mission of cultural enterprises to enter the ranks of brand internationalization, adopt global marketing methods, achieve low marketing costs, unify products and corporate images, and form an international cultural brand image. Only by truly going out and receiving feedback from audiences around the world can we find more appropriate ways of cultural expression and communication and enhance the global distribution of Chinese stories.

4 Combined with “Technology Enabling”, Create a New Model of Chinese Characters IP Creative Products

4.1 Let Static Chinese Character IP Text Creation “Move”

With the development of science and technology in our country and the continuous improvement of national quality, the demand for cultural creative products is not only better displayed or more humanized, but also tends to realize the dynamic feedback and even interactive experience of the products themselves [4]. Dynamic design is always focused on bringing better experience to users: By establishing the intimacy between products and users, dynamic details are constantly refined and concept output is enriched, so as to achieve a perfect combination between design and products [5]. Digital technology has brought immeasurable scope for cultural creativity and communication. Chinese character IP, as a digital technology for cultural integration, has gradually upgraded cultural and creative products from static to dynamic and static integrated products with more experience. It can educate people about Chinese culture, attract more people to cultural centers and other places, and further boost people’s cultural confidence. This is an important node in the development and transformation of Chinese character IP research and creation products.

4.2 Develop the Design and Intelligent Creation of Chinese Characters IP Digital Text

In recent years, “digital transformation” and “digital economy” have become social hot spots. In August 2022, the state announced that it would promote the development of digital economy and industrial digital transformation [6]. Developed countries also recognize the importance of intelligent technology to the transformation of cultural industry, and pay high attention to the deep integration of new technology and cultural industry [7]. Digital cultural and creative products need to be designed from multiple aspects during display and use, so that the audience can have a deeper understanding of the product information.

“Technology is the primary productive force”, which can not only promote economic development, but also the “enabling” effect of technology can give new power to traditional things [8]. As a new form of presentation, digital cultural and creative products bring new vitality to the innovation and communication of traditional cultural forms,

which is an important way to enrich traditional cultural forms and enhance the communication of excellent culture. Chinese character culture has a unique aesthetic value as well as practical value. The Chinese character IP cultural innovation industry can also take advantage of digital technology and use virtual reality technology or augmented reality technology to generate audience interest in Chinese character cultural content. In the process of cultural digitalization, the audience's interest in traditional exhibition methods is declining, but the application of augmented reality technology in calligraphy art can arouse people's strong interest [9]. The use of VR and AR can create not only individual pieces of artwork, but entire virtual museums that cannot be displayed on site, so that ancient historical cultures and regional cultures buried in books can be revitalized. Through the use of digital technology, we can not only improve the copyright protection and promotion of Chinese-language IP, but also improve the interaction of Chinese-language cultural content so that Chinese-language culture can successfully break out of the cycle.

UNESCO has reviewed and approved the inclusion of Chinese calligraphy as a representative work of the intangible cultural heritage of humanity. The combination of calligraphy culture and digital cultural creation can extract the formal beauty and artistic beauty of calligraphy and produce a new generation of cultural and creative experience products through innovative design. The entry of "calligraphy + digital" cultural and creative peripheral products into the NFT industry can open new development space for the NFT industry, and the NFT industry can stimulate the enthusiasm of traditional art creators to some extent. The two complement each other and open a new era of digital collection track. Moreover, with the rise of Generation Z consumers, the market is becoming more and more active. In the future, digital collections will also drive the common development of digital economy and industrial real economy [10]. The services developed by NFT game platforms are among the most popular. Digital games have been around for a long time, are younger, and have achieved huge growth and high revenue. Tencent has introduced calligraphy culture into the game characters, to some extent injecting new color into the culture of Chinese characters. In the digital age, science and technology provide new products and services for the total cultural needs, and bring new opportunities, new directions and new challenges for cultural consumption. It dares to innovate boldly and break the waves to move forward, and continuously infuses the source power for the IP creative design of Chinese characters.

5 Conclusions

Nowadays, with the advent of the digital age, the rapid development of The Times and the continuous upgrading of the consumption level, the inheritance and development of Chinese calligraphy and excellent traditional Chinese culture is becoming increasingly important in the process of the great rejuvenation of the Chinese nation, which has important practical significance. We should attach importance to content innovation of cultural industry and technology-enabled cultural industry chain, creatively integrate Chinese culture with science and technology, creates and promotes various creative products and themed innovative activities, accelerating the industrialization development of the integration of Chinese culture and scientific and technological innovation, and enable

the inheritance and development of Chinese culture through scientific and technological innovation. We should firmly grasp the digital tide and actively use digital technology and digital thinking to stimulate the core of Chinese calligraphy culture and create new inexhaustible forces.

Contemporary creators should combine new design thinking, lead creativity with science and technology, capture user psychology, improve user product recognition and capture consumer psychological orientation. With the help of Internet marketing and communication, the quality of products and services can be improved. Chinese calligraphy, as a distinctive Chinese aesthetic system, differs from Western aesthetic traditions that emphasize realism. Chinese classical aesthetics, which focus more on the communication and resonance of emotional charm, have launched innovative activities in the visual image and modeling space of Chinese IP cultural products. In order to design culturally creative products based on traditional Chinese cultural elements, it is necessary to have an in-depth understanding of China's unique aesthetic system, and not just from a Western aesthetic perspective. Not only gives its style and cultural characteristics, but also can give full play to the role of cultural and creative brand value, attract young people to stay, and then foothold in the market, more can spread the extensive and profound traditional culture and refined mood, facing the future, improve the core competitiveness in the international market.

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