

Analysis of the Value of Digital Collectibles of Traditional Cultural Intellectual Properties from the Perspective of Industrial Chain

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Abstract: As an important carrier and blue ocean field of current digital content products, digital collectibles have developed rapidly since 2021. Their role in protecting digital copyrights and the advantages in inheriting and disseminating traditional intangible cultural heritage have made them a cutting-edge direction in the research of cultural digitization. The research on digital collectibles in China mainly focuses on the value generation logic of digital collectibles, copyright protection issues, policy regulations, the role of digital collectibles in the protection and inheritance of intangible cultural heritage, and the development strategies of specific industrial digital collectibles. Against the backdrop of the development of the cultural industry and the pan-entertainment industry, the operation of traditional cultural intellectual properties (IP) has become a hot topic in current academia. Traditional cultural IP possesses relevant cultural creative resources, collective emotional resonance, and intellectual property resources, which give it unique advantages in the distribution of digital collectibles. At the same time, digital collectibles can also provide new ideas for the operation of traditional cultural IP, promote its further digital development, and facilitate the creation of digital cultural works that blend with the current era by utilizing relevant resources, enriching the contemporary connotation of traditional cultural IP. This study takes a comprehensive perspective of the industrial chain and aims to clarify the intrinsic connection between digital collectibles and the operation and development of traditional cultural IP, and to determine the specific value of digital collectibles in the development of traditional cultural IP. It is expected to provide new perspectives and directions for the research on the relationship between digital collectibles development and traditional cultural IP, and further promote the development of traditional cultural IP through the use of digital collectibles.

Keywords: digital collectibles, cultural IP, traditional culture, industrial chain

1. Research Background

With the global development wave of Non-Fungible Tokens (NFTs), digital collectibles have entered a period of rapid growth. Several leading internet companies in China, such as Baidu, Alibaba, and Tencent, have established their own digital collectibles platforms. Compared to traditional digital

content, digital collectibles have inherent advantages in terms of digital copyright protection, transaction records, and originality protection. They have become an important carrier of digital content products and can be widely applied in the fields of intangible cultural heritage protection and development, digital publishing, art distribution, and cultural and creative development. With the rise of the concept of operating traditional cultural intellectual properties (IP), the emergence of digital collectibles can help traditional culture achieve diversified presentation through the use of new technologies, creating more vivid and modern digital cultural products. In terms of protecting traditional culture, blockchain technology can be used to effectively record digital copyrights. In terms of disseminating traditional culture, digital collectibles can reduce distribution costs, improve dissemination efficiency through the use of the Internet and metaverse technologies, and enhance cultural confidence. As an important carrier of global digital content, the development of digital collectibles (NFTs) is in line with the overall background of cultural digitization strategy. With further deepening of cultural digitization, smooth circulation of various data elements, strengthened regulation, and establishment of a digital governance system for culture, the impact of security risks and copyright disputes on the development of digital collectibles will be reduced. This paper takes a comprehensive perspective of the industrial chain to study the dual role of the operation and development of digital collectibles and traditional cultural IP. It aims to provide some directions for the development and utilization of digital collectibles in the inheritance of traditional culture.

2. Concept of Digital Collectibles

2.1. NFT

NFT, or Non-Fungible Token, is a type of token that has been developed with the further improvement of blockchain technology. It serves as a new electronic certificate for various types of digital assets due to its indivisibility, uniqueness, and storability. As a general token, NFT has strong liquidity and high security, making it applicable to digital transactions. In the international market, NFT is considered a financial product and is traded on public chains. The non-fungible attributes endowed by its technological characteristics allow NFT to go beyond the functions of general tokens and generate symbolic value for buyers. According to Qiming Shi and Xueyin Guo, “These non-fungible attributes enable it to be linked to specific assets and can be associated with various fields such as digital art, copyrights, music, film, and games, thereby reflecting the value of virtual and abstract objects and possessing cultural value attributes that general digital currencies do not have”. [1] NFT products come in various forms, including images, short videos, music clips, game skins, and more. Most digital products can be linked and transformed into NFTs. The importance of NFT is also reflected in its foundational role in constructing the metaverse. NFT, along with blockchain, can create metaverse assets and establish an effective economic system for the metaverse. [2]

2.2. Digital Collectibles

Digital collectibles represent a Chinese exploration of NFT. Generally, foreign NFT products often adopt a user-generated content (UGC) creation model, where they can be directly purchased on the public chain by other virtual tokens such as Dogecoin and Bitcoin, making them highly liquid and tradable on secondary markets. However, in China, a consortium blockchain is usually employed, which imposes certain thresholds and restrictions on the creation and distribution process. There is a more cautious attitude towards virtual currency transactions. At the same time, the secondary trading of digital collectibles is not clearly defined. Some larger NFT issuance platforms in China, such as Topnod and IllusionCore, explicitly do not provide secondary trading services. Currently, there are no specific policies or regulations in China that prohibit or allow trading in the secondary market for NFTs. The “gray” nature of secondary trading weakens the monetary attributes of digital collectibles.

Digital collectibles emphasize the value of collecting digital products and cultural value while weakening the attributes of secondary trading for NFTs. They represent a new form of digital cultural and creative derivatives. [3]

3. Value Analysis of Traditional Cultural IP Digital Collectible Issuance from the Perspective of Industrial Chain

3.1. Value Analysis of Issuance Based on the Digital Collectible Industrial Chain

3.1.1. Digital Collectible Creation: Abundant Resources, Diverse Content

Chinese culture is vast and profound, with a long history. The creation of cultural products relies on a rich and fertile content soil. Traditional cultural IP provides a constant source of inspiration for the creation of digital collectibles in terms of both quantity and quality. Many well-known digital collectibles in the current market have traditional cultural backgrounds, such as the NFT “Twelve Zodiac Animal Heads” based on the zodiac culture, and the NFT illustration “Twenty-Four Solar Terms” based on the twenty-four solar terms. In terms of individual traditional cultural IPs, the quantity and quality of related digital collectible creations are also considerable. Taking “Culture of a Journey to the West” as an example, current NFTs related to Journey to the West include Hong Zhang’s “Journey to the West”, Journey to the West card game NFTs, Zhizhong Cai’s hand-drawn Journey to the West NFTs, Journey to the West Planet, and Yuanjin Art Journey to the West poker NFTs, covering various types such as anime characters, card games, hand-drawn comics, poker, and related movie clips.

3.1.2. Digital Collectible Issuance: Authoritative Release, High Credibility

The domestic digital collectible market is still in its early stages, and due to the lack of complete industry standards, there are disputes over the copyright ownership of digital collectibles, leading to speculations and suspicions about the market [4]. Currently, some traditional cultural IP-related products in the digital collectible market are jointly released by public cultural service institutions in collaboration with platforms, especially public cultural museums that possess a large number of traditional cultural resources [5]. Digital collectibles endorsed by these museums can increase the credibility of digital collectibles to a certain extent and enhance consumer confidence in purchasing.

3.1.3. Digital Collectible Sales: Emotional Resonance, Broad Market

One of the important attributes of digital collectibles is their social nature. According to Baudrillard’s theory of symbolic exchange, after the second industrial revolution, the development of productivity has surpassed the need for “things” and shifted towards “symbolic” consumption [6]. The consumption of digital collectibles is no exception. By purchasing digital collectibles, consumers obtain “symbols” that generate recognition and reinforcement of their self-identity, satisfying their needs for social interaction within their circles. Therefore, when designing and developing digital collectibles, it is important to cater to the aesthetic preferences of the target consumer group, establish emotional connections with consumers, and meet their personalized needs. Chinese traditional culture carries the collective emotions of the Chinese people, and most Chinese people have been influenced by traditional culture since childhood, which also deeply affects their consumption choices. These traditional cultural IPs have a huge potential customer market [7]. Collective emotions endow the creation of digital collectibles related to traditional cultural IP with inherent potential markets and target customers. Data shows that on the Topnod platform, digital collectibles related to traditional culture account for 70% of the total.

3.2. Value Analysis of Issuance Based on the Full Industrial Chain of Traditional Cultural IP

3.2.1. Protection of Traditional Cultural IP: Technological Advantages in Cultural Preservation

Digital collectibles have characteristics such as immutability, uniqueness, and non-fungibility. After being uploaded to the blockchain, they can be publicly accessed, traded, and traced, with each transaction leaving a trace on the blockchain, ensuring the copyright of digital content. Traditional cultural content creators under the umbrella of intellectual property (IP) can effectively protect their rights through digital collectibles.

Digital collectibles also serve as an important means of preserving traditional cultural resources. The digitization of culture can effectively achieve the creative transformation and innovative development of Chinese traditional culture. Some traditional cultural resources face dilemmas in protection and development, which can be effectively resolved through digital means. For example, in the development of Dunhuang murals, digital technology has been used to achieve 3D reconstruction of caves and panoramic tours, avoiding the loss of mural resources caused by tourism development. The important form and technological features of digital collectibles enable them to protect traditional cultural resources in a more secure, low-cost, and low-loss manner.

3.2.2. Creation Related to Traditional Cultural IP

3.2.2.1. Digital Presentation Methods

The essence of digital collectibles lies in digital cultural products. The digital presentation methods break through the limitations of physical cultural and creative derivative products, enriching the expression of traditional culture. For traditional culture, digital cultural products can make content more vivid and expressive. With the help of digital technology, products can more fully restore the original meaning of traditional culture. Digital collectibles, as a new type of digital technology, provide a new way to combine traditional culture and digitization, allowing creators to preserve and create traditional cultural resources, exploring new possibilities under the combination of traditional culture and digitization. [8] Taking the Wu Culture Museum, which showcases traditional Jiangnan culture, as an example, they have launched the “Rediscover Jiangnan” digital collectible blind box. The digital work “Xiao Xuan Chuang” takes inspiration from the Southern Song Dynasty Yingqing Powder Box unearthed from the third-year tomb of Jingding in the Southern Song Dynasty at Qiongli Dun in Xietang, depicting the beauties of the Song Dynasty as the main elements. Through cartoonized female characters, it personifies the aesthetic pursuits of women at that time. Using digital techniques, it innovatively expresses the overall image of the Southern Song Dynasty Yingqing Powder Box.

3.2.2.2. Stimulating Contemporary Expression of Traditional Cultural IP

The development of the digital collectible market is accompanied by the rise of subculture consumption and the demand for personalized symbol consumption among the younger generation. [9] According to Aurora Data, in July 2022, users under the age of 35 accounted for 70.6% of the mainstream digital collectible app users. In the case of the phenomenon-level NFT auction “Everydays: The first 5000 Days”, statistics from Christie’s show that 58% of bidders are from the millennial generation (1981-1996). The target market for digital collectibles is the younger generation influenced by trendy culture. Therefore, the creation of digital collectibles needs to cater to the needs of the main audience through youthful expression. In the design process of digital collectibles, creators combine traditional culture with contemporary aesthetics and trendy culture, creating

traditional cultural collectibles that are more youthful and fashionable. Take the example of the “Cyber-Tiger Head” digital collectible, launched by Shuangjing Museum, which embodies the cyberpunk style. This digital collectible incorporates elements of the traditional Chinese zodiac animal-the tiger head, while adding mechanical cores to the original bronze sculpture. The design features blue light lines, conveying a contemporary aesthetic inclination towards technology. It successfully combines the majestic and domineering qualities of the traditional tiger head with the futuristic elements of cyberpunk, making it highly sought after in the market. [10]

3.3. Dissemination of Traditional Cultural IP: Telling China’s Story and Building Cultural Confidence

3.3.1. International Communication

Digital collectibles can reach the internet and metaverse, serving as a new and highly efficient form of cultural output in the current attention-grabbing business model. In the advancement of the metaverse concept, digital collectibles can be easily traced and authenticated during the dissemination process, making them excellent carriers for international cultural outreach. By leveraging the characteristics of digital collectibles, high-quality digital collectibles with distinctive Chinese traditional cultural features can be created, effectively telling China’s story to the world. Take the example of the Bing Dwen Dwen digital blind box released during the Winter Olympics. Compared to the initial release price of \$99 on the nWayPlay platform, the highest-priced digital collectible in this series skyrocketed nearly 20 times. This not only achieved high commercial value but also spread Chinese culture through the image of Bing Dwen Dwen in this digital collectible series.

3.3.2. Intergenerational Communication

As a new form of cultural product embraced by contemporary young people, digital collectibles can serve as an effective medium for transmitting traditional culture to younger generations. By presenting traditional culture in ways that appeal to the younger generation, more young people will be willing to understand, become familiar with, and develop a greater fondness for traditional culture. This will effectively facilitate the intergenerational communication of traditional cultural IP and enhance the sense of identification and cultural confidence among the young generation towards Chinese traditions. [11]

4. Conclusion

As a new form of digital cultural product, digital collectibles are still in the stage of exploration and innovation, facing issues such as unclear industry regulations and insufficient constraints on creators. However, in the context of cultural digitization, their technological advantages can effectively contribute to the preservation of traditional cultural resources, inspire the creation of cultural and creative products related to traditional culture, promote the contemporary expression of traditional culture, and enhance the efficiency of traditional cultural dissemination through digital platforms, thus telling the story of China. Therefore, on the one hand, it is necessary to pay attention to market risks and strengthen regulation; on the other hand, it is also important to seize the opportunities provided by digital collectibles, recognize their advantages, continuously improve the digital cultural market, and further promote the development of traditional cultural intellectual property (IP).

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