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Research on the Problems and Countermeasures of Digital Development of China's Cultural Industry

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Abstract: *Based on the wide application of digital technology, the development mode of cultural industry has shown significant new changes. Compared with the traditional cultural industry, the good development of information digitization of the cultural goods industry chain has presented five outstanding features, such as the digitization of information in the production mode of the cultural industry, the networking of the dissemination mode, the personalization of the consumption mode, and the rapid change of technological innovation, so that the consumption of China's traditional modern cultural industry chain is directly integrated into the cultural production and daily life of modern people. In the digital economy and cultural industry, the digitalization of cultural industry has become an important strategic content. In addition, the state has continuously promoted the digitalization of cultural industry in terms of strategic demand, interest pursuit and policy support, thus ushering in the opportunity for the digitalization of cultural industry to develop greatly. This paper mainly discusses some problems encountered in the development process of digitalization of cultural industry in China at the present stage, and proposes corresponding countermeasures to solve them.*

Keywords: *Cultural industry; Digitalization; Countermeasures; Future trends*

Background of the Digital Development of China's Cultural Industry

The rapid changes in technology and science in the 21st century have brought culture and technology to a deep integration. The wide application of digital culture technology in the development of China's cultural industry has led to the expansion of the outreach of China's cultural industry and the gradual deepening of its connotation, and the traditional cultural industry has become better competitive in the market. Currently, the cultural industry is driving the development and advancing the structural deepening reform on the supply side of culture in the mode of independent innovation, allowing it to advance and integrate with the advanced digital era technology for synergistic drive, thus allowing new cultural industries to flourish and injecting new growth momentum for the high-quality development and upgrading of the cultural industry structure. After the outbreak of the Covid-19 at the end of 2019, the digital culture industry rose rapidly during the epidemic, breaking the original rhythm of development and reinforcing the integration of culture and technology. This has changed the product industry composition of the cultural industry, influenced people's perception of cultural products, and cultivated the public's cultural consumption habits and consumption choices. In the process of cultural industry development, digital creative economy has become an important part of

it. President Xi Jinping also pointed out that the deep and close integration of culture and modern science and technology has simultaneously cultivated and spawned a number of new cultural traditional industry development modes and extended new traditional cultural industry boutique industrial chains, while gathering a large number of cultural innovation and entrepreneurial talents, which is a cultural sunrise industry and has a great development future (Opinions of the Ministry of Culture and Tourism on Promoting the High-quality Development of the Digital Cultural Industry). However, the integration of digital economy and cultural industry is still in the period of exploration, there are still many problems and we should find the problem to better solve.

The Current Development of Digitalization in the Cultural Industry

Rich Cultural Experience

The great changes of generation have also led to the great development of the digital cultural industry, and through science and technology, we can experience culture in a richer way. The thinking of 'Internet+' has brought revolutionary changes to the digitalization of cultural industry. In the background of digital technology, the cultural industry brings us a new visual experience and carrier changes, including the transformation of some traditional media into a new medium through digital means. As a large domestic digital culture platform, MIGU Digital Media has created the first domestic book interconnected cultural service platform MIGU—Cloud Bookstore. The platform covers knowledge production, marketing and distribution. It is neither an offline physical form nor an online APP model, but a kind of platform for MIGU to provide various services to publishers, bookstores and other traditional cultural industry chains. Not only that, digitization also enhances the efficiency of cultural communication and cultural exchange. It also brings us a new value, a value that includes the content payment in the form of experience and the advertising revenue brought by the video, etc.

Shift in Consumption Patterns

China's mobile Internet services are showing diversified development and a more active mobile data content market. The digitization of the cultural industry relies on the reshaping of the cultural consumption model. The consumer Internet has been transformed into the industrial Internet, relying on digital technology for cultural creation, production, dissemination and services, including digitalization, networking and intelligence to foster new supply and promote the occurrence of new consumption patterns. According to the statistics of China Internet Users Data Center, as of December 2020, the size of China's Internet users has reached more than 989 million people, the Internet penetration rate has reached 70.4%, and the size of cell phone users is 986 million. The market competition advantage of super size and scale has created market space for the rapid development of China's digital network culture industry, and online consumption has been the first choice of people's consumption mode. Since the outbreak of the Covid-19, most Chinese consumers have begun to live at home. Whether they live in third- or fifth-tier cities, or in first- or second-tier cities, they are all keen on online shopping. Especially during the outbreak, the number of people shopping online has increased dramatically. According to the China Consumer Confidence Survey, consumers often shop online, and many will do so through platforms such as the third APP, official brand websites and WeChat communities. The

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mobility of life patterns has shaped a shift in people's consumption habits, and online consumption and online sharing of digital cultural products has become a tendency of modern consumers (Zuo, 2020).

The Field of Dual Innovation is Active

Under the conditions of the Internet as a foundation, the digital cultural industry as an implementation tool has drastically reduced the difficulty of entrepreneurship and innovation for a group of people with innovative ideas, high knowledge and excellent abilities, especially young people. A large number of opportunities for entrepreneurship and wealth creation are offered to them, allowing them to be employed on their own. And promote non-traditional employment. 2021 National Bureau of Statistics website released the annual report on the operating income of professional cultural tourism enterprises nationwide in 2020, according to the income survey of 60,000 large professional cultural enterprises above the scale of culture and its related tourism industry nationwide last year,these cultural enterprises achieved a cumulative annual operating income of 985.14 billion yuan, an increase of 2.2% over the same period of the previous year, with cultural digital Content services operating income growth rate of more than 20%. Among them, film and television culture, entertainment industry development is a fertile ground to promote the current digital era cultural industry to carry out innovation and transformation of entrepreneurship. Network entrepreneurship culture is a typical area of active employment of free citizens. According to statistics, China literature is a digital creation reading and dissemination platform, has now accumulated 4 million well-known writers and anchors, including an average daily sales of more than 10,000 yuan of digital writers nearly 100. Similarly, Himalaya, an audio music sharing and reading platform, has gathered 600 million registered users and 10 million anchors in just a few years, and the advertising revenue of many anchors has far exceeded the income level of the average office worker (Zhang, 2018). Digitalization and the cultural industry have created many jobs for the public and also provided a large number of employment opportunities for a group of non-traditional professionals to stand out, making dual creation in the digital culture field extremely active.

Problems in the Digital Development of Cultural Industries

The continuous change of consumer lifestyle and the pursuit of differentiated consumer demands have led to the involvement of more and more groups of the general public. Continuous optimization of product supply is an effective way to meet the development needs of the general public for a better life. Promoting the transformation and upgrading of cultural industry development is an important driving engine for economic development (Li & Zhao, 2021). However, when it is a new model for the integration and development of the resource collection of the emerging modern cultural service industry with the traditional cultural industry, it still has many problems while reaping opportunities in its development, and new strategies and development suggestions are put forward for it in many aspects such as lack of consumption scenes, imperfect industrial ecology, insufficient talent training, and poor digital integration.

Lack of Consumption Scenarios

With the continuous pursuit of the effect, efficiency and effectiveness of the output of the cultural industry, the emergence of a new experience effect will inevitably bring new benefits and promote the development of

more new digital cultural products, which will continue to push out new products. With a good consumption scene to create a new consumption field, thus generating new industrial value, bringing a new experience and new effect to people and generating new value (Hu, 2020).

Nowadays, many communities and spaces in the country are just living spaces, which do not provide more cultural supplies and services for people, resulting in a single cultural consumption content. The process of digitization of the cultural industry should continuously integrate across borders, expand consumption scenes, and eliminate consumption limitations in order to better cultivate the public's consumption habits of high-end cultural industries and promote the organic combination of people's daily lives and cultural consumption needs.

Imperfect Industrial Ecology

With the advent of digital economy, cultural and creative industries present the ecological development trend of cross-industry penetration and integration, open and inclusive synergy, whole industry chain synergy, online and offline interaction, mutual empowerment and multi-win. This ecological development trend is a concrete manifestation of the modern transformation of the cultural and creative paradigm and a requirement of the times to cope with the important opportunities and challenges of the development of digital economy. On the one hand, looking at China's digital development path and strategic planning, more emphasis is placed on products and technologies, and the innovation of digital development mode at the level of industry and economic structure is not mature. On the other hand, the industry is the core of the economy, the pure technology solution is only the change of communication form and expression form, which will not touch the change of industry essence. It is necessary to systematically view the synergy between different technologies from the perspective of the whole society, the whole industry and the whole elements, and jointly promote the changes of the whole industrial ecology.

Insufficient Composite Talents

The development and growth of any industry is inseparable from the support of talents. The digitization of cultural industry is developing rapidly in China, and the demand for the number and types of professional talents is gradually increasing. Cultural digitization is a fusion industry, involving talents in many aspects such as art, technology development, network maintenance, marketing, after-sales service, and management, so it is necessary to cultivate a large number of composite talents to develop digital cultural industry. In the actual market, however, there is an overall shortage of cultural digitization talent in China, which contrasts with the rapid development of the industry itself, and this imbalance has constrained the development of digitization in China's cultural industry. A significant number of creative talents are not necessarily highly educated or have high titles, but they can produce very high output. This shows that the establishment of a mechanism for training and evaluating talent is imperative.

Poor Digital Integration

The integration of digital technology and culture has undergone a development process from creative means

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and communication media to product formats, profit models, and management thinking, and its impact on the structure of the cultural industry has been not only an innovation of products or formats, but a comprehensive integration (Zhang & Li, 2014). With the development of the digital economy, the original development model of traditional cultural production has been broken, leading to the transformation of many cultural enterprises, but in the transformation they do not have a comprehensive understanding of or preparation for digitalization. Weak foundation of digitization and too high technical threshold are the basic difficulties that many cultural enterprises generally face in digitization. For example, companies like Tencent Entertainment and Ali Entertainment, which have their own technological and digital characteristics, are penetrating into the cultural field, but few traditional cultural enterprises have taken the initiative to choose technological transformation or digital upgrading. At this stage, from the perspective of cultural products, it is more to meet people's entertainment consumption and primary consumption, and cannot meet the demand of higher digital consumption mode.

Problems in the Digital Development of Cultural Industries

Build a New Consumer Scene

As a new driving force for modern urban development, the consumption scene reveals the cultural driving mechanism generated by the spiritual values and lifestyle of a place, which provides important conditions to meet people's pursuit of a better life and also provides strong support for the development of cultural industry digitization. Building a good consumption scene starts with exploring a good linkage model among government, enterprises and social parties to build a new scene of sustainable consumption. For example, promoting the transplantation of existing cultural contents to immersive contents and enriching virtual experience contents. Secondly, develop immersive cultural product experience projects to spread culture through cultural theme parks, special neighborhoods, etc.; to effectively pull cultural consumption expansion and upgrade can also carry out services such as digital cultural exhibition halls and virtual cultural scenic spots. Finally, it is possible to integrate online and offline resources, allowing multiple organizations to work together to empower the cultural industry with the help of cultural and creative thinking. For example, in recent years, Racer's "Live + Education", "Live + Cultural Tourism", "Live + Performance" and other application models; Tencent's "Glory of the King" and Dunhuang Research Institute, the Central Government of China, and other cultural organizations have been working together. "Tencent has been trying out cross-border cultural activities with Dunhuang Research Institute, CCTV's National Treasures and Zhejiang Xiao Baihua Yueju Troupe, giving rise to new scenes of cultural consumption. Cross-industry and cross-regional joint development model can promote the emergence of new consumption models and products more quickly.

Create a Virtuous Industry Chain

Today, many industries are characterized by value linkage, and an industry cannot solve all problems with a single product, but must form an ecology and create value for each other in order to have synergy. "Culture + technology" integration development, data and technology-driven, through the recommendation algorithm to provide accurate docking, in-depth guidance and influence on the creation and consumption of digital cultural content, to achieve the combination of creative art creation and industrial scale production. In the future

economic environment integrated into the double cycle, the development of the digitalization of the cultural industry cannot be separated from the construction of a benign industrial chain, and platforms are needed to generate industrial clusters and drive the consumption of digital cultural products. Therefore, it is very necessary to lay out a good industrial chain. First, starting from the supply side and consumption side, based on the characteristics of diversified, personalized and internalized cultural consumption on the demand side, the supply side should pay more attention to the specialization, interactivity and quality of content creation, and combine the head effect and long-tail effect; from the trend of industrial resource integration, we should strengthen creative synergy, technology upgrade and scene conversion in terms of resource platform, and innovate scene transformation and business model; in terms of industrial integration In terms of industrial integration, digital culture should be used to enhance the value of other industries and form synergy effects. With the orderly force of capital, we will promote the dynamic and balanced development of cultural industry in both supply and demand, and realize the benign construction of industrial ecology.

Establishing a Talent Development System

The development of digital culture industry cannot be achieved without excellent talents. The reliance of digital culture industry on talents far exceeds that of other traditional industries. Especially, the composite talents who are proficient in digital technology, have cultural connotation and sensitive to the value of cultural products are the foundation of digital development of cultural industry. Establishing a perfect talent training system is the necessary way to cultivate digital talents in order to cultivate a group of creative and technical talents (Fan, 2019). First, we should establish a perfect evaluation mechanism, actively explore the evaluation and assessment system that meets the characteristics of industrial development4, and promote the construction of market-oriented talent cultivation and evaluation mechanism. Secondly, the top-level design construction of digital cultural industry talent training should be strengthened and improved, supported by the National Natural Science and Social Science Foundation and the National Culture and Science and Technology Innovation Project, in order to form a group of experts. Based on the demand for talents, the traditional talent training and selection mode needs to be reformed to some extent, to expand the coverage of educational resources, to build a multi-level and diversified talent training system, and to promote the organic integration and complementary advantages of higher education and vocational education. In colleges and universities with certain conditions, pilot programs related to digital culture courses are offered, and various higher education institutions are encouraged to actively organize and implement vocational skills training; through various industry associations, exchanges and studies between various industries and enterprises with different backgrounds are organized on a regular or irregular basis, etc. to encourage the combination and interaction of industry, academia and research in various industries, and to create conditions to attract more talents from various fields and aspects to join the cultural industry, and continuously promote the development and growth of the technical talent team in the cultural industry. Finally, in the process of using talents, the traditional way of employing people should be changed. The introduction of talents and joint training should be closely integrated, and it is necessary not only to attract outstanding foreign talents specializing in digital publishing, but also to vigorously carry out the training of talents from related industries. At the same time, strengthen training efforts, provide employees with learning and exchange opportunities, give full play to the role of the radiation source of high-end talent, to point to lead a more rapid formation of high-end talent team.

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Highly Integrated Development of Characterization

Technology innovation has an irreplaceable role and significance in the development of cultural industry, and the integration of technology and culture has greatly expanded the development space of cultural industry, while the integration of culture and technology is more important to the development of digital content industry. The development of digital content industry needs not only the support of profound cultural heritage, but also the progress of technology to achieve the development of the industry with generation. The more important role of technological progress is to improve the level of creative design and services in the digital content industry, through the integration of technology and culture, to achieve continuous innovation in design and services, through the power of innovation to promote the upgrading of digital content industry. Therefore, the two main lines of "digitalization into culture" and "culture into digitalization" are adopted, one is to use the integration of digitalization and new lifestyles to give birth to new cultural industries; the second is to combine the characteristics of digitalization to transform cultural industries and promote the upgrading of existing cultural industries; the third is to integrate public cultural resources into the digital industry. The third is to release public cultural resources to the consumer sector; the fourth is to promote the integration of cultural elements into the real economy and manufacturing sector with the help of digital technology. Driven by the high degree of integration between digitalization and cultural industries, more cultural technology enterprises will be generated to provide diversified cultural products and service experiences.

The Future Trend of Digitalization in the Cultural Industry

Although the digitalization of China's cultural industry has achieved rapid development, it is important to pay attention to the current problems, based on the characteristics of the digital economy and the current situation of China's digital culture development, the future development process should reasonably analyze the industry characteristics of the Internet and grasp the general direction of cultural development. This interconnection of the Internet and its widespread existence, "everyone connects", "things connect", "people and things link", has not only seriously changed the way people produce and live, but also blurred people's life and labor, production and consumption, making the cultural industry deeply integrated into the daily life of society at large and enabling everyone to become a producer with cultural resources and information provision and value (Guo, 2019). The future development of the digital culture industry is likely to be more colorful and broad in development direction.

Digital Transformation Drives Cultural Industry Upgrade

Under the new development pattern of "domestic circulation as the main body and domestic and international circulation promoting each other", all cultural entities should orderly comply with this situation and promote the transformation and upgrading of our traditional and cultural industries with the digitalization of traditional and cultural technology as the wing (2019 Network Literature Development Report). At present, digital information technology has been widely used in various fields, providing a new business form to our traditional cultural industry. Digital improvements have been made to the media and consumer terminals, making both traditional culture and consumer media more digital and transformed; for example, consumer terminals such as smart TV and personalized movies have been transformed, prompting the production and

production or dissemination of these cultural contents to be digital and transformed as well. Once again, the continuous innovation of consumption patterns has brought great challenges to the development of China's traditional cultural industry. For example, the consumption experience of the book publishing industry, making paper and traditional media will undergo fundamental changes, traditional paper books have been through the innovation and transformation of digital technology, the integration of audio, video and other modern scientific information technology, reading into a new consumer experience, in order to better meet the society and the public for digital reading habits, the book publishing industry is transforming and digital publishing industry and upgrading.

International Development Becomes a Trend

In the historical process of constructing the "Belt and Road" global community of human destiny, the dissemination of foreign culture and cross-sectoral cultural exchanges are the focus of our development. To let our fine Chinese culture "go out" and let other countries and regions in the "Belt and Road" better understand, be familiar with and recognize and accept them, is the basic premise and guarantee foundation for the realization of people-to-people communication. Most of the important products of China's digital culture industry have the important attribute of Chinese traditional culture and strong cultural communication ability, which is the important reason to promote the important products of China's digital culture industry and even be widely recognized and accepted by the whole world. The development path of enterprises towards the digital international cultural market has gradually become a key point to promote China's modern cultural industry towards digital strategy development. In recent years, the foreign export of China's intellectual copyrights has been increasing, with the total number of exported copyrights growing from 9,811 in 2016 to 14,816 in 2019, an increase of nearly two times in three years. Many outstanding works of Chinese online literature have been exported overseas, selling well in many developed countries and remote areas in the United States, Europe and Asia. For example, in 2019, the IP adaptations of "Qing Yu Nian" and "Wish You All the Best" have been authorized for publication and translation in Thailand and Vietnam, etc.(Liang & Dou, 2019); several movies based on the movie "All the Best" have been officially launched on Netflix, a major movie video website in the United States; the rapid development of the internationalization of digital culture industry has promoted other regions and countries in the world to fully understand and the rapid internationalization of the digital culture industry has promoted other regions and countries in the world to fully understand and recognize China's excellent traditional culture and modern Chinese culture, arousing the attention and interest of international friends in China's national characteristics and culture, thus mobilizing and activating the enthusiasm of cultural consumption, expanding the domestic and foreign market needs of the culture industry, and promoting the further development of the culture industry.

Integration Development Becomes the Direction

The digital culture industry has been developing and progressing for a long time, and has been gradually integrating with other industries. On the one hand, it aims to promote the mutual promotion of integration within the field of digitalization and cultural industry development. On the other hand, it is an attempt to effectively connect digitalization and cultural industries outside the field of development (Liang & Dou, 2019). There are often complex problems of large differences in the level of industrial technology and

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the obvious degree of compartmentalization between traditional manufacturing industries, and the high difficulty of cross-border integration of industrial structures. The combination of tradition and technology has allowed the boundaries between fields to diminish, for example, the digital representation of comics and some of the digital languages that people wish to create have been widely used in various aspects of video games, film and television, and design. The rapid development of cross-border has therefore gradually become an important typical development feature of many network literature and game enterprises in the game industry. Game enterprises that do network original video literature content can also directly expand to the research and development and manufacturing of video equipment through terminal network access, and game enterprises that do network literature can also directly expand to do film and television, animation and other game industries. The future digitalization of traditional culture industry will be deeply integrated development, the future development of strategic focus and higher technology level mainly lies in the depth of integration outside the traditional industry, with China's mobile era Internet and modern digital communication technology continues to develop rapidly and widely popularized, the traditional digital culture industry to modern digital industrial transformation and structural upgrading, digital traditional culture industry and other related services industry as the traditional digital culture industry transforms and upgrades its structure to the modern digital industry, the digital traditional culture industry and other related service industries are integrated with each other in depth, and the new generation of leading products and development modes based on the digital traditional culture industry are developed continuously. The coming modern digital information and culture industry in China and the development of different categories of industries in line with the national economy and the sustainable development of society have been deeply integrated, developing the primary industry, the secondary industry, and the new industry that combines the secondary industry and digital culture in a comprehensive manner. Vigorously support the enterprise's brand credit and enterprise culture construction, so that China's manufacturing industry, service industry brand value and cultural value have been enhanced. For example, the integration of animation games and the real economy is deepening, and the traditional animation games are used for brand licensing mode to improve the added value of the traditional business model. In addition, we should make efforts to speed up the promotion of digital modern cultural industry and advanced equipment manufacturing, consumer goods production and processing industry, wisdom of modern agriculture and other deep integration and linkage development, and modern finance, logistics, education, sports, e-commerce and other emerging modern cultural service industry depth of integration and linkage development. It also promotes the continuous development of commercial digitization of products and public services in public service cultural venues and their application in public service cultural venues, and enriches the forms of activities and service contents of public experience in public service cultural venues. In short, the digital culture industry will gradually form a huge consumer market and a large space for rapid development in the future.

Conclusion

At this stage, with the improvement of people's material living standard and the increasing demand for spiritual and cultural products, the development space of digitalization in cultural industry will be even more huge. This paper proposes to build new consumption scenarios and promote the accelerated launch of new consumption models and products; create a benign industrial chain to promote the circular development of the cultural industry; improve the talent training system; and promote the deeper integration of digitalization and

cultural industry to meet people's higher-level consumption needs. The development trend and development mode of digital culture industry will be more diversified and richer in the future, and the strong industrial development capability will promote the continuous development and innovation of the whole market economy.

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