

# THE PRACTICAL PATH OF DIGITAL TECHNOLOGY ENABLING THE HIGH-QUALITY DEVELOPMENT OF CULTURAL INDUSTRY IN JIANGXI PROVINCE

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**Abstract:** With the rapid development of digital technology, cultural industry is experiencing unprecedented changes. Jiangxi Province as an important province of cultural resources, how to use digital technology to enable the cultural industry to achieve high-quality development, has become an important topic of The Times. By analysis of the development status of the cultural industry in Jiangxi Province and its digitization process, this paper deeply discusses various problems and challenges faced by the application and transformation of digital technology in the cultural industry, and further from the four aspects of strengthening planning and guidance, strengthening talent support, expanding market players and preventing security risks. It puts forward the practical path of digital technology enabling the high-quality development of the cultural industry in Jiangxi Province.

**Keywords:** Cultural industry; Digital technology; High-quality development; Practical approach

## 1 INTRODUCTION

Cultural industry is known as the "sunrise industry" and "gold industry" in the 21st century. It plays an irreplaceable role in enriching people's spiritual life, stimulating consumption vitality and promoting employment growth. The 14th Five-Year Plan emphasizes that it is necessary to "make every effort to promote the cultural industry to a new stage of high-quality development, actively cultivate various new forms of cultural business, constantly strengthen the ability of cultural innovation and core competitiveness, and accelerate the modernization of the cultural industry."<sup>[1]</sup> As an important province with large cultural resources, Jiangxi attaches great importance to the development of cultural industry, and has promulgated and implemented a series of relevant policies and measures in recent years, aiming to drive the structural transformation and high-quality development of cultural industry.

With the all-round development of a new round of digital revolution, the development of digital information technology represented by big data, cloud computing, artificial intelligence and blockchain has shaped a new economic form and deeply empowered<sup>[2-3]</sup> traditional industries, and the digital transformation of cultural industry has ushered in unprecedented opportunities. With its strong innovation ability<sup>[4]</sup>, efficient communication advantages and extensive integration characteristics<sup>[5]</sup>, digital technology can deeply penetrate into every link of the development of cultural industries. From the conception and expression of cultural creativity to the production and production of cultural products; From the mining and integration of cultural resources to the promotion and marketing of cultural services, digital technology has shown its wide applied space and far-reaching influence<sup>[6]</sup>. It can not only give traditional cultural resources a new form of presentation, but also accurately grasp the market demand with the help of big data analysis, realize the personalized customization of cultural products and services, and then broaden the market boundary of cultural industry and enhance its core competitiveness.

In response to this development opportunity, Jiangxi Province actively promotes the integration of digital technology and cultural industry, implements the strategy of cultural industry digitalization, and accelerates the cultivation of new cultural entrepreneurship. However, on the whole, the province is still in the stage of exploration and development, and has not yet formed a systematic and perfect practice path. How to give full play to the enabling role of digital technology and effectively promote the high-quality development of the cultural industry in Jiangxi Province has become the focus of current academic circles and industry. Based on this, this paper attempts to analyze the digital development of the cultural industry in Jiangxi Province, explore the existing problems and challenges, and further put forward the practical path of digital technology enabling the high-quality development of the cultural industry in Jiangxi Province, in order to provide useful reference for the high-quality transformation of the cultural industry in Jiangxi Province in the digital era.

## 2 DEVELOPMENT STATUS AND DIGITIZATION PROCESS OF JIANGXI PROVINCE'S CULTURAL INDUSTRY

### 2.1 Overview of the Development of Jiangxi's Cultural Industry

With profound historical and cultural deposits, rich red cultural resources and unique folk customs, Jiangxi has a good foundation for cultural industries. At present, Jiangxi's cultural industry has formed an industrial structure dominated by cultural tourism, cultural creative design, film and television production, digital entertainment and other fields. Various

cultural enterprises and cultural and creative parks are constantly emerging, the scale of the cultural market continues to expand, and the competitiveness of the cultural industry is increasingly enhanced. According to the Jiangxi Cultural Industry Development Report (2023), the operating income of large-scale cultural industries in Jiangxi Province will reach 330.511 billion yuan in 2022, up 7.8 percent year on year, 6.9 percentage points higher than the national average growth rate. The total profit reached 23.021 billion yuan, up 17.92 percent. At the same time, the quantity/Qty of cultural enterprises above designated size increased to 2,403, an increase of 306 compared with 2021. Among them, there are 54 large enterprises with an annual operating income of more than 1 billion yuan, with a total operating income of 164.896 billion yuan, accounting for nearly half of the total revenue of Jiangxi's cultural industry.

## 2.2 The Digitalization Process of Jiangxi's Cultural Industry

In recent years, the digitalization process of Jiangxi's cultural industry has accelerated. New forms of culture, such as digital publishing, digital film and television, digital education, digital animation and digital entertainment, are constantly emerging, injecting new vitality into the cultural industry. The province's 16 industry segments with distinctive characteristics of new cultural formats achieved a total operating income of 106.523 billion yuan, an increase of 14.4% year-on-year, demonstrating a strong momentum of development.

At the infrastructure level, Jiangxi Province continued to strengthen the development support of digital cultural industry. At present, the "1+2+11+105" integrated media linkage command system covering the provincial, city and county levels has been established, which has significantly improved the efficiency of information dissemination. By the end of 2021, a total of 61,000 5G base stations will be opened in the province. Meanwhile, Nanchang, Jiujiang and Shangrao cities have been awarded the first batch of "Gigabit cities" in China, further consolidating the network foundation of the digital culture industry. In terms of industrial form, Jiangxi's digital cultural industry has shown diversified characteristics and has formed its own unique digital cultural industry layout. Among them, Nanchang and Shangrao focus on the expansion of digital games, digital media and Internet services, Jiujiang focuses on the development of digital cultural tourism industry, and Yichun makes efforts in digital entertainment industry. In addition, Jiangxi Province has also made remarkable progress in the construction of digital culture industrial parks. The first batch of provincial-level digital cultural industrial parks have been successfully established in Nanchang, Shangrao and Ganzhou, providing a powerful platform for the agglomeration and development of digital cultural industries.

## 3 PRACTICAL EXPLORATION OF MULTI-DIMENSIONAL APPLIED OF DIGITAL TECHNOLOGY IN THE CULTURAL FIELD OF JIANGXI PROVINCE

The applied of digital technology in the current cultural industry is increasingly extensive, such as virtual reality (VR), augmented reality (AR) and artificial intelligence (AI) and other technologies have brought new possibilities for cultural creativity and communication. On the whole, Jiangxi's cultural industry has made positive progress in the applied of digital technology, which can be reflected from multiple dimensions.

### 3.1 Digital Inheritance and Protection of Cultural Heritage

Jiangxi Province is committed to digital protection and inheritance of cultural heritage. Through the applied of digital technology, it is necessary to digitally record and protect ancient buildings, traditional skills and precious cultural relics, so as to improve the sustainability and inheritance efficiency of cultural heritage. For example, the first to the seventh batch of national key cultural relics protection units of the two-line range digitization work; A cultural heritage monitoring and early warning system for Lushan National Park has been established, and a heritage monitoring list and digital archives have been created by using big data and cloud computing technologies; It has built a cultural relics safety supervision platform in Jiangxi Province, and realized data integration with 24 national-level cultural relics protection units and national-level museums.

### 3.2 Digital Promotion of Cultural Tourism

Cultural institutions and tourist attractions in Jiangxi province are increasingly using digital technologies to create virtual exhibitions and cultural tourism experiences. pass VR and AR technology, tourists can experience rich historical and cultural information in the virtual scenarios to enhance the tour experience. In 2021, Gexian Village Resort in Shangrao, Jiangxi Province jointly held the "Xingyun Music Festival" with NetEase Cloud Music, successfully helping the scenic spot break the circle with the power of digital culture and creativity; The Haihun Hou State Site Museum of the Han Dynasty in Nanchang pass using modern technological means such as VR, AR and naked eye 3D.

### 3.3 Digital Transformation of Cultural and Creative Industries

In the process of digital development of Jiangxi's cultural and creative industries, a number of enterprises focusing on digital entertainment content and game development have gradually emerged, and are committed to creating and developing digital entertainment products with local characteristics of Jiangxi. A number of cultural and art institutions have also begun to make use of digital technologies such as VR and AR to enrich their exhibition and performance forms and provide a more immersive experience for audiences. For example, Jingdezhen integrates light and shadow,

audio and video, 3D technology, etc. into the classic process and instrument type of ceramic art, and launches and implements the digital project of "Furui Oriental" ceramic art and cultural creative industry.

### **3.4 Digital Mining and Dissemination of Rural Culture**

Many places in Jiangxi Province rely on digital technology to carry out digital mining and dissemination of cultural resources such as traditional villages and rural cultural relics at the industrial level, making contributions to the protection and development of rural culture. Taking Jinxi County, Fuzhou City, Jiangxi Province as an example, relying on the ancient village of Youda with profound heritage and skillfully integrating the advantages of digital technology, it carefully creates and disseminates a series of digital cultural masterpieces highlighting the cultural characteristics, folk skills, local features, pastoral scenery and production lifestyle of Jinxi countryside, which drives the communication, display and consumption of rural culture.

## **4 PROBLEMS EXISTING IN THE APPLICATION AND TRANSFORMATION OF INSIDE DIGITAL TECHNOLOGY IN JIANGXI'S CULTURAL INDUSTRY**

Although Jiangxi's cultural industry and its digital development have achieved certain results, it still faces some problems and challenges in the application and transformation of digital technologies.

### **4.1 The Level of Applied of Digital Technologies is Uneven**

In the process of digital transformation, there is an imbalance of digital level among different regions, different fields and different enterprises in Jiangxi Province. Some small and medium-sized cultural enterprises have insufficient investment in digital transformation and lack of in-depth understanding and effective application of digital technology, which limits the digital transformation of cultural industry; In some areas, especially in some remote or rural areas, cultural practitioners lack digital-technology-related training, resulting in their inability to make full use of digital technology to promote their own creation and dissemination; Some popular areas, such as cultural tourism industry, take advantage of its tourist attraction and market potential to become a key field of digital technology applied, such as Lushan Mountain, Sanqing Mountain and other well-known scenic spots are actively building digital tourism projects. However, the applied of digital technology in many minority cultural and artistic categories, such as Ruichang paper-cutting and Gannan tea-picking opera, is very scarce.

### **4.2 The Shortage of Professionals in the Field of Digital Culture Industry**

The prosperity and development of digital cultural industry is in urgent need of interdisciplinary talents with expertise in both digital technology and cultural fields, which is significantly different from that of traditional cultural industry. At present, the reserve of professional talents in the field of digital cultural industry in Jiangxi Province is still insufficient, especially the lack of industry leaders with leading role and talents with interdisciplinary professional skills, which is closely related to the economic development trend and talent training policy of Jiangxi Province. Jiangxi Province is located in the central region of China. Compared with the economically developed coastal areas, its location advantage is not prominent, and the carrying capacity of talent introduction is relatively weak. From the perspective of the distribution of higher education resources, there is only one "211" university in Jiangxi Province, and no "985" university. As a result, the level and quality of talent training are difficult to meet the actual needs of digital culture enterprises. In addition, the quantity/Qty of art education institutions and cultural research institutions is limited, which further aggravates the problem of talent shortage. As for attracting talents, although Jiangxi Province has issued a series of preferential policies in multiple dimensions such as household registration, financial assistance and social security, there are still obvious gaps in the support, breadth and depth of policies compared with neighboring provinces, making it difficult to retain high-level talents, especially professional[7] talents in the field of digital culture, by means of effective policy mechanisms.

### **4.3 Digital Culture Market Players are not Strong**

Compared with developed regions and neighboring provinces, Jiangxi Province has few leading digital platforms in the country, and there is a shortage of influential high-quality "Internet + industry" enterprises in the national range, especially the leading enterprises in the digital culture industry. In recent years, the new forms of digital culture in Jiangxi Province have shown a rapid development trend, but the overall scale is small and the economic benefits are not obvious[8]. In terms of the supply of original, initial and exclusive cultural products and services, the digital culture enterprises in Jiangxi Province are relatively insufficient, and most of them are located at the low end of the "smile curve" in the industrial chain, with weak competitiveness. In addition, in terms of the development of culture and science and technology industry, Jiangxi Province has not yet built a intact industrial chain and product system, and its radiating role in promoting others industries is not quite obvious.

### **4.4 Digital Culture Laws and Regulations are not Perfect**

In the process of digital transformation of the cultural industry in Jiangxi Province, laws and regulations concerning intellectual property protection, data privacy, and industrial supervision are not yet perfect. Some digital cultural enterprises do not pay enough attention to data management and security, leading to the existence of data leakage and infringement risks. It is widely believed that piracy in online literature, digital audio and other fields is still a persistent problem, and the legal rights and interests of original creators are not only costly, but also blurred, which has a certain impact on their creative enthusiasm. In addition, with the increasingly strong momentum of innovation in Jiangxi's digital culture industry and the endless emergence of new formats, it is easy to be restricted by the old system or regulatory vacuum, such as audio, video and other subdivisions, the required licenses are numerous, the application process is complex, and enterprises are faced with many difficulties. At the same time, the emerging field of network live broadcasting is in a state of lack of supervision, which needs the intervention of an effective regulatory mechanism.

## **5 THE PRACTICAL PATH OF DIGITAL TECHNOLOGY ENABLING THE HIGH-QUALITY DEVELOPMENT OF JIANGXI'S CULTURAL INDUSTRY**

### **5.1 Strengthen Planning and Guidance, and Optimize the Environment for the Digital Development of Cultural Industries**

First, strengthen the effectiveness of policy support, formulate and issue a series of incentive policy document, provide necessary funds and policy assistance to cultural enterprises and institutions in the form of financial assistance, tax relief and special funds, expand the development foundation of private, small and medium-sized micro cultural enterprises, and encourage them to adopt digital technology for innovation and development. Second, strengthen technical training and knowledge popularization, and carry out systematic training and education activities related to digital technology for practitioners in the cultural industry. In particular, cultural practitioners located in remote areas or rural areas should focus on improving their applied level of digital technology and innovation ability. Third, digital protection platforms and cooperation mechanisms should be established. For some minority cultural and artistic categories, a digital protection platform can be established to digitally record, store and disseminate them. At the same time, the minority culture and arts can also carry out cross-border cooperation and innovation with the fields of tourism, education, science and technology, and jointly develop new digital technology products and applied.

### **5.2 Strengthen Support for Human Resources and Strengthen the Construction of Human Resources in the Digital Cultural Industry**

First, the implementation of the talent introduction project, targeted for Beijing and Tianjin, for the whole country to introduce high-level talents, open up the cultural industry and digital technology talent introduction green channel. pass the establishment of expert workstations, talent stations and other forms, we sincerely invite high-quality composite talents of digital culture industry to Jiangxi to carry out consulting and guidance, special lectures and joint research on technical problems and other activities[9]. At the same time, the competitive talents stay in Jiangxi policy will be formulated, and support will be strengthened in all aspects, covering venture capital, scientific research funds, salary subsidies, housing subsidies, household registration management, family placement, education and medical care, etc., so as to solve the worries of talents. Second, make full use of the abundant local science and education resources, encourage colleges and enterprises to carry out in-depth cooperation, build a platform[10] for professional personnel training, focus on cultivating highly skilled, high-end cultural creativity and operation and management talents, and enhance the talent reserve of local cultural industry. Colleges and universities in some provinces should set up majors related to the digital cultural industry to systematically impart professional knowledge in many aspects, including business operation, cultural innovation, laws and regulations, and strive to cultivate high-quality professionals in this field. The third is to improve the incentive mechanism system, formulate incentive measures in terms of financial support and professional title evaluation, fully mobilize the enthusiasm and creativity of various talents in the field of cultural industry and digital technology, and ensure the effective configuration and efficient utilization of human resources.

### **5.3 Strengthen Market Players and Promote the Vigorous Development of All Kinds of Digital Cultural Industry Enterprises**

First, make every effort to build leading enterprises. We are committed to cultivating a group of leading digital culture enterprises that master core technologies, possess original strength and have significant market competitive advantages. Actively promote all kinds of advantageous cultural enterprises to break through regional and industrial restrictions, carry out mergers, joint, and reorganization, in order to integrate resources, optimize structures, and comprehensively improve the overall market competitiveness of digital cultural enterprises in Jiangxi Province. Second, vigorously support project brand building. We will make innovations in policies and measures, support major digital projects in the cultural industry, make good use of the provincial special funds and equity investment funds for guiding the development of the cultural industry, and increase funding for key cultural industry projects and quality projects. Third, we need to promote competitive development. We will strengthen the development of incubation bases and creative parks for digital cultural industries, build platforms for sharing market, capital, talent and technology, and encourage all market players to compete fairly, develop together and promote each other.

#### **5.4 Guard Against Security Risks, and Promote the Rule of Law and Organizational Construction of the Cultural Industry**

First, we will strengthen measures to protect intellectual property rights. Strengthen the management and guidance on the intellectual property rights of digital culture enterprises and products, actively guide digital culture enterprises to enhance the awareness of intellectual property rights protection, encourage them to take the initiative to apply for patent rights and trademark exclusive rights, and consciously safeguard their own rights and interests through legal means. At the same time, strengthen the supervision and investigation of all kinds of infringement, build a comprehensive supervision system, strictly crack down on infringement chaos, and build a solid legal barrier for the rapid and orderly development of digital culture industry in Jiangxi Province. Second, improve the construction of copyright related systems. We will continue to improve the copyright protection system, refine copyright ownership and division of labor, promote the formulation of relevant rules, regulations, policies and regulations adapted to new forms of business, and fully protect the legitimate rights and interests of employees in new forms of business. Third, we need to establish a mechanism for collaborative governance involving multiple entities. The government should play a guiding, supporting and supervising role in the governance of the digital culture industry to ensure the effective implementation of policies and fair competition in the market. To give play to the role of profit-making organizations and the public in actively consulting and jointly participating in the formulation of policies and relevant laws and regulations, so as to form a good situation of joint governance by multiple entities.

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#### **CONFLICT OF INTEREST**

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