

# Research on the Innovative Development of the Intangible Cultural Heritage

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**Abstract:** Daoming bamboo weaving, a traditional handicraft from Daoming Town, Chongzhou City, Chengdu City, Sichuan Province, China, has been listed as a national intangible cultural heritage for its exquisite craftsmanship and unique artistic style. Under the dual background of the “double carbon” goal and the rapid development of Internet technology, Daoming bamboo weaving has broad development opportunities in green development and economic benefits. In order to delve deeper into the potential and challenges of Daoming bamboo weaving in the current environment, our team used a variety of research methods, including field research, questionnaire and literature research, to collect relevant data and information comprehensively and systematically. The macro environment, development status and challenges of related industries were studied and analyzed, revealing the unique value of Daoming bamboo weaving in the context of the current era, and a series of targeted and operable development countermeasures were put forward for the problems that may be encountered in its development process.

**Keywords:** DaoMing Bamboo Weaving; Internet Technology; Economic Benefits; Green Development; Macro Environment

## 1. Introduction

### 1.1 Research Background

With the rapid development of material culture and the severe situation of global climate change, China put forward the goal of “carbon peak before 2030 and carbon neutrality before 2060” at the United Nations General Assembly. On June 24, 2022, China duly put forward the initiative of “replacing plastic with bamboo”; In addition, Daoming bamboo weaving was

also listed as a representative item of national intangible cultural heritage in 2014.

With the further implementation of the rural revitalization strategy, the integrated development of Daoming's bamboo weaving industry and tourism, culture and other industries, market demand and consumption are constantly upgrading, and people have put forward higher requirements for product quality, design, cultural connotation and other aspects. The Daoming bamboo weaving in the selection of raw materials, production technology, quality control and other aspects of strict control, in the weaving process and other aspects of the display of a high level, can withstand the test of quality and time.

In terms of macro economic and social development, the market demand for handicrafts such as Daoming bamboo weaving is expanding, the global emphasis on cultural diversity and sustainability is deepening, and art-made products with rich cultural heritage are gradually becoming highly sought-after and popular commodities in the market. Lv Pintian once pointed out: “The development and utilization of handicraft as an ecological force is the demand of modern design practice for the construction of ecological civilization,”[1]and at the same time, traditional intangible cultural heritage products are also facing complex relationships and severe challenges with inheritance and innovation in the new era.” They urgently need to find new ways and solutions, and the general environment requires these traditional crafts to keep pace with the times, constantly integrate new design ideas and marketing concepts, and face the problem of inheritance talents facing faults.

### 1.2 Purpose of the Study

The purpose of this research is to use Internet technology to promote the innovation and development of China's outstanding intangible

cultural heritage, and at the same time promote the prosperity of rural economy, inject new vitality into China's outstanding intangible cultural heritage, and promote its innovative development. The team hopes that through the wide dissemination and in-depth application of the Internet platform, it will provide a broader development space and market opportunities for traditional handicrafts such as Daoming bamboo weaving. At the same time, this study also focuses on the prosperity and revitalization of the rural economy, as an important part of the rural characteristic industry, the development of Daoming bamboo weaving is related to the inheritance of cultural heritage, and is closely related to the rise of the rural economy. DAOMING bamboo weaving and its related industries will provide new ideas and solutions for the substitution of non-renewable resources.

### **1.3 Research Implications**

As a representative of traditional Chinese handicrafts, Daoming bamboo weaving is rich in unique cultural value and ecological significance. As Malinowski put it: "An object becomes a part of culture only where it is used in human activities, only where it satisfies human needs." [2] The study of Daoming's bamboo-related industries will help to understand the inheritance and development of traditional handicraft skills and promote the protection of intangible cultural heritage. In addition, it also has important economic and social value, which can promote local economic development with it as the core of the industry and further promote rural revitalization, providing successful cases and lessons for other regions. DAOMING bamboo handmade products also help to promote the modernization and fashion of bamboo weaving art, which can highlight the uniqueness of the charm of Chinese culture. Finally, while meeting the aesthetic needs of modern consumers, it will enhance its own cultural self-confidence, promote the inclusive development of cultural diversity, and inject more vigorous new vitality into intangible cultural handicrafts.

### **1.4 Literature Review**

The history of bamboo weaving in China can be traced back to the Neolithic Age, at this time it has gradually formed a variety of

practical living utensils. In the Tang and Song dynasties, the bamboo weaving process became more and more exquisite, resulting in lanterns, bamboo horses and other objects. During the Ming and Qing dynasties, the art of bamboo weaving was further developed, and combined with other crafts, bamboo weaving craftsmen would also come to the door to process. In the early days of the founding of the People's Republic of China, with the country's restorative development of arts and crafts, bamboo weaving products were exported to earn foreign exchange in the 50s of the 20th century, and gradually embarked on the road of industrialization. In the development of nearly a thousand years, China's bamboo weaving technology has formed distinctive regional characteristics, mainly in areas where bamboo is densely distributed, including 16 provinces such as Fujian, Jiangxi, Sichuan and Hunan. [3]

At the same time, the research on the protection of intangible cultural heritage in China has made certain achievements, from the main content of the research, the research of domestic scholars mainly focuses on the connotation and scope of intangible cultural heritage, the characteristics, value and function of intangible cultural heritage. From the perspective of research focus, domestic scholars mainly focus on the connotation, scope, characteristics, value and functional research of intangible cultural heritage, and more involve the ways of protecting China's intangible cultural heritage. From the perspective of the scope of research, most scholars in China take the whole country as the basis for the research on the protection of intangible cultural heritage, grasp the development trend of things from the overall situation, and guide the formulation of national macro policies. [4]

At present, new media communication based on digital technology and network technology is rapidly changing the form of information transmission in human society. For the folk handicraft culture such as bamboo weaving, such a theme of great cultural significance, especially in the social context of vigorously advocating the inheritance of excellent traditional Chinese culture, the application of mobile Internet will have a comprehensive and profound impact on cultural communication, and bring many opportunities and challenges.

The basic characteristic of modern media is popularity, if modern media can combine people's appreciation and folk art and culture, it can take into account the effect of cultural communication while popularizing content and form.[5]

## **2. Current Situation of Development**

As a part of China's intangible cultural heritage, Daoming bamboo weaving originated from Daoming Town, Chongzhou City, Chengdu City, Sichuan Province, China. It is a traditional bamboo handicraft. This handicraft is famous for its exquisite craftsmanship and unique artistic style, and is widely used in various fields such as daily necessities, decorations and works of art.

### **2.1 Daoming Bamboo Weaving Geographical Environment**

The geographical environment of Daoming bamboo weaving is closely related to its development and inheritance. Daoming Town is located in Chongzhou City, Chengdu City, Sichuan Province, China. The geographical environment here provides unique conditions for the development of bamboo weaving technology.

Daoming town is located in the southern coast, the area belongs to the subtropical humid seasonal climate, with obvious four distinct seasons, rich rainfall and humidity suitable for the unique climate conditions. The temperature and humidity remain mild and humid all the year round, with no severe cold in winter and no extreme heat in summer. According to statistics, the annual average temperature is 16°C, the average temperature in January is 5.5°C, and the average temperature in July is as high as 24.9°C. In addition, the average frost-free year is 289 days, and the average annual sunshine time is about 1100 hours. The average annual precipitation is about 1000 mm, with most of the rainfall is concentrated in July and August each year. This special climate environment is especially conducive to the growth of plants such as Ci bamboo, spotted bamboo and white bamboo, providing high-quality raw materials for local bamboo weaving handicrafts.[6]

Daoming Town is located in the western edge area of Sichuan Basin, with diverse terrain, including two major landform types: hills and plain. The soil fertility here is rich, which is

very suitable for the strong growth of all kinds of bamboo vegetation. The bamboo sea can be seen everywhere in Daoming town, forming a very rich and high-quality treasure house of bamboo resources, which has also become an important cornerstone for the vigorous development and steady growth of its bamboo products industry.

### **2.2 Daoming Bamboo Weaving Industry Development**

**2.2.1 Systematic protection of cultural heritage**  
As a traditional craft listed in the list of China's intangible cultural heritage, Daoming bamboo weaving has been highly valued by the national level and local governments. Relevant departments have implemented a series of protection measures, including the establishment of Chongzhou Daoming Bamboo Weaving Museum, organizing skills demonstration and inheritance activities, and providing financial support for skill inheritors, aiming to ensure the continuation of the vitality of this ancient craft.

**2.2.2 The policy support system was improved and strengthened**

Government for traditional handicraft field introduced more powerful supporting policy, in 2017, put forward the strategy of "rural revitalization", the bamboo weaving as the town characteristic industry, is the town of the geographical indication protection products, by the government policy support, fiscal subsidies, tax incentives, market development, such as multi-dimensional support, for the healthy development of the bamboo weaving industry laid a solid policy foundation.[7]

### **2.3 Summary of Research Report**

The team visited Daoming Bamboo Art Village, combining the cultural heritage and tourism development to create a tourist attraction based on bamboo architecture, bamboo culture, bamboo industry and bamboo landscape. In addition, there are also some young people founded the home stay, for the tourists to provide cultural exchange space. There is also an exhibition hall of bamboo weaving handicrafts, displaying a variety of exquisite bamboo weaving works, such as buildings, furniture and ornaments, all of which are carefully made by non-genetic inheritors and young makers. In the bamboo weaving experience area, it provides tourists

with an immersive creative experience, and also provides a channel for the inheritance and development of Daoming bamboo weaving. In the Bamboo Art Park, the team visited the bamboo culture experience hall, learned about the cultural tradition of bamboo weaving and the excellent works of modern bamboo weaving handicrafts, listened to the study of non-genetic inheritors, and also saw the economic value created by this series of cultural tourism products for Daoming Town under the accurate data one by one.

However, the Daoming bamboo weaving industry still needs to deal with a series of challenges in the process of development, including the declining attention of young people to traditional handicrafts, the fluctuation of raw material price and the increasing pressure of market competition. Looking into the future, Daoming bamboo weaving industry needs to continue to explore how to realize the deep integration and coordinated development with modern society while adhering to the traditional foundation, so as to ensure the lasting prosperity and inheritance of the industry.

### **3. The Challenges in the Development of Daoming Bamboo Weaving**

#### **3.1 Daoming Bamboo Weaving is Less Famous**

As a traditional handicraft, Daoming bamboo weaving has a low popularity. According to the questionnaire survey conducted by the team in the early stage, more than half of the college students lack the understanding of Daoming bamboo weaving, and even 18.75% of them have never heard of passing through Daoming bamboo weaving.

At present, traditional handicrafts often lack the support of modern marketing means, which leads to their low recognition in the public. In today's highly developed Internet and social media, various publicity channels emerge in an endless stream. However, Daoming bamboo weaving in the use of these channels for publicity often appears powerless. On the one hand, craftsmen may not be familiar with the operation rules and marketing strategies of the Internet and social media; on the other hand, they may not be able to be effectively promoted on these platforms due to their limited resources.

In addition, Daoming bamboo weaving brand awareness is weak. Brand is the key to enhance product awareness and influence. Daoming bamboo weaving brand positioning is not clear, has not yet established a distinct brand positioning, as well as a novel brand slogan, making Daoming bamboo weaving is difficult to leave a deep impression in the hearts of consumers.

#### **3.2 Daoming Bamboo Weaving Innovation Strength is Limited**

As a traditional handicraft, Daoming bamboo weaving is easy to be bound by traditional ideas. After a long time of accumulation and precipitation, Daoming bamboo weaving has formed a fixed production process and aesthetic mode. Under this thinking pattern, the inheritors of Daoming bamboo weaving are often confined to the tradition, unable to balance innovation and inheritance, and difficult to adapt to the needs and changes of the market.

At present, there are less than 300 weaving practitioners in the Daoming bamboo weaving industry, but as far as the whole industrial chain is concerned, their position in Chongzhou is very important. Now most of the bamboo weaving artists are more than 60 years old. Weaving still follows the traditional process of the 20th century, and the inheritance of skills is relatively complete, but the ability of innovation and exploration is insufficient. Since the 1990s, bamboo weaving products are mainly daily necessities, such as baskets, sieve, cage, mat, pocket and other products, and the economic benefits generated by their cultural value are not enough for young people to join.[6]The traditional skills of Daoming bamboo weaving failed to inject fresh vitality, can not keep pace with The Times, the pace of innovation stopped.

#### **3.3 Daoming Bamboo Weaving Scale is Difficult to Form**

Bamboo weaving products have low profit, long production time "disadvantage", bamboo weaving materials need thickness, uniform thickness, bamboo weaving process, including at least bamboo to green, broken bamboo, drying, open strip, uniform, cooking 6 steps, and in the production of bamboo weaving process must be delicate, exquisite, should have enough patience and perseverance.[8]

The complex process and special requirements for materials make it difficult to make Daoming bamboo weaving to form large-scale production.

In addition, most of the Daoming bamboo weaving inheritors are scattered in rural areas, with a lack of productivity and cooperation among the inheritors, which fail to form a unified production and sales system.

### **3.4 Bamboo Weaving Industry Integration is Low**

The industrial chain of bamboo weaving industry is not extended enough, and many bamboo weaving enterprises are still stuck in the traditional production mode, and lack of advanced processing technology and equipment, resulting in low production efficiency and uneven product quality. According to the team to worship state city Ming village field research analysis, worship state city Ming town is located in the western Sichuan plain, the low level of economic development, the consumption concept, capital, technology, policy factors, most of the bamboo weaving enterprises failed to effectively integrate bamboo weaving industry and other industries, such as education, the media, entertainment, fashion, etc., limit the diversified development of the industry.

## **4. Fourth, the Development of Bamboo Weaving Strategies**

### **4.1 Internet+ Technological Innovation and Industrial Upgrading**

#### **4.1.1 Develop Daoming bamboo intelligent design software and online database**

Use big data technology to conduct in-depth analysis of the market, thereby helping designers better understand consumer needs and preferences. In this way, we can provide more targeted guidance for product design and promote product innovation and diversification. At the same time, Daoming bamboo weaving online database will be established to collect, organize and display various materials related to bamboo weaving.[9]Whether it is traditional bamboo weaving techniques or modern innovative designs, a wealth of information can be found on this platform. For inheritors of bamboo weaving skills, the online database will be a valuable learning resource. They can find a variety of tutorials, case studies and

expert lectures here, so as to continuously upgrade their skills and knowledge level. In addition, the platform can also promote exchanges and cooperation, so that inheritors can learn from each other and share experiences, and jointly promote the development of bamboo weaving skills.

#### **4.1.2 Establish Daoming bamboo weaving internet of things**

First of all, the Internet of Things technology can monitor various parameters in the production process in real time, such as temperature, humidity, equipment operating status, etc. By collecting these data, we can better understand the actual situation of the production process and adjust the production strategy in time to ensure the optimization of production efficiency and quality. This will help reduce the waste of energy, thus reducing energy consumption. Secondly, iot technology enables remote monitoring and control of devices. This means that we can operate and maintain production equipment remotely via the Internet, reducing the need for manual intervention. This not only improves production efficiency, but also reduces the possibility of human error, further reducing energy consumption and carbon emissions. In addition, iot technology can also help us optimize supply chain management. By monitoring the availability of raw materials and inventory levels in real time, we can predict demand more accurately, avoid overproduction and inventory overhang, and reduce the waste of resources. Finally, the use of Internet of Things technology to promote the implementation of circular economy. By monitoring the generation and disposal of waste, we can better manage and reuse waste, reduce environmental impact, reduce energy consumption and carbon emissions, and achieve sustainable development.

### **4.2 Internet+ Talent Training and Inheritance**

#### **4.2.1 Carry out online bamboo weaving skills training courses**

Online bamboo weaving skills training courses are usually taught by professional bamboo weaving artists or experienced craftsmen, who teach students basic and advanced skills of bamboo weaving through video teaching, live explanation, online interaction and other ways. Students can receive professional guidance

and advice by watching video tutorials, taking part in live classes or interacting with instructors online. Students can learn different design ideas and styles, give play to their imagination, and create unique bamboo weaving works. At the same time, the course will also introduce the historical and cultural background of bamboo weaving, so that students can better understand the value and significance of this traditional handicraft.

#### 4.2.2 Establish a communication community of Daoming bamboo weaving inheritors

Social media and online platforms provide a platform for tolerant communication. In this community, they can share their experiences, skills and ideas, learn from each other and inspire each other. This kind of communication not only helps the inheritance of skills, but also inspires new creative inspiration and promotes the innovative development of skills. By Posting photos of their work, video tutorials and other content, Daoming bamboo weaving inheritors can showcase their skills to a wider audience. This can not only attract more people to be interested in Daoming bamboo weaving, but also bring more opportunities and possibilities for the inheritance and development of skills. At the same time, these platforms can also provide inheritors with the opportunity to collaborate with other artists, designers, etc., to further broaden the application and influence of the craft.

### **4.3 Internet+ Market Expansion and Brand Building**

#### 4.3.1 Establishment of Daoming bamboo weaving e-commerce platform

By establishing our own e-commerce platform, we can interact directly with consumers, reduce intermediate links, reduce sales costs, and improve product competitiveness and exposure. At the same time, we can also better understand consumer demand and purchasing behavior through the data collection and analysis of the platform, so as to optimize the product structure and marketing strategy. Carry out online personalized customized services to meet the personalized needs of consumers and improve the added value of products. We will be able to attract more consumers who are interested in traditional culture and meet their demand for high-quality, personalized products.

#### 4.3.2 Use the network platform marketing means

Through the live broadcast platform, we can show the production process of Daoming bamboo weaving in real time. This interactive approach can attract the audience's attention, make the public more aware of the artistry and complexity of bamboo weaving, and expand its influence and popularity. Through elaborately produced short videos, we can show the beauty and practicality of bamboo woven products to the fullest. The video can display different styles of bamboo woven products, including baskets, vases, decorations, etc., so that the public can intuitively feel the diversity and creativity of bamboo woven.

### **4.4 Internet+ Promotion and Cultural Exchange**

#### 4.4.1 Online exchanges and cooperation with international intangible cultural heritage projects

Online cooperation has also brought more learning and growth opportunities for Daoming Bamboo Weaving, attracting more international attention and recognition. We can learn from the successful experience of other countries in the protection of intangible cultural heritage, and learn their protection strategies and technical means, so as to improve the protection level of Daoming bamboo weaving. At the same time, we can also exchange and cooperate with artists from other countries to explore new creative inspirations and techniques, and enrich the artistic expression of Daoming bamboo weaving. In addition, online exchanges and cooperation also provide more opportunities for the inheritance and development of Daoming bamboo weaving. By participating in international exhibitions, seminars and competitions, Daoming bamboo weaving can show its unique value and charm to the world and attract more people's attention and support. This not only helps to enhance the popularity and influence of Daoming bamboo weaving, but also can stimulate more people's interest in and love for traditional culture, and promote the inheritance and development of Daoming bamboo weaving.

#### 4.4.2 Carry out online environmental education activities

As a renewable resource, bamboo grows fast and has little impact on the environment, so it

is an ideal environmental protection material. Through online environmental education activities, we can show the public the production process of Daoming bamboo weaving and let them understand the environmental concept behind this traditional handicraft.[10]At the same time, we can also invite experts to give lectures, in-depth analysis of the growth characteristics of bamboo, the environmental advantages of bamboo weaving technology, and how to choose and use environmentally friendly products in daily life. In addition, we can also encourage the public to participate in environmental practices through online activities. For example, online bamboo weaving workshops can be organized so that participants can experience the fun of bamboo weaving and learn how to use the resources around them to create environmental protection. Such activities can not only raise the public's awareness of environmental protection, but also cultivate their environmental skills.

## 5. Conclusion

This paper discusses the development status of Daoming bamboo weaving comprehensively and deeply, and systematically sorts out the geographical environment, industrial development, challenges encountered in development and countermeasures of problems encountered in development. The results show that, as an important part of China's intangible cultural heritage, the inheritance and innovation of Daoming bamboo weaving are of great significance for the protection and development of traditional crafts. At the same time, in the face of the changes in modern society, Daoming bamboo weaving industry has made positive progress in innovation and development, market expansion and sustainable development, but it still faces many challenges.

The future research can further pay attention to the following directions: first, to dig deeply into the cultural connotation and artistic value of Daoming bamboo weaving to enhance its competitiveness in the global handicraft market; the second is to study how to promote the development and upgrading of Daoming bamboo weaving industry; the third is to study how to promote the scale and professional development of bamboo weaving industry

through policy guidance and financial support; and the fourth is to study how to use Internet + market expansion to promote the brand building of Daoming bamboo weaving.

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