

A Review on the Transformation and Development of Yunnan Village Intangible Cultural Heritage Space Driven by E-commerce Economy

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Abstract: Under the background of digital economy and rural revitalization, this study examines how e-commerce drives the spatial transformation and development of intangible cultural heritage villages in Yunnan Province. Drawing on case studies of Xinfa Village and Sanjie Town, we employ a mixed-methods approach combining policy analysis, field observations, and interviews with local stakeholders to reconstruct material, cultural, and social spaces. Our findings reveal that e-commerce platforms and live-streaming technologies have reshaped traditional residences into multifunctional compounds, enhanced cultural capital through branded IP and tourism integration, and reconfigured social networks by empowering younger generations in digital entrepreneurship. Quantitative indicators show a 30 % year-on-year increase in silverware livestream sales and a 15–20 % premium on embroidered products. We conclude that while e-commerce stimulates economic growth and cultural inheritance, sustainable governance frameworks and equitable benefit distribution are essential to address emerging challenges and ensure long-term vitality.

Keywords: e-commerce economy; Yunnan intangible heritage village; Spatial transformation

1. Research background and significance

1.1 The impact of e-commerce economy on rural areas

The development of e-commerce economy in rural areas has gone through many stages. From 2003 to 2010, "Taobao villages" emerged in Jiangsu and Zhejiang provinces, forming a "farmer + online shop" model. Due to lagging infrastructure construction, more than 80% of e-commerce villages are concentrated in suburban areas, creating "digital enclaves".

In 2014, the implementation of "targeted poverty alleviation" and "broadband to the countryside" promoted network infrastructure, and the number of e-commerce villages surged from 212 in 2013 to 5,425 in 2020. Yunnan flower base through the cold chain to reduce losses, the proportion of rural female online business increased, industrial chain and social capital has been activated.

In 2020, the epidemic gave birth to live streaming e-commerce and community group buying. The number of rural live streaming users reached 240 million, and online sales of intangible cultural heritage products increased, but 37% of live streaming of intangible cultural heritage technology has the problem of symbol distortion. At present, the Action Plan for Digital Rural Development (2022-2025) puts forward the concept of "promoting agriculture through digital commerce" and advocates the construction of a collaborative governance framework.

E-commerce in frontier villages of Yunnan Province started late, restricted by geography and infrastructure. Although some explorations have been made after policy support and Internet popularization, difficulties in product standardization and low logistics efficiency hinder its development.

1.2 Theoretical value: To construct an interactive analysis framework of "technology-space-society"

This study constructs a "technology-space-society" interactive framework, integrating e-commerce, village space and social culture. E-commerce promotes the transformation of village space, changes architectural functions, attracts young people to return home, reshapes social structure, and influences cultural inheritance. Social factors act in reverse, and cultural symbols are integrated into e-commerce to enhance the display of spatial culture. Take Xinfa Village as an example, e-commerce live broadcast changes building functions and social structure, and villagers' cultural identity helps cultural symbols to be used in e-commerce and optimize spatial display.[1]

1.3 Research purpose

To explore ways for e-commerce economy to break through the geographical restrictions of intangible cultural heritage villages in Yunnan border areas, clarify the connection between architectural spatial characteristics and e-commerce development.

opment, and provide theoretical and practical guidance for the sustainable development of villages.

2. Literature classification and theoretical framework

2.1 According to the research object: intangible cultural heritage villages

Yunnan intangible heritage villages are rich in intangible heritage resources, with historical and cultural value and regional characteristics. The Measures for the Protection of Traditional Villages in Yunnan Province identify intangible heritage villages based on cultural inheritance, architectural features and villagers' participation, so as to promote "living inheritance" and sustainable development. Its e-commerce development models are diverse[2]:

- (1) Cultural IP + e-commerce model: Chuxiong Sanjie Town creates a "Diyong Golden lotus" cultural IP, which integrates Yi embroidery and agricultural product sales through live broadcasting to form a brand to help villagers increase their income.
- (2) Cultural and tourism integration mode: Heqing Xinfa Village builds the "silverware workshop + live broadcast base + tourism" mode, integrates Bai silver jewelry skills with rural tourism, and promotes online sales of intangible cultural heritage products.

These models promote non-genetic innovation, transform the architectural space from traditional residence to multi-functional compound, add related venues and bases, and realize the combination of ancient and modern.

2.2 According to the research dimension

- (1) Physical space: The e-commerce economy has changed the physical space of the village, and the architectural function has shifted from traditional residence and sacrifice to e-commerce business, and the layout has been optimized. For example, Jiaoyuan Village in Jizhou, Jiangxi Province has reformed traditional buildings to balance protection and development.
- (2) Social network: e-commerce changes village social network. In terms of social structure, power is transferred to young people who master e-commerce technology; In terms of interpersonal relations, the division of labor is professionalized, and some villagers are transferred to emerging occupations such as e-commerce operation.
- (3) Technology empowerment: live streaming and other e-commerce technologies boost village development. Live broadcasting and short videos are important means to promote intangible cultural heritage products, which can enhance visibility and shorten the distance between production and marketing[3].

3. Case selection methodology

3.1 Geographical coverage

Focus on the border areas of Yunnan, select representative villages, cover different geographical and ethnic cultural areas, and ensure the regional adaptability of the research results. For example:

Heqing Xinfa Village, Yunnan: Located in Dali Bai Autonomous Prefecture, it is famous for its silver jewelry making skills and is a typical non-heritage village in Yunnan.

Sanjie Town, Chuxiong, Yunnan: Located in Chuxiong Yi Autonomous Prefecture, it focuses on the Yi "Diyong Golden lotus" culture, demonstrating the integration mode of Yi intangible cultural heritage and e-commerce.

3.2 Cultural representation

The selected non-heritage villages with multi-ethnic communities cover Bai and Yi cultures, and explore the influence of different ethnic cultures on the spatial transformation of the villages. For example:

Xinfa Village, Heqing, Yunnan Province: Featuring Bai nationality silver jewelry skills, create "cultural IP + e-commerce" to promote the integration of intangible cultural heritage and modern economy.

Sanjie Town, Chuxiong, Yunnan Province: Relying on Yi embroidery, the "experience museum + mini program + tourism" model promotes the deep integration of intangible cultural heritage and e-commerce.

3.3 Availability of data

Data sources, government reports, and media reports ensure that the research is scientifically sound. Such as:

Xinfa Village, Heqing, Yunnan Province: The e-commerce model and spatial transformation of the village were analyzed by searching the literatures on CNKI and combining with the Report on the Protection and Development of Traditional Villages in Yunnan Province and media reports.

Sanjie Town, Chuxiong, Yunnan Province: According to the Protection and Development Plan of intangible cultural Heritage in Chuxiong Prefecture and media reports, explore the path of combining intangible cultural heritage and e-com-

merce.

3.4 Differences in transition stages

Select villages at different stages of development, including mature and early villages, and comprehensively analyze the development characteristics and problems at each stage. For example:

Mature case: Xinfa Village, Heqing, Yunnan Province, the "cultural IP+e- commerce" model forms a complete intangible cultural heritage product industry chain, which is a development model.

Early case: Sanjie Town, Chuxiong, Yunnan Province, is rich in intangible cultural heritage resources, but due to the lack of digital infrastructure, the development of e- commerce faces challenges, requiring policy and technical support.

4. Mechanism classification and exploration

4.1 Case 1: Xinfa Village, Heqing, Yunnan — the deep integration of intangible silver ware and e-commerce

- (1) Silver forging in Xinfa Village of Heqing, Yunnan Province has a long history, dating back to the Nanzhao State, and was included in the national intangible Heritage List in 2008. In recent years, Xinfa Village has promoted the modernization of intangible cultural heritage with the help of e-commerce platforms.[4]
- (2) E-commerce enables non-genetic inheritance: Silverware craftsmen bring goods through Tiktok live broadcast, traditional silver ware sells well in the country, and the trading volume of limited silver POTS in a single live broadcast exceeds 500.
- (3) Changes in social structure: e-commerce attracts many young people to return home and start businesses, forming a collaborative model of "Silver touch network" and young people returning home. The young generation dominates the village economy by livestreaming and bringing goods, changing the traditional power structure.

4.2 Case 2: Sanjie Town, Chuxiong, Yunnan Province — The innovative combination of intangible cultural heritage embroidery and e-commerce

The famous embroidery skills of the Yi ethnic group in Sanjie town of Chuxiong, Yunnan province, have been included in the national intangible cultural Heritage list to promote the revitalization of rural industries with the "intangible cultural heritage + e- commerce" model.

- (1) E-commerce platform helps sales of intangible cultural heritage products: Yi embroidery covers the whole network on Taobao, Pinduoduo and other platforms, with annual sales of 10 million yuan. For example, "Diyong Jinlian" cultural IP brings goods through live broadcast, integrates intangible cultural heritage embroidery and agricultural product sales, forming brand effect. [5]
- (2) Spatial and functional reconstruction: Sanjie Town transformed the traditional embroidery workshop into an e-commerce live broadcast base, and some residential buildings were used for product display and storage. The spatial reconstruction improves the competitiveness of products and the transmission of intangible cultural heritage.
- (3) Social network and cultural identity: The development of e-commerce attracts young people to participate in non-genetic inheritance, and promotes the collaborative model of "old technology + new economy". Embroidery inheritors have trained more than 100 apprentices with the help of e-commerce platforms, driving more than 500 people to employment.

5. Conclusions

E-commerce economy reshapes the intangible heritage villages in Yunnan border areas, and promotes the reconstruction of physical space, cultural capital and social network. Heqing Xinfa Village and Chuxiong Sanjie Town realize multi-functional transformation of village space with the help of e-commerce.

Digitalization helps inheritance of intangible cultural heritage skills and enhance product value. Xinfa Village silver live streamer sales increased by 30% year on year, Sanjie Town Yi embroidery into the cultural story after a premium of 15%-20%.

E-commerce attracts young people to return to their hometowns, changing the power and division of labor in villages. The voice of anchors in Xinfa Village has been improved, and Sanjie Town has created an industrial chain of "old craft + new economy", which has led to more than 500 people's employment.

Future research should focus on digital justice, explore the integration of technology and traditional space, formulate protection policies, analyze the impact of algorithms, improve benefit distribution and collaborative governance, and ensure sustainable development of villages.

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