

# Design Strategies for the Development of Cultural and Creative Products in the Context of Rural Revitalization

Chenxi Yue<sup>1</sup>, Yingquan Wang<sup>1,\*</sup>, Jingyi Chen<sup>1</sup>

1. College of Design and Fine Arts, Qingdao Huanghai University, Qingdao, China

\*Correspondence: wangyq@qdhhc.edu.cn

## Abstract

With the advancement of the rural revitalization strategy, the development of cultural and creative products has become a crucial approach to promoting rural economic growth, cultural heritage preservation, and social innovation. This study focuses on the integration of rural revitalization and explores design strategies for cultural and creative products. First, it examines the advantages of developing rural cultural and creative products, including cultural empowerment, industrial synergy, and rural social innovation. Then, from a design perspective, it elaborates on innovative strategies such as personalized and intelligent design, the revitalization of intangible cultural heritage, and brand development. Additionally, it integrates emerging technologies to facilitate the digital transformation and immersive experience of rural cultural and creative products. Finally, the study proposes a systematic approach based on material and process innovation and green sustainable design to enhance product aesthetics, functionality, and environmental friendliness. By constructing a comprehensive development framework, rural cultural resources can be effectively transformed into marketable products, achieving a coordinated balance between economic, cultural, and ecological benefits and providing long-term industrial support for rural revitalization.

**Keywords:** Rural revitalization; cultural and creative product design; cultural innovation; green sustainability; digital transformation.

## Introduction

Rural revitalization is not only an adjustment of economic structures but also a significant opportunity for cultural revival and sustainable social development. Against the backdrop of globalization and modernization, many rural areas face challenges in preserving and passing down their cultural heritage. A critical issue to address is how to leverage creative design and market mechanisms to breathe new life into rural culture. Cultural and creative products serve as vital carriers for transforming rural cultural resources, encompassing local intangible cultural heritage, folk traditions, and traditional craftsmanship. Through design innovation, commercialization, and technological integration, these products can facilitate the diversification of rural economies. Moreover, the incorporation of emerging technologies provides new opportunities for the digital transformation of cultural and creative products, enhancing user

experience and market adaptability. By integrating digital tools such as augmented reality (AR), virtual reality (VR), and artificial intelligence (AI), cultural and creative products can offer more engaging and interactive experiences, ensuring the sustainable development of rural industries in the modern economy.

## **1. Advantages of Developing Cultural and Creative Products in the Context of Rural Revitalization**

### **1.1 Cultural Empowerment: Revitalizing Intangible Cultural Heritage and Regional Characteristics**

The implementation of the rural revitalization strategy has led to a renewed appreciation of rural cultural resources, with intangible cultural heritage and regional cultural elements emerging as key drivers for the development of rural cultural and creative products. Rural China holds a wealth of cultural heritage accumulated over centuries, including traditional handicrafts, folk festivals, local opera, vernacular architecture, and distinctive cuisine. These cultural elements are not only integral to national heritage but also serve as unique cultural symbols of rural areas. However, with the acceleration of modernization and urbanization, many rural intangible cultural heritage (ICH) crafts are facing challenges in transmission, leading to a decline in their influence. The development of cultural and creative products serves as a bridge between tradition and modernity, as well as between culture and the market, breathing new life into ICH through innovative design approaches. By transforming ICH into cultural and creative products that align with contemporary aesthetics and consumer preferences, traditional crafts can transition from niche collections to mainstream consumption, integrating seamlessly into modern society.

In the context of rural revitalization, cultural empowerment is not merely about utilizing traditional cultural resources but also about innovating their expression and extending their value. The development of cultural and creative products should remain faithful to historical and cultural connotations while incorporating modern technologies and emerging media. For example, many traditional crafts have been revitalized through digital technology, where 3D printing can be used to create traditional carving models, enhancing interactivity and engagement. AR/VR technologies can reconstruct rural ICH environments in virtual reality, allowing consumers to experience cultural heritage in an immersive manner. Another important trend is the IP-driven development of rural cultural and creative products, where recognizable cultural symbols—such as traditional paper-cutting motifs or folk tale characters—are transformed into product IPs. These IPs can be applied to stationery, clothing, home decor, and other creative products, thus expanding the market reach of ICH beyond its traditional boundaries.

### **1.2 Industrial Integration: Cultural and Creative Products as Drivers of Rural Economic Diversification**

The development of cultural and creative products is not only a means of revitalizing cultural resources but also a powerful driver for diversifying the rural economy under the rural revitalization strategy. Traditionally, rural economies have been heavily reliant on agriculture and fisheries, with relatively single economic structures and low value-added industries, making it difficult to adapt to rapidly changing markets. As part of the creative economy, the cultural and creative industries leverage unique rural resources, integrating agriculture, handicrafts, tourism, and homestays with cultural creativity to establish new industrial chains. For instance, many rural areas are developing culturally inspired agricultural product packaging, incorporating local cultural elements to enhance both cultural and commercial value. Some regions have also developed folk handicrafts and local cultural IP derivatives, forming a “Cultural Creativity + ICH” industrial model that revitalizes traditional crafts through market-oriented operations. This integration not only creates new economic value from rural resources but also optimizes rural economic structures, facilitating a shift from traditional agriculture-based economies to multi-industry economic models.

Beyond industrial integration, cultural and creative products also extend the market reach of rural economies through digital transformation, supporting sustainable rural economic growth. E-commerce, short-video marketing, and livestream selling are key tools in overcoming geographical constraints, allowing rural cultural and creative products to reach a broader audience. For example, many rural regions have successfully marketed their cultural and creative products through online platforms, offering home decor inspired by rural lifestyles or stationery and clothing featuring local cultural themes, thus expanding access to national and even international consumers. Moreover, cultural and creative products contribute to the growth of rural tourism. Visitors to rural areas often purchase locally crafted souvenirs or participate in handicraft workshops, enriching their cultural experience while stimulating local service industries. This “Cultural Creativity + Tourism” model fosters an integrated economy that combines cultural consumption with experiential tourism.

### **1.3 Rural Renewal: Promoting Social Innovation and Sustainable Development**

The rural revitalization strategy aims not only to boost economic growth and cultural preservation but also to drive social innovation and sustainable development. In this process, cultural and creative product development plays a key role by revitalizing rural cultural identity and improving rural spatial environments through creative design. Many rural communities have transformed their public spaces through cultural and creative design, reshaping the visual and functional landscape of traditional villages. Examples include repurposing vernacular materials for architectural renovations, incorporating artistic installations to beautify rural streets, and converting abandoned houses into creative workshops or rural bookstores. These initiatives not only enhance the quality of life for rural residents but also increase the cultural appeal of rural areas, turning them into unique cultural destinations. Additionally, cultural and creative

development fosters stronger community engagement by encouraging villagers to participate in cultural innovation activities, such as handicraft training, rural arts festivals, and cultural fairs. This inclusive approach helps locals rediscover their role in cultural and creative industries, strengthening social cohesion and a sense of cultural pride.

Cultural and creative product development also contributes significantly to the sustainable development of rural areas. Unlike traditional rural economies, which often rely on resource-intensive industries, cultural and creative industries emphasize innovation, environmental consciousness, and sustainable resource utilization, guiding rural economies toward eco-friendly development. For example, some villages have begun producing cultural and creative products from environmentally friendly materials, such as bamboo utensils, straw crafts, and recycled paper stationery. These efforts not only reduce environmental pollution but also add market value to traditional craftsmanship. Additionally, cultural and creative industries can drive the growth of green economies, such as developing rural brands that integrate sustainable agriculture with artisanal production, thereby strengthening rural economic resilience. Furthermore, cultural and creative product development attracts younger generations to return to their hometowns, with many entrepreneurs leveraging local resources to establish unique cultural brands, injecting new energy into rural communities. Through these initiatives, cultural and creative products serve as a sustainable engine for economic, social, and environmental progress in rural revitalization.

## **2. Innovation in Cultural and Creative Product Design in the Context of Rural Revitalization**

### **2.1 Promoting Personalized and Intelligent Design to Enhance User Experience**

In the context of rural revitalization, the design of cultural and creative products must not only embody cultural significance but also align with contemporary consumer trends by meeting the needs for personalization and intelligent experiences. Personalized design prioritizes the user experience, incorporating regional cultural elements to enhance creative expression, while intelligent design leverages digital technology to improve interactivity and convenience. The integration of these two aspects enhances user engagement with rural culture and strengthens the market competitiveness of rural cultural and creative products.

Personalized design plays a crucial role in product innovation by utilizing user data analysis, modular design, and customization services to create products that cater to individual aesthetic and emotional preferences. For instance, the development of cultural IP images based on local symbols can involve AI-assisted illustration generation or customization of colors and patterns according to user preferences, fostering a sense of cultural belonging. The application of

parametric design enables traditional cultural and creative products, such as handicrafts and accessories, to adapt flexibly to diverse aesthetic demands, breaking the constraints of mass production and resulting in products with greater warmth and emotional value.

Intelligent design introduces richer interactive experiences, transforming cultural and creative products from mere physical objects into mediums for cultural communication. The integration of augmented reality (AR) and virtual reality (VR) allows traditional handicrafts and rural architectural models to present dynamic digital content, offering users immersive experiences through scanning or wearable devices. Additionally, technologies such as smart voice interaction and the Internet of Things (IoT) enable users to control cultural and creative products via voice commands or mobile applications. Examples include smart lighting systems and cultural-themed smart speakers that not only carry cultural significance but also enhance usability. This development fosters a seamless integration of rural cultural and creative products into modern life, establishing engaging cultural consumption scenarios with long-term appeal.

## **2.2 Exploring Rural Cultural Identity and Constructing an Innovative System for Intangible Cultural Heritage Revitalization**

The essence of rural culture lies in its profound historical legacy and unique regional characteristics, with intangible cultural heritage (ICH) serving as a crucial repository of rural memory, craftsmanship, and aesthetics. In the framework of rural revitalization, cultural and creative product design must extract distinctive symbols, techniques, and narratives from rural cultural identity and reimagine them through contemporary artistic design methods. This process ensures that ICH is no longer confined to museums or artisan workshops but instead becomes an accessible and interactive cultural experience embedded in modern life. Through visual arts, material innovation, and cross-disciplinary integration, ICH revitalization can transcend traditional forms, expanding its societal impact while simultaneously contributing to rural economic development.

A key aspect of ICH revitalization lies in the reinterpretation of traditional crafts using modern design language to align with contemporary aesthetic preferences. For example, traditional embroidery, brocade weaving, and paper-cutting can be transformed into symbolic graphic elements through modern visual design and applied to fashion, home decor, and packaging, thereby extending the relevance of these time-honored techniques. Furthermore, digital modeling and smart manufacturing technologies facilitate the efficient production of traditional crafts, preserving the warmth of handmade artistry while meeting market demands for functionality and aesthetic appeal. Designers can also incorporate narrative design principles, embedding local history and folklore into cultural and creative products to provide consumers with deeper cultural immersion, thereby enhancing the value and marketability of ICH-based products.

Cross-disciplinary integration serves as a key strategy for establishing an innovative ICH

revitalization system by merging art, technology, and commerce to expand the industrial applications of ICH. For instance, the combination of traditional bamboo weaving with modern eco-friendly design concepts has led to the development of sustainable furniture and home accessories, allowing ICH craftsmanship to transcend its cultural symbolism and gain ecological value. Similarly, digital interactive technologies have facilitated the creation of immersive ICH experiences, such as AR-enhanced illustrated books and VR-based virtual craft workshops, making ICH more accessible to younger audiences. By constructing a comprehensive system for ICH revitalization, traditional rural craftsmanship can undergo a modern transformation, driving the industrialization of rural cultural resources and ensuring that rural culture remains a sustainable economic force.

### **2.3 Integrating Emerging Technologies to Develop Digital Cultural and Creative Products and Rural Experience Economy**

The innovation of cultural and creative products within the rural revitalization framework requires not only in-depth cultural exploration but also the incorporation of emerging technologies to facilitate the digital transformation of traditional rural culture. Technologies such as augmented reality (AR), virtual reality (VR), artificial intelligence (AI), blockchain, and big data analytics enable more diverse expressions of rural culture while providing users with immersive and interactive experiences. For instance, AI-powered recommendation systems can match users with rural cultural and creative products based on their preferences, while AR/VR applications allow users to experience traditional ICH in dynamic digital formats without physical presence. Additionally, the application of blockchain technology in digital cultural and creative products, such as non-fungible token (NFT) collectibles, creates new business models for rural artisans, allowing rural cultural assets to gain recognition in the global market.

Digital cultural and creative product development is not limited to online platforms but also plays a pivotal role in enhancing the rural experience economy. By utilizing emerging technologies, rural areas can offer immersive cultural experiences such as digital guided tours, interactive museums, and smart rural tourism solutions. For example, AI-driven smart rural tourism systems can analyze visitor behavior to optimize travel routes, ensuring tailored cultural experiences for different age groups and interests. The application of AR/VR technologies enables visitors to access historical insights, cultural narratives, and interactive elements through mobile devices or smart glasses while exploring rural heritage sites, handicraft workshops, or scenic landscapes. This approach transforms rural destinations into technology-integrated cultural experience centers, increasing visitor engagement and contributing to the long-term sustainability of rural tourism.

The key to leveraging technology for the rural experience economy lies in breaking the physical constraints of traditional cultural and creative products and expanding cultural consumption beyond tangible goods into digital and experiential forms. For instance, by integrating blockchain

and the Internet of Things (IoT), rural areas can introduce traceable agricultural and cultural product brands, allowing consumers to verify product origins and production processes through digital authentication, thereby fostering trust and enhancing brand value. Digital twin technology can further replicate rural landscapes, cultural heritage sites, and folk traditions in virtual environments, enabling remote visitors to explore and interact with rural culture online, ultimately attracting more tourists for in-person experiences. This “online engagement + offline experience” business model ensures the continuous growth of the rural economy by merging technological advancements with cultural heritage preservation. Through the integration of technology and artistic design, rural cultural and creative industries can evolve beyond their traditional roles as cultural carriers, emerging as globally relevant economic assets that drive the modernization and sustainable development of rural culture.

### **3. Design Strategies and Methods for Cultural and Creative Products in the Context of Rural Revitalization**

#### **3.1 Experience-Driven Design Thinking and the Creation of Core Product Value**

Experience-driven design thinking emphasizes the emotional connection, interactive experience, and cultural identity that users develop when engaging with a product. It extends beyond the product's appearance and functionality, focusing on users' psychological responses and deeper engagement during the interaction process. In the context of rural revitalization, the development of cultural and creative products must go beyond their material attributes, incorporating experience-driven design principles to make them mediums for cultural perception. This approach allows users to establish a stronger emotional connection with rural culture, fostering immersive experiences. Artistic design plays a key role in this process by utilizing multi-sensory engagement, including touch, color, and sound, to enhance product interaction. For example, the use of natural and rustic materials, such as handcrafted pottery textures and naturally dyed fabrics, helps users immediately perceive the authenticity and simplicity of rural culture. Additionally, narrative design can be integrated into cultural and creative products by embedding local folklore, intangible cultural heritage techniques, and traditional customs, transforming product consumption into an experiential journey of cultural discovery.

In practical applications, experience-driven design can further enhance user participation through innovative interaction methods. For instance, in the development of rural handicrafts, interactive design principles can be applied to establish a dynamic two-way connection between the product and the user. One approach is to integrate smart technology and digital tools, allowing users to scan a QR code on the product to learn about its craftsmanship history or even interact with artisans online. Another method involves offering personalized customization services, enabling users to participate in the design process, fostering a sense of ownership and emotional



attachment. Experience-driven design not only increases the added value of products but also enhances the market-oriented dissemination of rural cultural and creative products. These products are no longer limited to souvenirs or collectibles but become daily-use objects carrying rural cultural memories. By leveraging experience-driven design strategies, rural cultural and creative products can build unique brand value, serving as cultural communication mediums that integrate local traditions with global trends. This approach strengthens their role in rural revitalization by contributing both economic and cultural value in the long term.

### **3.2 Material and Craft Innovation: Enhancing Product Form and Functional Value**

Material and craft innovation is fundamental to both the aesthetic appeal and the functional value of cultural and creative products. Innovative material selection can enhance a product's distinctiveness by considering sustainability, locality, and sensory experience. For example, the use of locally sourced natural materials such as bamboo, hemp, rattan, and terracotta, combined with modern processing techniques, breathes new life into traditional crafts. This region-specific material selection not only reduces production costs and enhances environmental sustainability but also strengthens the intrinsic connection between the product and rural culture. Meanwhile, the incorporation of emerging smart materials, such as temperature-sensitive ceramics, bio-based plastics, and new composite textiles, enables traditional handicrafts to adapt to contemporary lifestyles while introducing a futuristic aesthetic. For instance, digital engraving techniques can be applied to traditional woodcarving and bamboo weaving to refine intricate details, while special coatings can be used to improve weather resistance, enhancing the product's competitiveness in the market.

In terms of craft innovation, integrating traditional craftsmanship with modern manufacturing technologies significantly expands the range of product forms and functionalities, breaking the limitations of conventional handmade techniques. For example, the use of 3D printing in ceramic and woodcarving processes allows for greater precision and efficiency, enabling the mass production of complex designs at reduced costs. The application of parametric design ensures that cultural and creative products can be customized based on user preferences, enhancing both user experience and market appeal. The innovation of rural cultural and creative products should not merely replicate traditional forms but instead optimize production processes through technology, preserving the cultural essence while meeting modern consumer expectations for quality, practicality, and interactivity. In the domain of intangible cultural heritage textile crafts, the integration of smart weaving technologies can improve fabric breathability, elasticity, and stain resistance, allowing traditional textile products to enter broader consumer markets. By combining material and craft innovation, rural cultural and creative products can overcome traditional market constraints, adopting a modern design language to engage with global consumers and drive the contemporary transformation of rural culture.



### **3.3 Green Sustainable Design: Advancing the Ecological Development of Rural Cultural and Creative Products**

Green sustainable design is a crucial direction for the development of rural cultural and creative products, impacting both environmental conservation and resource efficiency while also determining their long-term market competitiveness. The sustainable design of these products involves optimizing material choices, production methods, and lifecycle management to minimize environmental impact while enhancing cultural value. For instance, the selection of biodegradable, recyclable, or bio-based materials, such as natural fibers, reclaimed wood, and plant-based dyes, can reduce carbon footprints while preserving the product's regional identity. Traditional rural crafts, such as bamboo weaving, terracotta pottery, and handwoven textiles, inherently align with low-carbon, eco-friendly practices. Under the guidance of green design principles, these traditional techniques can integrate modern environmental technologies, making them more competitive in today's market. Sustainable design also emphasizes emotional durability, meaning that well-designed products can foster deeper user attachment, reducing excessive consumption and waste. For example, through refined craftsmanship and personalized customization, cultural and creative products can acquire unique cultural value, encouraging users to keep and cherish them for extended periods rather than discarding them after short-term use.

From a production and lifecycle perspective, green sustainable design promotes a holistic product lifecycle approach, ensuring that sustainability is embedded from the initial design phase through production, use, maintenance, and recycling. For example, in rural woodcraft and furniture production, modular design can be adopted to allow for easy disassembly, repair, and upgrades, extending the product's lifespan and reducing material waste. The integration of digital manufacturing technologies, such as CNC carving and 3D printing, enhances production efficiency while minimizing raw material waste, enabling more precise customization. In branding and marketing, rural cultural and creative products can incorporate carbon footprint tracking, sustainable packaging, and non-toxic dyeing techniques, establishing a green brand identity that appeals to environmentally conscious consumers. By fully integrating green sustainable design principles, rural cultural and creative products can meet modern aesthetic and functional demands while contributing to global sustainability initiatives, reinforcing their role in advancing rural revitalization.

## **4. Conclusion**

The development of rural cultural and creative products is not only an effort to preserve cultural heritage but also an essential component of the rural revitalization strategy. By leveraging cultural empowerment, industrial integration, and social innovation, rural cultural resources can be transformed into high-value-added creative products, enriching the diversity and sustainability of rural economies. From a design perspective, the integration of personalized and intelligent design, intangible cultural heritage revitalization, market research, and brand development ensures that

rural cultural and creative products meet contemporary consumer demands while enhancing their market appeal and cultural significance. Additionally, the incorporation of emerging technologies, such as augmented reality, artificial intelligence, and blockchain, provides new experiential dimensions for rural cultural and creative products, furthering the digital transformation and immersive experience economy.

Looking ahead, the sustainable development of rural cultural and creative products must continue to prioritize green design principles and the optimization of production processes. Material and craft innovation will enhance both aesthetic and functional value, while green sustainable design will promote eco-friendly, low-carbon, and environmentally responsible production that aligns with modern sustainable consumption trends. Furthermore, through policy support, financial innovation, and cross-sector collaboration, the vitality of the rural cultural and creative industry can be further stimulated. This will ensure that rural cultural resources not only flourish within their local contexts but also gain recognition in the global market, achieving a balanced integration of economic, cultural, and ecological progress. Ultimately, these efforts will provide continuous momentum for rural revitalization, ensuring its long-term success.

## Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

## Funding

This research was supported by the 2024 Shandong Provincial College Students' Innovation and Entrepreneurship Training Program. Research on the Design of Cultural and Creative Products in the Context of Rural Revitalization Integration—A Case Study of Tasting Tengzhou (Project No.: S202413320070)

## References

- [1] Cai, K., & Zheng, Y. (2024). Design of traditional handicraft cultural and creative products based on Jiangxi rural revitalization. *Creativity and Design*, (06), 56-61.
- [2] Fang, Y. (2024). Exploration of intangible cultural heritage cultural and creative product design innovation based on rural revitalization. *Popular Literature and Art*, (19), 45-47.
- [3] Han, D. (2025). Virtual reality and augmented reality technology in cultural and creative product design. Springer Nature Singapore, 105-115.
- [4] He, F. (2025). Development and design of IP tourism cultural and creative products from the perspective of rural revitalization. *Footwear Technology and Design*, 5(03), 14-16.

- [5] Li, Y., Zhou, Y., & Han, W. (2024). Research on innovative design of cultural and creative products from a semiotic perspective. *China Packaging*, 44(07), 86-90.
- [6] Ning, W., et al. (2024). Efficiency assessment method for evoking cultural empathy in symbolic cultural and creative products based on fuzzy-FMEA. *Applied Sciences*, 15(1), 221.
- [7] Papadaki, E., Kourgiantakis, M., & Apostolakis, A. (2025). Sustainability messages from cultural and creative industries. *Springer Nature Switzerland*, 87-98.