

FROM TRADITION TO INNOVATION: INTEGRATING DALI BAI HERITAGE INTO CREATIVE PRODUCT DESIGN

Yueyuan ZHANG¹, Akapong INKUER², Chanoknart MAYUSOH³ and Pisit PUNTIEN³

1 Doctoral Student of Philosophy Program in Visual Arts and Design, Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University, Thailand; s64584948007@ssru.ac.th

2 Advisor in Visual Arts and Design, Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University, Thailand; akapong.in@ssru.ac.th

3 Visual Arts and Design, Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University, Thailand; chanoknart.ma@ssru.ac.th (C. M.); pisit.pu@ssru.ac.th (P. P.)

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ABSTRACT

Dali, Yunnan, as the birthplace of Bai culture, boasts rich resources of intangible cultural heritage and traditional handicrafts. In the trend of integrated development of tourism and culture, transforming Bai culture into cultural and creative products innovatively has emerged as a significant challenge. Research has found that although some traditional crafts are still being passed down, they face three major challenges overall: first, young people's identification with traditional culture has decreased; second, there is insufficient drive for innovation in handicrafts; third, tourism products lack characteristics and are highly homogenized. Through field research and data analysis, numerous elements of Bai culture can be refined and applied in creative product design. The development and design of more exceptional cultural and creative tourism products featuring Bai culture can effectively propel the growth of Dali's tourism industry and cultural creative industry.

Keywords: The Bai People of Dali, Intangible Cultural Heritage, Sustainability, Product Design

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INTRODUCTION

This study focuses on constructing an innovative theoretical framework for the creative transformation of Bai ethnic intangible cultural heritage (ICH) resources. By systematically deconstructing the genetic genealogy of Dali Bai ICH, we establish a trinity research paradigm of "cultural archetype-design translation-industrial application." The research emphasizes revealing the multimodal expression mechanisms of ICH elements in modern cultural and creative products, proposing a dual-driven strategy rooted in cultural authenticity and market compatibility. This approach culminates in an innovative design methodology that integrates ethnic aesthetic characteristics with contemporary contexts.

Further, the study demonstrates that constructing a "cultural genetic map" systematically extracts the formal language, pattern systems, and technical essence of Bai traditional craftsmanship, forming culturally recognizable creative transformation pathways. Such innovation grounded in cultural authenticity not only enhances the sustainable development capacity of ICH projects but also elevates the cultural added value and market competitiveness of Dali's cultural tourism industry. This provides a replicable paradigm for modernizing traditional cultural resources in ethnic regions.

Adopting perspectives from sustainable ICH inheritance and product development, the research combines literature analysis, field interviews, and practical exploration to investigate the current status, challenges, and application strategies of Bai culture in creative product design. Through systematic inquiry, it clarifies the expressive potential and implementation pathways of Dali Bai cultural elements in contemporary creative industries.

Research Objectives

This study examines the historical-cultural context of traditional craftsmanship and intangible cultural heritage (ICH) of the Dali Bai ethnic group, identifying foundational cultural elements to inform contemporary creative product design.

Research and Analysis of Sustainable Development Theories Related to Dali Bai Folk Crafts and Intangible Cultural Heritage Preservation

LITERATURE REVIEWS

The Historical Development and Cultural Characteristics of the Dali Bai Ethnic Group




The Dali Bai ethnic group traces its origins to the mid-late Neolithic period over 4,000 years ago, with archaeological evidence from the Cang'er Lake and Dianchi Lake basins revealing the dawn of Bai civilization. These riverine communities pioneered the earliest rice cultivation system on the Yunnan-Guizhou Plateau while maintaining a composite subsistence model integrating fishing, hunting, and sedentary agriculture, marking the maturation of early civilization in the southwestern frontier regions.

Bai cultural evolution demonstrates a stratified developmental trajectory: emerging from primordial Cang'er culture, progressing through Bronze Age foundations during the Shang Dynasty, assimilation with Dian culture (Warring States to Western Han), consolidation under Nanzhao Kingdom (Sui-Tang), peaking with the Dali Kingdom (Song-Yuan), and culminating in multicultural integration during the Ming-Qing periods. This diachronic cultural genealogy stems from a unique fusion mechanism—preserving the indigenous "mountain-basin" cultural matrix while systematically integrating Di-Qiang bronze metallurgy, Bashu symbolic systems, Jing-Chu aesthetic paradigms, and Southeast Asian Buddhist artistry, ultimately forging a symbiotic system of multidimensional cultural traits.



Figure 1 The Bai people of Dali

Table 1 An Analytical Framework for the Sociocultural Characteristics of the Dali Bai Ethnic Group

Type	Cutural characteristics	Application for case
Dali Bai traditional clothing	The traditional costumes of Dali Bai people are colorful and exquisite in craftsmanship.	
Religion and beliefs	Bai Benzhu worship	
Festivals and Celebrations	The annual "Bai March Street" is an important ethnic festival in the Bai nationality.	
Folk art	Folkmusic and dance traditions	

Type	Cutural characteristics	Application for case
		
Social customs	Wedding, adult ceremony, funeral	

As a living embodiment of Dali's regional culture, Bai ethnic folk craftsmanship encapsulates the group's symbolic systems for comprehending the world and their artisanal wisdom. Within the framework of cultural-tourism integration, tourism-oriented creative products essentially function as hybrid entities serving dual roles as cultural decoding media and memory construction vehicles, maintaining a profound dialectical relationship with ethnic craft traditions. Particularly in Dali's tourism-driven economy, this cultural reproduction process demonstrates notable industrial synergies. This study investigates the current categories of tourism-oriented creative products in the Dali market, as detailed in the following table:

Table 2 The Types of Tourism Creative Products on Dali Market

Folk craft name	The types and percentage of creative tourism products currently available in the market (100%)			
Bai ethic armored horse	Clothing category (15%)	Stationery category (5%)	Decorative category (25%)	Bag (20%)
Bai embroidery	Clothing category (40%)	Bags (30%)	Decorative category (15%)	Other (15%)
Bai ethic tie dye	Clothing category (20%)	Decorative category (60%)		
Jianchuan Woodcraving	Decorative category (40%)	Home Furnishings (50%)	Other 105%)	
White tile cat	Decorative category (50%)	Crafts (50%)		
Bai ethic silverware	Decorations (10%)	Crafts (20%)	Accessories (40%)	Equipment (30%)
Bai bronze ware	Equipment (85%)	Crafts (10%)	Other (5%)	

Protection and inheritance of Dali Bai people's intangible cultural heritage

The intangible cultural heritage (ICH) system of the Dali Bai ethnic group functions as a living cultural genome, holistically manifesting the collective wisdom and creative praxis paradigms cultivated over millennia. These cultural expressions not only encode the evolutionary trajectory of the Cang'er civilization but also construct a mnemonics of cultural community for multi-ethnic nation-states through materialized narratives. Its value proposition manifests dual orientations: serving both as the embodied articulation of Bai's "Cangshan Mountain-Erhai

Lake" civilizational identity and as a microcosmic validation of China's pluralistic-yet-integrated cultural cosmology. This study utilizes field investigation data collected from the following research sites within Yunnan Province, China: Dali City, Heqing County, and Jianchuan County. The specific locations include:

- ① Xizhou Town and Wanqiao Town, Dali City, Dali Bai Autonomous Prefecture, Yunnan Province
- ② Zhoucheng Village, Xizhou Town, Dali City, Dali Bai Autonomous Prefecture, Yunnan Province
- ③ Dali Intangible Cultural Heritage Museum, Dali Bai Autonomous Prefecture, Yunnan Province
- ④ School of Art, Dali University, Dali Bai Autonomous Prefecture, Yunnan Province
- ⑤ Xinhua Village, Heqing County, Dali Bai Autonomous Prefecture, Yunnan Province
- ⑥ Shihe Village, Jianchuan County, Dali Bai Autonomous Prefecture, Yunnan Province

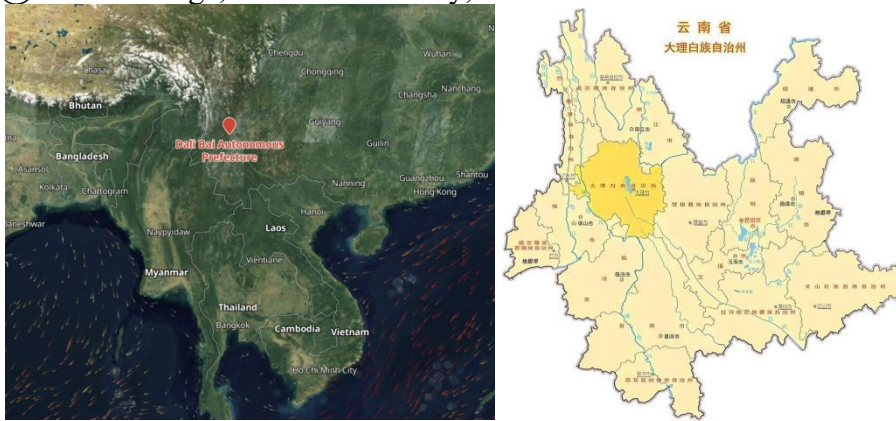


Figure 2 The location of Dali Bai people in Yunnan Province is located in Yunnan Province

Table 3 The main category table of the Bai people in the Bai people in the Bai people in Dali
Statistical Table of main categories of handicrafts in Bai people, Bai people, Dali

Category	Traditional skills of Bai nationality in Dali			Main categories of Arts and Crafts in Bai people						
Name	Bai ethnic tie dye	Jian chuan Wood carving	Bai ethnic silver ware	Bai ethnic clay sculpture	Bai ethnic armored horse	Bai embro idery	Bai Paper Cuttings	White tile cat	Bai ethnic paper-making	Bai ethnic paper-making
Gathering Place	Dali	Jian chuan	Heqing	Fengyi	Xizhou	Dali	Ha dong	He qing	He qing	Jian chuan

The status quo of Dali Bai people's intangible cultural heritage

The intangible cultural heritage (ICH) of the Dali Bai ethnic group has flourished under tourism industrialization, yet its development reveals profound contradictions including the erosion of cultural subjectivity, intergenerational transmission fractures, and excessive commercialization. Research identifies the core challenges as the weakening of traditional cultural agency and the absence of sustainable development mechanisms. This study proposes a tripartite strategy: 1) establishing "cultural subjectivity" as the cornerstone, 2) constructing a "boutique-sustainability" synergy model, and 3) activating ICH's "cultural capital" attributes to address cultural transformation pressures, ultimately achieving dynamic equilibrium between preservation and innovative utilization.

Bai folk crafts, serving as composite cultural-economic vehicles, encompass traditional techniques such as tie-dyeing, woodcarving, silverware, and embroidery. Exemplified by the nationally recognized Bai tie-dyeing (listed in China's inaugural ICH registry in 2006), this millennium-old craft demonstrates revitalization mechanisms. In Zhoucheng Village—the core

transmission site—over 300 artisans sustain a "16 production households + 286 sales households" industrial cluster, attracting 180,000 annual visitors. The Puzhen Tie-Dye Museum operationalizes an "ICH workshop + cultural tourism experience" model, hosting 30–60 daily tour groups, thereby validating a trinity framework of "productive preservation – contextualized dissemination – industrial value-added" for ICH revitalization.



Figure 3 Dali folk craftsmanship

Market data and product research and development trends of Dali Bai people cultural and creative products

Structural characteristics of market data

Consumer group layered Market Stratification Characteristics

2023 data from Dali's cultural tourism consumption (Source: Dali Culture and Tourism Bureau) reveals that youth demographics (18-35 years) constitute 42.3% of visitors, exhibiting dual behavioral traits of symbolic consumption and experience economy. The mid-to-high-end market (family travelers/cultural elites) prioritizes products' cultural narrative depth (87% value craft provenance) and collectible value (63% prefer limited editions).

Demand Evolution Pathways

Generation Z consumers favor ICH-themed FMCGs (e.g., tie-dye accessories, Bai papercraft décor, Jiaama motif trendy collectibles), while cultural elites pursue immersive cultural praxis (35% participation rate in Bai silverware customization workshops, 25% repurchase rate for woodcarving crafts) (Source: Research team survey).

Channel Evolution Trends

Online: Social commerce platforms achieved 62% CAGR (2021-2023) in ICH product sales (Douyin: +58%; Xiaohongshu: +67%), with short-video-driven instant cultural symbol consumption exceeding 35% market share.

Offline: Cultural landmarks (Chuangdan Factory Art Zone, Shaxi Pioneer Bookstore) elevated average transaction values by 300% (YoY 2022-2023) through curated retail scenography.

Cultural Premium Manifestation

Willingness-to-pay analysis demonstrates 200-300% premium margins for products with complete cultural narrative chains (e.g., pattern genealogy documentation, inheritor storytelling), validating Bourdieusian "cultural capital → economic capital" conversion dynamics.

Innovation Pathways in R&D Strategy

Reconfiguration of Cultural Value Chains

Front-end: Establish a "Digital Twin Laboratory for ICH," utilizing motion capture and knowledge graph archiving to preserve endangered artisanal techniques.

Mid-end: Develop a "Cultural Transcoding Algorithm" to autonomously generate pattern variation solutions with modern aesthetic compatibility.

Back-end: Implement a blockchain traceability system for end-to-end cultural narrative authentication, spanning from cotton cultivation to tie-dye production.

Industry-Academia-Research Collaborative Innovation Framework

Form the "Dali Bai Cultural Innovation Consortium" with global art academies and Yunnan ICH Conservation Center, launching specialized research tracks in "AI & Design."

Execute the "Artisan-in-Residence Program" to facilitate co-creation between designers and traditional craftspeople, mitigating semantic loss in cultural transcoding processes.

Developed Dali Bai people's non -material cultural and creatives

Based on market research findings, design strategies were formulated to develop cultural and creative product proposals rooted in Dali Bai ethnic culture. The research and development outcomes encompass the following domains: pattern design, ceramic design, textile bag design, tie-dye design, electronic peripheral design, cloth doll design, and related packaging derivatives.

Researchers established a dual-path development framework for Bai Intangible Cultural Heritage (ICH) creative products, structured as follows:

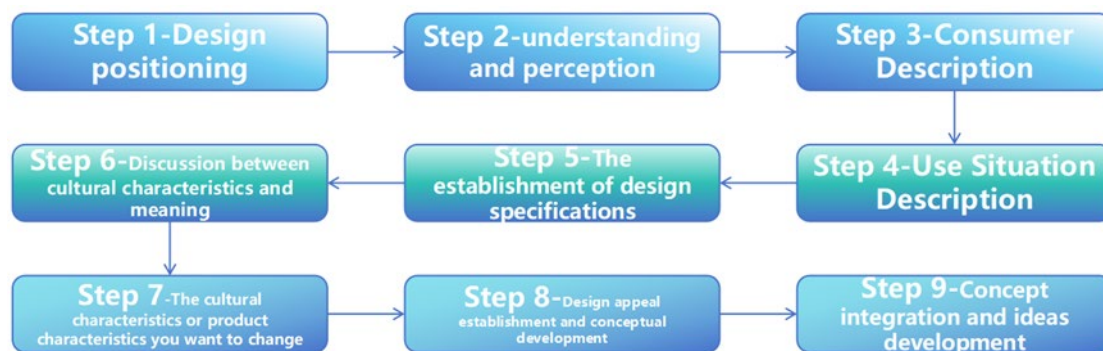


Figure 4 Process of cultural and creative product design

RESEARCH METHODOLOGY

Research Design

This study employs a mixed-methods approach (qualitative + quantitative) to systematically investigate the transmission status of Dali Bai cultural heritage and its transformative mechanisms in cultural and creative product development. The technical pathway is structured as follows:

Data Collection Framework

Literature Analysis

Scope: Scholarly works on Bai cultural product development (2010-2023, global)

Objective: Construct a "Cultural Gene-Design Translation-Industrial Application" theoretical model

Ethnographic Fieldwork

Sites: Zhoucheng Village (tie-dyeing), Xinhua Village (silverware), Shaxi Town (woodcarving)

Methods: Documenting ICH craft processes and cultural spatial transitions through participatory observation

Questionnaire Survey

Stratified Sampling (N=332)

Group	Composition	Sample Size	Method
G1	ICH inheritors/practitioners	15	In-depth interviews
G2	Entrepreneurs/designers/scholars	5	Semi-structured interviews
G3	Core consumers (aged 15-45)	312	Structured questionnaires

Questionnaire Architecture

Demographics (7 items): Age, gender, education, etc.

Perceived Value Scale (21 items, Cronbach's $\alpha=0.87$):

Functional value (utility/durability)

Social value (cultural identity/status symbolism)

Formal value (aesthetics/innovativeness)

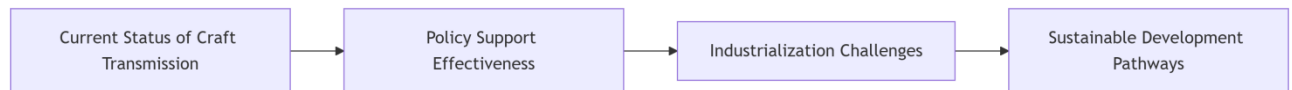
Craft Impact Assessment (7 items): Heritage transmission/employment/economic effects

Implementation: 450 questionnaires distributed July-December 2024 (69% response rate), targeting key consumer demographics

In-Depth Interviews

Participants: 19 ICH inheritors and cultural administrators

Thematic Framework:



Evaluation Tool: 5-point Likert scale

Data Analysis Methods

Quantitative Analysis

Reliability/Validity Testing: SPSS 26.0 for item analysis (CITC>0.5), exploratory factor analysis (KMO=0.812)

Statistical Modeling: Multiple regression analyzing perceived value's impact on purchase intention (β coefficients)

Qualitative Analysis

Coding Strategy: NVivo 12-assisted three-tier coding generating cultural identity cognitive maps

Triangulation: Cross-verification of interview transcripts, field notes, and literature

Research Validity Control

Ecological Validity: Coverage of 85% representative ICH clusters

Content Validity: Expert panel validation (CVR=0.92)

Response Bias Mitigation: Anonymous responses + reverse-scored items

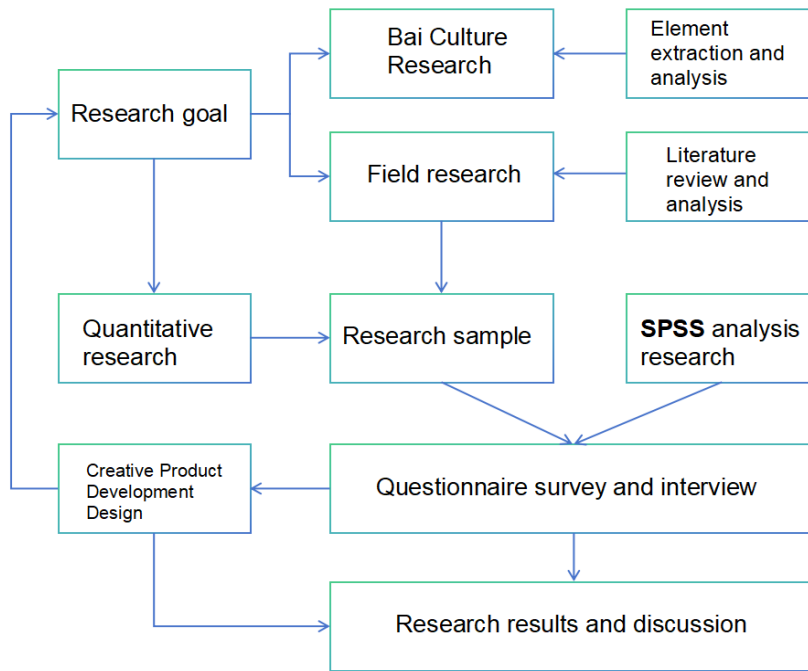


Figure 5 Quantitative research procedures

RESEARCH RESULTS

The Bai ethnic group, China's 15th largest minority with a population of approximately 2 million, is predominantly distributed across Yunnan, Guizhou, and Hunan provinces, with the Dali Bai Autonomous Prefecture in Yunnan serving as its primary settlement. The Bai people possess their own language, Bai (classified under the Yi branch of the Sino-Tibetan language family), while Chinese characters have been widely adopted. Their distinctive architectural styles, carvings, and paintings reflect unique cultural achievements. Divided into three main subgroups—Minjia, Lemo, and Nama—the Bai exhibit strong Han cultural influences, with archaeological evidence (e.g., the Cang'er Site) tracing their cultural roots to the Yangshao and Longshan cultures of northern China.

Dali, Yunnan, boasts rich intangible cultural heritage (ICH) resources, including six national-level ICH designations and 59 provincial-level entries. Among these, three Bai traditional crafts have attained national ICH status: Bai tie-dyeing (2006), Jianchuan woodcarving (2011), and Bai silverware (2014). The tourism market features diverse Bai handicrafts such as tie-dyed textiles, Bai ethnic armored horse, embroideries, and others, deeply intertwined with Bai lifestyles, beliefs, and traditions. These artifacts—spanning architecture, attire, festivals, and folk arts—provide abundant inspiration for creative product design.

However, despite localized preservation efforts, Bai folk crafts face systemic challenges in cultural transmission, exacerbated by diminishing cultural identity among residents. Against the backdrop of booming tourism, leveraging innovative product design to revitalize these crafts has emerged as a critical imperative.

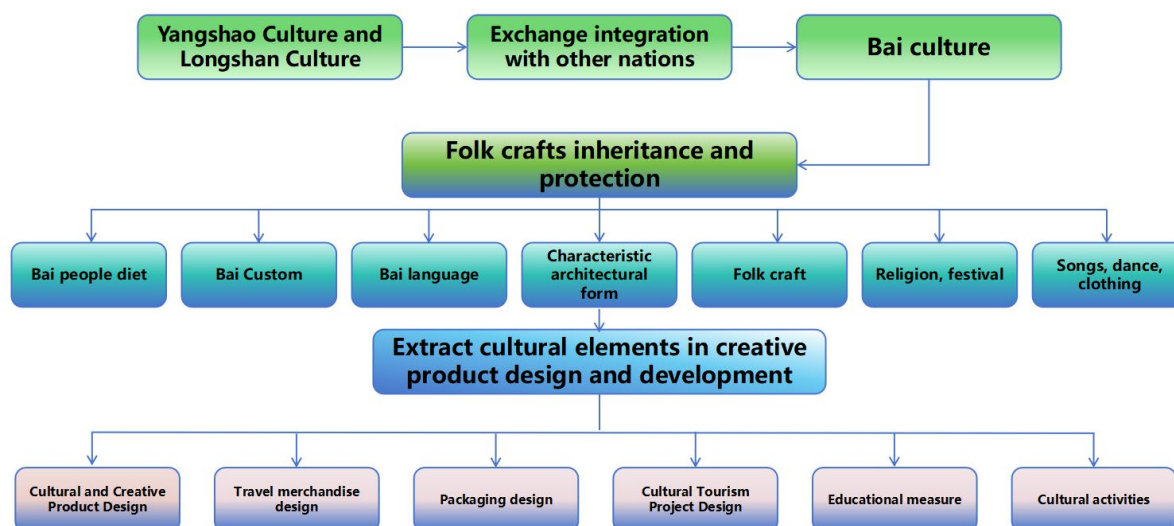


Figure 6 Development Pathways, Characteristics, and Application Structural Diagram of Dali Bai Nationality Culture

Dali Bai Cultural Survey Result

An empirical investigation into the current status of Dali's Bai ethnic culture reveals critical insights regarding the utilization of traditional resources in tourism product development. Field data demonstrates that while the Bai community possesses abundant intangible cultural heritage, particularly in folk craftsmanship, these resources remain significantly underutilized in tourism-oriented creative product development. The operational scale and innovation level of such applications markedly lag behind those observed in tourism-developed provinces.

Notably, two systemic gaps emerge:

Limited Creative Transformation: Most indigenous craftsmanship has not been effectively translated into modern creative products or derivative merchandise, resulting in sluggish industrial upgrading.

Design Stagnation: Despite the flourishing tourism market, over 70% of commercially available products remain predominantly confined to traditional craftsmanship and conventional designs, exhibiting severe innovation deficits in aesthetic patterns and functional adaptability.

This paradoxical coexistence of cultural resource abundance and creative underdevelopment highlights structural barriers in cross-domain value conversion, suggesting the urgent need for institutional interventions to bridge cultural preservation with contemporary market demands through design innovation and industrial restructuring.

Public participation and policy recommendations

Research findings reveal that Dali's tourism creative products demonstrate promising developmental momentum and broad prospects, yet confront systemic challenges primarily rooted in the absence of systematic planning. Current product development predominantly relies on fragmented individual initiatives, constrained by insufficient macro-level coordination and management. In response, institutional stakeholders including the Yunnan Provincial Tourism Development Commission, governmental tourism committees at various levels, and academic tourism product R&D departments have expressed commitment to advancing this sector through policy interventions and strategic measures. However, the entrenched operational framework of Dali's tourism merchandise market, shaped over decades, necessitates gradual structural transformation through accumulated efforts and paradigm shifts in business philosophies.

To address these challenges, relevant authorities must implement a dual approach: 1) Formulate comprehensive development blueprints while strengthening macro-regulation and sectoral

guidance to coordinate multi-stakeholder collaborations for market restructuring; 2) Prioritize the integration of indigenous cultural elements and artisanal craftsmanship into product innovation. This strategy advocates cultivating proprietary R&D capabilities to develop distinctive local tourism commodities, thereby enabling culturally-grounded creative products to progressively secure market share through competitive differentiation.

The proposed framework underscores the necessity of balancing institutional top-down governance with bottom-up cultural empowerment, offering actionable pathways to reconcile heritage preservation with commercial viability in regional tourism development.

Practice survey and case analysis

Through case study analysis, it has been observed that the cultural and creative industry has demonstrated three prominent developmental characteristics under governmental support in recent years:

Firstly, a virtuous mechanism has emerged for the protection and inheritance of folk art. This mechanism not only enhances artisans' technical competencies and social recognition but also effectively safeguards the ecological space for traditional artistic practices.

Secondly, a new model of cultural transformation has been established. By employing creative reinterpretation and technological innovation, the industry develops derivative products rooted in regional cultural heritage. These outputs, while manifesting distinct forms from their cultural origins, retain and reinterpret core cultural values through contemporary expressions.

Thirdly, a dual-cycle cultural propagation system has been formed. The circulation mechanism operates bidirectionally: 1) Cultural products serve as tangible media that enhance regional visibility and stimulate consumer interest in indigenous cultures; 2) The market recognition subsequently motivates local artisans to reinforce cultural preservation efforts, thereby creating a self-reinforcing loop where cultural value and market value reciprocally enhance each other. This developmental pattern demonstrates how systematic integration of policy support, creative adaptation, and market dynamics can generate sustainable cultural ecosystems, providing replicable references for cultural heritage revitalization in developing contexts.

Research Limitations

This study exhibits limitations in the selection and perspective of research subjects. While existing scholarship predominantly focuses on macro-level analyses, micro-level investigations into participants' behavioral patterns, psychological experiences, and perceptual dynamics within product evaluation contexts remain insufficiently explored.

DISCUSSION & CONCLUSION

Drawing on case study investigations and analyses, this research proposes innovative design strategies for Bai cultural tourism products. As condensed expressions of Dali's ethnic cultural symbols, Bai folk crafts serve as vital carriers for transmitting the group's multifaceted cultural heritage. Tourism-oriented creative products function as both cultural interfaces for tourist-destination engagement and mnemonic devices shaping visitors' experiential memories. The intricate interdependence between ethnic craftsmanship and tourism product development proves particularly salient in Dali's tourism-driven economy. To transcend prevailing product homogenization, the core strategy involves abandoning conventional design paradigms in favor of innovative ethnic symbol utilization—specifically through deconstructing traditional pattern genomes, integrating contemporary design lexicons, and constructing immersive experiential scenarios. This approach facilitates the conversion of cultural capital into product value-added benefits, ultimately fostering symbiotic development between living heritage transmission and cultural tourism economies.

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Data Availability Statement: The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Conflicts of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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