

Integrating Red Culture and Intangible Cultural Heritage Crafts to Empower Urban Cultural Tourism: Evidence from Naval-Themed Cultural and Creative Consumption in Taizhou

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Abstract: The deep integration of red culture and intangible cultural heritage (ICH) crafts constitutes a crucial pathway for unleashing the endogenous momentum of urban cultural tourism. Taking Taizhou, the birthplace of the Chinese People's Liberation Army Navy, as a case study, this research adopts a mixed-methods approach that combines literature review, questionnaire survey, and field interviews to empirically examine the enabling mechanism between naval red culture and Zhuhong traditional wooden boat-making craftsmanship. Drawing on 849 valid questionnaires, the study systematically analyzes cultural cognition, consumption intention, product preference, and channel choice. The findings reveal that local red cultural tourism currently faces several practical constraints: exhibition formats remain predominantly static, cultural and creative products lack deep cultural interpretation, the urban IP enjoys limited dissemination, and public awareness of ICH remains low. Accordingly, this paper proposes a four-pronged development strategy: deepening the dual cultural core of “red plus ICH,” constructing a tiered and scenario-based product system, building an integrated online-offline sales network, and establishing a multi-media communication matrix. These recommendations aim to provide decision-making support for upgrading Taizhou's naval red cultural tourism and to offer a replicable practical paradigm for similar regions in China.

1. Introduction

Red culture represents a valuable spiritual legacy created by the Chinese people throughout revolution, construction, and reform. Its material carriers and spiritual connotations together constitute a distinctive resource endowment for cultural tourism development^[1]. The Outline of the 15th Five-Year Plan for National Economic and Social Development of the People's Republic of China explicitly calls for strengthened protection of revolutionary heritage and dynamic utilization of red culture^[2]. As the birthplace of the People's Liberation Army Navy, Taizhou is widely known as the “Mother City of Sailors” and has accumulated red cultural tourism resources centered on the

“two museums and one park”: the Navy Birthplace Memorial Hall, the former site of the Navy Birthplace in Baima Temple, and the Naval Vessel Culture Park. Meanwhile, Xinghua, a county-level city under Taizhou's jurisdiction, is the cradle of Zhuhong traditional wooden boat-making craftsmanship, which was inscribed on the national list of intangible cultural heritage in 2008 (Project No. VIII-137). The shared cultural symbol of “ship” or “vessel” between wooden boats and naval warships provides a natural cultural bond for integrating red culture and ICH crafts^[3]. However, existing scholarship rarely combines naval red culture with local national-level ICH crafts in market-oriented empirical research, leaving a noticeable gap in Taizhou-specific studies. Against this backdrop, the present study takes Taizhou as a case, collects first-hand data through questionnaire surveys and field interviews, systematically examines public cognition of naval culture and mortise-and-tenon ICH as well as consumption orientation, identifies practical bottlenecks in integrated development, and proposes targeted and actionable pathways.

2. Research Design and Data Collection

2.1 Research Methods

This study employs a mixed-methods design combining quantitative and qualitative approaches. At the literature review stage, domestic and international academic achievements and industry policy documents related to naval red culture, red cultural and creative product development, dynamic inheritance of ICH, and integration of the cultural tourism industry were systematically reviewed, laying a theoretical foundation for questionnaire design and data analysis^[4]. At the field investigation stage, from February to August 2026, the research team conducted site visits to red cultural tourism venues such as the Navy Birthplace Memorial Hall, the Naval Vessel Culture Park, and the “First Sail of the East Route” site, together with surrounding areas. Semi-structured interviews were conducted with staff from tourism and culture departments, inheritors of Zhuhong wooden boat craftsmanship, on-site venue personnel, and visiting tourists, incorporating authentic visitor experiences and frontline practitioners' expertise into the analysis. At the questionnaire survey stage, a questionnaire was designed around the public's understanding of Taizhou naval culture, intention to purchase cultural and creative products, and consumption scenario demands, and a stratified survey was conducted among social groups of different ages and occupations.

2.2 Questionnaire Design and Distribution

The questionnaire followed a logical chain of “cognition-consumption intention-product preference-consumption behavior,” taking into account the differentiated characteristics of respondents of different ages and occupations. The survey was distributed both online and offline: online distribution relied on social media platforms to ensure broad coverage, while offline distribution targeted on-site visitors at red scenic spots such as the Navy Birthplace Memorial Hall and the Naval Vessel Culture Park. A total of 1,000 questionnaires were issued, and 849 valid questionnaires were recovered, yielding an effective response rate of 84.9%. The valid sample covered primary school students (153, 18%), middle school students, university students (170, 20%), enterprise and institution employees (136, 16%), military personnel, and other social groups across 12 categories. The age structure spanned from under 18 to over 50, and the occupational distribution included students, employees of enterprises and institutions, military personnel, and other groups, enabling the sample to reflect, to a certain extent, differences in cognition and consumption preference regarding naval culture and mortise-and-tenon ICH cultural and creative products among different populations.

3. Status Quo Analysis Based on Survey Data

Drawing on the 849 valid questionnaires, this study systematically analyzes group differences and demand characteristics in Taizhou's naval cultural and creative consumption market from four dimensions: cultural cognition, consumption intention, product preference, and channel choice.

3.1 Cultural Cognition: Significant Group Differentiation

The survey data indicate that age and occupation are core factors influencing public cognition of naval culture. Active military personnel and middle-aged employees of enterprises and institutions show higher levels of naval cultural cognition, closely related to their occupational environments and work experience. However, primary and secondary school students have a weak cognitive foundation and relatively superficial understanding, reflecting deficiencies in current mass popularization of naval culture and highlighting the urgent need to improve science communication targeting young adolescents. Regarding ICH cognition, the overall situation is not optimistic: 32% of respondents stated that they knew nothing about Zhuhong wooden boat mortise-and-tenon ICH, and the cognitive gap is particularly pronounced among young groups and ordinary citizens. Notably, awareness of wooden handcrafts and mortise-and-tenon naval models is generally low across all groups, with only 12% of respondents aware of such cultural and creative products, indicating a significant supply-side gap for ICH handicraft cultural and creative products. This finding not only reveals current shortcomings in ICH dissemination but also implies broad market opportunities for the integrated development of “red naval culture plus mortise-and-tenon ICH” cultural and creative products.

3.2 Consumption Intention: Generally Positive but Group-Differentiated

The survey results show that naval cultural and creative products have promising market prospects. Most respondents would choose to purchase naval cultural and creative products when they encountered appealing designs, and the overall purchase intention for naval-themed products is strong across groups. However, purchase demand varies significantly by age and occupation: young groups emphasize creative design and cultural connotation, primary school students prefer products with strong fun and educational value, and middle-aged consumers place greater weight on product quality and commemorative or collectible value. Regarding purchase intention for mortise-and-tenon wooden boat ICH cultural and creative products, middle-aged working groups show relatively high willingness, while intention is more polarized among young groups, with some showing insufficient willingness. Although young people show interest, some tend to be conservative in consumption, requiring differentiated and scenario-based marketing to stimulate purchasing behavior. Most middle-aged ordinary citizens do not actively search for cultural and creative products, but demonstrate strong purchase intention when designs match their needs, representing a key potential consumer group to be cultivated.

3.3 Product Preference: Price Sensitivity and Scenario Orientation Coexist

In terms of price acceptance, the 30-50 RMB range is the most concentrated choice (52%), followed by 50-80 RMB (22%), while high-end ranges of 80-120 RMB and above attract relatively limited audiences. This distribution suggests that market pricing should prioritize basic models, supplemented by mid-range products for working groups, with a small number of high-end products for enthusiasts and gift buyers, thereby forming a tiered product matrix. In terms of application scenarios, “parent-child hands-on educational toys” represent the broadest demand scenario (54%).

Employees of enterprises and institutions favor study-trip teaching aids and parent-child toys, military personnel concentrate their demand on study-trip teaching aids, parent-child toys, and festival gifts, while ordinary citizens show a relatively balanced distribution of demand. Parent-child education and study-trip teaching aids constitute mainstream demand directions, while tourism souvenirs, festival gifts, red-themed ornaments, and military collectibles form distinctive niche segments. In terms of preferred experience duration, the one-hour standard option is the most popular (54%), followed by the 5-30 minute simple option (40%), mainly serving study-trip students and fast-paced tourists. These data provide direct guidance for tiered design of experience-based products.

3.4 Channel Choice: Complementarity between Offline Experience and Online Promotion

Offline exhibition hall counters are the most favored purchase channel (64%), reflecting the strong conversion power of the “see-and-buy” consumption model in cultural tourism scenarios. Short-video live streaming enjoys high acceptance among young groups, while e-commerce platforms cover middle-aged working groups, and bulk purchases for study trips can expand the campus market. Overall, a four-in-one diversified sales network of “offline experience + online seeding + e-commerce conversion + bulk study-trip procurement” can be constructed. In terms of publicity channels, local official media in Taizhou enjoy the highest trust (52%), while university students show a balanced distribution of information channels: local official media, craftsman short videos, and enthusiast community reviews together account for approximately 60%, and on-site experience at scenic spots accounts for about 40%. Military model and ICH enthusiast communities, as well as university “three-rural” social practice and science popularization activities, although limited in coverage, feature highly precise audiences and are suitable for targeted promotion.

Based on the above analysis, the following core characteristics can be summarized. First, public cognition of Taizhou naval culture and mortise-and-tenon wooden boat ICH follows an “olive-shaped” distribution: general awareness is acceptable but in-depth understanding is insufficient; young students and elderly groups are key targets for cognition cultivation. Second, overall consumption intention for naval cultural and creative products is strong, and design is the core factor driving purchases. Third, market cognition of mortise-and-tenon wooden boat ICH cultural and creative products is relatively weak, but the craft and cultural value endow them with considerable development potential. Fourth, price, usage scenario, product style, and communication channel all show significant group differences, calling for differentiated strategies based on tiered and categorized segmentation. Fifth, online content-driven traffic combined with offline cultural tourism experience constitutes an efficient way to reach all types of consumers.

4. Practical Dilemmas in Integrated Development of Red Cultural Tourism

Based on the survey data and field visits, this study identifies four core problems constraining the integrated development of Taizhou's naval red cultural tourism.

4.1 Static Exhibition Formats and an Unclosed Tourism Consumption Loop

The survey shows that Taizhou's “two museums and one park” currently rely mainly on static graphic exhibitions; visitors predominantly engage in passive viewing, lacking immersive and interactive experience segments. In interviews, many visitors expressed hope for more participatory activities such as handicraft making and simulated operations. The integration among ICH crafts, cultural and creative products, and naval themes remains insufficient, and study-trip and hands-on experience formats are underdeveloped, making it difficult to convert exhibition traffic into

consumption growth. The cultural tourism industry chain remains relatively short, and a complete closed loop of “viewing-experiencing-consuming-disseminating” has not yet been formed. The data show that 54% of respondents prefer the one-hour standard experience and 40% choose the 5-30 minute simple experience, indicating clear market demand for experience-based products that current supply fails to match effectively.

4.2 Shallow Cultural Interpretation and Homogenization of Cultural and Creative Products

Current Taizhou naval cultural and creative products are dominated by lightweight symbolic items such as keychains and commemorative badges (54% awareness). Although such products enjoy a broad audience base, they offer limited cultural added value and are prone to homogenized competition. Awareness of wooden handcrafts and mortise-and-tenon naval models is only 12%, indicating that ICH craft-based cultural and creative products are almost blank in the market. Existing products have not fully exploited the cultural connection between the unique IP of the “birthplace of the Navy” and Zhuhong mortise-and-tenon craftsmanship; product differentiation is insufficient to satisfy consumers' increasingly diverse emotional needs and aesthetic expectations. Research based on the BTM-Kano model has found that consumer demand spans functional, price, social, and emotional dimensions, with cost-performance ratio and cultural identity belonging to attractive-quality requirements^[5]. A configurational analysis of youth groups' emotional cognition of red cultural and creative products further indicates that emotional value and cultural identity are important drivers of purchase intention^[6]. This implies that only products with profound cultural connotation can stimulate consumers' deep-seated purchase motivations.

4.3 Low Public Awareness of ICH and a Weak Market Cultivation Foundation

The weak public cognitive foundation of Zhuhong wooden boat mortise-and-tenon ICH is an important bottleneck restricting integrated development. Thirty-two percent of respondents knew nothing about this ICH item, and the cognitive gap is particularly prominent among young groups and ordinary citizens. The dynamic inheritance of ICH requires raising public awareness through diversified channels such as education and new media, so that national-level ICH truly enters daily life^[7]. In terms of participation willingness, although 76% of respondents expressed willingness to participate in ICH experience activities, the actual participation enthusiasm of young children and ordinary groups aged 26-35 still needs to be improved. Simplifying participation procedures, enhancing activity fun, and lowering participation thresholds are needed to stimulate the enthusiasm of these groups.

4.4 Insufficient Dissemination of the Urban IP and Limited External Radiation

As Taizhou's most recognizable urban cultural IP, the “Mother City of Sailors” suffers from obviously insufficient external communication. The survey shows that only 6% of respondents reported a very good understanding of naval culture, and young groups generally show low cognition. The dissemination of venues such as the Navy Birthplace Memorial Hall is mainly confined to the local Taizhou area, and their influence at the national level, especially in northern coastal cities and military enthusiast communities, needs to be expanded. Although local official media enjoy relatively high trust (52%), there is a lack of nationally influential communication events and viral new-media content, and a three-dimensional communication matrix covering traditional media and emerging social platforms has not yet been formed.

5. Development Pathways for Empowering Integration of Red Culture and ICH Crafts

Targeting the four core problems identified above, this study proposes a systematic development strategy from four dimensions: cultural integration, product system, cognition cultivation, and communication matrix.

5.1 Deepening the Dual Cultural Core of “Red plus ICH” and Innovating Immersive Tourism Experiences

To address the static nature of exhibitions, cultural deep integration should be used as a breakthrough, organically embedding naval red narratives and mortise-and-tenon ICH craftsmanship into cultural tourism experience scenarios. Specifically, mortise-and-tenon ship assembly experience zones can be set up in the Navy Birthplace Memorial Hall and the Naval Vessel Culture Park, allowing visitors to appreciate the exquisiteness of ICH craftsmanship while assembling miniature vessel models and simultaneously learning about the development history of the People's Navy. Experience projects can be divided into three levels by duration and difficulty: a 5-30 minute simple version for young students and fast-paced tourists, a one-hour standard version for parent-child families and study-trip teams, and a collector-level deep-experience version for senior enthusiasts, with reservations available for on-site guidance by Zhuhong craftsmen.

At the level of cultural symbol extraction, core narrative themes such as “Baima Setting Sail” and “Deep-Blue Journey” can be distilled based on collection artifacts and historical events and integrated into experience space design and product shape development. The key to integrating ICH elements into cultural and creative products lies in transforming traditional craftsmanship and cultural context into participatory and perceptible product experiences, enabling consumers to complete a dual cognitive construction of red culture and ICH craftsmanship through hands-on practice.

5.2 Constructing a Tiered and Scenario-Based Cultural and Creative Product System and Building a Distinctive Cultural Brand

To address the insufficient cultural connotation of cultural and creative products, a tiered product matrix should be constructed based on survey data and on the marketing logic of museum cultural and creative products^[8]. On the price dimension, a three-tier gradient can be established: basic products (30-50 RMB) for mass tourists and student groups, focusing on lightweight items such as mortise-and-tenon keychains and mini ship ornaments; mid-range products (50-80 RMB) for working groups and cultural and creative enthusiasts, focusing on modular mortise-and-tenon ship models and themed handcraft sets; high-end products (80-120 RMB and above) for collectors and the gift market, offering craftsman hand-customized and limited-numbered products.

On the scenario dimension, differentiated development should revolve around core demands: simple assembly toy sets for parent-child families, accompanied by fun illustrated instructions; teaching-aid packages with course guides for the study-trip market, incorporating mortise-and-tenon ship making into the teaching system of naval culture and ICH inheritance; portable souvenir series for the tourism market; and collector-level precision ship models for military enthusiasts and red culture consumers. Through scenario-based design, cultural and creative products can be upgraded from mere souvenirs to cultural carriers integrating educational, social, and collection functions.

5.3 Deepening ICH Cognition Cultivation and Expanding Study-Trip Education and Social Participation Channels

To address low public awareness of ICH, study-trip education and social participation should be used as breakthroughs to build a multi-level cognition cultivation system. At the study-trip education level, mortise-and-tenon ship making can be incorporated into the study-trip curricula of primary and secondary schools in Taizhou and surrounding areas, accompanied by naval culture interpretation and ICH craftsmanship experience. The survey shows that hands-on study-trip practice for primary and secondary schools enjoys an approval rate of 80% among the under-18 group, indicating that this channel has high conversion efficiency and can effectively achieve the dual goals of naval culture dissemination and ICH craftsmanship popularization. At the same time, school collective procurement of mortise-and-tenon ship model teaching aids can consolidate the cognitive foundation of ICH among young people.

At the social participation level, targeted promotion can be carried out through vertical interest communities such as military model forums and ICH enthusiast communities, and the influence among young groups can be expanded through university “three-rural” social practice and science popularization activities. Although such channels have limited coverage, they feature high audience precision and strong communication depth, which helps cultivate core consumer groups. In addition, public welfare mortise-and-tenon wooden boat making experience activities can be regularly held at community cultural centers and public libraries to lower participation thresholds, expand the social coverage of ICH activities, and gradually change the status quo in which 32% of respondents know nothing about mortise-and-tenon ICH.

5.4 Building a Multi-Media Communication Matrix and Enhancing Urban IP Influence

To address insufficient urban IP dissemination, a tiered and categorized communication system should be constructed to enhance the national visibility of the “Mother City of Sailors” IP. At the mainstream communication level, Taizhou local television stations and newspapers can be partnered with to produce special reports on naval culture and mortise-and-tenon ICH, shaping brand credibility. Documentary short videos about craftsmen can be filmed, telling the craft legend of Zhuhong wooden boats “without a single nail” and the strong-army stories of naval vessels, using emotional narratives to resonate with audiences.

At the digital communication level, accounts on short-video platforms such as Douyin and Xiaohongshu can be operated to publish naval culture stories, mortise-and-tenon assembly tutorials, and cultural and creative product displays, completing the conversion from communication to consumption through “content seeding + live streaming sales.” E-commerce platform stores on Taobao and JD.com can be established to match the online shopping habits of middle-aged groups, building a diversified sales network of “offline experience + online seeding + e-commerce conversion.” A special exhibition and sales zone can be opened at the Xinghua Zhuhong ICH Experience Hall to connect the spatial linkage between red cultural tourism and ICH experience, forming a consumption closed loop of “viewing-selecting-practicing” and extending the cultural tourism industry chain. Through a three-layer communication architecture of “official media building credibility-digital channels expanding reach-community channels deepening engagement,” the national influence of the “Mother City of Sailors” IP and social awareness of mortise-and-tenon ICH can be gradually enhanced.

6. Conclusion

This paper takes Taizhou, the birthplace of the People's Liberation Army Navy, as a case to

examine how naval red culture and Zhuhong traditional wooden boat-making craftsmanship can be integrated to energize urban cultural tourism. Drawing on 849 valid questionnaires and field interviews conducted between February and August 2026, the study finds that consumption intention for naval cultural and creative products is strong on the whole, yet the integration of red culture with mortise-and-tenon ICH crafts is still held back by four factors: exhibitions that remain largely static, cultural and creative products with thin cultural interpretation, weak public awareness of ICH, and limited external reach of the "Mother City of Sailors" IP. In response, the paper suggests deepening the dual cultural core of "red plus ICH," building a tiered and scenario-based product system, connecting offline experience with online seeding and e-commerce conversion, and shaping a multi-media communication matrix. Since the sample was concentrated in Taizhou and no longitudinal data were available, the conclusions should be read with caution; follow-up research could compare cities with similar resource endowments and track how these strategies perform over time.

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