

A Study on Foreign Trade Transformation under Dual-Dimensional Drivers: Empowering Industry with Yue Opera Culture—A Case of Shengzhou's Scarf and Tie Sector

Jiaying Zhang¹ Qiwei Pang^{1*}

¹ School of International Economics and Trade, Ningbo University of Finance & Economics, Ningbo 315175, China

*Corresponding author Email: pangqw@nbufe.edu.cn

Received 30 January 2026; Accepted 4 March 2026; Published 10 March 2026

© 2026 The Author(s). This is an open access article under the CC BY license.

Abstract: Driven by the dual wheels of globalization and the national strategy for cultural advancement, the living inheritance of intangible cultural heritage (ICH) and the upgrading of local foreign trade industries have become core issues for achieving high-quality regional economic development. As a major ICH province in Zhejiang, the Shengzhou scarf and necktie industry serves as a core pillar of the local export economy. Yet, it faces development dilemmas such as intensifying international competition and severe product homogenization, with small and medium-sized enterprises (SMEs) particularly encountering a crisis of order loss. The deepening implementation of Zhejiang's ICH support policies and the transformation of the international textile market constitute a dual-dimensional driving force, propelling industrial transformation. Through methods such as literature research and case analysis, this paper explores the pathways for cultural empowerment under this dual-dimensional drive, identifies fusion points between Yue Opera culture and this industry, and ultimately constructs a practical pathway system for Yue Opera culture to empower industrial transformation. This provides a replicable model for the high-quality development of traditional foreign trade industries.

Keywords: ICH support; International market transformation; Foreign trade industry transformation; Cultural empowerment

1. Introduction

Amid the deepening advancement of economic globalization and the implementation of the national strategy for cultural advancement, the living inheritance of intangible cultural heritage (ICH) and the transformation and upgrading of local foreign trade industries have become core drivers and catalysts for promoting high-quality local economic development. As the birthplace of Yue Opera, Shengzhou possesses a profound cultural heritage and distinctive visual symbols of Yue Opera, offering rich cultural resources for industrial empowerment. Renowned as the "Home of China's Neckties" and the "Famous City for Chinese Silk and Knitted Apparel," the local scarf and necktie industry, after over forty years of development, has established a significant scale advantage, with an annual production capacity of 300 million neckties and 50 million silk scarves. Exports account for 65% of its total output, covering over 30 countries and regions, making it a core pillar of the local export economy.

In recent years, however, the Shengzhou scarf and necktie industry has encountered multifaceted developmental bottlenecks. The rise of Southeast Asian countries has gradually occupied the mid-to-low-end international market, placing unprecedented competitive pressure on domestic enterprises. Furthermore, over 80% of enterprises within the industry rely on "imitative design" as their core competitiveness, resulting in severe product homogenization, a lack of independent intellectual property rights, and insufficient cultural value-added,

failing to meet the core demand for cultural attributes and emotional experience in international markets. Affected by this, the industry's export growth rate declined from 12% (2022) to 5.3% (2024), with most SMEs facing survival pressures from order loss and profit decline.^[1]

Against this backdrop, the continued deepening of Zhejiang Province's ICH support policies and the profound transformation of the international textile market present a "dual-dimensional drive" opportunity for industrial transformation and upgrading. On the policy front, Zhejiang has issued a series of measures for ICH protection and inheritance, establishing a robust talent cultivation system and promoting the deep integration of ICH with various industries, laying a solid foundation for the cultural empowerment of the scarf and necktie industry. On the market front, the international textile market exhibits trends towards "culturalization, personalization, and greening," with rising demand for products possessing both cultural connotation and green attributes, opening new space for industrial upgrading.

Leveraging the deep excavation and effective empowerment of Yue Opera culture can not only chart a broader development path for the transformation of Shengzhou's scarf and necktie export industry but also holds significant practical and theoretical value for promoting its "going global." Through the practice of empowering the export industry with Yue Opera, a distinctive Chinese ICH^[2], we can better assist this traditional export industry in breaking through development bottlenecks and enhancing its core export competitiveness. Moreover, empowering the industry enables the living inheritance of this traditional cultural form. This study, against the dual background of the intrinsic drive of Yue Opera culture and the external impetus of Shengzhou's scarf and necktie export industry, combines the core cultural connotations and unique visual symbols of Yue Opera. It deeply analyzes the industry's development dilemmas, systematically constructs a cultural empowerment transformation pathway addressing the cultural, market, and management contradictions it faces, providing in-depth practical reference for the industry's upgrading and the living inheritance of Yue Opera culture.

2. Literature Review, Core Concepts, and Theoretical Foundations

2.1. Literature Review

Against the backdrop of deepening cultural-economic integration and accelerated globalization, research on the integration of ICH and foreign trade industries has become a scholarly focus.^[3] Its developmental trajectory has evolved alongside cultural-tourism integration and the digital economy, shifting from early-stage studies on static ICH preservation and singular foreign trade industry transformation towards exploring the fusion of living ICH inheritance and industrial empowerment.^[4] Scholars domestically and internationally have conducted research on ICH inheritance, textile export industry upgrading, and cultural empowerment pathways, forming diverse theoretical outcomes and practical cases that lay the foundation for research on ICH empowering traditional foreign trade industry transformation.

As practical activities in the scarf and necktie industry deepen, foreign research has gradually shifted from pure theoretical exploration to more in-depth studies on industrial application. Studies in Europe, America, and East Asia on the integration of Chinese traditional culture and the textile industry have formed different research emphases, such as Europe's focus on fashion transformation of cultural symbols, America's on commercial application of cultural IP, and Japan and South Korea's on craftsmanship inheritance and detailed innovation.^[5] Theories by scholars like Porter and Gereffi also provide important support for our understanding of cultural empowerment and value chain upgrading in the scarf and necktie industry. Domestic research, guided by policy and ideology, has diversified into areas like digital dissemination of ICH, cross-industry application of Yue Opera culture, and commercial conversion of textile ICH IP, achieving breakthroughs. Scholars have also identified cultural

empowerment as the core pathway for transforming traditional textile export industries, with cross-border e-commerce serving as a crucial carrier for cultural and creative product exports.^[6]

Existing research still exhibits evident shortcomings. Foreign research on Chinese traditional culture often remains superficial, lacking targeted exploration of Yue Opera culture; design and research mostly stay at the level of pattern transplantation, with insufficient exploration of its integration with male accessories like neckties. While domestic research has formed mature models for ICH-textile industry integration, discussions are often macro-level, lacking in-depth, systematic studies on specific pathways for Yue Opera culture to empower the transformation of the Shengzhou scarf and necktie export industry. Based on this, this paper, against the background of the dual-dimensional drive, focuses on the Shengzhou scarf and necktie export industry, explores integration points between Yue Opera culture and the industry, constructs a systematic cultural empowerment transformation pathway, addresses gaps in existing research, and provides a replicable practical model for the high-quality development of traditional foreign trade industries.

2.2. Core Concept Definitions

2.2.1. Intangible Cultural Heritage (ICH)

Intangible Cultural Heritage refers to various traditional cultural expressions, along with objects and spaces associated with them, that are regarded as part of their cultural heritage by communities, groups, and, in some cases, individuals, and are transmitted from generation to generation.^[7] Its core value lies in safeguarding cultural roots, enhancing national cultural identity, and providing a rich source of cultural wisdom for modern industrial innovation. It possesses three core characteristics: living inheritance, cultural uniqueness, and regional distinctiveness. Yue Opera, as a representative ICH of Zhejiang Province, is characterized by lyrical and melodious singing styles, forming three main vocal systems, and six main role types. Its performance integrates the artistic essence of Kunqu Opera and spoken drama. Its costumes, patterns, and classic repertoire stories possess distinct visual and cultural features, making it a high-quality cultural resource for industrial empowerment.^[8]

2.2.2. Local Foreign Trade Industry Transformation

Local Foreign Trade Industry Transformation refers to the process whereby local governments or regions, through policy guidance, resource integration, and technological innovation, promote local export enterprises and industrial chains to adjust from traditional export models towards high value-added, diversified, and digitalized directions.^[9] Its core objective is to break through the dilemmas of low added value and homogeneous competition in traditional foreign trade, enhance the core competitiveness of the regional export industry, adapt to changes in the global economic landscape and new international market demands, and achieve high-quality, sustainable development of the regional export economy.

2.2.3. ICH Cultural Empowerment

ICH Cultural Empowerment refers to the model whereby intangible cultural heritage, through living inheritance, innovative application, and resource integration, injects developmental impetus into economic, social, and cultural fields via pathways such as product innovation, brand building, marketing communication, and supply chain upgrading. Its core involves deeply integrating the connotations, symbols, and craftsmanship of ICH into the entire production, operation, and sales chain of the local foreign trade industry, providing cultural support, differentiated advantages, and value increment for industrial transformation, achieving a win-win situation of living ICH inheritance and high-quality industrial development.^[10]

2.3. Theoretical Foundations

2.3.1. Comparative Advantage Theory

Proposed by David Ricardo in 1817, the Comparative Advantage Theory posits that countries should specialize in producing and exporting goods for which they have a lower relative opportunity cost, thereby achieving optimal resource allocation and maximum overall welfare through international trade.^[11] This theory provides support for this paper: the Shengzhou scarf and necktie export industry can leverage the inherent comparative advantage of Yue Opera ICH culture, transforming its craftsmanship and cultural symbols into product differentiation features, breaking through the traditional trade model reliant on cost and scale, forming a unique cultural competitive advantage in the international market, and enhancing product pricing power and market share.

2.3.2. National Competitive Advantage Theory

Proposed by Michael Porter in 1990, the National Competitive Advantage Theory (Diamond Model) holds that the international competitiveness of a nation or region's industry depends on the synergistic interaction of six factors: factor conditions; demand conditions; related and supporting industries; firm strategy, structure, and rivalry; government; and chance.^[12] This theory provides a systematic analytical framework for ICH empowering foreign trade industry transformation: relying on characteristic production factors formed by Yue Opera ICH craftsmanship and cultural talent, grasping the demand conditions of overseas cultural consumption upgrading, linking with related and supporting industries like cross-border e-commerce and cultural-creative design, leveraging Zhejiang's ICH protection and export upgrading policies, seizing opportunities presented by international market transformation and digital economy development, and constructing the international competitive advantage of the Shengzhou scarf and necktie export industry through the synergistic fusion of these six factors.

2.3.3. Global Value Chain Theory

Proposed by Gary Gereffi and others around 2005, the Global Value Chain Theory points out that global industrial division of labor presents a hierarchy of "R&D and Design — Production and Manufacturing — Marketing and Branding," with high value-added segments concentrated at both ends of the chain, while production and manufacturing occupy a low-end, low value-added position. This theory clarifies the core direction for the transformation of the Shengzhou scarf and necktie export industry: relying on the advantages of Yue Opera ICH culture, breaking free from the predicament of singular production/manufacturing and low-end contract manufacturing, and extending towards upstream value chain segments (product R&D, culturally-empowered design) and downstream segments (brand operation, cross-cultural marketing), realizing a shift from "manufacturing" to "creation and branding," and enhancing the industry's position in the global value chain.

3. Current Status of Zhejiang's ICH Support and International Market Transformation

3.1. Current Status of Zhejiang Province's ICH Support

Through the in-depth advancement of constructing a diversified ICH policy system, continuously cultivating high-level ICH professionals, and integrating ICH cultural connotations into real-life production, Zhejiang has laid a solid foundation for the living inheritance of ICH on one side, and provided strong support for ICH-enabled industrial empowerment on the other. Driven by policies like the Zhejiang Province Intangible Cultural Heritage Protection Regulations, the province not only provides subsidies for provincial-level ICH inheritors but also actively promotes the establishment of digital platforms like the "Zhejiang ICH Culture Cloud," significantly enhancing ICH protection

work.^[13] By establishing a four-tier inheritor system (national, provincial, municipal, county) and fully utilizing methods like university training programs and "ICH in Campus" activities, a large number of professional ICH talents have been cultivated. Meanwhile, projects to document ICH processes have been implemented. Based on deep integration, the exquisite cultural connotations of ICH have been incorporated into characteristic blocks. Particularly, with the promotion of over 11,000 ICH events in 2024, the lifestyle-ization and industrialization of ICH have been further advanced, building a richer platform for better integration of ICH with modern industries.

3.2. Current Status of International Market Transformation

Against the backdrop of deepening globalization and the gradual development of the digital economy, the international market for ICH products and textiles is undergoing profound transformation, exhibiting new characteristics such as diversification of traditional dissemination carriers, deepening technological innovation, and personalized product demand, creating new opportunities for ICH-enabled foreign trade industry transformation. ICH "going global" has broken through traditional exhibition and sales models, forming diverse communication channels like short videos, live streaming, cross-cultural performances, and international exhibitions, achieving a shift from static display to dynamic interaction, and deeply integrating cultural dissemination with trade sales.^[14] By perfectly integrating digital technology with modern craftsmanship, it not only provides solid technical support for ICH craftsmanship innovation and industrialization but also greatly enhances production efficiency and product competitiveness while preserving the core skills of ICH, thereby creating an efficient, sustainable, and highly competitive new integrated development model of "culture + technology + brand." Along with continuous innovation in ICH products, the design is no longer singular but tightly grasps international market demands, integrating popular IP with profound Eastern cultural elements, continuously transforming towards personalization, fashion, and cultural-creativity, thereby accurately meeting international consumer demand for ICH products and effectively releasing the cultural value-added they bring to the international market.

Table 1 Key data on the digitalization of intangible cultural heritage and cross-cultural communication:

Indicator Category	Specific Data or Case	Description and Significance
Digital Repository Access	The Digital Dunhuang Repository's global access reaches 23 million times	Reflects the fundamental role of digital technology in the static display and global dissemination of intangible cultural heritage.
Social Media Communication Effectiveness	Single-season playback volume of intangible cultural heritage live streams on TikTok exceeds 100 billion times	Reflects the enormous influence of short video or live stream formats in the dynamic, interactive dissemination of intangible cultural heritage.
Commercialization and Global Expansion Results	In 2023, overseas sales of Dunhuang-themed derivative products exceeded 40 million RMB	Demonstrates the driving effect of digital dissemination on the international sales of intangible cultural heritage products.
Forms of Technological Empowerment	VR/AR immersive experiences, and social media short videos/live streams	Lists the main technological pathways for the transformation of intangible cultural heritage from "static display" to "dynamic interaction".

3.3. Trends in International Textile Market Transformation

As of 2025, the international textile market is at a critical stage of structural restructuring, forming four core

transformation trends centered on green transition, digital and intelligent upgrading, regional pattern reconfiguration, and increased market concentration. These trends pose new requirements for the transformation and upgrading of traditional textile export industries while clarifying the development direction for ICH cultural empowerment of industries. Driven by global "dual carbon" goals, green transition has become an industry imperative, with the application proportion of sustainable materials increasing and the commercialization of green technologies accelerating. The implementation of mechanisms like the EU's Carbon Border Adjustment Mechanism (CBAM) makes carbon label certification and green compliance the foundation for enterprises to participate in international competition. Digital and intelligent technologies are profoundly reshaping industry development models.^[15] On the production end, technologies like 5G and 3D virtual sampling enhance efficiency and shorten R&D cycles; on the sales end, cross-border e-commerce and live-streaming e-commerce optimize export structures, with flexible production becoming the core trend to adapt to fragmented and personalized market demands. The regional pattern and supply chain of the textile industry are rapidly reconfiguring. Asia remains the manufacturing core, with China moving towards high value-added segments of the global value chain, Southeast Asia undertaking mid-to-low-end production capacity, Europe focusing on high-end and technical textiles, and Africa becoming a new growth pole.^[9] Simultaneously, industry market concentration continues to increase, with leading enterprises strengthening advantages through scale consolidation. Raw material price fluctuations accelerate industry consolidation, making it urgent for SMEs to rely on product differentiation and cultural value-added to achieve market breakthroughs. This also provides important market space for Yue Opera culture to empower the transformation of the Shengzhou scarf and necktie industry.

Table 2 Monthly Import and Export Data of Silk Scarves, Ties, and New Fabrics in China (2025)

Month	Silk Scarf & Tie Export (Million USD)	New Fabric Export Value (Million USD)	Import Value (Million USD)	Trade Balance (Million USD)
Jan	45.2	12.3	4.2	41.0
Feb	38.7	10.8	3.8	34.9
Mar	52.1	14.2	4.5	47.6
Apr	48.3	13.5	4.3	44.0
May	51.8	14.8	4.1	47.7
Jun	49.2	13.9	3.9	45.3
Jul	47.6	13.2	3.7	43.9
Aug	46.9	12.8	3.6	43.3
Sep	48.5	13.6	3.8	44.7
Oct	50.2	14.1	4.0	46.2
Nov	53.7	15.2	4.2	49.5
Dec	55.8	15.8	4.3	51.5

4. Development Dilemmas of the Shengzhou Scarf and Necktie Export Industry

Currently, the Shengzhou scarf and necktie industry occupies approximately 60% of the global market and 90% of the domestic market, establishing itself as a core production base. However, under the dual impact of profound

changes in the international market and inherent development contradictions, this leading high-tech industry has gradually fallen into a series of development dilemmas, including narrow profit margins, severe product homogenization, and volatile export demand. Even leading enterprises like Babei Group have had to actively explore breakthrough paths under this background, yet still face numerous challenges. These have become core pain points for the transformation and upgrading of this leading industry.

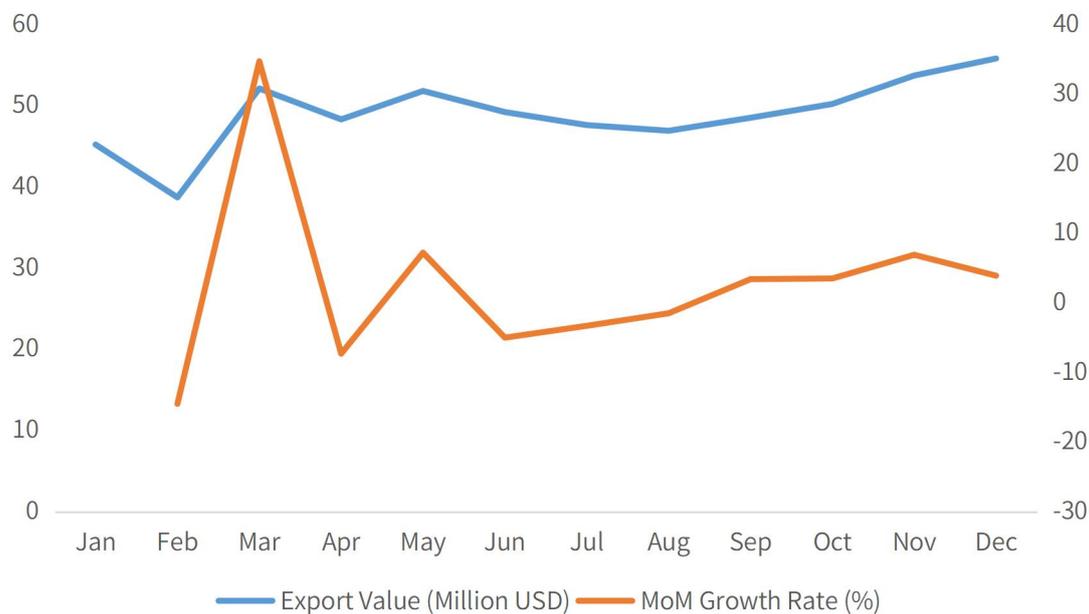


Figure 1. Monthly Trends of Export Value and Trade Balance in 2025

4.1. Narrow Profit Margins, Uncontrollable Raw Material Costs

From the perspective of Global Value Chain Theory, the Shengzhou scarf and necktie industry has long been dominated by contract manufacturing, positioned in the low value-added production and manufacturing segment of the mid-tier of the global value chain, with low technological content and product added value, resulting in extremely weak pricing power for enterprises in the international market. As an industry leader, Babei Group once engaged in nearly 20 days of negotiations with a US purchaser, ultimately achieving only a \$0.10 increase per colored-woven necktie, a typical example of insufficient industry pricing power.

Simultaneously, the industry heavily depends on external raw materials, with over 90% of the raw silk used in Shengzhou sourced from outside the region. Traditional rural sericulture is significantly affected by seasons and natural conditions, with annual raw silk price volatility reaching up to 30%. Substantial fluctuations in raw material costs directly compress the export profit margins of enterprises.^[16] Although Babei Group, after 7 years of R&D and an investment exceeding 500 million yuan, successfully developed factory-based silkworm rearing technology, becoming the only enterprise globally capable of full-cycle artificial feed silkworm rearing and achieving independent control over raw materials, most SMEs lack the capital and technical capability to break through the raw material bottleneck, leaving cost control issues unresolved.

4.2. Severe Product Homogenization, Absence in High-End Markets

According to the Intra-Industry Trade Theory, product differentiation is the core driver of intra-industry trade.^[17] However, the number of enterprises in the Shengzhou scarf and necktie industry once exceeded a thousand, with the majority being SMEs and family workshops lacking independent R&D and design capabilities. Product styles and processes are highly similar, making it difficult to form product heterogeneity, unable to drive intra-industry trade

development through differentiation and economies of scale. Enterprises can only compete for market share in the mid-to-low end through price competition.

Following the 2008 global financial crisis, Southeast Asian countries seized orders by leveraging lower labor and raw material costs, further intensifying price competition domestically and causing a severe absence of the Shengzhou scarf and necktie industry in high-end markets. Although leading enterprises have begun to achieve breakthroughs through differentiation: McDirol focuses on the high-end silk printing field, avoiding mid-to-low-end price wars; Jiajia Necktie concentrates on R&D of eco-friendly fabrics, adapting to green consumption trends; Babei Group leverages its independent raw silk supply to expand products into home textiles, apparel, and even explores applications of silk protein in cosmetics and biomedicine, and collaborates with Yue Opera inheritors to jointly host Yue Opera Silk Scarf and Necktie Cultural Festivals, moving beyond the limitations of single necktie products. Overall, however, the industry's high-end transformation is still in its infancy, lacking independent intellectual property rights and high-end brands, and struggles to meet the demands of the international high-end market.

4.3. Volatile Export Demand, Hindered Traditional Channels

Against the backdrop of continuous global economic fluctuations and profound changes in increasingly mature consumer habits, the Shengzhou scarf and necktie export industry has gradually fallen into the dilemma of significant demand shocks. Based on a nearly 40% decline in Shengzhou's necktie export volume around 2019, with nearly half of enterprises forced to suspend production or transform due to order loss, the post-pandemic era saw a slow recovery in the global consumer market. This led to a continuous decline in export growth rates, placing enormous survival pressure on SMEs.^[18]

Simultaneously, traditional offline export channels have been significantly impacted by new channels like cross-border e-commerce and live-streaming e-commerce, with international market orders showing a trend towards fragmentation. However, most SMEs in the Shengzhou scarf industry find it difficult to truly implement digital concepts across all aspects of their operations, lacking a genuine grasp of online operations, and are unable to effectively connect emerging online channels with increasingly fragmented order demands. Consequently, market expansion for enterprises reliant on traditional export channels has fallen into an increasingly severe predicament. Although leading enterprises in Shengzhou, in conjunction with the government, have established logistics centers integrating resources across R&D, warehousing, and logistics, significantly enhancing export circulation efficiency, and leveraged emerging e-commerce industrial parks to fully utilize online and offline sales channels (e.g., online orders accounting for 70% in some stores, especially for young-oriented categories like JK neckties, providing stable online sales), this has somewhat alleviated the pressure from the contraction of traditional export channels. Nevertheless, the digital transformation of SMEs still faces multiple obstacles in capital, technology, and talent, resulting in relatively slow overall progress in this transformation.

5. Industrial Transformation Pathways under the Dual-Dimensional Drive

Zhejiang Province boasts a solid foundation in the textile export industry, with its industrial scale accounting for a quarter of the nation's total and its export volume ranking first in the country for ten consecutive years. Under the dual drive of Zhejiang's ICH support policies and international market transformation, a model of industrial upgrading characterized by "cultural empowerment + market adaptation" has emerged.^[19] Relying on this dual-dimensional drive, the Shengzhou scarf and necktie export industry, from the dimension of ICH support, solidifies the core of cultural empowerment, and from the dimension of international market transformation, expands industrial development tracks. Through the integration of these two dimensions, it constructs a systematic transformation pathway, providing a practical example for the upgrading and development of traditional textile

export industries.

5.1. ICH Support Dimension: From Craftsmanship Inheritance to Industrial Empowerment, Consolidating the Transformation Core

Leveraging Zhejiang Province's ICH support policies, deeply integrate the inheritance of Yue Opera cultural craftsmanship with the transformation and upgrading of the Shengzhou scarf and necktie industry. Consolidate the cultural empowerment core of industrial transformation from three aspects: policy foundation, craft revitalization, and digital empowerment, realizing the shift of Yue Opera culture from "static inheritance" to "dynamic empowerment".

Policy Support and Cluster Synergy as the Foundation: Construct a support system for ICH empowering the industry. Relying on policies like the *Zhejiang Province Modern Textile and Apparel Industry Cluster Construction Action Plan*, incorporate Yue Opera ICH craftsmanship into the top-level design for the transformation and upgrading of the Shengzhou scarf and necktie industry. Promote the linkage between the government, enterprises, industry associations, and ICH inheritors, forming a support system of "ICH Workshops + Industrial Clusters + Public Services." Establish a special fund for Yue Opera culture empowering industrial transformation, providing financial support for enterprise R&D of Yue Opera cultural elements and design talent cultivation. Build a public service platform for the integration of Yue Opera culture and industry, achieving the integration and sharing of ICH resources and industrial resources, reducing the cost of cultural empowerment for enterprises.

Craft Revitalization and Value Excavation: Fully unleash the industrial value of Yue Opera. By meticulously excavating the core visual elements of Yue Opera culture—the unique beauty of Yue Opera costume patterns, the artistic expression of classic colors, the charm of distinctive shapes—and integrating them with modern, fashionable design techniques, symbols from classic Yue Opera stories are incorporated into scarf and necktie product R&D, injecting new impetus into industrial development and enhancing product competitiveness. Simultaneously, by integrating traditional Yue Opera crafts like embroidery and weaving with modern textile technology, the cultural connotations of Yue Opera are better reflected, significantly enhancing the craft value-added of products. Leveraging certification systems like "Zhejiang Made," Yue Opera cultural elements are transformed into product premium points, better promoting product upgrading towards mid-to-high-end markets, and helping the scarf and necktie export industry break through the long-standing development dilemmas of product homogenization and low added value.

Digital Empowerment and Inheritance Upgrading: Promote the digitization of Yue Opera culture. Leveraging Zhejiang's digital economy advantages, a digital repository centered on Yue Opera cultural resources can be established, enabling the digital preservation and innovative design of Yue Opera patterns, craftsmanship, and stories. Yue Opera cultural elements can be promoted for standardized, scaled production through digital platforms like industrial "brains" and smart factories. While preserving the core essence of Yue Opera ICH craftsmanship, the international adaptability of Yue Opera products is enhanced. Simultaneously, through digital technologies like virtual reality/augmented reality and short videos, cross-cultural dissemination of Yue Opera culture is achieved, significantly improving international market recognition of Yue Opera culture, laying a solid foundation for the overseas expansion of Yue Opera culture-empowered products.

5.2. International Market Transformation Dimension: From Passive Adaptation to Active Leadership, Expanding Transformation Tracks

Adapting to the international textile market's transformation trends towards greening, digitalization, and personalization, expand industrial transformation tracks from three aspects: green transformation, channel

innovation, and demand adaptation, promoting the Shengzhou scarf and necktie industry's shift from passively adapting to international markets to actively leading market demand.

Responding to Trade Barriers, Advancing Green Transformation, Building Green Competitive Advantage: Addressing challenges like the EU's Carbon Border Adjustment Mechanism (CBAM) that pose "green trade barriers," efforts should focus on enhancing corporate carbon management capabilities and promoting carbon label certification for products, ensuring green compliance. Priority should be given to constructing energy-saving and carbon-reduction demonstration projects, promoting green technologies like recycled polyester and waterless dyeing, thereby increasing the green value-added of products. Simultaneously, firmly establishing the product label of "Yue Opera Culture + Green Textiles" better aligns with global sustainable consumption trends, elevating product international status and helping overcome a series of international "green trade barriers."

Promoting Channel Innovation, Deploying in Global Markets, Constructing a Digital Export Channel System: Relying on in-depth cooperation with cross-border e-commerce platforms like Amazon and Ozon, and close alignment with local platforms like Alibaba International Station and TikTok, effectively promote enterprises' online cross-border marketing layout. This adapts to the fragmented order demands of the international market while better introducing local advantageous resources to global markets. Simultaneously, through government-led initiatives like the "Thousand Groups, Ten Thousand Enterprises" market expansion campaign, organize enterprise participation in international large-scale textile exhibitions, cultural exhibitions, and other international events, building offline export channels, bringing new business opportunities. Furthermore, by fully utilizing integrated R&D, warehousing, and logistics resources, construct an export logistics center represented by Shengzhou's scarves and neckties,^[20] enhancing export circulation efficiency and building a global marketing network centered on "online + offline."

Adapting to Market Demand, Advancing Product Upgrading, Creating International Cultural Products: By deeply exploring the international market demand for functional and intelligent textiles, increase investment in R&D of new fiber materials and smart textile technologies, pushing the practical functionality of scarves and neckties to new heights. According to the cultural and aesthetic preferences of different major target markets, promote the localization adaptation of Yue Opera cultural elements — simplifying Yue Opera patterns and enhancing fashion sense for the European market; deeply exploring Yue Opera cultural connotations and emphasizing craft details for the East Asian market. Also, explore more fusion points between Song Dynasty aesthetics and Yue Opera culture, developing creative products that combine national trend characteristics with international aesthetics, meeting the personalized and cultural demands of the international market.

5.3. Core Transformation Pathways of Dual-Dimensional Integration

The dual-dimensional drive of Zhejiang's ICH support and international market transformation are not independent but deeply integrated and synergistic.^[21] Through three core pathways — value reconstruction, chain upgrading, and ecosystem co-construction — achieve the dual-dimensional integration of ICH support and international market transformation, promote the systematic transformation of the Shengzhou scarf and necktie export industry empowered by Yue Opera culture, and build the industry's international core competitiveness.

Value Reconstruction Pathway: Form a value chain closed-loop of "ICH + Technology + Brand." Taking the integration of Yue Opera culture into product R&D as the core, enhance the cultural value-added of products.^[22] Guided by international market demand, force the modernization and innovation of Yue Opera craftsmanship and the application of green technologies, enhancing the technological value-added of products. Centered on cultural storytelling, reshape corporate brand image, creating brands with both Yue Opera cultural distinctiveness and international influence, achieving the shift of products from "contract manufacturing" to "own brand." Ultimately,

form a value chain closed-loop of "ICH culture empowering product innovation — technological upgrading enhancing product competitiveness—brand building realizing value addition," promoting the industry's climb from the low end to the mid-to-high end of the global value chain.

Chain Upgrading Pathway: Connect the entire chain from ICH empowerment to export. Driven by the close integration of the upgrading system of "digital workshops — smart factories — future factories," comprehensively promote the digital transformation of the production and manufacturing segments of the Shengzhou scarf and necktie industry. Simultaneously, integrate diverse resources like Yue Opera ICH workshops, textile design enterprises, and export enterprises to connect the entire chain from ICH inheritance, to R&D and design, production and manufacturing, and cross-border export. Achieve precise matching of Yue Opera cultural resources, international market demand, and industrial supply chains, thereby reducing the impact of international market changes on industry costs and demand, and realizing faster market response speeds.

Ecosystem Co-construction Pathway: Foster a synergistic development ecosystem for ICH-empowered export industries.^[23] At the policy level, strengthen initiatives like the "Whole-Chain Empowerment Partnership Plan," incorporating Yue Opera cultural element product R&D, ICH design talent cultivation, green technology application, and cross-border e-commerce deployment into the export industry support system, achieving seamless connection between ICH support policies, export upgrading policies, and green development policies. At the enterprise level, through the cultivation of specialized, sophisticated, distinctive, and innovative enterprises and single-product champions, foster a group of leading enterprises possessing both Yue Opera ICH inheritance capabilities and international competitiveness. Leverage the leading role of these enterprises to promote the synergistic development of SMEs. In the industry-university-research dimension, link universities, research institutions, and ICH inheritors to establish R&D platforms and talent cultivation bases for the integration of Yue Opera culture and the textile export industry, cultivating interdisciplinary talents with both Yue Opera cultural literacy and export operation capabilities, providing talent support for industrial transformation. Ultimately, form a synergistic development ecosystem of "policy + enterprises + industry-university-research + industry associations," achieving a win-win situation for the living inheritance of Yue Opera culture and the high-quality development of the Shengzhou scarf and necktie export industry.

6. Conclusion

Taking the Shengzhou necktie export industry as a case study, under the dual drive of Zhejiang's ICH support and ongoing international market transformation, this paper conducted a relatively in-depth analysis of the core cultural connotations and visual symbols of Yue Opera, deeply analyzed the various industrial development dilemmas it faces, and constructed a systematic cultural empowerment transformation pathway for these dilemmas. The study finds that the synergistic force of ICH support policies and international textile market transformation is a key prerequisite for ICH cultural empowerment of industrial transformation. The former lays a solid foundation of policy, talent, and scenarios for industrial development, while the latter indicates the direction for industrial culturalization and high-end upgrading. Yue Opera culture is highly compatible with the Shengzhou scarf and necktie industry. Its distinctive visual and cultural characteristics can provide rich elements for product R&D, and its cross-cultural communication potential can further help the industry build international cultural competitive advantages, solving the problems of homogenization and lack of added value.

The "value reconstruction—chain upgrading—ecosystem co-construction" under dual-dimensional integration is the core pathway for industrial transformation. The three, interconnected and synergistic, form a combined force for transformation: value reconstruction creates a "ICH + technology + brand" value chain closed-loop, promoting the industry's climb towards the mid-to-high end of the global value chain; chain upgrading connects the entire chain

from ICH inheritance to cross-border export, enhancing the industry's market response speed; ecosystem co-construction fosters a multi-stakeholder linkage ecosystem, providing comprehensive support for transformation. Shengzhou' s transformation practice has formed a replicable and promotable "Zhejiang Model." With ICH as the core gene, market demand as the guide, and policy and technology as support, it achieves a win-win situation for the living inheritance of ICH and the high-quality development of the export industry, providing an important reference for the transformation of similar domestic industries.

Against the background of deepening Zhejiang' s ICH policies and the ongoing transformation of the international textile market, there remains broad development space for Yue Opera culture to empower the Shengzhou scarf and necktie industry. Future efforts can focus on three aspects to achieve higher-quality internationalized development. Deepen the dual-dimensional synergy between ICH and the market, promote policy integration and "ICH + technology" innovation, enhance international recognition of Yue Opera culture. Seize opportunities presented by free trade agreements to strategically position in the global value chain, promoting the climb of products towards high value-added segments, transforming Yue Opera culture into internationally recognized symbols and achieving localized innovation. Utilize industrial brains to integrate resources, cultivate interdisciplinary talents, promote the fusion of Yue Opera culture with cultural tourism and cultural-creative industries, creating a model of "Yue Opera Culture + Textile Export + Cultural Tourism." Ultimately, form a sustainable ecosystem of ICH inheritance, industrial development, and regional economic enhancement, aiding Zhejiang' s textile export industry in maintaining its global competitive advantage.

References

- [1] Ghazi M. Magableh, et al. Supply Chains and the COVID - 19 Pandemic: A Comprehensive Framework[J]. *European Management Review*, 2021, 18(3): 363-382.
- [2] Jialun Lian, et al. Research on Countermeasures for Promoting Wenzhou's Traditional Culture to "Go Global" and "Gain Popularity"[J]. *Frontiers in Humanities and Social Sciences*, 2025, 5(8): 116-121.
- [3] Bilal Karim, Muhammad Arif, Zafar Ali Khan, et al. Integration of Pakistan' s Cultural Heritage Products into Global Value Chains: Challenges and Opportunities[J]. *Journal of Business and Social Sciences*, 2025, 2025(2):.
- [4] Chuanchuan Yuan, Li Gan, Huili Zhuo, et al. Coupling Mechanisms and Development Patterns of Revitalizing Intangible Cultural Heritage by Integrating Cultural Tourism: The Case of Hunan Province, China[J]. *Sustainability*, 2022, 14(12): 6994.
- [5] Greg Richards, Julie Wilson, et al. Developing creativity in tourist experiences: A solution to the serial reproduction of culture?[J]. *Tourism Management*, 2005, 27(6): 1209-1223.
- [6] Mu Guo, et al. The Yiwu Model of China' s Exhibition Economy[J]. *Provincial China*, 2010, 2(1):.
- [7] Dorothy Noyes, et al. Traditional Culture: How Does it Work?[J]. *Museum Anthropology Review (Indiana University)*, 2011, 5: 39-47.
- [8] Ying Zhao, Phiphat Sornyai, et al. Education and Literacy in Yue Opera: Historical Development in Shaoxing, Zhejiang Province, China[J]. *International journal of education and literacy studies*, 2024, 12(1): 96-105.
- [9] Liena Kano, Eric W. K. Tsang, Henry Wai - chung Yeung, et al. Global value chains: A review of the multi-disciplinary literature[J]. *Journal of International Business Studies*, 2020, 51(4): 577-622.
- [10] Mohsin Shafi, Katarzyna Szopik-Decpzyńska, Katarzyna Cheba, et al. INNOVATION IN TRADITIONAL HANDICRAFT COMPANIES TOWARDS SUSTAINABLE DEVELOPMENT. A SYSTEMATIC LITERATURE REVIEW[J]. *Technological and Economic Development of Economy*, 2022, 28(6): 1589-1621.
- [11] Gene M. Grossman, Elhanan Helpman, Grossman, Gene M., et al. Technology and Trade[J]. *RePEc: Research Papers in Economics*, 1994, 3: 1279-1337.
- [12] Byoungjo Jin, Hwi - Chang Moon, et al. The diamond approach to the competitiveness of Korea's apparel industry[J]. *Journal of Fashion Marketing and Management*, 2006, 10(2): 195-208.
- [13] Anne E. McLaren, et al. Eco-sites, Song Traditions and Cultural Heritage in the Lower Yangzi Delta[J]. *Asian Studies Review*, 2011, 35(4): 457-475.
- [14] Reto Felix, Philipp A. Rauschnabel, Chris Hinsch, et al. Elements of strategic social media marketing: A holistic framework[J]. *Journal of Business Research*, 2016, 70: 118-126.
- [15] Pang, Q., Cai, L., Wang, X., & Fang, M. (2024). Digital transformation as the fuel for sailing toward sustainable success: the roles of coordination mechanisms and social norms. *Journal of Enterprise Information Management*, 37(3), 1069-1096.
- [16] Olga Petricević, David J. Teece, et al. The structural reshaping of globalization: Implications for strategic sectors, profiting from innovation, and the multinational enterprise[J]. *Journal of International Business Studies*, 2019, 50(9): 1487-1512.
- [17] Mitsuyo Ando, et al. Fragmentation and vertical intra-industry trade in East Asia[J]. *The North American Journal of Economics and Finance*, 2006, 17(3): 257-281.
- [18] Pang, Q., Lai, P. L., Su, M., Xing, J., & Fang, M. (2025). Talk is cheap; Show me the code: managing the sustainable performance of shipping firms through big data analytics. *Maritime Policy & Management*, 1-16.
- [19] Christiaan Grootaert, Deepa Narayan, Veronica Nyhan Jones, Michael Woolcock. , *Measuring Social Capital*[M]. , World Bank working paper, , (2004).

- [20] Pang, Q., Wang, M., Yao, J., & Fang, M. (2026). Employees' perceived respect and performance in Logistics 4.0: a dyadic perspective of the congruence between employee voice and supervisor listening. *International Journal of Physical Distribution & Logistics Management*, 56(2), 224-248.
- [21] Yue Zhang, Mingqing Han, Weiwei Chen, et al. The strategy of digital scenic area planning from the perspective of intangible cultural heritage protection[J]. *EURASIP Journal on Image and Video Processing*, 2018, 2018(1):.
- [22] Mengmeng Wang, et al. The Realization Way of the Fusion Development of Folk Art and Tourism[J]. *Frontiers in Art Research*, 2021, 3(3):.
- [23] Wen Wang, Shiqi Wang, Ye-Shan Li, et al. Assessing the sustainability and competitiveness of tourism economies in China' s Chengdu-Chongqing metropolitan area[J]. *Environmental Science and Pollution Research*, 2022, 29(44): 66960-66978.