

# Development Model for Creative Economy Based on Local Wisdom: The Case of *Songkok Recca* in South Sulawesi Province

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## Abstract

This research analyzes the potential development of a creative economy based on local wisdom through a case study of *songkok recca* craftsmanship in Awangpone District, Bone Regency, South Sulawesi. Using a qualitative-descriptive approach, the study identifies production structures, traditional marketing patterns, and sustainability challenges within this craft industry. Through comprehensive SWOT analysis, a quadruple helix-based development model is formulated that integrates the roles of government, academia, business actors, and communities within the creative economy ecosystem. The findings indicate that digital transformation, preservation of traditional knowledge, raw material conservation programs, and quality standardization based on geographical indications are key components in the development strategy. This model demonstrates how local wisdom values can be integrated into a contemporary creative economy framework to create sustainable enterprises that maintain cultural identity while remaining responsive to global market dynamics.

**Keywords:** creative economy, local wisdom, sustainability, *songkok recca*, quadruple helix

## Introduction

The creative economy has emerged as a significant potential sector in national economic development across numerous developing countries (Fahmi et al., 2017). In Indonesia, this sector is projected to contribute substantially to the national GDP, with predictions reaching 7-8% by 2025 and employment absorption of up to 17 million people (Bekraf, 2019). The development of the creative economy as an alternative economic driver that does not depend on natural resource exploitation has prompted many countries, including Indonesia, to formulate strategic policies for developing this sector (Kusumastuty et al., 2022).

One of Indonesia's competitive advantages in creative economy development is its wealth of cultural heritage and local wisdom distributed throughout the archipelago, which can serve as sources of inspiration and added value in the creation of creative products (Simatupang et al., 2020). The integration of local wisdom values into creative economy products not only creates product differentiation but also contributes to cultural preservation and strengthening community identity (Suryana, 2018). In an increasingly homogeneous global context, products with strong cultural identities have better market penetration opportunities, especially in consumer segments that value authenticity and sustainability (Nilasari et al., 2022).

*songkok recca*, a traditional headwear from South Sulawesi made from woven lontar palm leaves, represents a perfect combination of local wisdom, handicraft, and creative economic potential. As a cultural heritage of the Bugis community, *songkok recca* holds profound cultural and symbolic value while offering economic prospects as a premium handicraft-based product (Idris et al., 2018). The production process, which requires high skill levels and extended production time, creates a natural barrier to entry that protects the product from mass imitation while also providing the basis for premium pricing that reflects the product's intrinsic value.

Despite its significant economic potential, the *songkok recca* craft industry faces various structural challenges that impede its development. Issues such as artisan regeneration due to minimal interest from younger generations, limited market access because of middlemen dominance in the distribution chain, and threats to raw material sustainability resulting from deforestation and land conversion represent complex challenges requiring a systemic approach (Permatasari et al., 2022). These challenges are exacerbated by changing consumer preferences and lifestyle modernization that potentially reduce the relevance of traditional products in contemporary life.

In addressing these challenges, a development model that holistically integrates cultural, economic, and environmental aspects is necessary. The quadruple helix model, which emphasizes collaboration between government, academia, business actors, and communities, offers a relevant conceptual framework for developing a creative economy based on local wisdom (Carayannis & Campbell, 2009). Through this approach, various stakeholders can collaborate in developing an ecosystem that supports the sustainability of creative industries, from the preservation of traditional knowledge to digital transformation in marketing.

This research comprehensively analyzes the production structure, marketing strategies, and development challenges of *songkok recca* craftsmanship in Awangpone District, Bone Regency, South Sulawesi. Based on this analysis, the research formulates a creative economy development model that integrates local wisdom with contemporary market dynamics, focusing on digital transformation strategies, traditional knowledge preservation, raw material conservation programs, and quality standardization based on geographical indications. The research findings are expected to serve as a reference for the development of culture-based creative industries in similar regions and contribute to academic discourse on the role of local wisdom in the contemporary creative economy.

## Literature Review

### 1. Creative Economy and Sustainable Development

The concept of creative economy was first popularized by Howkins (2001), who defined it as economic activities based on creativity, skills, and individual talent. In its development, the creative economy has evolved into a development strategy that integrates economic and cultural aspects (Hesmondhalgh, 2020; Akhmad et al., 2020). Potts and Cunningham (2008) identified four models of the relationship between the creative economy and the overall economic system: welfare model, competition model, growth model, and innovation model. In the Indonesian context, the growth model and innovation model have become the dominant frameworks in creative economy development policies (Simatupang et al., 2020).

The relationship between the creative economy and sustainable development has become a research focus in the last decade. De Beukelaer (2015) examined how creative industries in developing countries can contribute to sustainable development through job creation, cultural preservation, and strengthening community identity. Research by Fahmi et al. (2017) highlighted the role of the creative economy in economic diversification and reducing dependence on natural resources in Indonesia.

### 2. Local Wisdom and Economic Value Addition

Local wisdom is defined as a worldview, knowledge, and life strategies manifested in activities performed by local communities in addressing various problems to fulfill their needs (Dahlani et al., 2015). In the context of the creative economy, local wisdom can become an intellectual and cultural resource that creates added value and product differentiation (Leksono et al., 2018).

Suryana (2018) affirms that the integration of local wisdom in the creative economy creates products with a unique selling proposition that is difficult for global competitors to imitate. Nilasari et al. (2022) found that craft products incorporating local wisdom values have higher competitiveness in international markets, especially in consumer segments that value authenticity and sustainability.

### 3. Quadruple Helix in Creative Economy Development

The quadruple helix model is a development of the triple helix concept proposed by Etzkowitz and Leydesdorff (2000). This model emphasizes the interaction of four main actors in the innovation ecosystem: government, academia, industry, and society/community (Carayannis & Campbell, 2009). In the context of the creative economy, this model emphasizes the importance of collaboration among actors to create an ecosystem conducive to the growth of creative industries.

Kusumastuty et al. (2022) researched the implementation of the quadruple helix model in creative economy development in East Java and found that effective collaboration among actors contributes significantly to increasing the competitiveness of local creative products. Meanwhile, Permatasari et al. (2022) identified the quadruple helix model as an effective framework for addressing structural challenges in the creative industries, including issues of capital access, knowledge transfer, and market development.

## Research Methodology

This research employs a qualitative approach to comprehensively analyze the *songkok recca* craft industry in Awangpone District, Bone Regency, South Sulawesi. Primary data collection was conducted through participatory observation and in-depth interviews with craftsmen, middlemen, consumers, and relevant stakeholders. Secondary data was obtained through literature reviews, government documents, and related publications.

Data analysis utilized a phenomenological approach to understand the production structure and marketing patterns of *songkok recca* from the perspective of industry actors. To formulate development strategies, the research employed SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis, which was then integrated with the quadruple helix framework to produce a comprehensive model for creative economy development based on local wisdom.

## Results and Discussion

### 1. Profile of the *songkok recca* Craft Industry

*songkok recca* is a traditional headwear of the Bugis community made from woven lontar palm leaves. The production process of *songkok recca* involves complex stages requiring specialized skills, from the selection and processing of raw materials to weaving and finishing. *songkok recca* craftsmen are concentrated in Awangpone District, Bone Regency, South Sulawesi, with an estimated 150-200 active craftsmen. Based on observations, the characteristics of the *songkok recca* industry can be identified as follows:

- a) Business structure dominated by micro and small units with family management.
- b) Labor-intensive production processes with minimal mechanization.
- c) Knowledge and skill transfer occurring informally within family or community contexts.
- d) Product diversification based on motif complexity and the use of precious metal ornaments (copper, silver, gold).

From a creative economy perspective, the *songkok recca* industry fulfills the characteristics of the craft subsector with added value derived from traditional skills, the use of local materials, and cultural values embedded in the product. This aligns with the findings of Simatupang et al. (2020), which emphasize the close relationship between the craft subsector and local cultural identity within Indonesia's creative economy ecosystem.

### 2. Analysis of Conventional Marketing Strategies

The marketing strategy for *songkok recca* in Awangpone District is still dominated by traditional patterns with the following characteristics:

- a) Extended distribution chain: The majority of craftsmen market their products through middlemen who then distribute to traditional markets and shops in various cities across Sulawesi.

- b) Negotiation-based pricing: The pricing system still employs traditional bargaining methods without standardized price structures, with price ranges from IDR 150,000 to millions of rupiah depending on the complexity of motifs and ornamental materials.
- c) Dependence on middlemen: Middlemen play a central role in the distribution chain, determining production volume, prices, and design trends, with craftsmen receiving relatively small profit margins compared to the final value of the product.
- d) Limited digital marketing: Some young craftsmen have utilized social media for marketing, but with limited reach and effectiveness due to digital literacy constraints.

This marketing pattern creates inefficiencies in the value chain and positions craftsmen as price-takers with weak bargaining power. This is consistent with the findings of Permatasari et al. (2022) on the general characteristics of craft-based creative industries in rural Indonesia.

### 3. Comprehensive SWOT Analysis

#### a) Strengths

##### Cultural Value and Uniqueness of Production Process

*songkok recca* possesses profound cultural value as a symbol of Bugis community identity that has been inherited across generations. The unique production process requiring specialized skills creates a natural barrier to entry for newcomers, protecting the continuity of traditional craftsmen. Each manufacturing stage—from lontar leaf selection, fiber processing, weaving to finishing—requires expertise mastered only by trained craftsmen, creating product exclusivity that cannot be easily replicated by mass manufacturing.

##### Standardization of Quality Raw Materials

The use of premium and standardized raw materials forms the foundation of *songkok recca*'s quality. Selected lontar leaves processed traditionally, special high-durability thread, and precious metal ornaments used in premium variants ensure products have high durability and aesthetic value. These quality standards have been formed through intergenerational practices and create a product reputation that is difficult for competitors to match.

##### High Value-Added Potential

Through premium product segmentation, *songkok recca* has significant potential for economic value addition. Product differentiation based on design complexity, material usage, and historical value enables optimal pricing for different market segments. Basic models to special variants with precious metal ornaments for ceremonial occasions provide flexibility in pricing strategies, increasing profit margins and economic sustainability for craftsmen.

##### Cultural Identity as Heritage Product

*songkok recca* is deeply rooted in the cultural identity of the Bugis community, making it more than just a product—but a symbol of social status and local wisdom. This historical value creates an emotional connection with consumers, especially Bugis people worldwide. This cultural element provides a narrative advantage that can be leveraged in marketing strategies and product development that is difficult for contemporary products to possess.

##### Sustainability of Production Process

The use of natural materials and traditional production techniques makes *songkok recca* an environmentally friendly product. The process of harvesting lontar leaves without damaging trees, using natural dyes, and minimal production waste creates a sustainable business model. In an era of global

environmental awareness, this sustainability aspect becomes an increasingly important value proposition for modern consumers concerned about the environmental impact of products they use.

## b) Weaknesses

### Craftsmen Regeneration Issues

The challenge of craftsmen regeneration has become a structural problem threatening the long-term sustainability of this industry. The intergenerational knowledge transfer gap occurs due to young generations' lack of interest in pursuing traditional crafts considered economically unpromising. The lengthy and intensive learning process—often requiring years to master advanced weaving techniques—becomes an additional barrier in craftsmen regeneration, creating the risk of losing valuable traditional knowledge.

### Limited Capital Access

The majority of *songkok recca* craftsmen face constraints in accessing formal financing sources. Relatively small business scale, lack of collateral, and limited financial literacy make it difficult for craftsmen to meet conventional financial institution requirements. Consequently, many craftsmen rely on informal financing with high interest rates or become trapped in limited capital cycles that inhibit business expansion and production capacity improvement.

### Traditional Marketing Systems

The extended distribution chain with multiple intermediaries results in inefficiencies and reduced profit margins for craftsmen. Dependence on collectors and traditional distributors limits direct access to end consumers, creating market information asymmetry and craftsmen's inability to maximize the value of their products. Limited knowledge and digital marketing infrastructure further complicate the implementation of more efficient modern marketing strategies.

### Product Standardization and Quality Control

The absence of a standardized quality control system causes product quality variations that can damage the collective reputation of *songkok recca*. Production still based on household crafts with informal and varied quality monitoring methods creates inconsistencies in the final product results. The absence of documented and measurable quality parameters also hinders efforts to systematically improve production standards.

### Dependence on Weather Factors

The production process that depends on natural conditions—especially in the drying and processing stages of lontar leaves—creates uncertainty in production schedules. During the rainy season, the raw material drying process is significantly hampered, causing production delays and inability to fulfill orders on time. This dependence limits annual production capacity and reduces craftsmen's flexibility in responding to market demand dynamics.

## c) Opportunities

### Global Sustainable Fashion Trends

Increasing global consumer preferences for sustainable and ethical products open significant opportunities for *songkok recca*. Characteristics of environmentally friendly production, use of natural materials, and socio-cultural values embedded in the product align with the rapidly growing sustainable fashion trend. Consumers are increasingly willing to pay premium prices for products with minimal ecological footprints and positive social values, positioning *songkok recca* ideally to enter this growing market segment.

### Digital Technology Development



The democratization of access to e-commerce platforms and social media opens direct marketing channels previously unreachable. With minimal investment in digital infrastructure, craftsmen can access global markets, reduce dependence on intermediaries, and increase profit margins. Digital technology also enables effective storytelling about the cultural value and sustainability of *songkok recca*, creating direct connections with consumers who appreciate authenticity and transparency.

#### Integration with Tourism Sector

The development of cultural tourism and sustainable tourism opens opportunities for income diversification through craft-based tourism experiences. Demonstrations of *songkok recca* making, interactive workshops, and visits to production centers can become tourist attractions that educate while generating additional income. Integration with local tourism packages also expands distribution channels and creates revenue from direct sales to tourists.

#### Design Innovation

The combination of traditional elements with contemporary features opens opportunities for broader market penetration. Design adaptations that maintain cultural essence but remain relevant to modern aesthetic preferences can attract new consumer segments, especially urban young generations who appreciate products with cultural value that are still functional and stylish. Innovation in product applications—such as using *songkok recca* motifs in contemporary fashion accessories—can also create product line diversification.

#### Development of Certification and Geographical Indication

Formalization of product quality and authenticity through certification systems and geographical indications can increase the value and competitiveness of *songkok recca*. Geographical indication status protects the product from imitation while providing authenticity assurance for consumers. Development of specific certifications—such as sustainability or fair trade standards—also adds value and access to premium market segments that appreciate the ethical and sustainable aspects of products they purchase.

#### d) Threats

##### Raw Material Sustainability

Deforestation and land conversion threaten the availability of lontar palm trees that are the main raw material for *songkok recca*. Changes in land use patterns for development and commercial agriculture reduce the natural habitat of lontar palm trees, while the absence of planned cultivation efforts creates the risk of long-term raw material scarcity. Without structured conservation and cultivation interventions, this industry risks facing increased raw material costs or even the inability to meet production demand.

##### Mass-Produced Competition

Imitation products made from synthetic materials with much lower prices threaten the market share of *songkok recca*, especially in consumer segments with high price sensitivity. Mass manufacturing can produce similar products with minimal production costs, creating unbalanced price competition for traditional craftsmen. Consumers' inability to distinguish the quality and value of authentic products from imitations also increases the risk of devaluing the perceived value of *songkok recca* in the market.

##### Changes in Consumer Preferences

Lifestyle modernization and cultural value shifts threaten the relevance of *songkok recca* in daily life. Adoption of global dress styles and reduced formality in traditional events decrease the frequency of traditional headwear use. Younger generations also tend to choose products with practical value and contemporary aesthetics, creating a gap between the traditional offerings of *songkok recca* and contemporary consumer preferences.

## Risk of Losing Traditional Knowledge

Without systematic documentation and effective knowledge transfer mechanisms, *songkok recca* making techniques risk disappearing as the number of master craftsmen decreases. Specific knowledge about material selection, processing techniques, and traditional weaving motifs passed down orally is highly vulnerable to discontinuity. The loss of this knowledge will impact product authenticity and the ability to maintain traditional quality standards that are the main advantage of *songkok recca*.

## Economic and Policy Uncertainty

Macroeconomic fluctuations and policy changes can create uncertainty in the *songkok recca* value chain. Volatility in raw material prices, changes in trade regulations, and fluctuations in consumer purchasing power create an unstable business environment. Government policies that do not consider the specific needs of traditional craft industries can also create structural barriers that disrupt business sustainability, especially for small-scale craftsmen with limited adaptation capacity.

### e) Strategic Implications

This comprehensive SWOT analysis demonstrates that *songkok recca* occupies a unique strategic position—possessing significant cultural advantages and sustainability, yet facing structural challenges in adapting to modern market dynamics. The development of this industry requires a holistic approach that integrates the preservation of traditional values with innovation responsive to contemporary market demands.

Strategic interventions need to focus on strengthening craftsmen's capacity, formalizing quality standards, diversifying marketing channels, and preserving raw materials. Regeneration programs combining economic incentives with cultural pride development are also crucial for the long-term sustainability of the *songkok recca* industry as a creative economy asset and Bugis cultural heritage.

Multi-stakeholder collaboration—involving craftsmen, government, educational institutions, and the tourism sector—is necessary to implement comprehensive and sustainable development strategies. With the right approach, *songkok recca* can transform from a cultural commodity into a premium product with global competitiveness, while maintaining its intrinsic value as an expression of the local wisdom of the Bugis community.

## SWOT Matrix and Strategic Analysis

Table 1. Internal Factors

Strengths (S)	Weaknesses (W)
Cultural value and uniqueness of production process creating natural barriers to entry	Craftsmen regeneration issues and knowledge transfer challenges
Standardization of quality raw materials (lontar palm leaves, special thread, precious metal ornaments)	Limited access to capital and formal financing
High value-added potential through premium product segmentation	Traditional marketing system with extended distribution chains
Strong cultural identity as a heritage product of Bugis community	Unstructured product standardization and quality control
Sustainable production process utilizing natural materials	Dependency on weather factors in production processes

Tabel 2. External Factors

Opportunities (O)	SO Strategies (Strengths-Opportunities)	WO Strategies (Weaknesses-Opportunities)
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Global trends toward sustainable fashion and handmade products	Develop premium product lines highlighting cultural value and sustainability (S1, S3, S4, S5, O1)	Develop training programs for young craftsmen utilizing digital technology (W1, O2)
Development of digital technology and e-commerce platforms	Leverage cultural identity for developing educational tourism packages focused on <i>songkok recca</i> production (S1, S4, O3)	Form cooperatives to improve financing access and optimize digital marketing (W2, W3, O2)
Potential integration with tourism sector	Integrate traditional values with contemporary designs to expand market reach (S4, O4)	Develop standardization and certification systems for quality control (W4, O5)
Design innovation combining traditional and contemporary elements	Develop certifications and geographical indications to enhance product value (S2, S4, O5)	Integrate business with tourism for income diversification (W2, O3)
Development of certification and geographical indication systems	Utilize digital platforms to market the uniqueness of production processes (S1, S4, O2)	Develop production facilities that are not weather-dependent (W5, O1)
<b>Threats (T)</b>	<b>ST Strategies (Strengths-Threats)</b>	<b>WT Strategies (Weaknesses-Threats)</b>
Raw material sustainability due to deforestation and land conversion	Develop lontar palm conservation programs to ensure raw material sustainability (S2, S5, T1)	Establish education and training centers for craftsmen regeneration (W1, T4)
Competition from low-cost mass-produced products	Strengthen positioning as premium quality products to avoid price competition (S2, S3, T2)	Develop alternative financing schemes specific to creative industries (W2, T5)
Changes in consumer preferences and lifestyle modernization	Adapt designs according to consumer trends while maintaining traditional values (S1, S4, T3)	Build integrated supply chains to reduce distribution costs (W3, T2)
Risk of losing traditional knowledge	Document traditional knowledge as intellectual assets (S1, S4, T4)	Develop technology-based quality management systems (W4, T2, T3)
Macroeconomic uncertainty and policy changes	Diversify products to reduce dependence on a single market segment (S3, T5)	Adopt more efficient raw material processing technologies that are not weather-dependent (W5, T1)

This SWOT analysis demonstrates that *songkok recca* possesses significant potential for development as a premier creative economy product rooted in local wisdom, though strategic interventions are required to address structural weaknesses and anticipate external threats.

#### 4. Development Model Based on Quadruple Helix

Based on comprehensive analysis, this research formulates a creative economy development model for *songkok recca* that integrates the quadruple helix framework with local wisdom values.

##### Government

The government serves as facilitator and regulator in developing the *songkok recca* creative economy. Through an integrated regulatory approach, the government develops a legal framework that provides comprehensive protection for Intellectual Property Rights (IPR) and geographical indication certification, recognizing the uniqueness and authenticity of *songkok recca* as a regional cultural product. The government's role also encompasses the formulation of supportive fiscal policies, such as tax incentives for *songkok recca* entrepreneurs and the allocation of specific budgets for the development of this sector.

the financing aspect, the government develops credit schemes tailored to the characteristics of traditional craft enterprises, including modifications to People's Business Credit (KUR) requirements to make them more accessible to artisans who generally operate on micro and small scales. Special revolving



funds for the creative economy are designed with management mechanisms involving the craftsmen community to ensure targeted implementation and program sustainability.

Marketing strategies are realized through the integration of *songkok recca* in regional tourism promotion, positioning this craft as part of the authentic cultural experience offered to tourists. The government develops integrated marketing centers that function not only as trading venues but also as centers for education and cultural interaction that directly connect craftsmen with consumers.

The sustainability aspect is manifested through a conservation program for the lontar palm tree, which is the main source of raw materials. This program includes the development of land management regulations that support lontar palm cultivation, incentives for farmers who preserve these plants, and research for more efficient and sustainable cultivation techniques.

#### Academia

Academic contributions focus on developing a knowledge base and innovations that support the sustainability of *songkok recca*. Documentation of traditional knowledge is carried out through in-depth ethnographic research involving senior craftsmen as primary information sources. The documented knowledge is then compiled in structured formats, both digital and print, to facilitate the process of intergenerational knowledge transfer and serve as a reference for sustainable innovation.

Research on material innovation and production techniques is conducted with a collaborative approach that combines local wisdom with scientific methods. The research focus includes exploration of alternative materials compatible with traditional characteristics, development of production techniques that increase efficiency without reducing handicraft value, and quality testing that validates product durability and aesthetic characteristics.

Standardized training programs are developed based on competency analysis and market needs. The training curriculum covers technical aspects of *songkok recca* production, material knowledge, quality control, and basic business skills. A competency certification system is developed in collaboration with national standardization bodies to provide formal recognition of the skills possessed by craftsmen.

Entrepreneurship education based on local wisdom is designed to develop an entrepreneurial mindset aligned with local cultural values. This curriculum integrates modern business principles with values such as "sipakalebbi" (mutual respect), "sipakainge" (mutual reminding), and "sipakario" (mutual assistance) which form the foundation of socio-economic interactions in the local community.

Technology transfer is facilitated through the development of appropriate technology that considers the social, economic, and cultural context of craftsmen. The introduced technology focuses on the efficiency of repetitive production stages while maintaining stages that provide unique value to the final product.

#### Business Actors

Business actors implement an integrated quality management approach that begins with raw material selection and continues through to final product packaging. Quality standardization is developed by considering traditional values and contemporary market expectations. A value-based pricing structure is developed to communicate product differentiation based on processing complexity, design uniqueness, and embedded cultural value.

Premium branding and packaging strategies are developed to position *songkok recca* as a cultural heritage product with contemporary value. Visual and narrative elements in branding emphasize aspects of local wisdom, sustainability, and the uniqueness of the production process, which are the main differentiators of the product. Packaging is designed with consideration of functional aspects, aesthetics, and environmental sustainability.

Digital transformation is realized through the development of e-commerce platforms adapted to product characteristics and target markets. Digital marketing strategies include content marketing that

conveys cultural values and stories behind the product, engagement with cultural product enthusiast communities, and loyalty programs that connect consumers with craftsmen on an ongoing basis.

Product diversification is developed based on clear market segmentation, ranging from premium heritage lines for collectors and cultural enthusiasts, contemporary products for the fashion market, to derivative products that are more affordable for the broader segment. Each product line is designed while maintaining cultural essence as a core value.

Collaboration with contemporary designers is built as a long-term strategic partnership that enables the transfer of knowledge and perspectives. Designers serve as bridges between traditional values and contemporary market preferences, producing designs that remain authentic yet relevant to the needs and tastes of today's consumers.

### Community

The craftsmen community organizes itself in associations with democratic and inclusive governance structures. These associations function as vessels for strengthening collective capacity, advocating craftsmen's interests, and managing shared resources. Through associations, craftsmen build stronger bargaining positions in the value chain and improve access to resources and markets.

Cultural preservation programs are implemented with a participatory approach involving various age groups and backgrounds in the community. Festivals and creative events become means to introduce the cultural value of *songkok recca* to the wider community while strengthening the collective identity of craftsmen. Documentation of stories and philosophy behind this craft is done in an appealing and accessible format.

Women's empowerment becomes a special focus considering that the majority of craftsmen are women. Empowerment programs include leadership development, business management capacity building, and increased access to productive resources. Interventions focus on eliminating structural barriers that limit women's participation in decision-making and access to economic benefits.

Consumer education is conducted through various communication channels that convey cultural values, production processes, and sustainability aspects of *songkok recca*. Storytelling becomes the main approach that connects consumers with the cultural and social context behind the product, creating stronger emotional connections and appreciation for the intrinsic value of the product.

Community-based tourism development offers immersive experiences for visitors to learn about and participate in the *songkok recca* production process. This tourism model is designed to maximize economic benefits for the local community while maintaining cultural and environmental integrity. Tourism packages are developed with variations that meet the needs of different tourist segments.

**Table 3. Matrix of Roles and Interactions Among Actors**

Actor	Primary Roles	Interaction with Government	Interaction with Academia	Interaction with Business	Interaction with Community
<b>Government</b>	1. Regulation & policy 2. Financial support 3. Strategic planning 4. Resource conservation 5. Marketing infrastructure	-	1. Funding for applied research 2. Collaboration in curriculum development 3. Facilitation of competency standardization	1. Fiscal incentives for innovation 2. Market access facilitation 3. IPR and geographical indication protection	1. Policy dialogue facilitation 2. Community empowerment programs 3. Environmental conservation program synergy

<b>Academia</b>	<ol style="list-style-type: none"> <li>1. Documentation &amp; research</li> <li>2. Innovation &amp; development</li> <li>3. Capacity building</li> <li>4. Entrepreneurship education</li> <li>5. Technology transfer</li> </ol>	<ol style="list-style-type: none"> <li>1. Research-based policy advocacy</li> <li>2. Policy impact evaluation</li> <li>3. Performance indicator development</li> </ol>	-	<ol style="list-style-type: none"> <li>1. Collaborative research for product innovation</li> <li>2. Structured internship programs</li> <li>3. Quality management consultation</li> </ol>	<ol style="list-style-type: none"> <li>1. Participatory research</li> <li>2. Community education programs</li> <li>3. Local knowledge documentation</li> </ol>
<b>Business</b>	<ol style="list-style-type: none"> <li>1. Quality management</li> <li>2. Branding strategy</li> <li>3. Digital transformation</li> <li>4. Product development</li> <li>5. Design collaboration</li> </ol>	<ol style="list-style-type: none"> <li>1. Participation in policy dialogue</li> <li>2. Regulatory compliance</li> <li>3. Tax contribution for development</li> </ol>	<ol style="list-style-type: none"> <li>1. R&amp;D partnerships</li> <li>2. Provision of industry data</li> <li>3. Participation in curriculum development</li> </ol>	-	<ol style="list-style-type: none"> <li>1. CSR programs for community development</li> <li>2. Sustainable business practices</li> <li>3. Community engagement in value chain</li> </ol>
<b>Community</b>	<ol style="list-style-type: none"> <li>1. Collective organization</li> <li>2. Cultural preservation</li> <li>3. Gender empowerment</li> <li>4. Consumer education</li> <li>5. Creative ecotourism</li> </ol>	<ol style="list-style-type: none"> <li>1. Participation in development planning</li> <li>2. Monitoring of policy implementation</li> <li>3. Advocacy for community interests</li> </ol>	<ol style="list-style-type: none"> <li>1. Provision of traditional knowledge</li> <li>2. Feedback on appropriate technology</li> <li>3. Participation in action research</li> </ol>	<ol style="list-style-type: none"> <li>1. Provision of skilled labor</li> <li>2. Social quality control</li> <li>3. Co-creation of products and experiences</li> </ol>	-

This analysis demonstrates how synergistic interactions among actors in the Quadruple Helix model can produce a sustainable creative economy ecosystem for *songkok recca*. The success of this model depends on the balance between modernization aspects necessary to enhance competitiveness and the preservation of traditional values that constitute the product's uniqueness.

This holistic approach also underscores the importance of local wisdom principles as the foundation for interactions among actors, where the values of "*sipakalebbi*" (mutual respect), "*sipakainge*" (mutual reminding), and "*sipakario*" (mutual assistance) form relationship patterns that support the sustainability of the creative economy. Thus, the development model formulated aims not only at economic growth but also at strengthening social capital, cultural preservation, and environmental sustainability.

The model emphasizes synergistic interactions among actors to create an ecosystem that supports the development of *songkok recca* as a premier creative economy product. Because the product is strongly rooted in local wisdom, the community plays a central role in the development model, in line with the concept of community-centered development proposed by Fahmi et al. (2017).

## 5. Model Implementation Strategy

For the effective implementation of the developed model, the following priority strategies are proposed based on SWOT analysis results:

### a) Priority Strategies for *songkok recca* Development Based on SWOT Analysis

#### Digital Transformation

Digital transformation constitutes a crucial step in modernizing the *songkok recca* industry to expand market reach and enhance the economic value of products. The development of a specialized e-commerce

platform for premium handcrafted products will create direct distribution channels to global consumers, reducing dependence on intermediaries and increasing artisans' profit margins. Digital marketing training programs for young craftspeople will not only enhance the digital competencies of the successor generation but also drive innovation in marketing strategies aligned with contemporary consumer trends.

Digital documentation of production processes will strengthen the product's value proposition through authentic storytelling strategies, enhancing perceived value and justifying premium pricing. Integrated digital payment systems will facilitate cross-border transactions and increase international consumer confidence. The development of virtual showcases utilizing virtual/augmented reality technologies will provide an immersive experience for global consumers to understand the uniqueness and complexity of *songkok recca*, fostering appreciation for the cultural value and craftsmanship inherent in the product.

#### b) Preservation of Traditional Knowledge

The preservation of traditional knowledge forms the foundation for the sustainability of the *songkok recca* industry, considering the threat of skill loss due to generational gaps. Comprehensive multimedia documentation of production processes will codify tacit knowledge that has traditionally been transmitted orally, creating a knowledge repository accessible to future generations. Structured apprenticeship programs with economic incentive mechanisms will systematically facilitate intergenerational knowledge transfer, addressing the issue of diminishing interest among younger generations.

Development of formal curricula for local vocational schools will institutionalize knowledge transmission and integrate it with the national education system, providing academic legitimacy to traditional skills. The establishment of a *songkok recca* training and innovation center will create a creative hub combining research, training, and incubation of businesses based on traditional crafts. Providing economic incentives for master craftsmen functioning as guardians of knowledge will enhance the social and economic status of traditional knowledge holders, creating incentives for them to share their expertise.

#### c) Raw Material Conservation Program

Ecological sustainability is a prerequisite for the economic sustainability of the *songkok recca* industry. Mapping and conservation of lontar palm trees in Bone Regency using geospatial approaches will enable strategic resource management and identification of critical areas for protection. Sustainable planting programs involving local communities will create long-term raw material stocks while generating green jobs and enhancing the economic resilience of local communities.

Research into diversification of alternative raw materials compatible with product characteristics will reduce pressure on single species and increase supply chain resilience to climate change. Development of processing techniques that minimize waste will improve production efficiency and reduce the industry's ecological footprint. Sustainable harvesting certification for raw materials will provide market differentiation and meet the demands of increasingly environmentally conscious consumers, opening access to premium market segments with high sustainability awareness.

#### d) Quality Standardization and Certification

Quality standardization is a prerequisite for penetration into premium markets and export. Development of tiered quality standards will enable more effective market segmentation and differential pricing strategies, increasing access for consumers with varying purchasing power. Application for geographical indication for *songkok recca* Awangpone will provide legal protection for the intellectual property of the artisan community, preventing cultural appropriation and low-quality imitations that could degrade product reputation.

Development of structured quality control mechanisms will ensure product consistency, building consumer trust and brand loyalty. Sustainable craftsmanship certification for artisans will provide market differentiation and price premiums, particularly in global markets that increasingly value social and

environmental sustainability. Establishment of an independent quality testing institution will enhance certification credibility and facilitate standardization required for exports to markets with strict regulations such as the European Union and North America.

#### e) Creative Tourism Development

Income diversification through creative tourism will create economic resilience for the artisan community. Integration of artisan workshops into cultural tourism packages will generate complementary income and increase consumer awareness of the cultural value of *songkok recca*. Development of a living museum will preserve cultural heritage while creating educational tourist attractions that provide economic value to cultural preservation activities.

Participatory "make your own *songkok recca*" tourism programs will create immersive experiences that enhance appreciation for the complexity of craftsmanship, justifying premium product pricing. Annual *songkok recca* craft festivals will generate significant seasonal income, increase product visibility, and create marketing momentum that can be capitalized throughout the year. Collaboration with the local hospitality industry will create an integrated tourism ecosystem that distributes economic benefits across various sectors within the community, increasing social support for the preservation of traditional crafts.

This implementation strategy emphasizes a holistic approach that responds to complex challenges in developing creative economies based on local wisdom. The integration of cultural, economic, and environmental aspects in this strategy aligns with the principles of sustainable development proposed by Leksono et al. (2018).

### Conclusion and Recommendations

This research demonstrates that *songkok recca* has significant potential to be developed as a flagship creative economy product that integrates local wisdom with contemporary market orientation. The quadruple helix-based development model formulated offers a comprehensive framework that accommodates the complexity of challenges in the traditional craft industry, encompassing aspects of environmental sustainability, cultural preservation, and economic viability.

The findings of this research indicate that the development of creative economies based on local wisdom requires an ecosystem approach involving synergistic collaboration between government, academia, business actors, and communities. This model emphasizes that the competitive value of creative products based on local wisdom does not lie in production cost efficiency, but rather in the cultural value, authenticity, and sustainability inherent in the product.

Based on the research results, the following strategic steps are recommended:

1. Local governments need to develop comprehensive policies that position *songkok recca* as a flagship regional creative economy product, including facilitation of geographical indication certification and raw material conservation programs.
2. Educational and research institutions need to be actively involved in documenting traditional knowledge and developing formal curricula for artisan regeneration, as well as innovation research that maintains the traditional essence of the product.
3. Business actors need to develop value-based marketing strategies that utilize digital platforms and effective storytelling about the cultural value and sustainability of *songkok recca*.
4. Communities need to strengthen organizational capacity through the formation of artisan associations that can improve bargaining positions in the value chain and facilitate intergenerational knowledge transfer.

The model and strategies formulated in this research are not only relevant for the development of *songkok recca* in South Sulawesi but can also be adapted for various creative economy products based on



local wisdom in Indonesia and other developing countries. Further research is needed to measure the effectiveness of model implementation and its impact on community economic empowerment, cultural preservation, and environmental sustainability.

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