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Determination of critical factors in the supply chain management of palmyra crafts using SWOT-AHP

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ABSTRACT

This study analyzed the critical factors in the supply chain management of the Palmyra handicraft industry in Central Lombok, Indonesia, using a SWOT-AHP methodology. The research aimed to identify strategic directions to enhance the industry's development by addressing strengths, weaknesses, opportunities, and threats. The findings highlighted key strengths such as increasing product demand, availability of raw materials, and high product quality. Conversely, weaknesses included limited financial capital, inadequate marketing capabilities, and the absence of a centralized production facility. Opportunities identified encompassed access to partnerships and capital, institutional support, and the application of appropriate technologies. However, threats such as raw material scarcity, declining interest among artisans, and rising supply chain costs posed significant challenges. The research concluded that prioritizing strengths and addressing critical weaknesses were vital for sustaining and growing the Palmyra handicraft industry. These insights provided actionable strategies for stakeholders to enhance competitiveness and operational efficiency.

Keywords: Critical factors, supply chain management, creative industry, palmyra handicraft, SWOT-AHP

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INTRODUCTION

According to BPS data, the development of the manufacturing industry nationally is progressing in its ability to compete with the national economic base, namely the agricultural and trade sectors. This is evidenced by the manufacturing industry's 19.70% proportional contribution to the national economic structure (Badan Pusat Statistik, 2020). Additionally, labor absorption in the manufacturing sector has also increased (Badan Pusat Statistik, 2019). A study by Nugeroho et al. (2021) described how the Indonesian economy still relies heavily on small-scale industries exhibiting distinct business characteristics. These industries offer a diverse range of products, are community-based, demonstrate greater resilience to economic crises, and serve as a source of income

for a wide segment of the population. According to Abdullah et al., (2023), 95% of firms worldwide are Small and Medium-sized Enterprises (SMEs). India, for example, has successfully harnessed small-scale industry development strategies as economic drivers. Approximately 40% of India's workforce is employed by SMEs, which significantly contribute to the country's GDP. In this context, SMEs play a vital role in economic and social development, particularly in developing countries (Jumbulingam et al., 2024).

As a developing country, Indonesia derives significant economic strength from its micro, small, and medium-scale manufacturing industries (MSMEs). According to Purnomo (2018) MSMEs in Indonesia hold substantial potential for driving economic growth and improving community welfare. They play a strategic role in national development, and their continued development offers Indonesia an excellent opportunity to transition into a developed nation. Similarly, it is highlighted that MSMEs are essential components of the national economy and require further development, as one of the primary obstacles faced by MSME actors is their limited ability to manage resources and expand their businesses (Suwarsono et al. 2022).

These challenges are closely tied to internal factors, such as weak management and strategic planning capabilities, poor financial management, limited production capacity, ineffective product marketing strategies, and inefficient allocation of human resources. Additionally, MSME players have faced significant external challenges, including the COVID-19 pandemic over the past two years, which severely disrupted business activities. Many businesses were forced to halt operations or shut down entirely, resulting in substantial impacts not only on business operations but also on the career prospects of workers in the MSME sector, many of whom lost their jobs.

In West Nusa Tenggara Province (NTB), economic activities in the MSME sector demonstrate relatively low productivity compared to other sectors. According to BPS NTB data, the MSME-scale manufacturing industry contributes only 4.13% to the province's Gross Regional Domestic Product (GRDP) (Badan Pusat Statistik Provinsi Nusa Tenggara Barat, 2022). Nevertheless, the MSME sector plays a crucial role in supporting community welfare, primarily through its significant capacity to absorb labor. The labor force in NTB has shown a consistent growth trend, with the MSME-scale manufacturing industry accounting for 13.27% of the total workforce in the province in 2021, making it the third-largest contributor after the agriculture and trade sectors (Badan Pusat Statistik Provinsi Nusa Tenggara Barat, 2021).

Despite its importance, the MSME-scale manufacturing industry in NTB exhibits relatively slow growth, underscoring the need for development and enhanced competitiveness to align with market demands and strengthen bargaining power. Efforts to develop and improve the competitiveness of the MSME-scale manufacturing industry should not only address the economic demand side but also meet the social demand side—particularly the growing labor force's needs.

The industrial sector continues to evolve in response to the rapid advancements in technology and science, which increasingly demand that it adapt and innovate. A key issue highlighted in this study is the lack of synergy between local governments and industry players. This is evident in the absence of strategic and technical policies, as well as development programs, aimed at supporting creative industry business actors in Central Lombok. Currently, stakeholders operate independently without leveraging each other's strengths. If stakeholders could collaborate and work cohesively, the potential and capabilities of regional industries could significantly contribute to regional development.

This issue arises from several factors: a lack of awareness of the importance of synergy among local governments, business actors, and stakeholders; insufficient insight among industry players into strategic business development planning; and inadequate information and considerations available to the government and stakeholders for making informed decisions about the strategic development of creative industry players in Central Lombok Regency.

This research focuses on identifying the critical factors in the supply chain flow of Iju handicrafts in Central Lombok. The goal is to contribute to the development of the MSME-scale creative industry in Central Lombok Regency, NTB, particularly for Palmyra handicraft industry players. According to BPS NTB data, Central Lombok Regency has the highest number of MSME business actors in the province, with 45,791 MSMEs, accounting for 42.21% of the total (Badan Pusat Statistik Provinsi Nusa Tenggara Barat, 2021). Economically, the handicraft sector dominates the industry in Central Lombok, making up 53.98% of the total industrial output in the region (Badan Pusat Statistik Kabupaten Lombok Tengah, 2022).

In this context, efforts to develop and enhance the competitiveness of MSME actors in Central Lombok will have a significant impact on the region's economic performance. This view is supported by Zainuri (2021), which highlights the MSME-scale manufacturing industry as one of the leading sectors in Central Lombok. However, it also reveals that MSMEs in the region face challenges, such as low productivity, as evidenced by declining production and marketing levels. This suggests the need for strategies to develop and improve MSME capabilities in order to survive amidst market competition. Additionally, the majority of the population in Central Lombok is employed in the MSME-scale manufacturing industry. The presence of the Mandalika Special Economic Zone (SEZ), a regional tourism magnet and economic driver, raises optimism for the advancement of the MSME-scale manufacturing sector in Central Lombok.

Statistically, creative industries, such as handicrafts, dominate the community's economic activities and have become a leading sector prioritized by the Central Lombok Regency Government in the Jonggat District. Strengthening the capabilities of MSME actors in the handicraft sector is expected to enhance the region's economic value and benefit society as a whole. However, the Palmyra handicraft industry has yet to receive adequate attention, particularly in terms of business development and efforts to increase the competitiveness of MSME actors.

Empirically, several common obstacles have been identified in the economic activities of Palmyra industry players, as highlighted in previous studies. These include weak management and financial stability, poor resource and organizational management, excessive focus on short-term decisions and goals, lack of long-term planning, and difficulty in assessing business performance. In this context, identifying the critical factors in the Palmyra handicraft industry's supply chain is a crucial first step toward developing and enhancing competitiveness. Today, competition exists not only between MSME organizations but also with large industry players. Therefore, strategic planning for MSME business actors is both relevant and urgently needed to ensure business sustainability. This research aligns with the view of Purnomo (2018), which emphasizes the importance for MSME actors to understand their business's strategic position, as this knowledge can significantly impact business performance and efficiency.

So far, related research in this area still requires further development. A similar study on palm crafts is the research conducted by Nurhazah & Kurniasari (2019), which focused on economic development efforts in Cimuncang Village, Malasma District, specifically regarding the household-scale Palmyra handicraft industry. The theoretical foundation of their study is primarily based on macroeconomic analysis from an economic development perspective, explicitly highlighting the economic inequality between rural and urban areas. Their research employs a combination of analytical methods, including the analysis of job creation, growth opportunities, production and marketing processes, and village-city interaction. The study recommends several development strategies for Palmyra handicraft industry players to consider, particularly concerning capital, information systems, and infrastructure (Nurhazah & Kurniasari, 2019).

Purnomo et al. studied the case of leather calligraphy crafts in Sukoharjo Regency, Central Java. Their research identified opportunities for developing the leather calligraphy craft industry in the region. In addition to the substantial demand, the craft industry also provides social benefits, contributing to the welfare of artisans. Therefore, strategic planning is crucial for these craft industry players to navigate the increasingly dynamic and competitive business environment (Purnomo, 2018).

Similar research can also be found in the studies by Maulina and Raharja, which focus on the case of bamboo handicrafts in Bandung, West Java. The primary motivation for their study was the expansion of bamboo handicraft products both domestically and internationally, which requires proper strategic planning to sustain bamboo handicraft MSMEs (Maulina & Jaja Raharja, 2018). The handicraft industry is a key sector in national economic growth. Over time, it has evolved into a sub-sector of the creative industry, which is unique in several ways. This includes its reliance on human skills in the production process, the cultural elements embedded in its products, and its dependence on human creativity. However, the creative industry faces challenges such as dependence on the availability of production materials, a lack of innovation, and the need to adapt business strategies to the evolving global economic competition (Aisyah et al., 2020).

This view supports the research's goal of encouraging the development of creative industries in Indonesia across various economic activities. Strategic planning for Palmyra handicraft industry players in Central Lombok is essential for all stakeholders: business actors along the creative industry supply chain, the government as the policymaker in the economic and industrial sectors, and investors. Moreover, each type of creative industry faces its own set of challenges, with characteristics based on factors such as product value, cultural elements, and the skills and creativity of artisans (Aisyah et al., 2020). Therefore, this study aims to identify critical factors along the supply chain of Palmyra handicraft products and develop appropriate strategies for advancing the creative industry in Central Lombok Regency.

The novelty of this research lies in strengthening the supply chain management strategy for the Palmyra handicraft industry by identifying critical factors along the supply chain flow. Additionally, there has been a lack of robust supply chain management in small Palmyra handicraft industries. This study takes a different approach from previous literature on supply chain management by focusing on identifying critical factors along the product supply chain. Ultimately, this approach aims to develop policy directions or strategies to strengthen the supply chain management of the Palmyra handicraft industry.

LITERATURE REVIEWS

Supply Chain Management

Supply chain management (SCM) coordinates all supply chain activities to enhance customer value (Heizer et al., 2016). The purpose of an efficient supply chain system is to minimize lead time and deliver the best quality products at the most competitive cost by eliminating all possible waste in the value chain (Heryjanto et al., (2020).

Additionally, SCM can help SMEs build better relationships with their customers. SCM systems offer significant potential in terms of process efficiency, customer satisfaction, and direct cost reductions for SMEs. Without a proper SCM strategy, action plan, and processes, SMEs risk losing business to competitors who are already implementing effective SCM practices (Heryjanto et al., 2020). In line with the definition of SCM, it is described as an activity that effectively integrates suppliers, companies, and retailers, ensuring that goods are produced and distributed at the right quality, location, and time, with minimal costs, in order to provide the highest quality services to consumers (Wilujeng et al., 2022).

SWOT-AHP Integration

SWOT analysis can be conducted through internal factors analysis (IFAS) and external factors analysis (EFAS) (Mandira & Damayanti, 2023). Internal factors are classified into strengths (S) and weaknesses (W), while external factors are categorized as opportunities (O) and threats (T) (Sudarmiatin et al., 2023). SWOT analysis generates business strategies (Risdarwanto et al., 2023). In designing the plan, SWOT analysis helps identify critical factors from both the internal and external environments (Suwarsono et al., 2022). Additionally, the Analytic Hierarchy Process (AHP) is used to prioritize the strategies formulated through SWOT analysis. The AHP method, proposed by Saaty, is a powerful tool for decision-making processes (Saaty, 1988). In relation to the research objectives, the AHP method was employed to identify the critical factors in the supply chain management of Palmyra handicrafts based on SWOT analysis. Research conducted by Lee et al. demonstrated that the SWOT-AHP approach effectively analyzes critical strategies or factors (Lee et al., 2021).

METHODS

The object of this research is the manufacturing industry within the creative industry sector, specifically focusing on the handicraft industry, particularly the processing of palm materials into various derivative products such as palm ropes, brooms, palm roofs, and palm mats. This case study is located in Pengerjek Village, Central Lombok Regency, West Nusa Tenggara Province. The research targets Palmyra handicraft business actors and the government, particularly the Central Lombok Regency Industry and Trade Office (Disperindag), as key stakeholders responsible for empowering regional small industries.

This study adopts a case study research design, combining qualitative and quantitative methods. The approach integrates SWOT and AHP analysis methods. The SWOT-AHP integration helps prioritize SWOT items or factors, as proposed by Lee et al. (2021) with the AHP method assigning weights to SWOT factors based on expert input. Appropriate strategies are then determined through the SWOT-AHP method.

Both primary and secondary data are required for this research. Primary data includes qualitative data on the critical factors within the SWOT analysis framework, while quantitative data is gathered through paired assessments from respondents based on the SWOT analysis outcomes. Secondary data is collected from various institutional sources and relevant scientific journals, accessed both online and offline.

Data collection employs observation techniques, unstructured in-depth interviews, and the distribution of closed questionnaires. Several parties are targeted for data collection, including Palmyra handicraft business actors, who in this case are collectors. Collectors manage materials and processed products of Palmyra handicrafts to meet consumer needs. Another key group is representatives from the Central Lombok Regency Disperindag.

To gather data using the AHP method, questionnaires are distributed to respondents. The AHP method uses a nine-point scale to assess the criteria. According to Saaty (1988), this scale is outlined in Table 1.

TABLE 1. AHP Method Assessment Scale

Assessment Scale	Description
1	Both criteria are considered equally important
3	One criterion is slightly more important than the other
7	One criterion is clearer and more absolutely important than the other
9	Absolute criteria are important over others
2,4,6,8	Values between two adjacent values

Source: Saaty (T. L. Saaty, 1990)

This study applies descriptive-analytical data processing techniques along with AHP method data processing. The data processed include primary data related to the analysis of SWOT components, which consist of internal and external factor data, as well as AHP-paired comparative assessment data reflecting respondents' preferences for business development criteria or strategies derived from the SWOT analysis. Generally, the stages of data analysis using AHP include developing a hierarchical model, assessing the relative weight of criteria, and making decisions.

RESULTS AND DISCUSSION

Results

Objective Conditions

With its various sub-sectors, the manufacturing industry sector continues to experience significant development, and its contribution to national income remains substantial (Badan Pusat Statistik, 2020; Zultaqaw et al., 2019). In particular, the creative industry sub-sector is showing a growing trend (Tim Penyusun, 2022), even though Indonesia is primarily an agricultural country. The creative industry encompasses economic activities driven by creativity and innovation in services or products (Krisiukėnienė & Pilinkienė, 2023). Supported by rapid technological advancements, the creative industry sector continues to benefit from new opportunities and increased profitability, such as easier market access. However, various challenges still exist for some entrepreneurs in the creative industry (Aisyah et al., 2020; Hatta, Riskarini, & Ichwani, 2019; Nurhazah & Kurniasari, 2019). Ultimately, effective business management and strategic planning are essential for accelerating the competitive advantage of the creative industry.

Analysis of Internal and External Conditions

In the analysis of internal conditions, two factors are the focus of the SWOT analysis: strengths (S) and weaknesses (W). Meanwhile, the analysis of external conditions aims to explore two key factors in the Palmyra handicraft business environment: opportunities (O) and threats (T). Based on the research findings, 32 critical factors were identified in the supply chain activities of the Central Lombok palm handicraft industry. These include nine critical factors related to strengths (S), nine related to weaknesses (W), eight related to opportunities (O), and six related to threats (T). The results of this identification are presented in Table 2.

TABLE 2. SWOT Analysis of The Palmyra Crafts Business

Strengths (S)		Weakness (W)	
Code	Strengths Factor	Code	Weakness Factors
S1	Wide market share	W1	Low production capacity
S2	The demand for relative products continues to increase	W2	Lack of innovation
S3	Competitive and affordable product prices	W3	There is no standard standard for product quality
S4	Quality products	W4	Raw materials still depend on natural resources
S5	The number of potential craftsmen is quite large (BPS NTB, 2022)	W5	Weak marketing ability (BPS NTB, 2023)
S6	Few local competitors	W6	Weak supply chain network management
S7	Artisans are the local workforce and the majority are women	W7	No production center
S8	Production materials do not use hazardous materials	W8	Weak financial capital
S9	Availability of raw materials	W9	Lack of supply chain partner network
Opportunities (O)		Threats (T)	
Code	Opportunity Factors	Code	Threat Factors
O1	Access digital marketing (BPS NTB, 2023)	T1	The emergence of similar competitor products
O2	Access to partnerships and capital (BPS NTB, 2023)	T2	Scarcity of raw materials (BPS NTB, 2023)
O3	Access to empowerment by related institutions (BPS NTB, 2021b, 2021a; Pemda Kabupaten Lombok Tengah, 2021), (Alexandri et al., 2019)	T3	Disruption (BPS NTB, 2023)
O4	Regional tourism potential (Zainuri, 2021)	T4	Increased supply chain costs
O5	Export opportunities (BPS NTB, 2023; Pemda Kabupaten Lombok Tengah, 2021)	T5	The fading interest of the local community in continuing their work as craftsmen
O6	Business innovation	T6	Uncertainty of demand and supply
O7	Sustainable business		
O8	Appropriate production technology		

Development of Hierarchy Models and Assessment of Critical Factors

In this section, the development stage of the AHP hierarchy model was conducted to identify the critical factors within the supply chain activities of the palm handicraft industry. Additionally, AHP data processing was performed based on the respondents' assessments of the criteria proposed in the research. The hierarchical model developed in this study is shown in Figure 1.

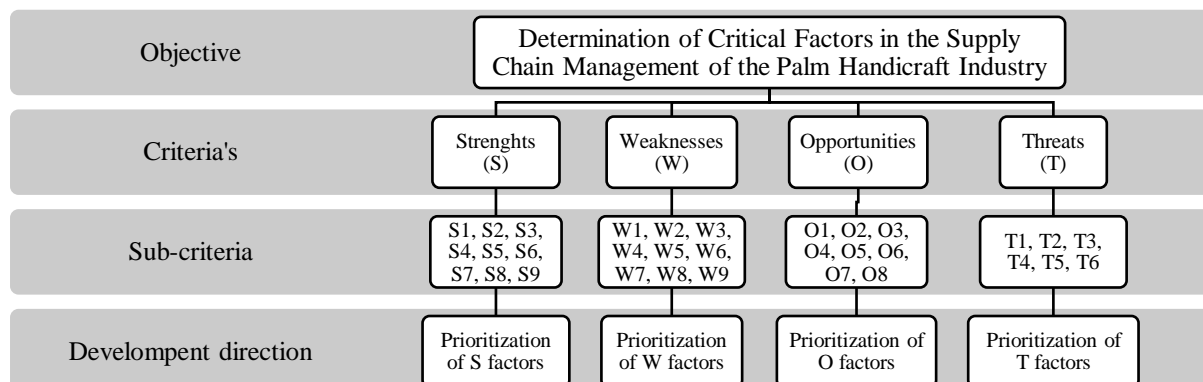


FIGURE 1. Hierarchical Model of Determining Critical Factors in the Supply Chain of the Palm Craft Industry

After developing the AHP hierarchy model, the next step was to assess each element of the model hierarchy by distributing a relative weighting questionnaire to the respondents. The respondents were entrepreneurs with over five years of experience in the Palmyra handicraft business and a market share that had expanded beyond the region. Additionally, most artisans collaborate with these entrepreneurs, producing a wide variety of products, such as ropes, brooms, and palm roofs, compared to other entrepreneurs. Data processing in this stage was carried out using Expert Choice 11 software to facilitate the research (Saaty, 1987). The results of this assessment stage yielded a relative weight structure at each level and prioritized the factors within the AHP decision elements. The results are presented in Figures 2 through 6 below.

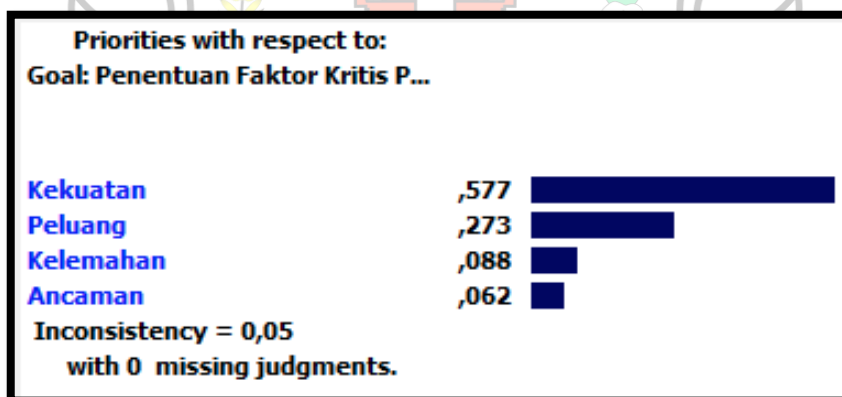


FIGURE 2. Results of AHP Assessment on SWOT Criteria

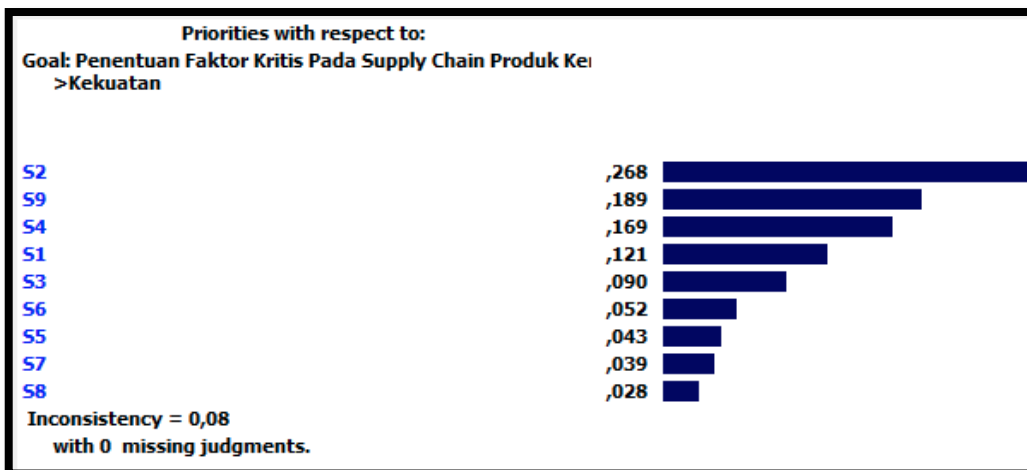


FIGURE 3. Results of AHP Assessment on Strength Factors

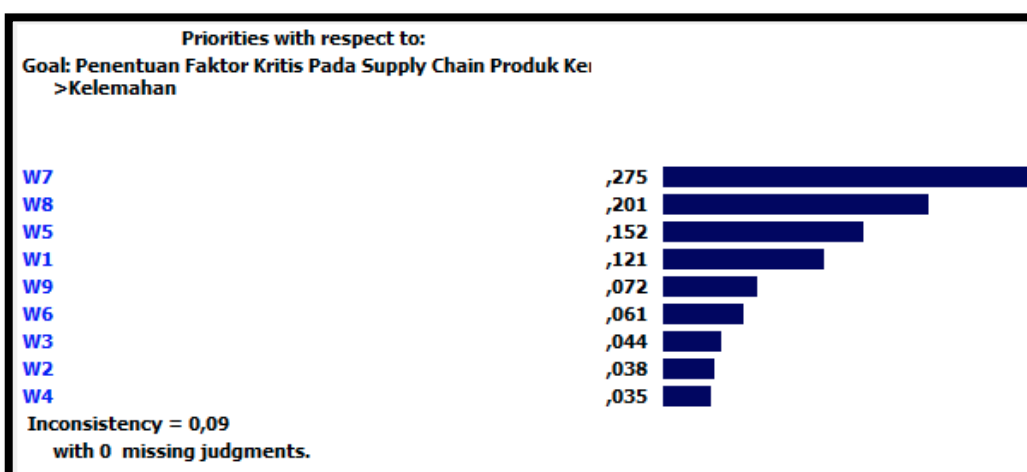


FIGURE 4. Results of AHP Assessment on Weakness Factors

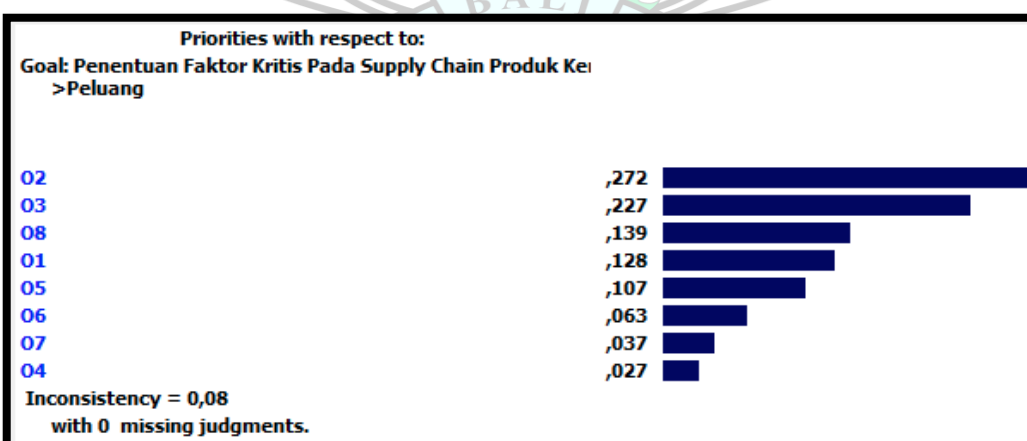


FIGURE 5. Results of AHP Assessment on Opportunity Factors

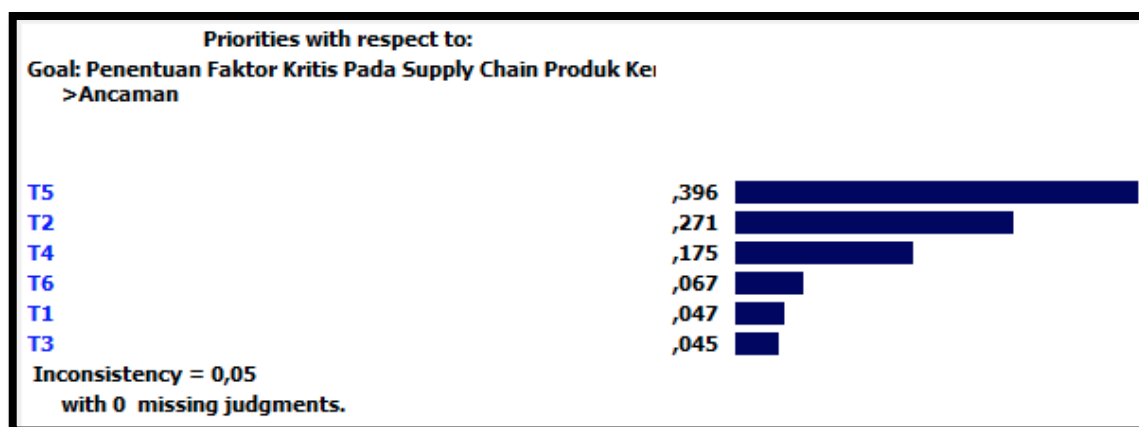


FIGURE 6. Results of AHP Assessment on Threat Factors

Discussion

According to the AHP method, a consistency test is required for the results of the respondents' assessments. The consistency value should not exceed 10%, although it does not need to be exactly 0%. If the consistency value is greater than 10% or does not meet this criterion, there is an error in the comparative data, and the data should be retaken. According to Saaty, the consistency test measures the level of coherence in respondents' assessments, reflecting their knowledge and experience in evaluating a given criterion (Saaty, 1988). The analysis excludes any consistency index greater than 10% (Lee et al., 2021).

Based on the AHP assessment of the criteria, presented in Figures 2 through 6, it is clear that the most prioritized criterion for achieving the research objectives is strengthening the strength factors of Palmyra handicraft business actors. As shown in Figure 2, the assessment results indicate that the strength factor has the highest priority level of 0.577. Additionally, experts emphasize the importance of focusing on opportunity factors, as appropriate measures must be taken to develop the Central Lombok palm handicraft industry.

Critical Factors of Strength Aspect

Regarding strengths, nine factors were analyzed and assessed for their priority in the supply chain performance of the Palmyra handicraft industry. The AHP assessment results reveal that the highest priority factor is S2, which pertains to the increasing and relatively continuous demand for Palmyra handicraft products. This is a key strength for the industry, as high demand plays a crucial role in the success of the palm handicraft business. This factor should be prioritized in the development of the Palmyra handicraft industry.

Experts agree that as demand for Palmyra handicraft products continues to rise, strategies should focus on strengthening the fulfillment of consumer demand. According to (Ndzabukelwako et al., 2024), SMEs can penetrate broader markets, increasing their exposure to competitive pressures. As such, stakeholders and business actors must formulate strategies to address the imbalance between demand and supply.

At the strategic level, business actors can enhance their supply chain management by adopting a lean approach. In supply chain management, lean strategy focuses on minimizing waste, ensuring that business processes add value while eliminating inefficiencies. At the tactical level, to support high demand, business actors should consider diversifying their product offerings, improving quality, and fostering innovation.

The second priority strength factor is S9, which concerns the availability of raw materials. In the context of this research, the availability of Palmyra raw materials is a significant strength for the industry. Access to raw materials for production remains relatively easy, with local suppliers able to fulfill the needs of the industry. This highlights the importance for stakeholders to focus on maintaining and enhancing access to Palmyra raw materials. Furthermore, efforts can be made to increase the value added to Palmyra handicraft products, thereby boosting the industry's competitiveness.

The third priority strength factor is S4, related to product quality. The quality of Palmyra handicrafts from Central Lombok is another key strength, as it meets consumer expectations. This factor aligns with the growing demand for Palmyra products. As product quality plays a crucial role in sustaining demand and ensuring consumer satisfaction, it is an essential area for industry development. At the supply chain level, business actors can strengthen relationships with suppliers to ensure a smoother flow of materials, cost management, and information. Enhancing these relationships will positively impact sourcing activities, which is vital for effective supply chain management.

Critical Factors Aspects of Weakness

In terms of weaknesses, the AHP assessment identified three priority critical factors: W7, W8, and W5. The W7

factor refers to the absence of a production center, W8 to the weak financial capital, and W5 to the weak marketing ability. Regarding the W7 factor, the absence of a centralized production facility is a significant limitation. Currently, artisans carry out the production process at their homes, which presents several challenges in terms of efficiency, scale, and meeting production targets. This issue has become a key concern for business actors striving to meet demand. Ideally, establishing a production center for artisans should be a part of the strategic plan for both business actors and government stakeholders to add value to the Central Lombok palm handicraft industry. According to the RPJMD (Regional Development Plan) of Central Lombok Regency, expanding the added value of the local handicraft industry is one of the key objectives (Peraturan Daerah Kabupaten Lombok Tengah, 2021). To support this strategic goal, the establishment of a production center for palm handicraft artisans in Central Lombok should be a priority consideration.

The second critical factor in the weakness aspect is W8, which refers to the weak financial capital capability. The findings of this study align with data from BPS NTB (2023), which highlights the financial challenges faced by the manufacturing industry. This indicates a significant need for external financial support for business actors. Moreover, further investigation revealed that financial management practices within these businesses are inadequate. Specifically, many business actors lack proper financial recordkeeping, making it difficult to evaluate and manage cash flows effectively. Therefore, this study underscores that, in addition to securing stronger capital, it is essential to enhance financial management capabilities. By improving financial oversight, business actors can make informed decisions based on their financial evaluations, which will help guide future policy decisions and strengthen their overall business operations.

The third most critical factor in the weakness aspect is W5, which pertains to marketing ability. According to BPS NTB, besides capital, the most significant weakness faced by small and medium industries in NTB is their inability to market their products effectively. This finding is consistent with the results of this study, which emphasize the importance of addressing this gap. Policymakers and business managers must implement strategies to strengthen marketing capabilities for entrepreneurs. In today's environment, advances in information technology and communication should provide business actors with more opportunities to reach their target markets. Therefore, enhancing marketing strategies should be a priority for business actors, alongside efforts to develop marketing skills through government support, ensuring these initiatives are implemented effectively.

Critical Factors of Opportunity Aspect

Regarding priority opportunities, the critical factors identified are O2, O3, and O8. The O2 factor refers to the opportunity for access to partnerships and capital. This factor is particularly relevant today, as Palmyra industry actors have numerous opportunities to enhance sales through partnerships with larger companies or other small industry players. According to Badan Pusat Statistik Provinsi Nusa Tenggara Barat (2021) such partnerships can open up new sales channels and expand market reach. Additionally, regarding capital, there are opportunities for small industry players to access funding from private financial institutions, government programs, and assistance from relevant agencies, all of which can support business growth and development.

Critical Factors Threat Aspects

The critical factors in the threat aspect identified in this study include T2, T5, and T4. The T2 factor refers to the threat of raw material scarcity, T5 pertains to the declining interest of the local community in continuing the craft, and T4 concerns the threat of rising supply chain costs. Among these, the priority threat is the scarcity of Palmyra raw materials. This factor highlights the dependency of Palmyra handicraft business actors on the availability of raw materials for the production process. Since Palmyra is a natural product that grows organically, its availability can become a significant issue, especially in the face of outside interventions or specific interests that could negatively impact its production. Therefore, both industry players and all stakeholders in the supply chain must be aware of this threat. The production process should be adapted to ensure the effective and efficient use of available materials. Additionally, from a regulatory perspective, it may be necessary to implement policies aimed at protecting and preserving the availability of Palmyra for local producers in Central Lombok.

The next critical factor is T5, which refers to the declining interest of the local community in continuing their work as craftsmen. This threat is exacerbated by societal shifts and changing times that often disrupt traditional industries, leading to a change in career preferences. In Pengerjek Village, where many women are engaged in handicraft production, the demand for professional regeneration is critical to sustain the economic potential of the community. To address this issue, government intervention is crucial in supporting the Palmyra handicraft industry and ensuring the continued involvement of younger generations in this sector.

Another significant threat to the sustainability of the Palmyra handicraft industry is the increase in supply chain costs. Effective and efficient supply chain management is widely recognized as a key driver of industrial competitiveness (Grant et al., 2017). Supply chain management involves all processes and actors in product creation, aiming to produce quality products at affordable, fast, and precise rates. However, in this study, the increase in supply chain costs poses a significant challenge, as the Palmyra handicraft industry consists primarily of small and medium enterprises where supply chain management remains traditional and transactional. This

means that supply chain cost increases are more likely due to factors like limited knowledge of modern supply chain practices. Consequently, addressing this threat should be a priority for all parties involved in the Palmyra handicraft industry, including both industry actors and government authorities. This focus aligns with the local government's strategic goal of increasing the added value of MSME-scale manufacturing industries in Central Lombok (Peraturan Daerah Kabupaten Lombok Tengah, 2021). One potential solution is to enhance supply chain management performance across the sector.

CONCLUSIONS AND SUGGESTION

Conclusions

The Central Lombok Palmyra handicraft industry holds significant potential to drive local economic growth and improve community welfare. However, its sustainable development depends on addressing both internal challenges and external threats through targeted strategies. This study highlights the critical role of supply chain management in enhancing the industry's competitiveness. Key priorities include optimizing demand fulfillment processes, ensuring a reliable supply of raw materials, and maintaining high product quality to meet market expectations.

Achieving these goals requires coordinated efforts from artisans, business actors, local governments, and relevant institutions. Establishing centralized production facilities would improve operational efficiency, elevate product quality, and foster a collaborative environment for artisans. Additionally, offering financial assistance, business management training, and marketing support would empower artisans to overcome challenges such as limited financial capital and restricted market access. By promoting sustainable practices and creating policies to protect raw material resources, the industry can mitigate the threat of scarcity and ensure long-term viability.

While this study has identified key factors and provided foundational insights, future research should focus on formulating actionable strategies based on these findings. Further exploration into the integration of digital technologies in production, marketing, and supply chain management could open new opportunities, enhancing the industry's competitiveness in an increasingly digital world. By addressing these aspects, the Palmyra handicraft industry can solidify its position as a vital economic contributor, preserving its cultural heritage while adapting to the evolving market landscape.

Suggestion

This research offers valuable insights to business actors and the government for making strategic decisions to enhance the development and competitiveness of the Palmyra handicraft industry. However, there are certain limitations that require further investigation. While the study successfully identified critical factors within the industry's supply chain management, future research should focus on assessing and formulating comprehensive strategies based on the identified SWOT factors. Moreover, the study did not explore the role of digital transformation in the context of the handicrafts industry—an area that could provide significant insights for future research.

To further support the industry's growth, stakeholders should consider establishing centralized production facilities, which would improve operational efficiency and product quality. Additionally, providing financial support and offering training in resource management would address challenges related to capital and financial management. Incorporating digital marketing strategies and fostering partnerships with larger enterprises could expand market access, allowing for greater competitiveness.

Addressing external threats, such as raw material scarcity, through sustainable practices and protective policies will help ensure the long-term availability of vital resources. By implementing these strategies, the Palmyra handicraft industry can strengthen its position as a key contributor to the regional economy, while also preserving its rich cultural and creative heritage.

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