

STRATEGIES FOR DEVELOPING THE COMPETITIVENESS OF HOUSEHOLD FOOD-PRODUCT MSMEs IN SOUTH CENTRAL TIMOR REGENCY

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Abstract

Micro, small, and medium enterprises (MSMEs) play an important role in national and regional economic growth. Nevertheless, household food-product MSMEs in South Central Timor Regency continue to face various constraints that hinder improvements in competitiveness, including weak financial recordkeeping, limited production technology, low workforce knowledge, limited business capital, suboptimal product quality standardization, and inadequate business legality. This study aims to: (1) identify and analyze the factors affecting the competitiveness of household food-product MSMEs in South Central Timor Regency based on the Porter Diamond Model; (2) formulate alternative *strategies* for developing the competitiveness of household food-product MSMEs in South Central Timor Regency based on SWOT analysis; and (3) determine the most appropriate priority strategies for developing competitive household food-product MSMEs in South Central Timor Regency using the AHP method. A mixed-methods approach combining *qualitative* and quantitative approaches in a single study was employed through questionnaires and interviews with 56 MSME respondents (determined using Slovin's formula) and five expert respondents purposively selected based on their competence and experience in developing household food MSMEs in TTS Regency. The Internal Factor Evaluation (IFE) matrix yielded a total score of 2.686, while the External Factor Evaluation (EFE) matrix yielded 2.695, placing TTS MSMEs in Cell V (hold and maintain) of the IE matrix. The SWOT analysis produced nine alternative strategies. The AHP analysis identified business legality as the most influential factor (weight: 0.242), with the highest-priority strategy being to build customer trust through legally compliant products (weight: 0.220). These findings offer practical recommendations for the Local Government, MSME actors, and future research. This study also makes a scholarly contribution by integrating the Porter Diamond Model, SWOT, and the Analytic Hierarchy Process (*AHP*) in *formulating* strategies to develop the competitiveness of household food MSMEs, an approach that has rarely been applied in previous studies in South Central Timor Regency.

Keywords: Competitiveness, MSME Development, *Porter Diamond Model*, SWOT, AHP

INTRODUCTION

Micro, small, and medium enterprises (MSMEs) play a strategic role in strengthening Indonesia's national and regional economic structure. MSMEs contribute 59.64% to national GDP and absorb 121.8 million workers (KemenUMKM, 2025). This condition confirms that MSMEs are the backbone of the Indonesian economy and serve as a major driver of inclusive economic growth and equitable public welfare.

One MSME sector with substantial development potential is household food products. The Food and Drug Supervisory Agency (BPOM, 2018) defines food as anything derived from biological sources and intended for consumption as food or beverages, including products of agriculture, plantations, forestry, fisheries, livestock, aquatic resources, and water, whether processed or unprocessed. Household food products are generally based on local potential, use raw materials available in the surrounding area, and involve community skills and knowledge passed down through generations.

South Central Timor (TTS) Regency, one of the 22 regencies/cities in East Nusa Tenggara Province, has considerable potential to develop competitive household food-product MSMEs. This potential includes the availability of diverse local raw materials such as corn, legumes, tubers, bananas, coconuts, coffee, moringa leaves, tamarind, vegetables and fruits, household medicinal plants, candlenuts, and various distinctive regional food

products. In 2023, BPS NTT (2025) recorded 16,593 MSME units in TTS Regency, including 65 household food-product MSMEs assisted by the Office of Industry, Trade, Cooperatives, and MSMEs (DinasPPK&UMKM, 2025).

Despite this potential, household food-product MSMEs in TTS Regency continue to face significant internal and external challenges. Internal problems include weak financial recordkeeping, limited production technology, low workforce knowledge, limited business capital, suboptimal product quality standardization, and limited business legality. External problems include inadequate infrastructure and logistics access, unstable raw-material prices, and competition from products originating outside the region. Various studies show that low levels of innovation, business legality, digital capability, and access to financing are major factors causing the competitiveness of food MSMEs to remain relatively low compared with large-scale enterprises. These problems hinder efforts to improve competitiveness and limit the ability of household food-product MSMEs to access broader markets.

Previous studies have examined MSME development strategies using either SWOT analysis or the Porter *Diamond Model* separately. Other studies have used AHP to determine strategic priorities, but have not integrated all three approaches into a single comprehensive analytical framework. Moreover, research on household food-product MSMEs in South Central Timor Regency remains very limited. This study seeks to address this gap by integrating the Porter Diamond Model to identify the determinants of competitiveness, SWOT analysis to formulate strategic alternatives, and the Analytic Hierarchy Process (AHP) to determine priority MSME development strategies.

The novelty of this study lies in integrating three analytical approaches—the Porter *Diamond Model*, SWOT, and AHP—to formulate strategies for developing the competitiveness of household food MSMEs in a relatively under-researched area, namely South Central Timor Regency. Accordingly, this study aims to: (1) identify and analyze the factors affecting the competitiveness of household food-product MSMEs in South Central Timor Regency based on the Porter *Diamond Model*; (2) formulate alternative strategies for developing the competitiveness of household food-product MSMEs in South Central Timor Regency based on SWOT analysis; and (3) determine the most appropriate priority strategies for developing competitive household food-product MSMEs in South Central Timor Regency using the AHP method. The findings are expected to provide both academic and practical contributions to the development of competitive MSMEs in the region.

LITERATURE REVIEW

A. Competitive Advantage Theory

The theory of competitive advantage proposed by Porter (1990a) explains that competitive advantage is achieved when an organization is able to create greater value than its competitors through cost efficiency, product differentiation, innovation, and responsiveness to market needs. Cost efficiency refers to the ability to become the lowest-cost market player; product differentiation emphasizes the development of unique products that distinguish the firm from its competitors; innovation relates to product development; and market responsiveness reflects the accuracy and speed with which a company adapts its goods and services to customer preferences.

This theory is supported by the concept of comparative advantage, which explains that a country or region benefits when it concentrates production on goods that can be produced at a relatively lower cost than other parties (Ricardo, 2015). In the MSME context, comparative advantage can be understood as the basic potential of a region, such as the availability of local raw materials, distinctive characteristics, local labor, and proximity to production resources (Tambunan, 2009). However, comparative advantage must be transformed into competitive advantage through innovation, product standardization, legality, production efficiency, and market opportunities (Barney, 1991).

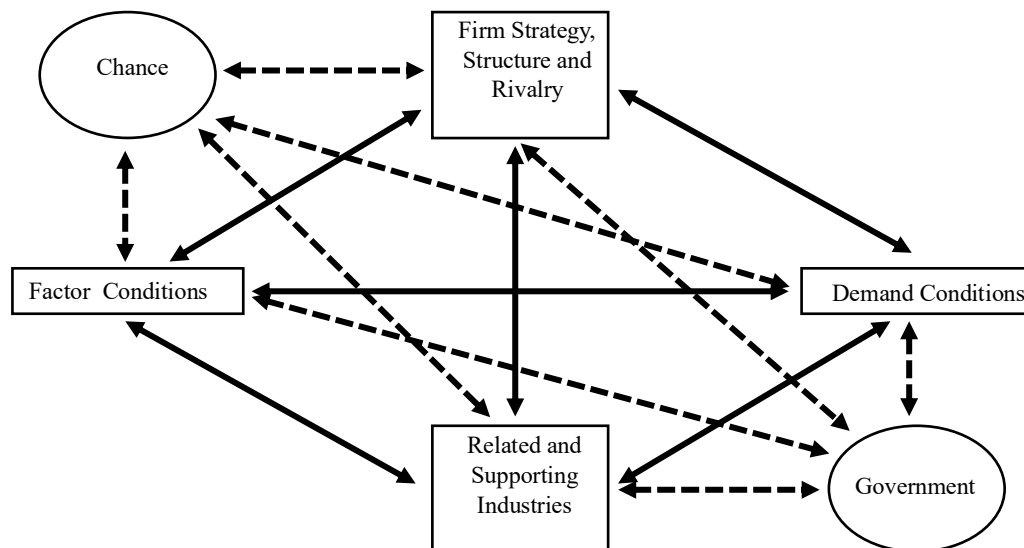
B. Resource-Based View and Capacity Building

According to the Resource-Based View developed by Barney (1991), competitive advantage is achieved by utilizing internal resources that are valuable, unique, difficult to imitate, and difficult to substitute. The Resource-Based View (RBV) is an approach that emphasizes strengthening competitive advantage derived from an organization's strategic resources (Teece et al., 1997). The *capacity-building theory* proposed by Baum and Ingram (2000) states that, to compete in global markets, MSMEs need to develop their internal capacities, including human-resource management, technology utilization, and more efficient managerial systems.

C. Porter Diamond Model

The *Porter Diamond Model* is used to explain the determinants of national and regional competitive advantage. The model consists of four main components and two supporting components. As shown in Figure 1, the four main components are: (1) Factor Conditions, referring to the availability of production inputs such as raw-material sources, labor, capital, technology, location, knowledge, and production costs; (2) Demand Conditions, including quality, price, and service within a particular industry; (3) Related and Supporting Industries, including raw-material suppliers, financial institutions, and promotional media; and (4) Firm Strategy, Structure, and Rivalry, which describe how firms are organized, managed, and compete with one another. The two supporting *factors* are chance (internal and external events beyond the firm's control) and government (regulatory and policy elements). The model provides a structure for explaining the rules of competition in each sector and their influence on long-term rivalry.

Figure 1. *Porter Diamond Model*



D. SWOT Analysis

One stage of analysis in strategic studies is the analysis of the business environment, which encompasses both internal and external environments (David, 2016). Internal analysis is the process of identifying an organization's *or* company's strengths *and* weaknesses, whereas external analysis identifies threats that must be avoided and opportunities that can benefit the business. According to Rangkuti (2021), SWOT analysis is a comprehensive process for identifying various factors in order to formulate business strategies. This framework produces four strategic options: SO (Strengths–Opportunities, aggressive strategy), WO (Weaknesses–Opportunities, turnaround strategy), ST (Strengths–Threats, diversification strategy), and WT (Weaknesses–Threats, defensive strategy).

E. Analytic Hierarchy Process (AHP)

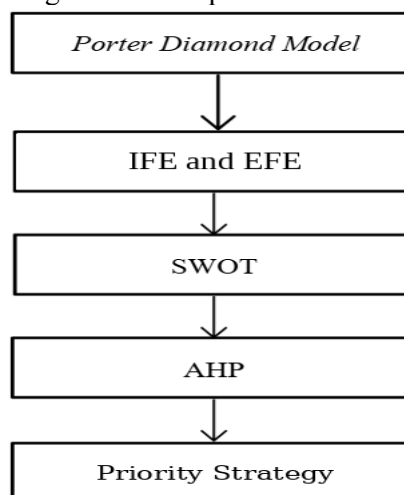
The *Analytic Hierarchy Process* (AHP), developed by Saaty (1987), is a multicriteria decision-making method. AHP structures complex problems into a hierarchy consisting of goals, criteria, subcriteria, and alternatives through pairwise comparisons and determines *the priority weight* of each criterion and alternative. AHP uses a 1–9 scale to indicate the relative importance of two elements. The Consistency Ratio (CR) is used *to assess whether respondents or experts* are sufficiently consistent; a CR value of ≤ 0.10 is considered acceptable. In this study, AHP was applied to assist decision-makers in identifying the best solution among the available alternatives (Marimim & Maghfiroh, 2010).

F. Conceptual Framework

The research framework for formulating strategies to develop household food-product MSMEs in TTS Regency begins by identifying MSME competitiveness using the *Porter Diamond Model*. *The results are* grouped into internal factors (strengths and weaknesses) and external factors (opportunities and threats), which are then analyzed using the Internal Factor Evaluation (IFE) and External Factor Evaluation (EFE) matrices. This is

followed by SWOT analysis to formulate alternative strategies and the Analytical *Hierarchy Process (AHP)* to determine priority strategies. The conceptual framework is presented in Figure 2.

Figure 2. Conceptual Framework



METHOD

A. Research Design and Approach

This study employed a mixed-methods *approach* with an exploratory sequential design. *This approach was selected* to obtain a comprehensive understanding of the phenomenon through two complementary stages, namely qualitative and quantitative stages. The qualitative approach involved field observations, in-depth interviews, questionnaires, and documentation involving household food-product MSME actors and relevant stakeholders. The findings from this phase were then analyzed quantitatively to test, measure, and prioritize strategies for developing the competitiveness of household food-product MSMEs in TTS Regency.

B. Research Location and Period

The study was conducted in TTS Regency, which was *selected* purposively *because it* has a substantial number of household food-product MSMEs and local potential that can be developed into leading regional products. The research was carried out from November 2025 to April 2026.

C. Population and Sample

The study population comprised all household food-product MSMEs registered with the TTS Regency Office of Industry, Trade, Cooperatives, and MSMEs, totaling 65 business units. The sample size was determined using Slovin's formula with a 5% margin of error, resulting in 56 respondents. Respondents were selected through purposive sampling based on the following criteria: active production status, a minimum business age of two years, regularly marketed products, and willingness to participate in the study. Five expert respondents were purposively selected for the AHP analysis based on their competence and experience in developing household food MSMEs in TTS Regency (Table 1).

Table 1. List of Expert Respondents

No.	Position
1	Chair of the Regional National Crafts Council of TTS Regency
2	Head of the Industry Division, TTS Regency Office of Industry, Trade, Cooperatives, and MSMEs
3	Head of the Food Consumption and Safety Division, TTS Regency Food Security Office
4	Head of the Public Health Division, TTS Regency Health Office
5	NGO/Household Food MSME Facilitator

D. Data Collection Techniques

Data were collected through: (1) field observations of production processes, production facilities, marketing, and other business activities; (2) in-depth interviews with key informants; (3) documentation in the form of photographs of business activities, government documents and reports, statistical data, previous research findings, and other scientific publications relevant to the research topic; and (4) a structured questionnaire using a five-point

Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) for 26 measurement items. Data triangulation was applied to validate the findings.

E. Validity and Reliability Testing

Instrument validity was assessed using the *Pearson Product-Moment correlation* (critical r value = 0.263 for $n = 56$ at the 5% significance level). Reliability was assessed using Cronbach's Alpha ($\alpha \geq 0.70$ as the threshold). SPSS software was used for the statistical analysis.

F. Data Analysis Techniques

Three sequential analytical stages were used:

- *Porter Diamond Model*: Analysis of six factors affecting competitiveness, namely factor conditions, demand conditions, related and supporting industries, firm strategy, structure and rivalry, the role of government, and chance, to comprehensively map MSME competitiveness.
- SWOT Analysis: Development of the Internal Factor Evaluation (IFE) and External Factor Evaluation (EFE) matrices using pairwise-comparison weighting (scale 1–3) and ratings (scale 1–4). The results were plotted in a SWOT diagram and the Internal–External (IE) matrix to determine the strategic position, producing four strategy groups: SO, WO, ST, and WT.
- *Analytic Hierarchy Process (AHP)*: **Development** of a hierarchy consisting of the main goal, factors, and strategic alternatives. Pairwise comparisons among criteria and strategic alternatives were assessed using Saaty's 1–9 intensity scale with Expert Choice software (*Consistency Ratio* ≤ 0.10). The resulting priority weights determined the most appropriate strategy.

RESULTS AND DISCUSSION

A. Porter Diamond Model Analysis

The analysis of the six determinants in the *Porter Diamond Model* produced the following results:

- **Factor Conditions**: TTS Regency has abundant local raw materials that constitute its main strength, including sweet potatoes, cassava, taro, corn, bananas, legumes, moringa, chilies, processed spices, and others, providing a strong comparative advantage. According to Porter (1990b), factor conditions are a major determinant of competitiveness because they include the natural resources, labor, capital, technology, and infrastructure used in the production process. However, this comparative advantage has not yet been fully transformed into competitive advantage because of limited human-resource quality, low technology utilization, limited capital, and inadequate supporting business infrastructure.
- **Demand Conditions**: Demand conditions indicate that household food products in TTS have relatively strong market demand, particularly for distinctive local products. According to Porter (1990b), increasingly sophisticated demand conditions encourage business actors to improve quality, innovation, and business efficiency. The study by Wijaya et al. (2026) shows that marketing has reached regional and national markets. Demand has increased through the use of digital platforms, discounts and digital promotions, and delivery services. This implies that household food-product MSMEs in TTS need to strengthen their marketing strategies and use of digital technology to expand markets, maintain service quality, and preserve customer loyalty.
- **Related and Supporting Industries**: Support from financial institutions, distribution networks, mentoring institutions, and business partners remains suboptimal because most MSME actors still experience difficulty accessing formal financing due to weak business administration and financial recordkeeping. According to Schmitz (1995), strong relationships between small businesses and supporting industries create collective efficiency that can sustainably improve business competitiveness. The findings of Suci et al. (2026) indicate that MSMEs have relatively good access to raw-material suppliers but have not maximized the role of financial institutions. This results in weak competitiveness and limited market access. Therefore, partnerships and business networks need to be strengthened by building *collective efficiency* that supports improved competitiveness.
- **Firm Strategy, Structure, and Rivalry**: Most MSME actors remain focused on small-scale production and have limited managerial capability. Competition from products originating outside the region, which often have superior packaging and distribution networks, pressures local MSMEs to innovate and improve quality. These findings are consistent with Suci et al. (2026), who found competition among similar businesses and consequently recommended differentiation strategies, including consistent branding elements such as packaging, promotion, and service. The implication for firm strategy, structure, and

rivalry in developing competitive household food-product MSMEs in TTS is the need to strengthen product innovation, service quality, and production efficiency in order to maintain market position.

- **Chance:** The chance factor, *reflected* in the development of information technology and increasing public interest in local products, represents an opportunity that can be used to improve business competitiveness. Sembiring et al. (2026) emphasized the importance of digital literacy and technological adaptability so that MSMEs can optimize the potential of social media and marketplaces, while Zed et al. (2024) showed that public interest in consuming and supporting local products is increasing. Both studies demonstrate opportunities that can be utilized to improve MSME competitiveness.
- **Government Role:** The TTS Regency Government, through the relevant agencies, has provided support in the form of training, production equipment assistance, product-promotion facilitation, and assistance with business legality. Government serves as a facilitator that creates an environment conducive to the growth of business competitiveness (Porter, 1990b). Wijaya et al. (2026) also found that government supports business development through digital-marketing training that has the potential to strengthen competitiveness. Such support helps MSME products gain acceptance in broader local and national markets and promotes business sustainability.

B. IFE Matrix Analysis

The IFE matrix identified seven strengths and five weaknesses of household food-product MSMEs in TTS Regency, as presented in Table 2.

Table 2. Internal Factor Evaluation (IFE) Matrix

No.	Internal Factor	Weight	Rating	Score
Strengths				
1	Diverse MSME food products	0,071	3.2	0,228
2	Use of high-quality local raw materials	0,082	3.8	0,311
3	Use of own capital for production	0,084	3.4	0,285
4	Competitive product prices	0,073	3.2	0,233
5	Products tailored to customer needs	0,074	3.4	0,252
6	Product packaging already includes labels	0,093	4.0	0,371
7	Some products have obtained halal certification	0,100	3.6	0,360
Total		0,574		2.030
Weaknesses				
8	Absence of financial recordkeeping	0,090	1.8	0,161
9	No formal supply contracts with suppliers	0,077	2.0	0,155
10	Low workforce knowledge and skills	0,083	1.8	0,150
11	Simple and limited production technology	0,090	1.2	0,108
12	Limited access to formal bank credit	0,083	1.0	0,083
Total		0,422		0,656
Grand Total		1.000		2.686

Source: Primary Data, 2026

The total IFE score of 2.686 indicates a moderate internal position, suggesting that MSMEs possess reasonably strong internal advantages but have not yet used them optimally to address their weaknesses. This is consistent with David (2016), who states that an IFE score ranging from 2.0 to 2.99 indicates a moderate position. The primary strength is that product packaging already includes labels (0.371). Labels communicate product identity and can increase customer confidence in product quality and food safety. The main weakness is the absence of financial recordkeeping (0.161). The lack of financial records constitutes a weakness in the development of more professionally managed MSMEs.

These findings indicate that household food-product MSMEs in TTS Regency have a reasonably strong internal foundation, particularly in the use of local raw materials and product quality. Nevertheless, weak financial recordkeeping remains a major obstacle to improving competitiveness. This result is consistent with Wijaya (2023), who states that strengthening managerial capacity enhances MSME competitiveness.

C. EFE Matrix Analysis

The EFE matrix identified five opportunities and three threats, as presented in Table 3.

Table 3. External Factor Evaluation (EFE) Matrix				
No.	External Factor	Weight	Rating	Score
Opportunities				
1	Opening broader market access	0,141	3.6	0,508
2	Increasing demand for processed food products	0,134	3.0	0,402
3	Local government support for MSME development	0.111	3.0	0,332
4	Advances in digital technology	0,145	3.6	0,521
5	Opportunities to partner with other businesses	0,123	3.0	0,370
Total		0,654		2.132
Threats				
6	Inadequate infrastructure and logistics access	0,123	1.8	0,222
7	Unstable raw-material prices	0,132	1.2	0,159
8	Intense competition from similar products	0,091	2.0	0,182
Total		0,346		0,563
TOTAL EFE SCORE		1.000		2.695

Source: Primary Data, 2026

The total EFE score of 2.695 indicates that the ability to respond to the external environment is also in the moderate category. This is consistent with David (2016), who states that an EFE score ranging from 2.0 to 2.99 indicates a moderate position. This means that MSMEs are able to respond to opportunities and threats, although not yet optimally. The main opportunity is the advancement of digital technology (0.521), while the greatest threat is inadequate infrastructure and logistics access (0.222), which disrupts the production of competitive MSME food products, causes delivery delays, and increases distribution costs.

These findings show that advances in digital technology provide food-product MSMEs with opportunities to expand into local, national, and even international markets. Inadequate infrastructure and logistics access also affect MSME performance. This issue requires attention because the production of high-quality products depends on adequate infrastructure and logistics support. This finding is consistent with Susilowati et al. (2022), who showed that infrastructure and logistics-access problems hinder MSME performance.

D. SWOT Diagram and IE Matrix

Based on the IFE and EFE scores, the SWOT diagram coordinates were calculated as follows: X (internal) = $2.030 - 0.656 = 1.374$; Y (external) = $2.132 - 0.563 = 1.569$. The coordinates (1.374, 1.569) place TTS Regency MSMEs in Quadrant I (Aggressive Strategy), indicating a favorable condition because the businesses possess strengths and opportunities that can be utilized simultaneously. Applicable strategies include expanding into new markets through social media and partnerships, and diversifying products by creating new variants through innovations in flavor, packaging, and product quality. This is consistent with Afkarina et al. (2026), who recommended an aggressive strategy through market-area expansion. Such measures are intended to maintain customer loyalty and attract new consumers.

The IE matrix, which combines the IFE score (2.686) and EFE score (2.695), places MSMEs in Cell V (hold and maintain). This position indicates that MSMEs are in a moderate condition in both internal and external terms. According to David (2016), applicable strategies include market penetration and product development. These strategies are consistent with the conditions of household food-product MSMEs in TTS Regency, which still face limitations in capital, technology, human-resource capacity, and market access.

E. SWOT Analysis: Alternative Strategies

The SWOT matrix generated nine alternative strategies across four strategic clusters, as summarized in Table 4.

Table 4. SWOT Analysis Results: Alternative Strategies

Strategy	Code	Alternative Strategy Description
SO – Strengths–Opportunities (Aggressive Strategy)	S1	Expand marketing through digital media.
	S2	Build customer trust through legally compliant products.
	S3	Produce goods that meet customer preferences at competitive prices.
WO – Weaknesses–Opportunities (Turnaround Strategy)	S4	Use advances in digital technology for financial recordkeeping.
	S5	Establish partnerships.
	S6	Utilize Local Government support.
ST – Strengths–Threats (Diversification Strategy)	S7	Develop product innovations that create added value.
	S8	Maintain food-product quality by optimizing business capital.
WT – Weaknesses–Threats (Defensive Strategy)	S9	Develop business management and production efficiency.

Source: Primary Data Analysis, 2026

Expanding marketing through digital media is an important strategy for improving the competitiveness of household food-product MSMEs. The findings show that most business actors still market their products locally and have not optimally utilized digital technology. According to Kotler and Keller (2016), digital marketing enables business actors to reach a broader consumer base at a relatively lower cost than conventional marketing. This strategy is consistent with Haryadi et al. (2025), who showed that digital *marketing* contributes to improved MSME competitiveness by expanding market access and increasing interaction with consumers. Expanding marketing through digital media can help MSMEs increase sales volume while enlarging their market share.

Building customer trust through legally compliant products is an important factor in strengthening consumer confidence. According to BPOM (2018), the legality of food products guarantees that marketed products have met food-safety standards and are fit for consumption. This strategy is consistent with Hutagalung and Parhusip (2024), who found that business legality increases business credibility, strengthens consumer trust, and expands market access. Therefore, this strategy is highly important for strengthening the competitiveness of household food MSMEs.

Producing goods that meet customer preferences at competitive prices is a form of market orientation that can improve competitiveness. This strategy is consistent with Pramudya et al. (2025), who emphasized that MSMEs must adapt their products to customer needs and preferences while maintaining competitive prices. However, Ibrahim and Fachrian (2025) found that products tailored to customer demand do not automatically encourage purchases because consumers are also influenced by competing similar products. According to Porter (1990b), product differentiation is a major strategy for building competitive advantage. Therefore, producing goods that meet customer preferences at competitive prices should be supported by adding value to the product in order to stimulate purchasing power despite the presence of competitors.

Using advances in digital technology for financial recordkeeping enables business actors to understand the condition of their businesses. According to Tambunan (2009), weak administration and financial recordkeeping constitute major barriers to MSME development. This strategy can therefore help business actors improve administrative efficiency, prepare simple financial statements, and make better business decisions.

Establishing partnerships with various parties provides long-term benefits. According to Schmitz (1995), cooperation among business actors and supporting institutions can create collective efficiency that contributes to improving the competitiveness of small enterprises. Partnerships should therefore be expanded through cooperation with government, universities, cooperatives, financial institutions, and the private sector.

Utilizing Local Government support involves training, production-equipment assistance, promotion facilitation, and assistance with business legality. According to Porter (1990b), government does not directly create competitiveness, but shapes the environment in which competitiveness can develop. Accordingly, synergy between business actors and government must continue to be strengthened to improve the effectiveness of MSME development programs. Developing product innovation that creates added value is important for establishing competitive advantage. According to Barney (1991), innovation can be a source of competitive advantage that is difficult for competitors to imitate. This strategy is consistent with Haryadi et al. (2025), who stated that product innovation is a major factor in improving MSME competitiveness. Product innovation is therefore essential for attracting consumers.

Maintaining the quality of food products by optimizing business capital is crucial to business success. According to Kotler and Keller (2016), high product quality increases customer satisfaction and loyalty. This is consistent with Sulistiyawan et al. (2024), who explained that a key to competitive advantage is the ability of MSMEs to optimize capital through product innovation, the use of digital technology, and more competitive workforce management. Strengthening business capital is necessary so that business actors can sustainably maintain the quality of raw materials, production processes, and product packaging.

Developing business management and production efficiency is necessary to improve productivity and business sustainability. According to Baum and Ingram (2000), organizational capacity development improves a business's ability to adapt to changes in the business environment. Therefore, improving managerial capacity, business planning, and the use of production technology should receive attention in the development of household food-product MSMEs.

F. AHP Analysis: Strategic Priorities

The AHP hierarchy consists of three levels: (1) *Goal*: Strategy for Developing Competitive Household Food-Product MSMEs in TTS Regency; (2) factor level, comprising local raw materials, business legality, human resources, infrastructure and logistics access, government support, and digital technology; and (3) alternative level, comprising nine strategies. The analysis was conducted using Expert *Choice software* with a *consistency index* of ≤ 0.10 .

The AHP results show that Business Legality has the highest priority (0.242), followed by digital technology (0.185), human resources (0.178), local raw materials (0.168), government support (0.116), and infrastructure and logistics access (0.111), as shown in Table 5.

Table 5. Factor Weights and Priorities Relative to the Goal (AHP)

Priority	Factor	Weight
1	Business Legality	0,242
2	Digital Technology	0,185
3	Human Resources (HR)	0,178
4	Local Raw Materials	0,168
5	Government Support	0,116
6	Infrastructure and Logistics Access	0.111

Source: Expert *Choice Results*, 2026

The weights of the alternative strategies generated by the Expert *Choice application* are presented in Table 6.

Table 6. Priority Ranking of Alternative Strategies

Priority	Code	Strategy	Weight
1	S2	Build customer trust through legally compliant products	0,220
2	S4	Use advances in digital technology for financial recordkeeping	0,113
3	S3	Produce goods that meet customer preferences at competitive prices	0,110
4	S1	Expand marketing through digital media	0,104
5	S6	Utilize Local Government support	0,101
6	S8	Maintain food-product quality by optimizing business capital	0,100
7	S7	Develop product innovations that create added value	0,096
8	S5	Establish partnerships	0,080
9	S9	Develop business management and production efficiency	0,077

Source: Expert *Choice Results*, 2026

The AHP results confirm that business legality is the most influential factor (0.242) in MSME development strategies. This finding is consistent with Hutagalung and Parhusip (2024), who showed that business legality positively affects consumer trust and business sustainability. In TTS Regency, product legality—such as halal certification, a Business Identification Number (NIB), a Home Industry Food Production Certificate (PIRT), and other distribution permits—is an important indicator used by consumers to assess the safety and quality of food products. Products with complete legal documentation are more readily accepted by modern markets, eligible to participate in exhibitions, able to receive government assistance, and better positioned to cooperate with distributors and financial institutions.

The AHP results show that the principal strategic alternative available to business actors is building customer trust through legally compliant products (0.220). The subsequent priorities are using advances in digital technology for financial recordkeeping (0.113), producing goods that meet customer preferences at competitive prices (0.110), expanding marketing through digital media (0.104), utilizing Local Government support (0.101), maintaining food-product quality by optimizing business capital (0.100), developing product innovation that creates added value (0.096), establishing partnerships (0.080), and developing business management and production efficiency (0.077).

The highest-priority strategy is to build customer trust through legally compliant products (0.220), which constitutes an SO strategy. This strategy is highly relevant because the main strengths—product packaging already equipped with labels (the highest IFE strength score: 0.371) and the fact that some products have halal certification (0.360)—have already been implemented by many TTS MSMEs. This strategy is considered the most effective because it can have broad impacts on various aspects of business, including marketing, access to financing, partnerships, and consumer protection. Overall, the AHP results show that developing MSME competitiveness cannot focus solely on increasing production and marketing, but must begin by strengthening business and product legality.

CONCLUSION

This study examined strategies for developing the competitiveness of household food-product MSMEs in South Central Timor Regency, Indonesia, using an integrated framework *comprising the Porter Diamond Model*, SWOT, and AHP. The following conclusions can be drawn:

First, based on the *Porter Diamond Model analysis*, the competitiveness of household food-product MSMEs in South Central Timor Regency is influenced by factor conditions, demand conditions, related and supporting industries, firm strategy, structure and rivalry, chance, and government support. The availability of local raw materials is the main strength, whereas limited technology, infrastructure, logistics access, and managerial capacity remain the principal constraints.

Second, the SWOT analysis produced nine alternative development strategies consisting of SO, WO, ST, and WT strategies. These strategies include expanding digital **marketing**, strengthening product legality, developing product innovation, improving product quality, producing goods in accordance with customer preferences, utilizing digital technology, establishing business partnerships, utilizing government support, strengthening business capital, and improving the efficiency of business management.

Third, based on the Analytic *Hierarchy Process* (AHP) results, the priority strategy for developing the competitiveness of household food-product MSMEs in South Central Timor Regency is to build customer trust through legally compliant products. This strategy is considered the most important because it can increase consumer confidence, expand market access, and create opportunities to obtain financing support and business partnerships.

These findings provide practical recommendations for various stakeholders. The South Central Timor Regency Government should expand assistance programs for business legality, halal certification, digital marketing, and access to financing for household food-product MSME actors. MSME actors should improve their financial-recording capabilities, utilize digital technology in marketing and business administration, and strengthen the legality of their businesses and products. Future research may develop the analytical model by integrating the *Quantitative Strategic Planning Matrix* (QSPM), *Analytic Network Process* (ANP), or *Structural Equation Modeling* (SEM) to obtain more comprehensive strategies.

REFERENCES

- Afkarina, I., Sutikno, B., & Wardani, P. S. (2026). Analisis SWOT Dalam Menentukan Strategi Pemasaran Pada PT. Fical Transport Indonesia. *Jurnal Manajemen Dan Akutansi*, 14(1), 136–149.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Baum, J. A. C., & Ingram, P. (2000). Interorganizational learning and network organization: toward a behavioral theory of the interfirm. In *The Economics of Choice, Change and Organization*.
- BPOM. (2018). *Peraturan Badan Pengawas Obat dan Makanan Republik Indonesia Nomor 22 Tahun 2018 tentang Pedoman Pemberian Sertifikat Produksi Pangan Industri Rumah Tangga*. <https://www.pom.go.id>
- BPS NTT. (2025). *Jumlah Perusahaan Industri Mikro dan Kecil Menurut Kabupaten/Kota*. <https://ntt.bps.go.id>
- David, F. R. (2016). *Manajemen Strategik Konsep* (D. A. Halim (ed.); Bahasa ind). Salemba Empat.
- Dinas PPK&UMKM. (2025). *Direktori Perusahaan Industri Kecil dan Menengah*.
- Haryadi, W., Mustofa, A., & Yunus, E. (2025). Integrasi Inovasi Produk, Digital Marketing, dan Kompetensi SDM sebagai Strategi Peningkatan Keunggulan Kompetitif UMKM di Era Society 5.0. *Jurnal Riset Ilmiah*, 4(11), 3401–3410.
- Hutagalung, C. S. I. B., & Parhusip, N. A. (2024). Mengenal Manfaat Legalitas Usaha UMKM. *Jurnal Ilmiah Wahana Pendidikan*, 10(June), 98–106.
- Ibrahim, A. M., & Fachrian, Z. (2025). Hubungan Kualitas Produk dengan Keputusan Pembelian melalui Harga Kompetitif: Studi Kasus pada Badan Jurnal X. *Jurnal Bisnis Dan Ekonomi*, 3(01), 42–58.
- Kemen UMKM. (2025). *UMKM Dalam Angka*. <https://umkm.go.id>
- Kotler, P., & Keller, K. L. (2016). *Marketing Management* (15th ed). Pearson Education.
- Marimim, & Maghfiroh, N. (2010). *Aplikasi Teknik Pengambilan Keputusan dalam Manajemen Rantai Pasok*. IPB Press.
- Porter, M. E. (1990a). *Competitive Advantage: Creating and Sustaining Superior Performance* Porter. The Free Press A Division of Macmillan, Inc.
- Porter, M. E. (1990b). The competitive advantage of nations. *Competitive Intelligence Review*, 1 Edisi 1.
- Pramudya, M. F., Putri, N., & Sanjaya, V. F. (2025). Analisis Diamond Strategy Framework Dalam Pengembangan UMKM: Studi Kasus Pada Ayam Geprek Farhan di Bandar Lampung. *Manajemen, Bisnis Dan Organisasi*, 1(November), 48–59.
- Rangkuti, F. (2021). *Teknik Membedah Kasus Bisnis: Analisis SWOT* (26th ed). PT Gramedia Pustaka Utama.
- Ricardo, D. (2015). *On the Principles of Political Economy and Taxation* (Cambridge). Cambridge University Press.
- Saaty, R. W. (1987). The analytic hierarchy process-What it is and how it is used. *Mathematical Modelling*, 9(3–5), 161–176. [https://doi.org/10.1016/0270-0255\(87\)90473-8](https://doi.org/10.1016/0270-0255(87)90473-8)
- Schmitz, H. (1995). Collective Efficiency: Growth Path For Small-Scale Industry. *The Journal of Development*

Studies, 31(4), 529–566. <https://doi.org/10.1080/00220389508422377>

- Sembiring, E. C., Tobi, M. H., Farhan, M., Aris, Samjaya, M. A., Maha, R. P., & Feti. (2026). Peran Marketplace Shopee, Tokopedia dan TikTok Shop terhadap Peningkatan Kinerja UMKM di Indonesia. *Jurnal Ilmiah Wahana Pendidikan*, 12, 98–107.
- Suci, A. W., Gienanti, A. A., & Sanjaya, V. F. (2026). Analisis Daya Saing UMKM Sektor F & B Menggunakan Porter ' s Diamond Model : Studi Kasus Natsu Coffee and Ice Creamal. *Jurnal Ekonomi*, 02(01), 25–33.
- Sulistiyawan, E., Istikhoroh, S., Lasiyono, U., Alam, Wira Yudha Miradji, M. A., & Prasetyo, A. (2024). Optimalisasi Manajemen Strategi Untuk Menjadikan UMKM Yang Unggul Dalam Persaingan Bisnis. *Jurnal Pengabdian Masyarakat*, 5(2721–9933).
- Susilowati, H., Ratnaningrum, Andriana, M., Hargyatni, T., & Sholihah, E. (2022). *Kinerja Bisnis UMKM Di Era Digital* (D. Widyaningsih (ed.); Oktober 20). Eureka Media Aksara.
- Tambunan, T. (2009). *UMKM di Indonesia*. Ghalia Indonesia.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic Capabilities and Strategic Management. *Knowledge and Strategy*, 18, 509–533.
- Wijaya, A. S. G. (2023). Meningkatkan Kinerja UMKM Melalui Pendampingan Manajerial. *Jurnal Peradaban Masyarakat*, 3(3), 2023. <https://journal-stiehidayatullah.ac.id/index.php/peradaban>
- Wijaya, M., Dwiguna, M., & Sanjaya, V. F. (2026). The Role of Technology and Digital Competence in The E-Commerce Strategy of Umkm Mie Jebew Bandar Lampung Based on The Diamond Strategy Approach Peran Teknologi Dan Kompetensi Digital Dalam Strategi E-Commerce UMKM Mie Jebew Bandar Lampung Berdasarkan Pen. *Jurnal Manajemen, Ekonomi, Bisnis Dan Kewirausahaan*, 1(1), 18–36.
- Zed, E. Z., Purnamasari, P., Nugroho, D., & Nawangsih, I. (2024). Pelatihan Pengembangan Produk Olahan Pangan Lokal Untuk Meningkatkan Daya Saing Di Pasar Kabupaten Bekasi. *Jurnal Pengabdian Kepada Masyarakat*, 2(6), 314–322.