

MARKETING STRATEGY FOR PROCESSED SMOKED FISH PRODUCTS ON THE MICRO, SMALL, AND MEDIUM SCALE POKLAHSAR IN TEGAL CITY

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ABSTRACT

Tegal City, located on the northern coast of Central Java, boasts abundant marine resources that support its thriving fisheries sector. However, the city faces various sustainable challenges in the processing of smoked fish by micro, small, and medium-scale Processing and Marketing Groups (Poklahsar), including obstacles in production, marketing, and product development. This research aims to formulate marketing strategies for smoked fish products processed by Poklahsar to increase sales. Using a qualitative and descriptive approach, this study involved 36 respondents from smoked fish processors. Data were collected through observation, interviews, and questionnaires to understand the socio-economic and technical conditions of Poklahsar. SWOT analysis was conducted to identify internal and external factors affecting marketing. The results indicate that the main strengths of the smoked fish business lie in the quality of raw materials, the availability of labor, and the market acceptance of the product's unique taste. However, weaknesses include limited packaging and marketing capabilities, as well as a lack of knowledge about information technology. Externally, there are opportunities to enter modern markets and utilize marketing technology, but challenges such as poor sanitation and intense competition pose threats. Based on the SWOT analysis, the business is positioned in quadrant 2, indicating that product diversification is the best approach to enhance competitiveness. Key recommendations include packaging innovation, capacity building for business actors, collaboration with the government, and strengthening distribution channels. Implementing these strategies is expected to increase sales and competitiveness of smoked fish products in Tegal City.

Keywords: Marketing strategy; smoked fish; SWOT analysis; MSME.

INTRODUCTION

Tegal City has abundant marine resources and has the potential to meet the needs of the community located on the north coast of Java Island, especially Central Java. With an area of 39.65 km² and a coastline of 10.5 km, the existence of fish landing sites (TPI) such as TPI Port, TPI Tegalsari, and TPI Muarareja have contributed significantly to the development of the fisheries and marine sector in this city. The progress of the marine and fisheries sector in Tegal City has great potential to improve the regional economy, primarily through fish auction places, which play an essential role in providing raw materials for fisheries industrialization (Mardani et al., 2018). The volume and value of fish production in Tegal City reveals a significant upward trend in the fish processing industry. Notably, the production volume in 2023 reached an impressive 87,220,641 kg, more than doubling the previous year's figures. Correspondingly, the production value in 2023 soared to Rp 2,742,505,325,950.00, the highest recorded in the dataset. Additionally, the average price per kilogram also peaked in 2023 at Rp 33,248 (Tegalsari Coastal Fishing Port Data Center, 2024). This data underscores a substantial increase in both production volume and value, highlighting the industry's robust growth over the past decade.

The fish processing industry has grown rapidly, especially in the micro, small, and medium enterprises (MSMEs) sector. Based on information from the Marine and

Fisheries Service, processed products such as smoked fish, shrimp paste, and pindang fish are produced by various registered processor and marketer groups (Poklahsar).

However, this industry faces challenges in terms of production and marketing (Vibriyanti, 2014). The main challenges in the smoked fish industry in Tegal City include the arrangement of the layout of production facilities, such as smoking kitchens, cleaning rooms, sorting rooms, packaging rooms, and storage rooms. The processing process also faces sanitation, hygiene, and recording obstacles and requires special attention to product packaging and storage. Only certain types of fish, such as etong, stingray, tuna, and others, can be processed into smoked fish, while the availability of raw materials is often limited and fluctuating.

Connecting these challenges to global trends, sustainability in fisheries is a significant concern worldwide. The fluctuating availability of raw materials for smoked fish production underscores the need for sustainable fishing practices to ensure the long-term viability of fish stocks. Additionally, the rise of digital marketing presents a substantial opportunity for MSMEs in the fish processing sector. Leveraging digital platforms can help these enterprises reach wider audiences, enhance visibility, and overcome traditional marketing barriers, thereby contributing to the global effort to protect marine ecosystems and biodiversity while connecting directly with consumers and potentially expanding into new markets.

Marketing problems are also significant, where smoked fish products have not penetrated the modern market, such as outlets in shopping centers, and no special outlets market the product. The lack of clear labels or brands causes the product's brand image not to be formed. Simple packaging, such as plastic baskets or oil paper, makes it difficult to store for the long term and hinders promotion in the modern market. Other problems identified by Kurnia (2018), include the weak marketing network for production results and limitations in mastering and developing technology. Sales are made directly to consumers, either through direct visits or through traders in traditional markets, with communication assisted by mobile phones.

Facing these various problems, smoked fish processors hope to increase their sales turnover with government support, especially in providing production facilities and infrastructure to develop marketing channels (Lee, G., Coles, J., & Hughes, 2024). This support, especially in terms of coaching and education, covers all aspects of the smoked fish business, from the production process to marketing. It is hoped that with better support, smoked fish processors can increase their sales and expand the reach of their products outside the Tegal City area.

To address the identified challenges and implement the proposed strategies, government agencies play a critical role in providing funding, infrastructure, and policy support. This includes facilitating access to modern production facilities, ensuring compliance with hygiene and sanitation standards, and offering training programs to enhance technical skills and marketing capabilities. Additionally, the government can assist in developing new marketing channels and platforms to help Poklahsar reach a broader audience. Poklahsar itself is pivotal in the practical application of these strategies, fostering collaboration among members to optimize production processes, maintain quality standards, and innovate product offerings. By actively participating in government-sponsored training and development programs, Poklahsar can better leverage the available resources to enhance their operations. Other partners, such as non-governmental organizations, industry experts, and academic institutions, can offer valuable support through research, expertise, and market insights. They can help in conducting market analysis, developing sustainable fishing practices, and providing technical assistance to improve production efficiency and product quality. Together, these stakeholders can create a synergistic environment that supports the growth and sustainability of the smoked fish industry in Tegal City.

Therefore, this study aims to formulate an effective marketing strategy for smoked fish products processed by Poklahsar in Tegal City. By analyzing social, economic, and technical conditions and applying SWOT analysis, the resulting marketing strategy is expected to increase sales and expand market reach. In addition, support from the government and related stakeholders is very important to create a conducive environment for the growth of this industry.

RESEARCH METHODS

This research was conducted in Tegal City, specifically in the smoked fish processing center located in Tegalsari, Muarareja, and Jl. Kurma, all of which are in the Tegal Barat sub-district. The researcher chose this location

because the area has smoked fish processors who are members of the Poklahsar under the auspices of the Tegal City Marine and Fisheries Service. The method used in this study is a qualitative approach, which facilitates the collection of descriptive data through direct observation, interviews, and documentation. This methodology allows for an in-depth analysis of the socio-economic and technical conditions of micro, small, and medium enterprises (Poklahsar) involved in smoked fish production. By using qualitative methods, researchers can gain valuable insights into the unique needs and constraints of these enterprises, facilitating the development of targeted and practical interventions to enhance productivity, hygiene practices, marketing strategies, and overall sustainability in the fish processing industry.

Primary data collection was conducted through direct observation of activities at the smoked fish processing center and in-depth interviews with 36 smoked fish processors. Additional interviews were conducted with one Tegal City Marine and Fisheries Service official, one Cooperatives and Small and Medium Enterprises Service representative, and two fisheries extension workers to supplement the data. According to Cohen and Manion (2007) and Marlien (2022), 36 respondents from smoked fish processors were considered adequate because a sample size exceeding 30 would be closer to a normal curve distribution.

Secondary data was collected from existing documents, reports, and previous studies relevant to smoked fish marketing strategies. These data sources complement the primary data, providing a broader context to the research findings.

The data collection instruments used include structured questionnaires and observation lists. Before data collection, respondents were explained the purpose of the study and the questionnaire. Criteria for inclusion included active membership in Poklahsar, involvement in smoked fish processing, and availability for interviews. The sampling process was purposive, targeting individuals who could provide rich, detailed information about the socio-economic and technical aspects of smoked fish processing. The questionnaire was designed by involving experts to ensure its suitability to the needs of the research analysis.

Data was collected using three main methods: observation, interview, and documentation. Observation was conducted systematically and structured to collect data in the subject's natural environment. Direct observation was conducted at the smoked fish processing center to record various phenomena related to smoked fish production. Interviews were conducted using an open-ended interview method to encourage more detailed participant responses. A pre-prepared questionnaire was used to guide the interview, involving members and heads of Poklahsar and related parties such as fisheries extension workers. The documentation method collected information from relevant documents at the smoked fish processing center, including operational records and marketing materials.

Data analysis was conducted using Microsoft Excel, focusing on descriptive and contextual analysis. The analysis framework includes:

- a. Analyze the social, economic, and technical conditions of Poklahsar, which is involved in smoked fish production, from production to marketing.
- b. Conduct a SWOT analysis to assess internal strengths and weaknesses and external opportunities and threats.

- c. Formulate marketing strategies that can be applied to smoked fish products to increase sales.

The steps in the SWOT analysis used in this study are explained as follows:

1. Identification of Internal and External Factors

The first step in the SWOT analysis is to identify internal factors including strengths and weaknesses, as well as external factors including opportunities and threats for the smoked fish processing industry in Tegal City. Internal factor data was obtained through interviews and direct observation of smoked fish processors, while external factors were identified based on literature, library studies, and interviews with related agencies, such as the Marine and Fisheries Service.

| | | |
|--|--|--|
| Internal factors | STRENGTHS (S) Determine 3-10 internal strength factors | WEAKNESS(W) Determine 3-10 internal weakness factors |
| | EXTERNAL FACTORS | |
| OPPORTUNITIES(O) Determine 3-10 external opportunity factors | STRATEGY - SO Create strategies to leverage strengths to take advantage of opportunities | STRATEGY - WO Create strategies that minimize weaknesses to take advantage of opportunities. |
| THREATS(T) Determine 3-10 external opportunity factors | STRATEGY - ST Create strategies to maximize strengths to overcome threats. | STRATEGY - WT Create strategies that minimize weaknesses to avoid threats. |

Figure 1. SWOT Matrix (Source: Rangkuti, 2015)

2. Determination of Weight and Score

Each identified internal and external factor is then analyzed to determine its importance to the marketing strategy. Each factor is given a weight based on its level of influence on a scale of 0.0 to 1.0, where the total weight for internal (IFAS) and external (EFAS) factors is 1.0 each. Furthermore, each factor is given a rating (score) based on its impact on the marketing strategy, with a value of 1 (very weak) to 4 (very strong) for strengths and opportunities, while for weaknesses and threats, a value of 1 indicates a very large influence and a value of 4 indicates the smallest influence. The weights are then multiplied by the scores to obtain the total value of each factor.

3. Preparation of SWOT matrix

After determining the total score of internal and external factors, the next step is to compile a SWOT matrix. This matrix allows for matching between internal and external factors to identify the position of the smoked fish processing business in the SWOT quadrant. The position of the quadrant will determine the strategy to be taken, namely.

4. Strategy Formulation

Based on the results of the SWOT matrix analysis, this study then formulated several alternative marketing strategies. Each strategy produced will be adjusted to the position of the smoked fish processing industry in the SWOT matrix. If the analysis shows a position in Quadrant I, the strategy implemented is aggressive growth, such as product diversification and packaging innovation. Meanwhile, if it is in Quadrant IV, the focus of the strategy will shift to efficiency and defensive steps to face challenges.

RESULT AND DISCUSSION

Respondents Overview

The characteristics of the respondents used in this study were 36 smoked fish processors who were classified based on age, education, and gender.

Age

Table 2. Respondents based on Age

| Age Group (Years) | Number of Respondents | Percentage (%) |
|-------------------|-----------------------|----------------|
| 20 – 30 | 1 | 3% |
| 31 – 40 | 7 | 19% |
| 41 – 50 | 10 | 28% |
| 51 – 60 | 12 | 33% |
| > 60 | 6 | 17% |
| Total | 36 | 100% |

Source: Processed primary data, 2024

Table 2 shows the age distribution of smoked fish processors, most of whom are in the middle-aged to elderly age group (41-60 years). Younger smoked fish processors (under 40 years) are relatively few, which may indicate challenges in workforce regeneration in this industry. Skills in smoked fish processing are more common among older people, which may be due to factors such as experience, skills inherited from their predecessors, and economic stability. This could be a concern for the sustainability of the industry in the future if the younger generation is not interested or not involved in smoked fish processing.

Education

Table 3. Respondents based on Education

| Level of education | Number of Respondents | Percentage (%) |
|---------------------------------|-----------------------|----------------|
| Didn't Finish Elementary School | 2 | 6% |
| Elementary School | 26 | 72% |
| Junior High School | 2 | 6% |
| Senior High School | 6 | 17% |
| Diploma/ Bachelor Degree | 0 | 0% |
| Total | 36 | 100% |

Source: Processed primary data, 2024

From Table 3, it can be seen that the majority of smoked fish processors only have an elementary school education. This shows that the industry is dominated by smoked fish processors with low levels of formal education, which could challenge increasing capacity and business development in the future. This challenge will be especially felt if the industry requires the adoption of new technologies or more complex management. The lack of higher education among processors can also limit innovation and sustainable business development. Therefore, an education-based approach and special training may be needed to improve the skills and knowledge of smoked fish processors. Table 4 shows that women, namely 89%, mainly do this work.

Gender

Table 4. Respondents based on Gender

| Gender | Number of Respondents | Percentage (%) |
|--------|-----------------------|----------------|
| Man | 4 | 11% |
| Woman | 32 | 89% |
| Total | 36 | 100% |

Source: Processed primary data, 2024

Social, Economic, and Technical Conditions of the Smoked Fish Poklahsar

Smoked fish products have become an essential part of the consumption culture of the people of Tegal City. This can be seen from the frequency of purchases and consumer preferences that consider smoked fish as healthy, cheap, and delicious food. This product is also popular in big events, such as weddings and family gatherings, this shows that smoked fish has a high social and cultural value in the Tegal community (RN Anisah & Susilowati, 2007). Consumer understanding of product quality shows that they want fresh products with a distinctive taste (Jumiati, 2012).

In terms of economy, smoked fish products show quite good competitiveness with relatively low prices compared to similar products. Competitive pricing, IDR 2,500 per slice for the basket price and IDR 3,000 for the end consumer, shows that this product is still accessible to various groups. This affordable price is one of the essential factors that keeps the demand for the product high (Ahmad & Anders, 2012). Table 5 illustrates that the most common smoked fish production volume is 50 kg per day. The distribution of production volume varies, ranging from 10 kg to 1000 kg per day, but most respondents produce between 30 and 70 kg per day. Thus, most smoked fish sellers in Tegal City operate on a small to medium scale.

Table 5. Amount of Smoked Fish Per Day in Tegal City

| Volume of smoked fish produced (kg) | Respondents | Percentage (%) |
|-------------------------------------|-------------|----------------|
| 30 | 3 | 8% |
| 40 | 5 | 14% |
| 10 | 1 | 3% |
| 50 | 14 | 39% |
| 60 | 3 | 8% |
| 70 | 4 | 11% |
| 75 | 2 | 6% |
| 100 | 1 | 3% |
| 150 | 1 | 3% |
| 200 | 1 | 3% |
| 1000 | 1 | 3% |
| Total | 36 | 100% |

The smoked fish production process in Tegal City involves several essential variables, including quality and production efficiency. Technically, the smoked fish production process still uses traditional methods, such as smoking using coconut shells. The smoking process lasts for three hours at a temperature of 65-70°C. Although this method provides a distinctive taste, health risks due to carcinogenic HPA compounds must also be considered. However, the level of toxicity can be reduced through distillation and filtration processes so that it is safe for food processing (Sarifudin et al., 2023)

From the packaging aspect, smoked fish products only packed in open baskets are very susceptible to contamination and reduce the product's shelf life. This makes it difficult for the product to penetrate a broader market, especially the modern market that requires good packaging quality (Carrasco et al., 2012).

SWOT Analysis Results

In formulating a marketing strategy for processed smoked fish products, the SWOT analysis method is used to classify data into four main categories. These categories include strengths and weaknesses, internal factors (IFAS), and opportunities and threats, which are part of external factors (EFAS). The data obtained are then analyzed in the IFAS Table (Table 7) and EFAS (Table 8) to provide a clear picture of the business position.

Table 6. Internal and External Factors Identification

| Strengths | Weaknesses |
|--|--|
| 1. High quality raw materials | 1. There is no packaging or label yet |
| 2. Available workforce | 2. Marketing in traditional markets |
| 3. Processors in Poklahsar have a joint business establishment number | 3. Production management (storage/freezer) is not yet available |
| 4. Key knowledge about fish quality in traditional processing | 4. Marketing management is not yet optimal |
| 5. Smoked fish products are acceptable to the market | 5. Lack of capital |
| 6. There is a demand for smoked fish (following market trends) | 6. Lack of mastery of information technology in marketing |
| 7. There is continuous sale of smoked fish | 7. Limited marketing reach of production results |
| 8. Simple and easy processing technology | 8. Lack of product promotion |
| 9. Smoked fish prices are affordable for consumers | 9. There is no administration for recording the sale of smoked fish. |
| 10. Consumers love the distinctive taste of smoked fish | 10. Fluctuating raw material prices |
| 11. The existence of a target consumer of smoked fish | 11. Lack of cooperation in marketing with related stakeholders |
| 12. The existence of smoked fish product segmentation | 12. Lack of maintenance of abandoned government-assisted smokehouses |
| 13. Continuous availability of smoke-supporting materials (coconut shells) | 13. Low education level (elementary school) |
| 14. Regular gathering/arian once a month | 14. Lack of knowledge of product marketing technique development |
| 15. The existence of distribution channels | |
| Opportunities | Threats |
| 1. Opportunities for smoked fish in modern markets/supermarkets | 1. Sanitation and hygiene are still lacking |
| 2. Smoked fish is a | 2. Short shelf life of smoked fish |

| | |
|--|---|
| superior local product | 3. Raw materials are not continuous because they depend on the weather |
| 3. The development of marketing information technology | 4. Increase in the price of raw fish and supporting materials |
| 4. City government's attention to smoked fish UMKM | 5. Irregular production process layout |
| 5. Partnership system between large, small, and medium entrepreneurs | 6. Construction of a production room building that does not meet production standards |
| 6. The economic growth of Tegal City is increasing | 7. Limited Marketing Area |
| 7. Has the potential to become a center for smoked fish in Tegal city | 8. Many competitors of similar products |
| 8. Has the potential to become a tourist area (domestic tourists visit to buy souvenirs) | 9. Lack of smoked fish product packaging technology |
| | 10. Not producing due to unfavorable weather (rain) |
| | 11. Rise in fuel prices |

Source: Processed primary data, 2024

Table 7. Strengths and Weaknesses Calculation Results

| No | Internal Factors | Weight | Rating | Score |
|------------------|--|--------------|-----------|--------------|
| Strengths | | | | |
| 1 | High quality raw materials | 0.040 | 4 | 0.150 |
| 2 | Available workforce | 0.039 | 4 | 0.141 |
| 3 | Processors in Poklahsar have a joint business establishment number | 0.031 | 3 | 0.096 |
| 4 | Key knowledge about fish quality in traditional processing | 0.036 | 4 | 0.128 |
| 5 | Smoked fish products are acceptable to the market | 0.041 | 4 | 0.147 |
| 6 | There is a demand for smoked fish (following market trends) | 0.039 | 4 | 0.137 |
| 7 | There is continuous sale of smoked fish | 0.036 | 4 | 0.127 |
| 8 | Simple and easy processing technology | 0.035 | 3 | 0.123 |
| 9 | Smoked fish prices are affordable for consumers | 0.038 | 4 | 0.141 |
| 10 | The distinctive taste of smoked fish is loved by consumers | 0.040 | 4 | 0.147 |
| 11 | The existence of a target consumer of smoked fish | 0.031 | 3 | 0.092 |
| 12 | The existence of smoked fish product segmentation | 0.036 | 3 | 0.107 |
| 13 | Continuous availability of smoke supporting materials (coconut shells) | 0.038 | 3 | 0.115 |
| 14 | Regular gathering/arisan once a month | 0.041 | 3 | 0.131 |
| 15 | The existence of distribution channels | 0.031 | 3 | 0.092 |
| Total | | 0.552 | 51 | 1,875 |

| Weaknesses | | | | |
|-------------------|---|--------------|-----------|--------------|
| 1 | There is no packaging or label yet | 0.031 | 2 | 0.047 |
| 2 | Marketing in traditional markets | 0.033 | 2 | 0.065 |
| 3 | Production management (storage/freezer) is not yet available | 0.031 | 2 | 0.056 |
| 4 | Marketing management is not yet optimal | 0.031 | 2 | 0.059 |
| 5 | Lack of capital | 0.036 | 2 | 0.067 |
| 6 | Lack of mastery of information technology in marketing | 0.031 | 2 | 0.053 |
| 7 | Limited marketing reach of production results | 0.031 | 2 | 0.058 |
| 8 | Lack of product promotion | 0.029 | 2 | 0.049 |
| 9 | There is no administration for recording the sale of smoked fish. | 0.031 | 1 | 0.042 |
| 10 | Fluctuating raw material prices | 0.033 | 2 | 0.059 |
| 11 | Lack of cooperation in marketing with related stakeholders | 0.031 | 1 | 0.044 |
| 12 | Lack of maintenance of abandoned government-assisted smokehouses | 0.035 | 2 | 0.063 |
| 13 | Low education level (elementary school) | 0.036 | 2 | 0.069 |
| 14 | Lack of knowledge of product marketing technique development | 0.030 | 1 | 0.043 |
| Total | | 0.448 | 24 | 0.775 |
| Total IFAS | | 1,000 | | 1,100 |

Source: Processed primary data, 2024

Table 8. Opportunities and Threats Calculation Results

| No | External Factors | Weight | Rating | Score |
|----------------------|--|--------|--------|-------|
| Opportunities | | | | |
| 1 | Opportunities for smoked fish in modern markets/supermarkets | 0.048 | 3 | 0.146 |
| 2 | Smoked fish is a superior local product | 0.062 | 4 | 0.221 |
| 3 | The development of marketing information technology | 0.060 | 4 | 0.212 |
| 4 | City government's attention to smoked fish UMKM | 0.067 | 4 | 0.249 |
| 5 | Partnership system between large, small and medium entrepreneurs | 0.049 | 3 | 0.152 |
| 6 | The economic growth of Tegal city is increasing | 0.055 | 4 | 0.201 |
| 7 | Has the potential to become a center for smoked fish in Tegal city | 0.044 | 3 | 0.117 |
| 8 | Has the potential to become a tourist area (domestic | 0.045 | 4 | 0.101 |

| No | External Factors | Weight | Rating | Score |
|-------------------|--|--------------|-----------|--------------|
| | tourists visit to buy souvenirs) | | | |
| Total | | 0.430 | 25 | 1,397 |
| Threats | | | | |
| 1 | Sanitation and hygiene are still lacking | 0.051 | 3 | 0.145 |
| 2 | Short shelf life of smoked fish | 0.057 | 3 | 0.170 |
| 3 | Raw materials are not continuous because they depend on the weather | 0.055 | 3 | 0.167 |
| 4 | Increase in the price of raw fish and supporting materials | 0.051 | 3 | 0.154 |
| 5 | Irregular production process layout | 0.044 | 3 | 0.124 |
| 6 | Construction of a production room building that does not meet production standards | 0.049 | 3 | 0.138 |
| 7 | Limited Marketing Area | 0.056 | 3 | 0.189 |
| 8 | Many competitors of similar products | 0.047 | 3 | 0.130 |
| 9 | Lack of smoked fish product packaging technology | 0.050 | 3 | 0.149 |
| 10 | Not producing due to unfavorable weather (rain) | 0.057 | 3 | 0.174 |
| 11 | Rise in fuel prices | 0.053 | 3 | 0.151 |
| Total | | 0.570 | 33 | 1,691 |
| Total EFAS | | 1.00 | 58 | - |
| | | | | 0.293 |

Source: Processed primary data, 2024

After the internal and external marketing strategy factors for processed fishery products, such as smoked fish, are known through the SWOT matrix, the next step is to determine the quadrant coordinate points. Determining the quadrant coordinate points is based on the results of the recapitulation of weighting and ratings from IFAS and EFAS. Furthermore, the internal and external analysis coordinate points are determined by subtracting the total strength score from the total weakness score for IFAS, while for EFAS, the total opportunity score is subtracted from the total threat score.

Table 9. Calculation for Quadrant Determination

| | X-axis | | Y-axis | |
|-------------------|--------------|-------------|---------------------------------|--------|
| Strategic factors | Strength | Weakness | Opportunity | Threat |
| Mark | 1,875 | 0.775 | 1,397 | 1,691 |
| | -0.29 | 1.10 | Quadrant II | |
| | | | Diversification strategy | |

Source: Processed primary data, 2024

With the above values, the coordinate point is in Quadrant II, as shown in Figure 2, which indicates that the right strategy is a diversification strategy (Bekaert & Harvey, 2003). In this diversification strategy, it is very important in product development, mainly including improving product quality to become a typical culinary food to increase its selling value, this is in line with the concept of product diversification,

where the variety of smoked fish products can be increased to attract more consumers (Anggrahani et al., 2020).

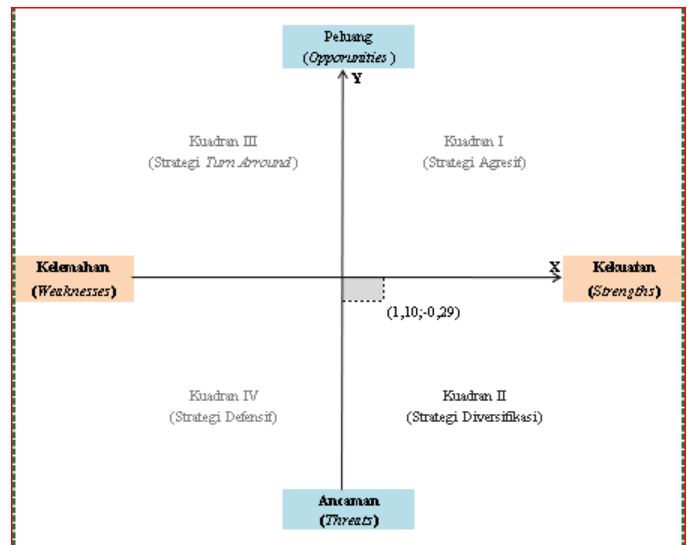


Figure 2. SWOT Quadrant

The SWOT analysis results of Poklahsar Smoked Fish show several essential aspects that influence this business. From the internal side, smoked fish products have significant strengths, such as distinctive taste and affordable prices, facilitating consumer acceptance. Using high-quality raw materials, such as fresh fish and coconut shells, also strengthens the product's position in the market. The simple processing process and the availability of labor provide wider development opportunities.

However, some weaknesses need to be considered. The lack of innovation in packaging and branding makes the product less attractive in the modern market. The limited knowledge of business actors about information technology and digital marketing hinders their ability to reach broader consumers. In addition, suboptimal management and administrative records indicate the need for mentoring for business actors to improve managerial skills.

From an external perspective, some opportunities can be utilized, such as the economic growth of Tegal City and access to modern markets and supermarkets. The government's attention to MSMEs and the development of marketing information technology can be utilized to increase product visibility. However, there are also challenges, such as poor sanitation and hygiene, short product shelf life, dependence on weather conditions for raw materials, and competition with similar products. The increase in raw material prices and limited marketing areas further add to the complexity of the challenges.

This analysis shows that the position of the smoked fish Poklahsar business is in Quadrant II in the SWOT matrix, which means that a diversification strategy is the most appropriate approach to increase competitiveness. Therefore, developing smoked fish derivative products and increasing innovation in packaging are strategic steps that need to be implemented to achieve these goals.

Comparing these findings with existing studies, such as the research by Belichovska and Pejkovski (2019) on smoke and smoked fish production, highlights the unique socio-economic and technical challenges faced by Poklahsar. Additionally, the study by Huda and Praswati (2024) on

enhancing customer relationship management in MSMEs underscores the importance of digital marketing and social media, which aligns with the identified weaknesses in Poklahsar's marketing strategies

Marketing Strategies That Can Be Applied to Poklahsar Smoked Fish Products

SWOT analysis shows that to increase sales of Poklahsar smoked fish products in Tegal City, an effective marketing strategy is needed, as shown in Table 10.

| | | Internal | Strength (S) | Weakness (W) |
|-----------------|---|--|--|---|
| External | | | <ol style="list-style-type: none"> High quality raw materials Available workforce Processors in Poklahsar have a joint business establishment number Key knowledge about fish quality in traditional processing Smoked fish products are acceptable to the market There is a demand for smoked fish (following market trends) There is continuous sale of smoked fish Simple and easy processing technology Smoked fish prices are affordable for consumers The distinctive taste of smoked fish is loved by consumers The existence of a target consumer of smoked fish The existence of smoked fish product segmentation Continuous availability of smoke supporting materials (coconut shells) Regular gathering/artisan once a month The existence of distribution channels | <ol style="list-style-type: none"> There is no packaging or label yet Marketing in traditional markets Production management (storage/freezer) is not yet available Marketing management is not yet optimal Lack of capital Lack of mastery of information technology in marketing Limited marketing reach of production results Lack of product promotion There is no administration for recording the sale of smoked fish. Fluctuating raw material prices Lack of cooperation in marketing with related stakeholders Lack of maintenance of abandoned government-assisted smokehouses Low education level (elementary school) Lack of knowledge of product marketing technique development |
| | Opportunity (O) | | SO Strategy Formulation (F-SO) | WO Strategy Formulation (F-WO) |
| | <ol style="list-style-type: none"> Opportunities for smoked fish in modern markets/supermarkets Smoked fish is a superior local product The development of marketing information technology City government's attention to smoked fish UMKM Partnership system between large, small and medium entrepreneurs The economic growth of Tegal city is increasing Has the potential to become a center for smoked fish in Tegal city Has the potential to become a tourist area (domestic tourists visit to buy souvenirs) | <p>Maximizing the role of government, fisheries extension workers, and related stakeholders in supporting smoked fish products, with a focus on increasing marketing through collaborative promotion and certification programs. Maintaining the best quality of raw materials, maintaining distinctive flavors and competitive prices, and strengthening distribution strategies to ensure that products remain popular with consumers and continue to meet high market demand.</p> | <p>Optimizing the Role of the Fisheries and Marine Service through fisheries extension workers in providing routine assistance, guidance, and consultation to smoked fish processors who are being supervised. This assistance includes improving production management and product marketing through intensive training and the use of information technology. In addition, collaboration with the Cooperatives and SMEs Service and the Tegal City Government will be strengthened to expand the smoked fish product market to modern markets and areas outside Tegal, with support in the form of access to financing and development of packaging that meets modern market standards. It is hoped that Tegal City's smoked fish products can become superior local products that compete in a wider market, with indicators of success in the form of increasing market reach, sales, and product quality.</p> | |

| Threat (T) | Formulation of ST Strategy (F-ST) | Formulation of WT Strategy (F-WT) |
|--|---|---|
| <ol style="list-style-type: none"> 1. Sanitation and hygiene are still lacking 2. Short shelf life of smoked fish 3. Raw materials are not continuous because they depend on the weather 4. Increase in the price of raw fish and supporting materials 5. Irregular production process layout 6. Construction of production room building that does not meet production standards 7. Limited Marketing Area 8. Many competitors of similar products 9. Lack of smoked fish product packaging technology 10. Not producing due to unfavorable weather (rain) 11. Rise in fuel prices | <p>By utilizing the strengths they have, such as high quality smoked fish, distinctive taste, and stable availability of supporting materials, smoked fish processors in Tegal City can continue to maintain and even increase production. To face threats such as many competitors and unfavorable weather, the government and fish processors need to collaborate in developing new packaging technologies that can extend the shelf life of products and ensure that production continues even in less than ideal weather conditions. In addition, to overcome the increase in raw material and fuel prices, it is necessary to procure alternative, more efficient raw materials and subsidy programs from the government. Strengthening distribution channels also needs to be done to expand the marketing area and overcome the limitations of the market area. With these steps, it is hoped that smoked fish in Tegal City can continue to compete and become a product that consumers demand continuously and sustainably. Focusing on technological innovation, collaboration with the government, and strengthening success indicators will help in dealing with existing threats</p> | <p>Building awareness and increasing the capacity of smoked fish processors in Tegal City about the importance of information technology, marketing, and basic production management. This step does not only rely on fisheries extension workers who have limited personnel, but also encourages the activeness of the smoked fish processor groups themselves. With the support of synergy between the Cooperatives and UMKM Service, the Fisheries and Marine Service, and the city government, it is hoped that processors can be more independent and adaptive in facing existing threats. Implementing simple technology training programs, strengthening the poklahsar structure, and participatory monitoring and evaluation will be the keys to ensuring the success of this strategy.</p> |

Source: Processed primary data, 2024

Quadrant I (SO - Strength-Opportunity)

Strategy to use strength to capture opportunities. The company is in a very advantageous position, with good internal strength and external opportunities. The appropriate strategy is aggressive growth.

This strategy is not only aimed at maintaining business sustainability but also to expand market share and improve product competitiveness. Therefore, formulating SO (Strength-Opportunities) strategies that integrate internal strengths with external opportunities is very important to achieve these goals.

First, the basis for developing a strategy is the importance of collaboration between the government, fisheries extension workers, and related stakeholders, such as suppliers and distributors. Government support through regulations, training, and technical and financial assistance will encourage the growth of the smoked fish business. In addition, coordinated promotional programs and product quality certification will increase brand awareness and provide quality assurance to consumers. To maintain customer loyalty, Poklahsar must maintain the quality of raw materials and product taste while setting competitive prices. Finally, strengthening the distribution strategy is crucial to ensure that smoked fish products are always available and easily accessible

to consumers in various regions and open up opportunities to expand the market to new areas.

Quadrant II (WO - Weakness-Opportunity)

Strategy to minimize weaknesses to take advantage of opportunities. The company faces external threats but still has internal strengths. A diversification strategy to take advantage of long-term opportunities can be applied in this situation.

The WO strategy focuses on optimizing the role of related agencies and strengthening collaboration between stakeholders. Through routine assistance from fisheries extension workers, smoked fish processors can receive guidance in production and marketing management, including intensive training and the use of information technology. Cooperation with the Cooperatives and SMEs Agency and the Tegal City Government will also be strengthened to expand the smoked fish product market to modern markets and areas outside Tegal.

With support in the form of access to financing and development of packaging that meets modern market standards, it is hoped that Tegal City's smoked fish products can become superior local products that compete more widely. The success of this strategy can be measured by increasing market reach, sales, and product quality. These steps are not only aimed at overcoming the obstacles faced by smoked fish

processors, but also to maximize existing potential, so that smoked fish products can be recognized and in demand by consumers in a larger market.

Quadrant III (ST - Strength-Threat)

Strategy uses strengths to overcome threats. The company has a large market opportunity but faces several internal constraints. Optimal strategy involves a combination of exploiting opportunities and overcoming internal constraints.

In facing external threats, the formulation of the ST strategy prioritizes utilizing product strengths, such as high quality and distinctive taste. Smoked fish processors must collaborate with the government in developing packaging technology to extend the shelf life of the product. In addition, the procurement of alternative raw materials and subsidy programs from the government can help reduce production costs. The implementation of this ST strategy is expected to have positive impacts such as increased competitiveness, wider market access, and production cost efficiency. With innovation in packaging technology and strengthening distribution channels, smoked fish products can reach consumers in more distant areas, while ensuring that quality is maintained.

Quadrant IV (WT - Weakness-Threat)

Defensive strategies to reduce weaknesses and avoid threats. The company is disadvantaged because it faces external threats and has internal weaknesses. Strategic actions need to be taken to overcome these challenges.

WT's strategy focuses on improving the skills of processors through targeted training, with synergistic support from the Cooperatives and SMEs Service, the Fisheries and Marine Service, and the city government. By optimizing the organizational structure and encouraging independence, it is hoped that operational efficiency can be improved.

Implementing participatory monitoring and evaluation ensures the program runs effectively, allowing processors to provide useful feedback. As a result, Tegal City's smoked fish products can have higher competitiveness, improving quality, production efficiency, and sales in a wider market.

With the description of the existing strategy, the priority strategy to increase smoked fish sales in Poklahsar Tegal City lies in implementing the ST (Strengths-Threats) strategy. Suppliers can maintain and even increase their production by utilizing internal strengths, such as high-quality smoked fish, distinctive taste, and stable availability of raw materials. To face threats, such as tight competition and unfavorable weather conditions, it is essential for the government and fish processors to collaborate in developing innovative packaging technology. This technology will not only extend the product's shelf life, but also ensure continuity of production even in difficult weather conditions. Thus, Tegal City smoked fish products can continue to compete and meet consumer needs effectively.

CONCLUSION

Based on research on marketing strategies for processed smoked fish products at micro, small, and medium-scale Poklahsar in Tegal City, several conclusions can be drawn. First, the smoked fish Poklahsar business has great

potential to be developed, supported by strong social conditions and competitive product prices in the market. However, there are technical challenges that must be faced, such as the use of traditional smoking methods and inadequate packaging, which have an impact on product shelf life and quality.

Based on the SWOT analysis showing the subject's position in Quadrant II, diversification and innovation are identified as the main approaches that need to be implemented to increase competitiveness and expand the market. The importance of collaboration between business actors, government, and other stakeholders is also emphasized, especially in the development of packaging, marketing, and distribution technology to increase the competitiveness of smoked fish products. The Strengths-Threats (ST) strategy is a priority in efforts to increase sales, with a focus on packaging innovation, strengthening distribution, and utilizing internal strengths such as product quality and distinctive taste.

In this regard, several suggestions can be given. First, business actors are advised to adopt modern packaging technology, such as vacuum or modified atmosphere packaging, to extend product shelf life and improve quality. Second, building a stronger distribution network through cooperation with modern retailers, e-commerce, and distributors in wider areas is essential.

Furthermore, increasing the capacity of business actors through intensive training programs related to production management, digital marketing, and packaging technology must be a priority. Building solid partnerships with fishermen and raw material suppliers is also important to ensure a stable supply and reduce the risk of rising raw material prices. Finally, conducting periodic evaluations of the implementation of the formulated strategy will be very helpful in ensuring its effectiveness in increasing the competitiveness and sales of smoked fish products in Tegal City.

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