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Integrating SWOT and Business Model Canvas for MSMEs Development

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ABSTRACT

MSMEs Pempek Koyek is a business engaged in the production of traditional Palembang food, facing several challenges, including a decline in sales due to the COVID-19 pandemic, limited promotional activities, a lack of an online store, and a less strategic location. This study aims to identify and analyze the internal and external factors that affect the business, and to formulate effective strategies for growth. A mixed-methods approach was adopted, using SWOT analysis and the Business Model Canvas (BMC) framework. Data collection included observations, interviews with owners, customers, and stakeholders, and surveys distributed to 122 respondents identified using Slovin's formula. The SWOT analysis revealed that the company is positioned in Quadrant I, suggesting the adoption of an aggressive Strength-Opportunity (S-O) strategy. Key strategies include using social media and e-marketplaces to promote high-quality products, forming strategic partnerships with the hospitality industry, diversifying product offerings, enhancing social media engagement, and optimizing customer service with faster delivery. The BMC approach focused on enhancing key activities, including raw material sourcing, product innovation, and digital marketing. The results of this study provide valuable insights into the strategic development of MSMEs, particularly in the food sector, by combining internal strengths with external opportunities. The findings contribute to the growing body of knowledge on MSME development and offer practical strategies for business sustainability in a competitive market environment.

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1. INTRODUCTION

In the context of a dynamic market environment, the efficacy of marketing strategies assumes paramount importance for organizations seeking to enhance their competitiveness and achieve sustainable growth. A meticulously formulated marketing strategy serves as a compass, guiding businesses in the identification of their desired customer segments. Moreover, it plays a pivotal role in the execution of marketing initiatives that are instrumental in fostering customer satisfaction and loyalty. For instance, Limna et al. (2023) emphasize the pivotal role of effective promotional strategies, such as loyalty programs and social media marketing, in attracting and retaining customers, thereby enhancing brand awareness and customer loyalty in the coffee shop industry.

The effectiveness of marketing strategies is crucial for organizations seeking to enhance their competitiveness and achieve sustainable growth in an increasingly dynamic market environment. A well-conceived marketing strategy not only guides businesses in targeting their desired customer segments but also plays a pivotal role in the execution of marketing initiatives that drive customer satisfaction and loyalty. For instance, Limna emphasizes that effective promotional strategies, such as loyalty programs and social media marketing, are vital in attracting and retaining customers, thereby enhancing brand awareness and customer loyalty in the coffee shop industry (Limna et al., 2023).

Moreover, the implementation of marketing strategies is equally significant as their conceptualization. Slater et al. highlight that managers' commitment to marketing strategies mediates the effectiveness of their implementation, suggesting that alignment with the organization's vision is essential for achieving desired outcomes (Slater et al., 2010). This notion is further supported by research indicating that effective execution of marketing strategies enables firms to utilize their resources efficiently, thereby attaining their strategic goals (Saif & Aimin, 2016).

In the context of digital marketing, the rise of e-commerce has necessitated the adoption of innovative marketing strategies to maintain a competitive advantage. Changreani et al., (2024) discusses how digital marketing and electronic word-of-mouth (e-WOM) have become critical components in influencing consumer purchasing decisions, particularly in competitive marketplaces like Tokopedia. This reflects a broader trend where businesses must leverage digital channels effectively to enhance their marketing performance and customer engagement (Sayudin et al., 2023). The importance of adaptability in marketing strategies is also highlighted, as firms must remain responsive to market changes to sustain their effectiveness (Rehman et al., 2023).

Furthermore, both the external and internal business environments significantly influence the effectiveness of marketing strategies. Erdi & Bambang, (2021) assert that companies must develop appropriate strategies to enhance their performance and competitiveness, particularly in the face of globalization. This is echoed in the findings of Morgan et al., (2012) which demonstrates that the effective implementation of marketing strategies contributes to improved financial performance and market success, particularly in export ventures. The ability to adapt marketing strategies to external pressures and internal capabilities is essential for achieving long-term business objectives (Klimova et al., 2023).

In Indonesia, the rapid growth of Micro, Small, and Medium Enterprises (MSMEs), with over 64 million businesses, accounts for 99.9% of all businesses operating in the country (Aini et al., 2021). MSMEs, particularly in the food sector, play a crucial role in driving economic growth and reducing unemployment rates in Indonesia (Supriyadi et al., 2017). One such MSMEs is Pempek Koyek, located in Palembang, which produces various types of pempek, a traditional food from Palembang, using fish and flour as its main ingredients. Despite having a solid marketing management approach, including proper pricing, social media promotions (Instagram and TikTok), and good customer service, Pempek Koyek faces challenges that include declining sales since the onset of the COVID-19 pandemic, limited promotion, and a less strategic location.

This study aims to design effective marketing strategies using the Business Model Canvas (BMC) and SWOT analysis to improve sales and create a competitive edge for Pempek Koyek. The BMC is chosen for its ability to comprehensively depict business models, while the SWOT analysis is used to assess the strengths, weaknesses, opportunities, and threats faced by the business (Indarsyah et al., 2023).

The integration of the SWOT analysis and the Business Model Canvas (BMC) is a powerful approach for business development, enabling organizations to assess their internal and external environments while refining their business models simultaneously. The SWOT analysis provides a structured method for identifying strengths, weaknesses, opportunities, and threats, which can inform strategic planning and decision-making processes (Ambarwati et al., 2023; Putri et al., 2019; Setiyani & Tjandra, 2022). This analytical framework is particularly valuable in evaluating how a business can leverage its strengths and opportunities while addressing its weaknesses and threats, thereby enhancing its competitive position in the market (Ambarwati et al., 2023; Larasati & Nugroho, 2023).

The Business Model Canvas complements the SWOT analysis by offering a visual representation of the business model, encompassing nine key components: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure (Nurulloh et al., 2022; Pinem et al., 2023). By utilizing the BMC, businesses can quickly adapt and innovate their models in response to changing market conditions and customer needs (Mangkudilaga et al., 2023; Nurulloh et al., 2022). For instance, the BMC has been effectively employed in various sectors, including aerospace, retail, and agriculture, to develop tailored business strategies that align with identified strengths and opportunities from the SWOT analysis (Nurulloh et al., 2022; Purwaty et al., 2018; Shobaah et al., 2023).

Moreover, the combination of these two methodologies allows for a comprehensive evaluation of business potential. For example, in the context of small and medium enterprises (SMEs), studies have shown that applying both SWOT and BMC can lead to the identification of critical areas for improvement and growth, such as enhancing product offerings, optimizing marketing strategies, and improving operational efficiencies (Ambarwati et al., 2023; Setiyani & Tjandra, 2022). The iterative process of analyzing the BMC alongside the SWOT analysis enables businesses to create actionable strategies that are grounded in a thorough understanding of their market environment and internal capabilities (Ambarwati et al., 2023; Pinem et al., 2023).

Several related studies highlight the importance of applying effective marketing strategies. Musfar et al., (2023) in their study on the coffee industry emphasize the need to focus on Generation Z and Millennials, as well as the addition of unique products as a selling point and promotion through social media with influencers. Abdulaziz et al., (2022) In the cake industry, the importance of utilizing digital platforms such as Gojek, Grab, and e-commerce is also emphasized to expand market reach. Implementing membership and giveaway strategies is also crucial to boost customer loyalty. Additionally, supply chain management, achieved through collaboration with communities and companies, contributes to the development of products.

Risfandipraja et al., (2023) In their analysis of the ecotourism industry, they highlight the importance of investing in infrastructure and service research. Promotions are carried out through various media, both conventional and digital, with revenue coming from sponsorships and CSR. Putra & Hariastuti, (2021) stress the importance of packaging and menu innovation, as well as the use of online media such as GoFood and GrabFood in the culinary industry to expand market reach. Indarsyah et al., (2023) In the biscuit industry, research indicates that managing raw materials and marketing through marketplaces like Tokopedia has a significant impact on product attractiveness.

Luthfi & Wijaya (2024) in the handicraft industry emphasize the importance of innovative handmade product quality and the use of digital marketing strategies to expand market reach and improve inventory management. (2023) in their research on the coffee industry emphasize the importance of improving business management cooperation, barista certification for human resources, and marketing through social media, such as Instagram, as well as utilizing GrabFood services to increase sales.

Overall, the results of this research indicate that applying SWOT analysis and BMC provides strategic insights that are useful in identifying opportunities, addressing business challenges, and designing innovative steps to improve competitiveness and business sustainability across various sectors. However, this study is limited to the implementation phase of the selected strategy and does not include the measurement or evaluation of its actual impact on business performance.

2. LITERATURE REVIEW

2.1. Micro, Small, and Medium Enterprises (MSMEs)

MSMEs are distinguished by their relatively simple ownership structures, limited operational scopes, and smaller sizes compared to larger enterprises in the same sector. These businesses frequently encounter managerial challenges due to the limited educational backgrounds of their owners or managers, which impairs their capacity to develop effective marketing and operational strategies. Furthermore, MSMEs contend with financial constraints and constrained operational capacity, impeding their ability to meet market demands (Novita et al., 2023).

Notwithstanding these challenges, MSMEs play a pivotal role in Indonesia's economy, creating employment opportunities, contributing to GDP, and providing economic security for low-income individuals. The advantages of MSMEs include the capacity to adopt new technologies, maintain flexibility in responding to market dynamics, and foster close relationships among employees due to their smaller scale. To achieve sustainable growth, MSMEs must adopt innovative strategies, such as creating unique and attractive products, designing compelling packaging, leveraging social media for promotion, and maintaining consistency in strategy implementation. These approaches are particularly vital in the era of Industry 4.0, where technology significantly influences business progress (Savitri & Naili, 2020).

2.2. Business Development Strategies

Business development strategies encompass various approaches designed to drive organizational growth and enhance performance.

1. These strategies include product development, which focuses on improving existing products or creating new ones to boost sales and customer satisfaction (Kotler et al., 2018).
2. Market development involves introducing current products to new geographical regions or customer segments, utilizing key marketing tools such as product refinement, pricing adjustments, promotional activities, and distribution management (Bukirwa & Kising'u, 2017).
3. Additionally, capital development optimizes financial resources to enhance productivity (Csordás et al., 2022).
4. Human resource development improves employee capabilities through training and education (Sairmaly, 2023).

The effectiveness of these strategies can be evaluated through key indicators, including revenue growth, customer growth, product quality improvement, and the quality of human resources. These metrics collectively reflect an organization's overall performance and growth trajectory.

2.3. SWOT Analysis

SWOT analysis serves as a crucial strategic planning tool that evaluates internal factors (strengths and weaknesses) and external factors (opportunities and threats) affecting an organization (Johansyah, 2020). The analysis employs Internal Factor Analysis Summary (IFAS) and External Factor Analysis Summary (EFAS) matrices to assess organizational conditions and guide strategic decision-making (Afifah & Formen, 2023). The resulting SWOT matrix identifies four strategic quadrants: Quadrant I for aggressive growth strategies, Quadrant II for diversification strategies, Quadrant III for focused initiatives, and Quadrant IV for defensive strategies (Prasetya, 2023). This comprehensive framework enables organizations to develop targeted strategies that align their resources with market opportunities while addressing challenges in an increasingly competitive business environment (Prastiwi et al., 2022).

2.4. Business Model Canvas (BMC)

A business model serves as a valuable tool that enables strategy planners and company owners to develop appropriate strategies for business growth and development (Abdulaziz et al., 2022). Among various business modeling approaches, the Business Model Canvas (BMC) stands out as one of the most straightforward and widely utilized frameworks by strategic planners (Hurairah & Ramelan, 2012). The Business Model Canvas provides a comprehensive framework for strategists to formulate new business strategies that can determine a company's success in achieving its targets.

According to Osterwalder & Pigneur (2010), as cited in Johansyah (2020), The Business Model Canvas comprises nine essential building blocks that work together to create a cohesive business strategy. The nine building blocks are Value Propositions, Customer Segments, Customer Relationships, Channels, Cost Structure, Revenue Stream, Key Activity, Key Partnership, and Key Resources.

2.5. The Integration of SWOT Analysis and BMC

The integration of SWOT Analysis and the Business Model Canvas (BMC) provides a comprehensive framework for developing business strategies. SWOT Analysis helps identify internal strengths and weaknesses that inform the Key Resources, Key Activities, and Value Propositions blocks of the BMC, while opportunities and threats influence Customer Segments, Channels, Customer Relationships, and Revenue Streams (Destyantara, 2022). This combination enables organizations to develop focused strategies that leverage strengths and opportunities while addressing weaknesses and threats. The BMC offers a visual framework to evaluate how SWOT factors impact the overall business model (Putra & Hariastuti, 2021).

3. RESEARCH METHODOLOGY

The research methodology involves data collection and analysis, which are essential for formulating appropriate business strategies.

3.1. Sample Determination

Sample selection in this study used purposive sampling, targeting individuals aged 17 and above who have experience with the Pempek Koyek business. The number of samples was determined using Slovin's formula (Sugiyono, 2013):

$$n = \frac{N}{(1+N.e^2)} \quad (1)$$

Where:
n = Number of samples
N = Number of populations
e = Error value

3.2. Data Collection

Data were collected through a combination of observation, interviews, and questionnaires. Observation was used to directly examine business operations and customer behavior in a natural setting. Interviews were conducted with the business owner and customers to gather in-depth qualitative data (Fakhurrozi, 2017). Questionnaires were distributed both digitally (via Google Forms) and in printed format to collect quantitative ratings.

The questionnaire was designed to collect ratings for both internal and external factors related to the Pempek Koyek business model. Internal factors, which consist of Strengths and Weaknesses, were assessed by customers based on their experiences and perceptions. Meanwhile, external factors (Opportunities and Threats) were evaluated by the business owner.

3.3. Data Analysis

The data analysis process follows a structured approach (Mahardika et al., 2023), consisting of the following steps:

1. Validity and Reliability Test
   Before analysis, validity and reliability testing were conducted to ensure the quality of the questionnaire instrument. Validity was tested using Pearson correlation, while reliability was tested using Cronbach's Alpha. A Cronbach's Alpha value above 0.6 is considered acceptable.
2. IFAS and EFAS Analysis
   Internal and External Factor Analysis Summary (IFAS/EFAS) was conducted by assigning weights (0–100) and ratings (1–4) to each SWOT factor based on its perceived impact (Kurniawan, 2018; Prasetya, 2023). The total score for each factor is the result of weight × rating.
3. Strategic Analysis (SWOT Quadrant Mapping)
   The results are plotted on a Cartesian diagram to determine strategic positioning, leading to the development of targeted strategies through the SWOT matrix (Prastiwi et al., 2022).
   After determining the weights and ratings, the total score is calculated by multiplying these values together. The SWOT diagram uses a Cartesian coordinate system, where the X-axis represents internal factors, and the Y-axis represents external factors (Kurniawan, 2018). The coordinates are determined using the following formulas:

   $$X = \frac{S-W}{2} \quad (2)$$

   $$Y = \frac{O-T}{2} \quad (3)$$

   Where:
   X = Internal coordinate point
   Y = External coordinate point
   S = Total strength score
   W = Total weakness score
   O = Total opportunity score
   T = Total threat score
4. Strategic Policy Formulation

The SWOT matrix serves as a strategic planning tool that synthesizes the analysis results, encompassing internal factors (strengths and weaknesses) at the top and external factors (opportunities and threats) at the bottom. This matrix enables companies to formulate focused action plans and effective strategies to achieve their business objectives (Prastiwi et al., 2022).

5. Current BMC Identification
   The current Business Model Canvas (BMC) was mapped using nine elements: customer segments as profitable customers sustain the organization, establish value propositions that outline unique product or service offerings, channels to describe communication and delivery methods, customer relationships to define engagement strategies, revenue streams, key resources, key activities, key partnerships, and cost structure.
6. SWOT-BMC Integration
   From the strategies developed in the previous stage using the TOWS matrix, selected strategies were directly added to the revised Business Model Canvas. Each strategy was aligned with the most relevant component(s) of the nine BMC elements, resulting in an integrated and strategy-oriented business model.
7. Strategy Implementation
   After formulating the revised Business Model Canvas, one selected strategy was implemented based on the business owner's preference and feasibility. This initial implementation serves as a pilot action to evaluate the effectiveness of the proposed strategic direction in improving business operations and competitiveness.

The research flowchart is presented in Figure 1 below, illustrating the systematic stages of this study, from data collection to strategy formulation and integration.

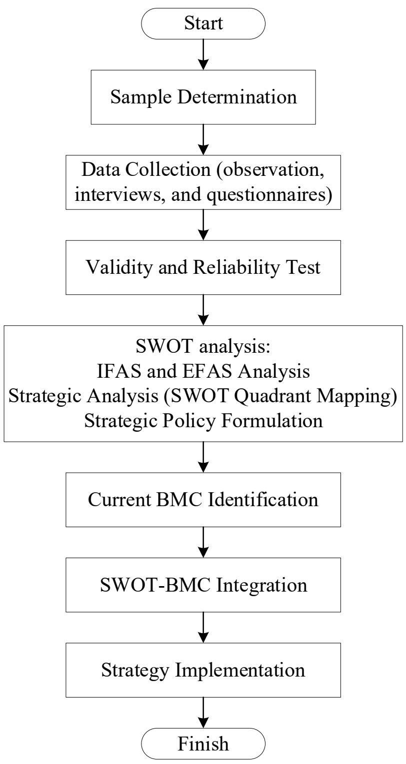

Figure 1. Research Flowchart

4. RESULTS AND DISCUSSIONS

4.1. Results

Data collection was conducted through observations, interviews, and questionnaires. Field observations examined operational activities, while interviews with owners and customers. Questionnaires were distributed both digitally (via Google Forms) and in print format to gather quantitative data.

From an average weekly customer base of 175 people. Using Slovin's formula (1), a sample size of 122 respondents was determined.

$$n = \frac{\mathrm{N}}{(1+\mathrm{N.e}^2)} \quad (1)$$

$$n = \frac{175}{(1+175 \text{ x } 0{,}05^2)}$$

n = 121,75 ≈ 122

The questionnaire was developed to obtain feedback on both internal and external factors linked to the Pempek Koyek business model. 122 customers rated internal characteristics, which included strengths and weaknesses, based on their consumer experiences and perceptions. Meanwhile, the business owner analyzed external factors (opportunities and threats) because they are thought to have a better awareness of the external environment, market trends, and business issues. This segmentation of respondents was designed to ensure the accuracy and relevance of the data obtained for SWOT analysis.

4.1.1. SWOT Factor Analysis

The first stage of the SWOT analysis involves identifying the internal and external factors that are owned or experienced by MSMEs. These factors were obtained through interviews and discussions with the owner of Pempek Koyek, ensuring that the data reflect actual business conditions and insights. The tables showing the results of the identification of these factors are presented in Table 1 and Table 2.

Tabel 1. Internal Factors

No.	Factor	Code
	Strengths	
1.	Premium quality raw materials	ST1
2.	Larger portion sizes at competitive prices	ST2
3.	Competitive pricing strategy	ST3
4.	Product variety	ST4
5.	Consistent product freshness	ST5
6.	Efficient and friendly customer service	ST6
	Weaknesses	
1.	Suboptimal location	WE1
2.	High market competition	WE2
3.	Limited product innovation	WE3
4.	Absence of online presence	WE4

Based on the internal and external factors identified in Tables 1 and 2, a TOWS matrix was developed to explore strategic alternatives for Pempek Koyek's business model. This matrix serves as a tool to systematically match

Tabel 2. TOWS Matrix

		Internal Factors	
		Strengths (S): ST1, ST2, ST3, ST4, ST5, ST6	**Weaknesses (S):** WE1, WE2, WE3, WE4
External Factors	**Opportunities (O):** OP1, OP2, OP3, OP4, OP5, OP6	**S - O Strategy:** 1. Promote high-quality products on social media and marketplaces. 2. Boost sales through partnerships with the hospitality and restaurant industries. 3. Diversify products in broad markets with innovation. 4. Enhance product visibility with engaging social media content. 5. Improve customer service by offering fast delivery on marketplaces. 6. Increase sales through special offers and promotions on marketplaces and social media.	**W - O Strategies:** 1. Increase sales through digital marketing and online marketplaces. 2. Address competition by developing innovative products. 3. Reach a broader market through partnerships and collaboration. 4. Optimize marketing and sales using social media platforms. 5. Improve availability and accessibility through online stores. 6. Strengthen competitiveness through collaboration and special offers.
	Threats (T): TH1, TH2, TH3, TH4, TH5	**S - T Strategies:** 1. Maintain product quality by sourcing raw materials from trusted suppliers. 2. Address competition through competitive sizing and pricing strategies. 3. Highlight product variety and customer service to stand out in a competitive market. 4. Strengthen customer loyalty by focusing on consistent quality and service. 5. Minimize the impact of competition through differentiation and a strong brand image. 6. Leverage fast service to enhance customer satisfaction.	**W - T Strategies:** 1. Expand digital marketing outreach to overcome location limitations and competition. 2. Diversify products to address the lack of innovation and intense market competition. 3. Counter aggressive competitor promotions with pricing and customer loyalty strategies. 4. Reduce dependence on specific raw materials to mitigate cost fluctuations. 5. Improve operational efficiency to manage location challenges and high material costs. 6. Strengthen branding and unique value propositions to lessen the impact of fierce competition.

strengths, weaknesses, opportunities, and threats, allowing the formulation of actionable strategies for business development and sustainability. The TOWS matrix is presented in Table 3.

Tabel 3. External Factors

No.	Factor	Code
	Opportunities	
1.	Social media marketing expansion	OP1
2.	E-marketplace integration	OP2
3.	Strategic partnership development	OP3
4.	Market expansion potential	OP4
5.	Product innovation opportunities	OP5
6.	Hospitality industry collaboration	OP6
	Threats	
1.	Market saturation	TH1
2.	Raw material price volatility	TH2
3.	Aggressive competitor marketing	TH3
4.	Competitive discount strategies	TH4
5.	Competitor product diversification	TH5

4.1.2. IFAS and EFAS Analysis

After the data were collected through questionnaires and completed by 122 respondents, validity and reliability testing were carried out to ensure the quality of the measurement tools. Validity testing was conducted to determine whether each item on the questionnaire accurately represented the intended construct. Furthermore, reliability testing was conducted using Cronbach's Alpha to assess the instrument's consistency. The results of the validity and reliability tests using *IBM SPSS Statistics 26* are presented in Tables 4 to 7 below:

The validity of each questionnaire item was assessed using Pearson Product-Moment correlation. As shown in Table 4, all items under the Strengths and Weaknesses variables have correlation coefficients (r) higher than the critical value of 0.2104 ($N = 122$, $\alpha = 0.01$). Reliability testing was conducted using Cronbach's Alpha to evaluate the internal consistency of the questionnaire items. As presented in Table 5, the Strengths variable achieved a Cronbach's Alpha of 0.783, indicating good reliability.

Tabel 4. Validity Test for internal factors

Variable	Item	Correlation Coefficient (r)	Description
Strengths	ST1	0.741	Valid
	ST2	0.727	Valid
	ST3	0.543	Valid
	ST4	0.699	Valid
	ST5	0.741	Valid
	ST6	0.698	Valid
Weaknesses	WE1	0.785	Valid
	WE2	0.548	Valid
	WE3	0.783	Valid
	WE4	0.725	Valid
Critical Value (r-table 0.01)		0.2104	

Tabel 5. Reliability Test for internal factors

Variable	Cronbach's Alpha	Number of Items	Description
Strengths	0.783	6	Reliable
Weaknesses	0.683	4	Reliable

Tabel 6. IFAS Analysis

No.	Factor	Wights	Rating	Score
	Strengths			
1.	ST1	15	4	60
2.	ST2	5	3	15
3.	ST3	5	3	15
4.	ST4	10	3	30
5.	ST5	15	3	45
6.	ST6	15	3	45
Strengths Total		65		210
	Weaknesses			
1.	WE1	10	2	20
2.	WE2	10	2	20
3.	WE3	5	2	10
4.	WE4	10	2	20
Weaknesses Total		35		70
Total		100		

Tabel 7. EFAS Analysis

No.	Factor	Wights	Rating	Score
	Opportunities			
1.	OP1	15	4	60
2.	OP2	15	4	60
3.	OP3	5	2	10
4.	OP4	10	4	40
5.	OP5	5	3	15
6.	OP6	5	2	10
Strengths Total		55		195
	Threats			
1.	TH1	10	2	20
2.	TH2	10	3	30
3.	TH3	10	3	30
4.	TH4	10	3	30
5.	TH5	5	3	15
Weaknesses Total		45		125
Total		100		

The Weaknesses variable obtained a value of 0.683, which is above the minimum acceptable threshold of 0.6. These results demonstrate that the measurement instrument used in this study is reliable and consistent in capturing respondents' perceptions related to internal factors. These tests confirm that the survey instrument is both valid and reliable for evaluating the business conditions and strategic direction of Pempek Koyek MSMEs. The factor weights were determined by the SME owner based on their business expertise, while ratings represent the average scores from 122 customer respondents. The results are shown in Tables 6 and 7.

4.1.3. Strategic Analysis

Using the previously compiled data, quadrant calculations were performed to determine the SWOT coordinate position. The coordinates were calculated using the following formulas (2) and (3) below:

$$X = \frac{S-W}{2} = \frac{210-70}{2} = 70 \quad (2)$$

$$Y = \frac{O-T}{2} = \frac{195-125}{2} = 35 \quad (3)$$

These coordinates (70, 35) were plotted on the SWOT diagram to identify the business's strategic position. The resulting position in Quadrant I (Figure 2) indicates an advantageous situation with strong internal capabilities and significant market opportunities.

Based on the calculations, Pempek Koyek MSMEs indicate that the business is positioned in Quadrant I (S-O Strategy). This suggests that both the company's strengths and opportunities are significant. A larger value on the X-axis indicates stronger capabilities, while a higher value on the Y-axis signifies greater potential opportunities. This position indicates that Pempek Koyek is in a favorable situation, with strong customer perception and an optimal environment for performance improvement. Given this, the conclusion is that the strategic policy should focus on an aggressive growth strategy (Growth-Oriented Strategy).

4.1.4. Strategic Policy

Strategic policies in SWOT analysis essentially involve adjusting to potential challenges. By comparing each SWOT component, a suitable strategic policy can be defined. Combining the aggressive growth strategy suggestion from the SWOT analysis, the strategic policy is shown in Table 3.

In an increasingly competitive food market, businesses must effectively utilize their strengths to capitalize on emerging opportunities. The pempek business boasts key advantages, including high-quality ingredients, competitive pricing, a wide range of products, and exceptional customer service. At the same time, the rise of digital marketing, e-commerce, and strategic partnerships opens new avenues for growth. By aligning internal strengths with these external opportunities, the business can expand its market reach, increase sales, and strengthen its brand presence. The following strategies outline how these strengths can be leveraged to maximize business potential.

S-O Strategy Analysis: Leveraging Strengths to Seize

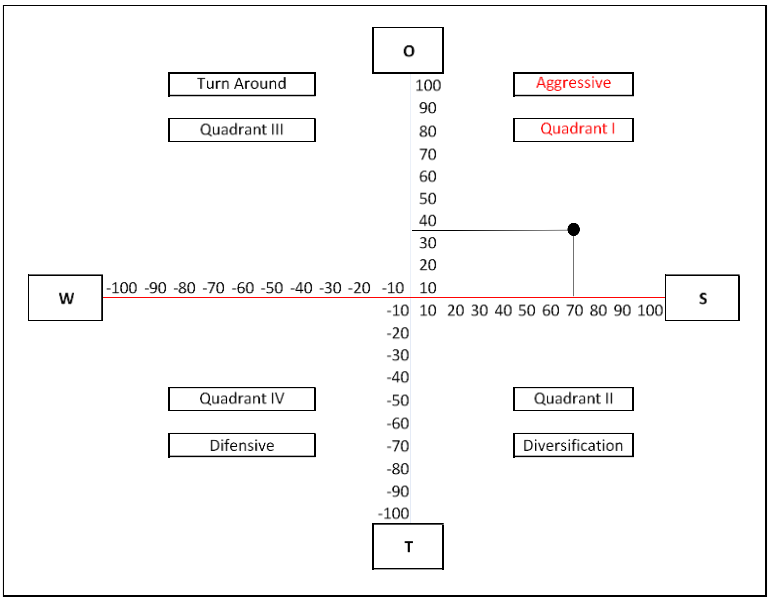

Figure 2. Quadrant SWOT Pempek Koyek MSMEs

Opportunities

1. Promote High-Quality Products on Social Media and Marketplaces
   a. Strengths Utilized: ST1, ST2, and ST5.
      Pempek's premium quality raw materials (ST1) ensure a superior taste and texture, making it a standout choice for consumers seeking authenticity and freshness. Additionally, the larger portion sizes offered at competitive prices (ST2) provide added value, making the product more appealing to budget-conscious buyers. Consistent product freshness (ST5) further reinforces customer trust and satisfaction, ensuring repeat purchases. By emphasizing these strengths, the brand can establish itself as a premium yet affordable option in the market.
   b. Opportunities Seized: OP1 and OP2.
      The expansion of social media marketing (OP1) and integration into e-marketplaces (OP2) provide valuable opportunities to reach a broader audience. Social media platforms enable direct engagement with potential customers through visually appealing content, while marketplaces facilitate easy access and purchasing convenience. By utilizing these digital channels, the brand can effectively showcase its product quality, encourage online orders, and increase overall sales.
2. Boost Sales Through Partnerships with Hospitality and Restaurant Industries
   a. Strengths Utilized: ST3 and ST6.
      The brand's competitive pricing strategy (ST3) allows it to offer attractive deals to potential business partners, making it a cost-effective option for hotels and restaurants. Additionally, the efficient and friendly customer service (ST6) ensures smooth collaboration with industry partners, fostering long-term relationships. By maintaining affordability and service excellence, the brand can become a preferred supplier in the hospitality sector.
   b. Opportunities Seized: OP3 and OP6.
      Strategic partnership development (OP3) and collaboration with the hospitality industry (OP6) create opportunities for bulk sales and consistent demand. Establishing agreements with restaurants and hotels to include pempek in their menus expands the brand's market presence. These partnerships also enhance credibility, as consumers associate the product with well-known hospitality businesses, leading to increased brand recognition and trust.
3. Diversify Products in Broad Markets with Innovation
   a. Strengths Utilized: ST4 and ST5.
      With an extensive product variety (ST4), the brand has the flexibility to experiment with different flavors, fillings, and packaging to cater to diverse consumer preferences. Maintaining consistent product freshness (ST5) ensures that new variations continue to meet the high quality that customers expect. By leveraging these strengths, the brand can continuously introduce innovative offerings that differentiate it from competitors.
   b. Opportunities Seized: OP4 and OP5.
      The broad market expansion potential (OP4) and opportunities for product innovation (OP5) allow the brand to reach untapped customer segments. Introducing unique pempek variations, such as premium packaged versions or ready-to-eat options, can attract health-conscious individuals, busy professionals, and international buyers. Expanding distribution channels, such as supermarkets or specialty food stores, further enhances accessibility and drives business growth.
4. Enhance Product Visibility with Engaging Social Media Content
   a. Strengths Utilized: ST1 and ST2.
      The use of premium quality raw materials (ST1) ensures that the brand can confidently highlight the superiority of its ingredients in digital marketing

efforts. Additionally, larger portion sizes at competitive prices (ST2) serve as an attractive selling point that can be emphasized through engaging visuals and promotional content. These strengths collectively create a compelling narrative for potential customers, making the product more appealing in a crowded market.

b. Opportunities Seized: OP1.
   The growing trend of social media marketing (OP1) provides an excellent platform to showcase the brand's unique value proposition. High-quality images, behind-the-scenes preparation videos, and interactive customer testimonials can significantly boost online engagement. By consistently sharing engaging content and utilizing digital advertising tools, the brand can enhance its presence and attract new customers.

5. Improve Customer Service by Offering Fast Delivery on Marketplaces
   a. Strengths Utilized: ST6.
      The brand's efficient and friendly customer service (ST6) plays a crucial role in enhancing the overall shopping experience. Ensuring that orders are processed quickly and delivered in excellent condition builds customer loyalty and positive reviews. A seamless service experience strengthens the brand's reputation, encouraging more people to trust and purchase the product.
   b. Opportunities Seized: OP2.
      With the increasing reliance on e-marketplaces (OP2), ensuring fast and reliable delivery is essential to meet customer expectations. Many consumers prefer online shopping for its convenience, and by offering prompt delivery, the brand can gain a competitive edge. Partnering with reliable logistics providers and optimizing order fulfillment processes can further improve efficiency, leading to increased customer satisfaction and repeat purchases.
6. Increase Sales Through Special Offers and Promotions on Marketplaces and Social Media
   a. Strengths Utilized: ST3.
      The competitive pricing strategy (ST3) enables the brand to introduce attractive discounts and special offers without compromising profitability. By offering promotions such as bundle deals or seasonal discounts, the brand can encourage bulk purchases and impulse buying. These pricing strategies not only attract new customers but also incentivize repeat purchases, driving overall revenue growth.
   b. Opportunities Seized: OP1 and OP2.
      The combination of e-marketplace integration (OP2) and social media marketing expansion (OP1) provides an ideal environment for promotional campaigns. Marketplaces allow for direct purchase incentives, while social media facilitates targeted advertising and influencer collaborations. By strategically leveraging both channels, the brand can maximize visibility, drive conversions, and increase overall sales.

4.1.5. Existing Business Model through the BMC

Based on the SWOT analysis positioning in Quadrant I (Aggressive Strategy), a Business Model Canvas development plan was created to integrate company strengths with market opportunities, focusing on current model identification and future development. The existing business model comprises nine key elements:

1. Customer Segments
   a. Geographic: Palembang, Lampung, Jakarta, and Java
   b. Demographic: Men and women aged 20+
2. Value Propositions
   a. Premium quality through experienced staff (15+ years) and quality suppliers
   b. Larger portion sizes compared to competitors
   c. Consistently fresh products
3. Channels
   a. Direct sales at production facility
   b. Social media (Instagram, TikTok)
   c. WhatsApp communication
4. Customer Relationships
   a. Social media content marketing
   b. Customer service via Instagram and WhatsApp
5. Revenue Streams
   a. Direct consumer sales
   b. Reseller distribution
6. Key Resources
   a. Physical: Production facility and equipment, Raw materials and packaging, and Mobile devices
   b. Human: Owner and production staff, Admin and delivery personnel
   c. Financial: Personal capital
7. Key Activities
   a. Raw material procurement
   b. Production operations
   c. Social media marketing
   d. Distribution management
8. Key Partnerships
   a. Raw material suppliers
   b. Packaging suppliers
   c. Logistics couriers
   d. Social media platforms
   e. Resellers
9. Cost Structure
   a. Fixed costs: Employee salaries
   b. Variable costs: Raw materials and Utilities (gas, electricity, water)

This comprehensive model provides a foundation for strategic business development and operational optimization. The existing business model is shown in Figure 3.

4.1.6. Development of A New Business Model

Based on the SWOT analysis and current business assessment, the following BMC elements were enhanced:

1. Key Partners: E-marketplace integration and Hotel/restaurant partnerships.
2. Key Activities: Enhanced customer service with rapid marketplace delivery, New product development utilizing quality ingredients, Live streaming

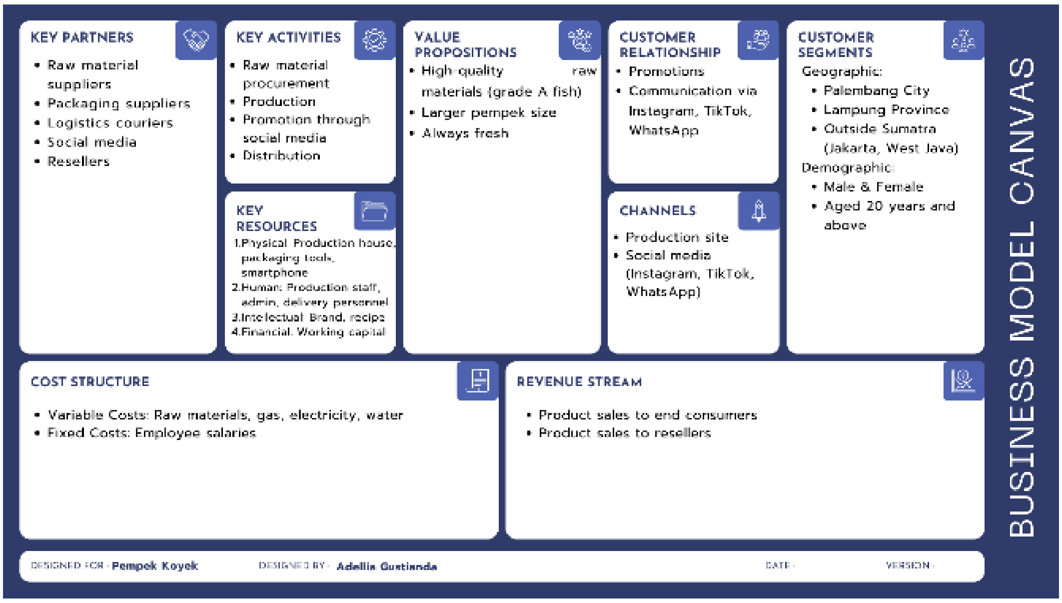

Figure 3. The existing business model before integration with SWOT analysis

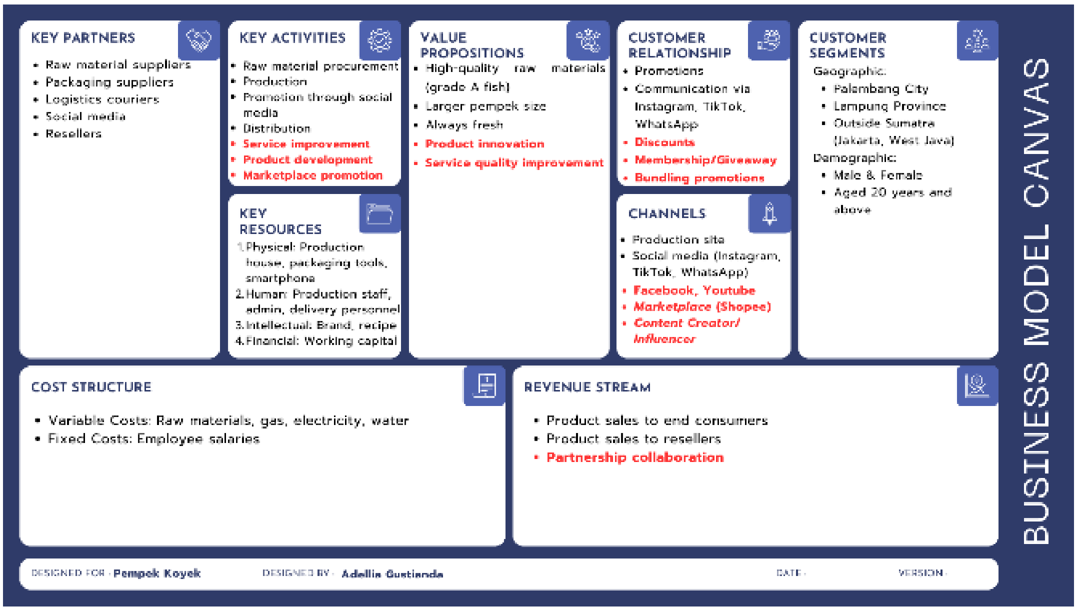

Figure 4. Development of a new business model using BMC integrated with SWOT analysis

promotions on TikTok, and Tokopedia.

3. Customer Relationships: Product bundles, discounts, loyalty programs, and enhanced social media marketing.
4. Channels: Expanded social media presence (Facebook, YouTube), E-marketplace integration (TikTok Shop, Tokopedia), and Product endorsements.
5. Value Propositions: Innovative product variations and Rapid delivery service.
6. Revenue Streams: Additional partnership revenue.

The development of a new business model is illustrated in Figure 4.

4.2. Discussions

The SWOT analysis positions the business in Quadrant I, suggesting an aggressive (S-O) strategy that leverages internal strengths to capitalize on external opportunities. Multiple research studies support this strategic positioning. (Indarsyah et al., 2023) that demonstrate the effectiveness of aggressive growth strategies for MSMEs in similar market positions.

Key strategic recommendations were developed based on both academic research and market analysis:

1. Promotion of Quality Products on Social Media
   Research by Jatmika & Andarwati (2021) demonstrates that strategic product promotion through social media and marketplaces significantly impacts sales performance. The study shows that highlighting product quality attributes through digital channels can effectively differentiate offerings in competitive markets.
2. Industry Partnerships
   Halik et al. (2020) found that strategic partnerships with hotels and restaurants can create sustainable

Figure 5. Promotional Poster Design 1

Figure 6. Promotional Poster Design 2

revenue streams and enhance brand credibility. Their research indicates that B2B partnerships can provide stability and growth opportunities, particularly for food-based SMEs.

3. Product Innovation
   Khamidi et al. (2013) emphasize the importance of market diversification through product innovation. Their study reveals that businesses can maintain traditional quality while introducing innovative variations, capturing new market segments without alienating existing customers.
4. Digital Content Strategy
   Research by Shadrina & Sulistyanto (2023) highlights the critical role of engaging social media content in building brand awareness and driving sales. Their findings suggest that consistent, high-quality content can significantly improve market visibility and customer engagement.
5. Service Enhancement
   Jatmika & Andarwati (2021) demonstrates that rapid delivery systems through marketplace integration can provide a competitive advantage. Their study reveals that efficient delivery services have a significant impact on customer satisfaction and repeat purchase behavior.
6. Promotional Strategy
   Additional research by Jatmika & Andarwati (2021) indicates that targeted promotions through digital channels can effectively drive sales growth. Their findings suggest that well-designed promotional campaigns can increase both customer acquisition and retention rates.

4.3. Implementation

Following a discussion with the Pempek Koyek owner, strategy 1 (promoting quality products on social media) was prioritized for immediate implementation. This involved enhancing social media presence across multiple platforms (Figures 4 and 5) and establishing marketplace integration through a new Tokopedia account (Figure 6) to streamline transaction processes.
This comprehensive approach aligns with current market trends and research findings, positioning the business for

sustainable growth while maintaining its core value propositions of quality and customer service.

Figure 6 represents authentic customer testimonials in Bahasa Indonesia, as the primary target market of Pempek Koyek is local consumers in Indonesia. The testimonial highlights customer satisfaction regarding taste, portion size, affordability, accessibility, and overall service quality.

5. CONCLUSIONS

Based on the research findings, several conclusions can be drawn. The SWOT analysis identified key factors influencing MSMEs Pempek Koyek, including six strengths, four weaknesses, six opportunities, and five threats. The quadrant coordinate analysis (X = 70, Y = 35) positioned the business in Quadrant I, indicating that an aggressive S-O strategy should be implemented to leverage internal strengths and capitalize on external opportunities.

To enhance its business model, several key elements of the Business Model Canvas (BMC) were improved. The integration of e-marketplaces and partnerships with hotels and restaurants strengthened key partnerships. Enhancements in customer service, product development using quality ingredients, and live-streaming promotions on TikTok and Tokopedia became primary activities. Customer relationships were improved through product bundles, discounts, and loyalty programs, while social media engagement was expanded across Facebook, YouTube, and marketplace platforms. The business also introduced innovative product variations and a rapid delivery service, creating additional revenue streams through strategic partnerships. Following discussions with the business owner, the immediate focus was placed on promoting quality products through social media.

REFERENCES

Abdulaziz, M. F., Sudiana, K., & Fitria, S. E. (2022). Analisis Strategi Pengembangan Bisnis Menggunakan Business Model Canvas (BMC) Dan Analisis Strength, Weakness, Opportunity, Dan Threats (SWOT) Pada Usaha Kecil Kue Ny Lina Di Kota Bogor. *E-Proceedings of Management*, *9*(2), 161–171.

Afifah, N., & Formen, A. (2023). Penggunaan Matrik IFAS dan EFAS untuk Analisis SWOT Sarana dan Prasarana di Satuan PAUD. *Jurnal Ilmu Sosial Dan Humaniora*, *1*(2), 47–60.

Aini, S., Fikri, A. J., & Sukandar, R. S. (2021). Optimalisasi Keuntungan Produksi Makanan Menggunakan Pemrograman Linier Melalui Metode Simpleks. *Journal Bayesian: Jurnal Ilmiah Statistika Dan Ekonometrika*, *1*(1), 1–16.

Ambarwati, N., Indrawan, R. D., & Ekananta, A. (2023). Business development strategies for EG group. *Indonesian Journal of Multidisciplinary Science*, *2*(11), 3953–3971.

Bukirwa, S., & Kising'u, T. (2017). Influence of competitive strategies on organizational performance of hotels in kenya (a survey of hotels in mombasa county). *The Strategic Journal of Business & Change Management*, *4*(2).

Changreani, E., Manalu, A. B., Purb, R. F., & Putri, D. (2024). The Influence of E-Wom and Digital Marketing on Purchasing Decisions at Shopee Marketplace in Palembang City. *Journal of Business Economics and Agribusiness*, *1*(2), 1–12.

Csordás, A., Pancsira, J., Lengyel, P., Füzesi, I., & Felföldi, J. (2022). The Potential of Digital Marketing Tools to Develop the Innovative SFSC Players' Business Models. *Journal of Open Innovation Technology Market and Complexity*, *8*(122), 1–14.

Destyantara, R. T. (2022). *Analisis Strategi Pengembangan Bisnis Dengan Pendekatan Bisnis Model Canvas (BMC) Dan SWOT*. Universitas Islam Indonesia.

Erdi, H., & Bambang, R. (2021). The Influence of the External and Internal Business Environment on the Marketing Strategy and Their Impact on the Marketing Performance. *European Journal of Business and Management*, *13*(7), 54–61.

Fakhurrozi. (2017). *Peran Usaha Mikro Kecil dan Menengah (UMKM) Pembuatan Tahu Tempe Terhadap Penyerapan Tenaga Kerja Di Kecamatan Kalideres, Jakarta Barat*.

Halik, R. A. F., Rifin, A., & Jahroh, S. (2020). Pengaruh Kemtraan Terhadap Kinerja Usaha Mikro Dan Kecil Tahu Di Indonesia. *Jurnal Agribisnis Indonesia*, *8*(2), 164–174.

Hendrawan, A. K., Wachidah, S. F., & Restuningsih, A. (2023). Strategi Pengembangan Bisnis Kedai Kopi Makosan dengan Menggunakan Analisis SWOT dan Business Model Canvas (BMC). *Jurnal Optimasi Teknik Industri (JOTI)*, *5*(1), 32.

Hurairah, A., & Ramelan, H. (2012). *Gerbang Pintar Pasar Modal*. PT. Capital Bridge Advisory.

Indarsyah, R., Rahman, A., Putrianti, S. D., & Taufik, N. I. (2023). Model Strategi Pemasaran Kue Kering Lebaran Di UMKM Ranayya Kitchen Menggunakan Business Model Canvas (BMC) Dan Analisis Swot. *Management Studies and Entrepreneurship Journal*, *4*(5), 7471–7487.

Jatmika, F., & Andarwati, M. (2021). Pengaruh Market Place Dan Media Sosial Terhadap Volume Penjualan. *Senasif*, *5*(1), 2962–2968.

Johansyah, B. (2020). *Strategi Pengembangan Bisnis Dengan Analisis SWOT Dan Business Canvas Model Di PT. Biro Klasifikasi Indonesia (Persero) Cabang Makassar*. Universitas Hasanuddin Makassar.

Khamidi, S., Fauzi DH, A., & Suyadi, I. (2013). Pengaruh Diversifikasi Produk Terhadap Penjualan (Studi Kasus pada Perusahaan Konveksi âFaiza Bordirâ Bangil â Pasuruan). *Jurnal Administrasi Bisnis S1 Universitas Brawijaya*, *5*(2), 76588.

Klimova, I., Hordieieva, I., Sereda, N., Pashchenko, O., & Petecki, I. (2023). Strategic Marketing In A Dynamic Market Environment: Adaptive Approaches , Analysis Of Trends And Implementation Of Innovations. *Conhecimento & Diversidade*, *15*(40), 98–118.

Kotler, P., Armstrong, G., & Opresnik, M. O. (2018). *Principles of Marketing* (17th ed.). Pearson Education Limited.

Kurniawan, F. (2018). *SWOT Analysis (Analisis SWOT) - Manajemen Pemasaran - Marketing*.

Larasati, A., & Nugroho, R. H. (2023). Marketing mix strategy through SWOT analysis method at PT. Toyo Maitsu Surabaya. *Enrichment: Journal of Management*, *13*(1), 664–673.

Limna, P., Kraiwanit, T., Jangjarat, K., & Maskran, P. (2023). The Antecedent Attributes of Customer Satisfaction and Loyalty in the Coffee Shop Business Domain. *Journal of Production, Operations Management and Economics*, *3*(4), 15–25.

Luthfi, Z., & Wijaya, F. (2024). Pengembangan Strategi Bisnis Tas Handmade Pada CV Cagho Prima Nusantara. *Jurnal Ilmu Sosial, Manajemen, Akuntansi Dan Bisnis*, *5*(1), 154–170.

Mahardika, I., Saputra, M. D. W., & Yasa, N. N. K. (2023). Perumusan Strategi Bisnis Pt Oasis Waters International Cabang Bali. *Jurnal Pijar Studi Manajemen Dan Bisnis*, *1*(3), 610–617.

Mangkudilaga, E. T. K., Jahroh, S., & Rifin, A. (2023). Vegetable distributor business development strategy (Case study at PT XYZ). *Indonesian Journal of Multidisciplinary Science*, *3*(3), 216–225.

Morgan, N. A., Katsikeas, C. S., & Vorhies, D. W. (2012). Export marketing strategy implementation , export marketing capabilities , and export venture performance. *Journal of the Academy of Marketing Science*, *40*, 271–289.

Musfar, T. F., Sitepu, R. F., & Wildah, S. W. (2023). Perencanaan Pengembangan Bisnis Menggunakan Business Model Canvas Dan Analisis SWOT Pada Sesi Coffee Pekanbaru. *Management Studies and Entrepreneurship Journal*, *4*(5), 6157–6173.

Novita, M., Ismail, M. S., Solihin, M., & Asman, M. (2023). Employing Service Learning in Community-University Partnership Program to Develop Local MSMEs in Bungo and Tejo Regencies. *ASEAN Journal of Community Engagement*, *7*(1), 96–112.

Nurulloh, M. I., Simbolon, L., & Deksino, G. R. (2022). Business Model Canvas For Indonesian Aerospace's CN235 Aircraft. *International Journal of Science, Technology & Management*, *3*(1), 86–92.

Osterwalder, A., & Pigneur, Y. (2010). *Business Model Generation*. John Wiley & Son, Inc.

Pinem, N. A., Sulistyawati, F., & Gulo, E. N. P. (2023). Analysis Of Business Implementation On Shopeepay Digital Wallet Using Business Model Canvas (BMC) And SWOT Analysis. *Jurnal Impresi Indonesia (JII)*, *2*(1), 71–82.

Prasetya, D. A. (2023). *Teknik Analisis SWOT* (A. Ishartadi (ed.)). Anak Hebat Indonesia.

Prastiwi, I. L. R., Soenarjanto, B., & Susiantoro, A. (2022). Strategi Pengembangan UMKM Desa Pekarungan Berbasis Analisis SWOT. *ULIL ALBAB : Jurnal Ilmiah Multidisiplin*, *1*(3), 412–424.

Purwaty, H. I., Oktaviani, R., & Suparno, O. (2018). Eel Business Development Strategy in PT Laju Banyu Semesta (Labas). *Indonesian Journal of Business and Entrepreneurship*, *4*(1), 99–109.

Putra, F. P., & Hariastuti, N. P. (2021). Strategi Pengembangan Model Bisnis Pasca Pandemi COVID-19 Dengan Pendekatan Business Model Canvas dan Analisis SWOT. *Prosiding Seminar Nasional Sains Dan Teknologi Terapan*, *9*(1), 9–14.

Putri, F. A., Jaja, R. S., Meisa, D. R., & Cosvi, H. (2019). Strategic Planning of Indonesian Skincare Clinics. *RJOAS*, *6*(90), 203–215.

Rehman, S. U., Hassan, S., Rafay, M., Dad, A. M., & Khan, S. N. (2023). Enhancing Marketing Strategy Effectiveness in Fintech: The Interplay of Big Data Analysis, Digital Engagement, and Market Adaptability. *Journal OfManagement Practices, Humanities and Social Sciences*, *7*(5), 48–59.

Risfandipraja, R., Muhardi, & Suwarsi, S. (2023). SWOT BMC Business Model Sebagai Strategi Bisnis Wisata Alam Berbasis Petualangan (Studi Kasus Pada Wana Wisata Grand Sayang Kaak Kabupaten Ciamis). *Journal of Comprehensive Science (JCS)*, *2*(11), 1868–1878.

Saif, N. M. A., & Aimin, W. (2016). Exploring the Value and Process of Marketing Strategy : Review of Literature. *International Journal of Management Science and Business Administration*, *2*(2), 7–18.

Sairmaly, F. A. (2023). Human Capital Development and Economic Growth: A Literature Review on Information Technology Investment, Education, Skills, and Productive Labour. *Jurnal Minfo Polgan*, *12*(2), 679–693.

Savitri, F. M., & Naili, Y. T. (2020). Henry Mintzberg's Business Management Strategy Post -Pandemic Covid-19 (Social Learning Approach on Ali Murah Shop Madinah). *International Journal of Social Learning*, *1*(1), 62–74.

Sayudin, Kartono, & Curatman, A. (2023). Increasing Business Effectiveness Through The Implementation Of An Integrated Digital Marketing Strategy. *Journal of World Science*, *2*(11), 1908–1913.

Setiyani, L., & Tjandra, E. (2022). Application of Business Model Canvas at Thirty- One Collection Boutique. *International Journal Education and Computer Studies (IJECS)*, *2*(1), 14–18.

Shadrina, R. N., & Sulistyanto, Y. (2023). Analisis Pengaruh Content Marketing, Influencer, dan Media Sosial Terhadap Keputusan Pembelian Konsumen. *Jurnal Manajemen Dan Bisnis Terapan*, *5*(2), 78–83.

Shobaah, R., Irianto, H., & Kusnandar. (2023). Formulation Of Business Development Strategies In Gula Aren Temon SMEs In Pacitan District. *Eduvest – Journal of Universal Studies*, *3*(5), 953–965.

Slater, S. F., Hult, G. T. M., & Olson, E. M. (2010). Factors influencing the relative importance of marketing strategy creativity and marketing strategy implementation effectiveness. *Industrial*

Marketing Management, *39*, 551–559.

Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. ALFABETA.

Supriyadi, Muslimat, A., Pratama, R., & Ramayanti, G. (2017). Implementasi Linear Programming Untuk Memaksimalkan Keuntungan. *Seminar Nasional Riset Terapan 2017 | SENASSET 2017*, *November*, 183–189.