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Empowering SMEs Through Product Innovation: A SWOT-Based Analysis of Income Enhancement in Maros Regency, Indonesia

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ABSTRACT: *This study explores the role of product innovation in increasing the income of Micro, Small, and Medium Enterprises (MSMEs) in Maros Regency, Indonesia. Using a descriptive qualitative approach and case studies of local food-processing MSMEs, the research adopts an interpretive paradigm to understand business dynamics from the actors' perspectives. SWOT analysis is employed to assess the strengths, weaknesses, opportunities, and threats of the innovation process. Findings reveal that product innovation—through product differentiation, attractive packaging, and the use of local materials—positively impacts income enhancement. Nonetheless, challenges such as limited capital, restricted market access, and insufficient digital skills persist. Opportunities arise from the growing healthy food trend and supportive local policies, while threats include intense competition and fluctuating raw material prices. The study contributes theoretically by enriching the discourse on innovation in semi-urban MSMEs, with originality rooted in its in-depth SWOT-based analysis of local entrepreneurial realities.*

Keywords*: Product Innovation, Revenue, Case Study, SWOT, MSMEs*

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are essential pillars of the national economy, especially in creating jobs and improving people's welfare. However, in globalization and digitalization, MSMEs face significant challenges in maintaining competitiveness and increasing revenue (Judijanto et al., 2023). Product innovation is one of the main factors determining the success of MSMEs, which can drive business growth and market competitiveness (Astuti et al., 2019). However, there is still a gap in understanding how product innovation can directly increase MSME income, especially in a local context such as the Maros District.

From the perspective of the Resource-Based View (RBV) theory, a company's competitive advantage is highly dependent on internal resources that are unique and difficult to imitate (Barney, 2015). RBV emphasizes the importance of innovation in increasing product value, which ultimately affects business performance. However, several studies show that product innovation application in MSMEs is often constrained by limited resources and technological access (Gerhart & Feng, 2021). Therefore, this study aims to criticize and further explore the role of product innovation in increasing MSME revenue by linking it to RBV theory.

The motivation for this research arises from the reality that most MSMEs in Indonesia still rely on conventional production methods and do not optimally adopt product innovation (Alfarizi et al., 2023; Putri & Arif, 2023; Sharon et al., 2024, 2025). This research seeks to understand how MSMEs in Maros

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Regency can optimize product innovation to improve their competitiveness and income. By understanding the factors that contribute to successful innovation, MSMEs are expected to be able to create more valuable products in the market.

Previous research has addressed the impact of product innovation on MSME performance but has been limited in looking at the specific relationship between product innovation and revenue generation in the local context (Åkesson et al., 2023; Chirumalla et al., 2024). Most studies focus more on technological aspects or marketing strategies without exploring how product innovation can translate directly into increased profitability. Therefore, this study offers novelty by examining how product innovation based on internal resources can improve the income of MSMEs in the Maros Regency.

This study aims to analyze the effect of product innovation on increasing MSME revenues in Maros Regency. This research's main contribution to the world of accounting is to provide insight into how internal resource management and innovation can be integrated into the business strategy of MSMEs. In addition, this research can also provide recommendations for stakeholders, including government and academics, in designing policies that support innovation in the MSME sector to achieve more sustainable economic growth (Centro de Estudios Médicos Interculturales, 2020; Delgado-Ceballos et al., 2023).

THEORETICAL REVIEW

Micro, Small, and Medium Enterprises (MSMEs)

Micro, Small, and Medium Enterprises (MSMEs) play a vital role in the structure of the Indonesian economy, with significant contributions to job creation, income distribution, and regional economic growth. According to Tambunan (2019), MSMEs contribute more than 60% to the Gross Domestic Product (GDP) and absorb around 97% of the national workforce. The Indonesian government regulates the classification of MSMEs based on Law No. 20/2008, which categorizes businesses based on asset ownership and annual turnover. The micro category has a maximum assets of IDR 50 million and a yearly turnover of up to IDR 300 million. At the same time, small and medium enterprises are larger in scale and make a broader contribution to regional and national markets.

Despite their extraordinary potential, MSMEs face various structural challenges that hinder business growth and sustainability (Harini et al., 2023; Setyoko & Kurniasih, 2022). The main barriers that often arise are limited access to capital, lack of financial literacy, and lack of ability to adapt to technology and innovation (Ministry of Cooperatives and SMEs, 2022). This is compounded by weak distribution networks and limited human resources that are competent in business management. Several studies also highlight that the lack of integration of MSMEs in the digital ecosystem makes them vulnerable to market changes (Erlany et al., 2022; Maryani et al., 2020; Setyoko & Kurniasih, 2022).

In the context of globalization and the digital era, innovation is a key element in improving the competitiveness of MSMEs. Product innovation, business models, and the adoption of information technology have been proven to encourage increased efficiency and expansion of market reach (Jing et al., 2023; Singh & Hanafi, 2020). Research (Singh & Hanafi, 2020) confirms that MSMEs that are active in innovating are more adaptive to market dynamics and have greater potential for sustainable growth. Therefore, strategies to strengthen innovative capacity through training, business incubation, and government policy support are essential in building a resilient and competitive MSME ecosystem amid rapid economic change.

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Product Innovation in the Context of MSMEs

Product innovation is creating or improving products to meet evolving market needs and preferences (Kotler & Keller, 2009). In the context of MSMEs, product innovation reflects business actors' creativity and ability to adapt to changes in consumer tastes and market dynamics (Heenkenda et al., 2022). According to Jing et al. (2023), Nurfarida et al. (2023), and Singh & Hanafi (2020), product innovation has a significant contribution to the creation of sustainable competitive advantage for MSMEs, especially in the face of competitive pressure from large industrial products and imported products.

MSMEs are unique in developing product innovation because their limited resources encourage the emergence of distinctive local creativity. Innovations are not always high-tech; they can be in the form of packaging changes, product quality improvements, local raw materials, or new variants that follow market trends (Maryani et al., 2020). Research by Alam et al. (2022), Jing et al. (2023), and Kljucnikov et al. (2022) shows that MSMEs that focus on local wisdom-based innovation can build customer loyalty and strengthen product identity. Therefore, utilizing local potential in the innovation process is one of the strengths of MSMEs in creating added value.

Furthermore, product innovation is also closely related to the ability of MSMEs to access market information, conduct small-scale research, and establish cooperation with various parties. A study by Xie et al. (2023) emphasizes that partnerships with educational institutions or business incubators can improve the innovation capacity of MSME players through mentoring and knowledge transfer. In addition, the role of digitalization is also proven to encourage a faster and more efficient innovation process, for example, through online surveys, customer feedback on social media, and e-commerce platforms that facilitate market tests of new products (Agostino et al., 2022; Malik et al., 2022; Maryani et al., 2020). Therefore, product innovation in MSMEs combines creativity, market knowledge, and openness to collaboration.

Product Innovation and Income Generation

Various studies mention that product innovation positively correlates with increasing MSME revenue (Andersén, 2021; Noone et al., 2024; Xie et al., 2023). Innovations relevant to consumer needs can expand market reach, increase customer loyalty, and create a competitive advantage. However, innovation success is strongly influenced by managerial capacity, institutional support, and technological readiness.

Product innovation is one of the key drivers in increasing MSME revenues as it enables the creation of added value and differentiation in the market. Innovation can be in the form of new product creation, quality improvement, repackaging, or adjustments to changing consumer preferences. According to Kljucnikov et al. (2022) and Mariani et al. (2020), sustainable product innovation provides a competitive advantage for small businesses in the face of market pressure, especially from large-scale competitors. MSME players who can respond to the market through innovation have proven to expand consumer reach and increase customer loyalty.

Research by Jing et al. (2023) and Kljucnikov et al. (2022) confirms that product innovation impacts increasing sales and significantly increases the profitability of MSMEs. Through innovation, businesses can set premium prices that reflect the quality and uniqueness of the product. In addition, the ability to customize products to local needs or consumer trends also opens up new market opportunities. MSMEs that develop products based on local wisdom or organic raw materials, for example, have succeeded in attracting a broader market segment, both domestic and international.

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Furthermore, a study by (Jing et al., 2023) showed that support for innovation, such as training, access to technology, and collaboration with research institutions, strengthens MSMEs' ability to increase revenue. They found that MSMEs that received innovation training experienced an increase in revenue of up to 30% within one year. Therefore, product innovation is not just a creative endeavour but a business strategy directly impacting financial performance and business sustainability. Investment in innovation should be a priority in MSME planning and development.

RESEARCH METHOD

The research method used in this study is a qualitative approach with a case study research type (Bungin, 2020; Widodo et al., 2021; Zakariah et al., 2020). This research aims to understand in depth how product innovation can encourage an increase in MSME income in Maros Regency. Maros Regency has great MSME potential, especially in the processed agricultural and fishery products. However, many MSME players are still oriented towards traditional production and have not innovated optimistically. A strategic approach based on local potential is essential to encourage sustainable income growth. Maros district in South Sulawesi has abundant natural resource potential, especially in the agriculture, livestock, and fisheries sectors. This potential makes MSMEs the backbone of the local economy, especially in processing farm products such as banana chips and palm sugar and seafood products such as shredded fish and seaweed crackers. However, most MSMEs in Maros still rely on traditional production processes with low added value. This makes it difficult for the income of business actors to grow significantly (Sari et al., 2022).

The main challenges MSME actors face in Maros are the low product innovation level, limited technology access, and lack of training. Pratono (2018) states that MSMEs in developing regions often struggle to access technological support and competent human resources to innovate. In addition, access to broader markets is also limited due to the lack of digitization of marketing and distribution. Innovative approaches based on local potential can increase the competitiveness of Maro's products at the regional and national
levels.

An integrated local potential-based development strategy is needed to encourage the sustainable growth of MSMEs. According to Sutrisno et al. (2021), place-based development can increase income by considering local distinctiveness, social networks, and community participation. Capacity building, entrepreneurship training, collaboration with universities, and utilization of digital technology are essential steps in transforming Maros MSMEs into more productive and innovative entities.

The qualitative approach was chosen because this research prioritizes an in-depth understanding of the phenomena that occur in the field, not just to statistically measure the relationship between variables. In this case, SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) is a strategic tool to identify internal and external factors that affect organizations, including MSMEs (Kenton, 2021). In the context of product innovation, SWOT analysis helps MSME players develop strategies adaptive to market changes and limited resources.

The reason for using qualitative methods is to gain a more holistic understanding of the factors that influence the success of product innovation in increasing MSME revenues. This approach allows researchers to explore the perspectives, experiences, and challenges faced by MSME actors directly. Using interviews and observations, this research can provide a more detailed and contextualized picture of how product innovation is implemented and its impact on their business income.

The analytical tool used in this research is SWOT analysis (Strengths, Weaknesses, Opportunities, Threats), which aims to evaluate the internal strengths and weaknesses of MSMEs and the external

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opportunities and threats faced in the product innovation process. Data were obtained through in-depth interviews and direct observation of MSME actors in Maros Regency and then categorized into four SWOT components. For example, strengths may include the availability of local raw materials and traditional skills, while weaknesses may consist of limited capital and lack of access to technology.

Opportunities are identified from market trends towards local products and local government policy support, while threats can come from market competition, fluctuating raw material prices, and low digital literacy. Through this approach, SWOT analysis allows researchers to thoroughly map the actual conditions of MSMEs and develop product innovation strategies that are more adaptive and realistic to local conditions.

The results of this SWOT analysis are expected to provide strategic insights into how MSMEs in Maros Regency can maximize their strengths and opportunities while minimizing weaknesses and facing threats. Thus, this research describes current conditions and provides a basis for future policy recommendations and interventions for developing product innovation-based MSMEs.

RESULTS AND DISCUSSION

As one of the essential pillars of the local economy, MSMEs play a vital role in creating jobs and improving people's welfare. However, to ensure sustainability and competitiveness, MSMEs must face various challenges and take advantage of existing opportunities, especially in increasingly dynamic economic changes. Therefore, a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis is important to identify factors influencing the region's success and sustainability of small and medium enterprises. Through this analysis, the strengths, weaknesses, opportunities, and threats faced by MSME actors will be discussed to provide a clearer picture of the development strategies that can be implemented to improve their performance and competitiveness in an increasingly competitive market.

This section presents the main findings of the research conducted on MSME actors in Maros Regency, specifically related to the role of product innovation in increasing income. Data were obtained through in-depth interviews and field observations and then analyzed using a SWOT approach to comprehensively describe local MSMEs' strengths, weaknesses, opportunities and threats. This analysis aims to identify internal and external factors that influence the success of product innovation and provide a strategic overview of steps that can be taken to encourage sustainable business growth. The following description will elaborate on the findings based on the four main components of SWOT.

SWOT analysis evaluates the pros and cons of product innovation as a driver of increasing MSME income in Maros Regency. SWOT effectively explores strengths, weaknesses, opportunities, and threats that MSMEs can face in implementing product innovation. The findings of this research are described below:

Table 1
Analysis Findings
SME Empowerment through Product Innovation: SWOT-Based Income Generation Analysis in Maros Regency, Indonesia

SWOT Category	Information	Statement	Thematic Findings
Strengths	Government (Village Head)	"Product innovation... able to attract the attention of markets outside the region... increase community income..."	Local-based innovations drive competitiveness and expansion of markets and community income.

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	Academician (Ramlah)	"Products that have uniqueness and differentiation... have the potential to penetrate a wider market."	Product differentiation is essential to reach national markets.
	Community (Sanasi)	" Food products made from local ingredients... are becoming the choice of many people."	Innovation introduces local culture and improves product quality.
	Community (Rusli)	"Products are getting increasingly distinctive and have their characteristics."	Innovation enhances the image and demand of markets outside the region.
	Culinary Business Players	Healthy snacks with local ingredients... make us more recognizable."	Innovation creates added value and strengthens branding
Weaknesses	Government (Village Head)	"Many MSME players in our village have creative ideas to develop products, but they find it difficult because the funds needed are not small. Without financial support, innovation becomes difficult to realize."	Limited Access to Funding Impedes Product Innovation
	Academician (Ramlah)	"In the academic world, innovation requires investment in tools, training, and research. Unfortunately, MSMEs still struggle to access financing for innovation, especially without guarantees of the success of new products."	Product Innovation Requires Investment and Weak Access to Financing
	Community (Sanasi)	"I heard from several MSME players that they have ideas for new products but are constrained by funds. So the products that are sold are just that."	Lack of Capital Limits MSME Product Variety
	Community (Rusli)	"Many MSMEs here still use traditional methods, not because they do not	Limited Knowledge a Access to Modern Product Technology

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		want to change, but because they do not know how and do not have people to help them."	
	Culinary Business Players	"We want to develop new products, but funds are limited, so innovation is difficult. Sometimes, we cannot even participate in exhibitions because of high costs."	Financial Limitations Hinder Promotion and Market Expansion of New Products
Opportunities	Government (Village Head)	"Our region has great natural resource potential, such as agricultural products processed into high-value products. This could be a great opportunity if utilized properly."	The Potential of Lo Natural Resources as Opportunity for MSI Product Development
	Academician (Ramlah)	"Many campus programs such as community service or thematic KKN can help MSMEs develop product innovation and marketing. It is just a synergy between the campus and business actors."	Academic Collaboration as an Opportunity for Mentoring and Innovation for MSMEs
	Community (Sanasi)	"Now many tourists come to our area. If MSMEs can sell typical products, many will be interested in buying them as souvenirs."	Market Opportunities from the Tourism Sector for MSME Local Products
	Community (Rusli)	"Many young people are now tech-savvy. If involved, they can help MSMEs go digital, such as selling online or promoting on social media."	Engagement of Tech-sav Young Generation as Opportunity for Dig Transformation of MSME:

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	Culinary Business Players	"There is a lot of demand for regional specialities from outside the city, especially if they can last a long time and are attractively packaged. This could be a great opportunity for expansion."	Demand for Durable Specialty Products as an Opportunity for Market Expansion
Threats	Government (Village Head)	"We are worried that local products will lose competitiveness with foreign products that enter through modern markets or large stores. The price and packaging are cheap, so our MSMEs are less attractive."	Foreign Product Competition as Threat to Competitiveness of Local MSME Products
	Academician (Ramlah)	"The dependence of MSMEs on old ways without technological adaptation can be a big threat, especially in the current digital era. They can be left far behind."	Lack of Technology Adaptation as a Threat to MSMEs' Lag in the Digital Age
	Community (Sanasi)	"Sometimes, when there are natural disasters or extreme weather, farming yields decline. Automatically, businesses that depend on these materials are also affected."	Dependence on Natural Conditions as a Threat to MSME Production Sustainability
	Community (Rusli)	"The problem is that the younger generation is no longer interested in continuing their parents' business. They would rather work in the city than build their own business in the village."	Lack of Business Regeneration as a Threat to Local MSME Sustainability
	Culinary Business Players	"The cost of raw materials is getting more expensive, while people's purchasing	Price Fluctuations and Purchasing Power as Threats to Culinary Business Sustainability

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		power sometimes drops. It is hard to maintain quality and remain profitable then."	

The table above illustrates the findings relating to the region's strengths, weaknesses, opportunities and threats faced by MSME actors. Furthermore, this section will present conclusions from these findings, providing a clearer picture of the key factors that need to be considered in formulating development strategies to improve the competitiveness and sustainability of MSMEs in the future.

Strengths: Competitive Local Product Innovation

Product innovation that utilizes local potential is a significant strength in developing MSMEs in the study area. This can be seen from the success of business actors in creating unique regional food products, which are produced from local raw materials and processed with a modern approach while maintaining traditional flavours. The Village Head mentioned that *"Product innovation can attract the attention of markets outside the region and increase community income,"* indicating the significant role of innovation in expanding market reach and increasing competitiveness.

This finding is consistent with the resource-based view theory (Barney, 2015), which states that internal uniqueness, such as innovation and local culture, is the basis of sustainable competitive advantage. Academic support also confirms that product differentiation is the key to penetrating the market. Research by Andersén (2021) and Chirumalla et al. (2024) support that product innovation based on local wisdom is essential to improving SME performance, especially when combined with effective digitalization strategies.

Weaknesses: Limited Financial Literacy and Digital Readiness

Although their products have high selling points, most MSME players still face limitations in financial literacy and digital skills. As academic Ramlah *states, "Many business owners still do not understand the importance of simple financial records and digital marketing strategies."* This leads to business decision-making that is often not based on accurate data.

This problem is in line with the research of Agostino et al. (2022), which highlights the importance of accountability and digital literacy in improving organizational effectiveness, including MSMEs. In addition, limited training and mentoring are also inhibiting factors. Sharon et al. (2024) state that the success of innovation in MSMEs is highly dependent on the readiness of human resources and adequate management information systems.

These weaknesses are the main obstacles for MSMEs to upgrade and be competitive in the digital era, especially in financial management, risk management, and online marketing.

Opportunities: Partnership Support and Digital Technology

Despite the challenges, local MSMEs have great opportunities to thrive through strategic partnerships with universities, government, and the private sector. The village government has demonstrated its commitment to supporting training and community empowerment programs, as expressed by the village head said, *"Collaboration with the college has opened new insights for the community in developing businesses."*

This reinforces the idea of the Triple Helix Model (Amaral et al., 2024) (Ruhrmann et al., 2022) (Etzkowitz & Leydesdorff, 2000), where the interaction between academia, government, and business is the driving force behind innovation and local economic growth. Digital technology also provides excellent opportunities in terms of marketing, network expansion, and operational efficiency. Putri and

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Arif (2023) emphasized that MSMEs that can integrate digital marketing strategies experience a significant increase in sales volume and customer loyalty.

By utilizing digital platforms, businesses can reach a broader market and build a strong and sustainable brand.

Threats: Seasonal Dependency and Market Competition

One of the real threats MSME players face is the dependence on harvest seasons and fluctuations in raw material prices. Sanasi, one of the business owners, revealed that *"When the season is not favourable, production drops dramatically, and demand cannot be met."* This shows the high vulnerability of MSMEs to external factors, especially in the agribusiness sector.

In addition, increasingly fierce market competition, both from other local products and outside the region, is an unavoidable challenge. Products that do not have a strong branding strategy will be easily displaced by similar products that are better known in the digital market. Research by Chirumalla et al. (2024) confirms that MSMEs will struggle to survive in increasingly dynamic competition without continuous innovation and adaptive risk management strategies. Another threat is the lack of protection for intellectual property rights and local branding, which makes village superior products vulnerable to imitation without fair economic value compensation for the original maker.

Based on the SWOT analysis above, MSME development in this region has great potential, especially through strengthening local product innovation and cross-sector collaboration. However, business sustainability highly depends on businesses' ability to improve financial literacy, adopt digital technology, and mitigate seasonal and external business risks.

CONCLUSION AND FURTHER STUDY

Based on the SWOT analysis results, product innovation can increase income for MSMEs in the Maros Regency. Product innovation's main strengths are increased competitiveness, product differentiation, and production efficiency, which can reduce operational costs. However, the most significant weaknesses are high investment costs and limited human resources skilled in technology.

Opportunities arising from product innovation include a wide range of local and national markets and increased demand for sustainable products. However, MSMEs must also face threats, such as the risk of product failure and increasingly fierce competition in the market. Therefore, MSMEs must carefully calculate the risks and potential benefits of product innovation and prepare strategies to deal with them.

Based on interviews with various informants, the main threats faced by MSMEs in the region include interrelated external and internal factors. From an external perspective, the influx of foreign products with low prices and attractive packaging threatens the competitiveness of local products. In addition, dependence on natural conditions such as extreme weather also directly impacts the supply of raw materials, especially for MSMEs based on agriculture and fisheries.

Meanwhile, from an internal perspective, the lack of adaptation to technology and the low interest of the younger generation in continuing family businesses pose a serious threat to the sustainability and regeneration of MSMEs. In addition, companies face pressure from fluctuating raw material prices and declining purchasing power, which has the potential to reduce product quality and profit margins.

Without proper mitigation strategies, these threats could hamper the future growth and sustainability of MSMEs.

ETHICAL DISCLOSURE

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In the study, *Empowering SMEs Through Product Innovation: A SWOT-Based Analysis of Income Enhancement in Maros Regency, Indonesia*, all participants provided written informed consent before involvement. They were informed about the purpose of the research, their voluntary participation, the right to withdraw at any time without consequences, and the confidentiality of all responses and information shared.

CONFLICT OF INTERESTS

The authors declare that there is no conflict of interest in conducting the study titled *Empowering SMEs Through Product Innovation: A SWOT-Based Analysis of Income Enhancement in Maros Regency, Indonesia*.

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