

## Adapting the Balanced Scorecard for Export-Oriented SMEs: A Case Study from Indonesia

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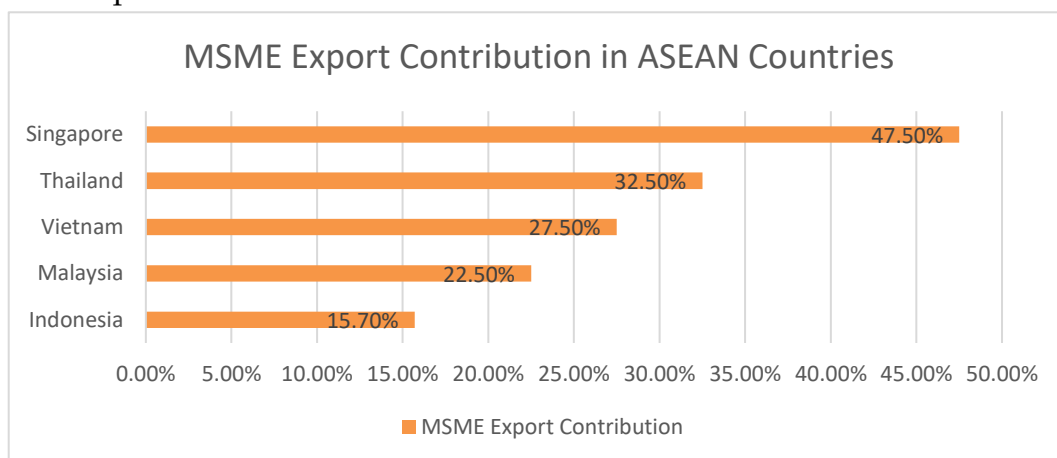
### ABSTRACT

This study investigates the adaptation of the Balanced Scorecard (BSC) as a strategic framework for export-oriented micro, small, and medium enterprises (MSMEs) in developing countries, using Keripik Tempe Rohani, a food-processing enterprise exporting to Taiwan, as a case study. Employing a qualitative case study design, data were collected through in-depth interviews with owners and employees, customer surveys, and document analysis, and analyzed with NVivo thematic coding across four BSC perspectives. The findings reveal that financial efficiency, customer responsiveness, internal process innovation, and participatory learning culture drive sustainable growth. The study contributes by demonstrating BSC's role not only as a performance measurement tool but also as a strategic enabler aligning MSMEs' sustainability goals with global market demands, supporting SDGs 8 and 9.

## INTRODUCTION

The snack food industry in Indonesia is one of the strategic sectors that supports national economic growth, especially through the contribution of small and medium enterprises (SMEs). This sector is relatively easy to run with limited capital, but has promising prospects due to increasing market demand in line with lifestyle changes and the growth of the middle class (Sibarani, 2023; Silaban et al., 2022). One notable case is Keripik Tempe Rohani based in Malang, East Java, which leverages abundant local raw materials to serve both domestic and international markets, including Taiwan. This example illustrates the global potential of Indonesian local food products (Usman et al., 2023).

This success is supported by innovation, participation in international exhibitions, and collaboration with distributors. However, exporting SMEs such as Keripik Tempe Rohani face serious challenges. The Taiwanese market demands high standards, ranging from product consistency and innovation to environmentally friendly packaging. For MSMEs, these requirements are difficult to meet with limited resources and cost efficiency pressures. (Cai & Wu, 2024; Gerke et al., 2023). The contribution of Indonesian SMEs to non-oil and gas exports is only 15.7%, far behind Thailand and Singapore at 30–40% (Respati & Djumena, 2022). This low contribution highlights the limitations of market access, financing, and weak international standard performance management systems. This highlights the need for a strategic performance measurement system to enhance MSME export competitiveness, as shown in Figure 1. Contribution of MSME Exports in ASEAN.



Source: (Respati & Djumena, 2022)

**Figure 1. Contribution of MSME Exports in ASEAN (%)**

In response to these challenges, the Balanced Scorecard (BSC) offers a relevant solution. BSC addresses the limitations of traditional measurement systems by evaluating financial and non-financial performance through four perspectives: financial, customer, internal business processes, and learning and growth (Kaplan & Norton, 1996; Madsen, 2025). Studies confirm that BSC strengthens accountability and aligns strategy with operations activities (Benková et al., 2020; Rekunen et al., 2024). For SMEs, BSC helps balance short-term cost efficiency with innovation and long-term competitiveness (Singh et al.,

2024; Usman et al., 2023). The differences with the traditional system are shown in Figure 2. Traditional VS Balanced Scorecard

**Traditional vs. Balanced Scorecard**

Aspect	Traditional	Balanced Scorecard
 <b>Focus</b>	Short-term profit	Long-term value creation
 <b>Indicator</b>	Only financial	Financial & non-financial
 <b>Scope</b>	Internal performance measurement	4 perspectives
 <b>Adaptability</b>	Not adaptive	Adaptive

Source: adapted from (Benková et al., 2020; Kaplan & Norton, 1996, 2000).

**Figure 2. Traditional VS Balanced Scorecard**

Furthermore, BSC is not only a measurement tool but also a strategic instrument that directs organizations toward future adaptation (Kaplan & Norton, 1996; Madsen, 2025). Research shows that its implementation improves efficiency, accountability, and alignment of strategies with daily activities (Muraba et al., 2024; Singh et al., 2024). In the export of MSMEs such as Keripik Tempe Rohani, BSC supports resource optimization while pursuing innovation and global market expansion. From a management accounting perspective, BSC also functions as a control system that links strategy with performance practices (Anthony & Govindrajana, 2007), providing indicators to assess innovation, service quality, and human resource development (Rekunen et al., 2024).

Nevertheless, most BSC research focuses on large and multinational companies (Benková et al., 2020; Kairu et al., 2013). Studies on export-oriented SMEs in developing countries, especially in the snack food sector, are still limited (Singh et al., 2024). The SME context differs fundamentally in terms of resources, market orientation, and performance management strategies. While BSC has been shown to improve SME competitiveness (Octaviana et al., 2023; Usman et al., 2023), its application in export-oriented SMEs requires specific adaptation. Global market access, international supply chains, and trade regulations require performance indicators that are aligned with internationalization strategies. Therefore, research on BSC adjustments for Indonesian export MSMEs contributes theoretically to strategic management literature and provides practical guidance for improving competitiveness and sustainability.

## **THEORETICAL REVIEW**

### ***Basic Concepts of the Balanced Scorecard (BSC)***

The Balanced Scorecard (BSC), introduced by Kaplan & Norton (1992), is a framework that integrates financial and non-financial perspectives – financial,

customer, internal business processes, and learning and growth—to provide a holistic view of organizational performance. Unlike traditional approaches that emphasize financial outcomes, the BSC translates vision and strategy into measurable actions, thereby linking short-term and long-term goals (Horngren et al., 2014; Kaplan & Norton, 1996).

Over time, BSC has evolved from a performance measurement tool into a strategic management system that ensures consistent implementation of strategy (Kaplan & Norton, 2000). Contemporary studies reinforce this view, showing that the BSC enhances strategic alignment and adaptability in competitive markets (Madsen, 2025; Tawse & Tabesh, 2023). Despite these advances, most applications have focused on large firms, leaving limited examination of its adaptability to SMEs, particularly those engaged in export markets.

### ***Measurement Aspects in the Balanced Scorecard (BSC)***

The financial perspective emphasizes resource management to sustain growth and profitability, with indicators such as cost efficiency, long-term planning, and financial stability (Benková et al., 2020; Malgwi & Dahiru, 2014). While suitable for large firms, in SMEs these measures must prioritize liquidity and survival strategies. The customer perspective evaluates satisfaction, loyalty, and acquisition (Horngren et al., 2012; Kaplan & Norton, 1992; Malgwi & Dahiru, 2014). However, in SMEs—especially export-oriented ones—this requires adapting to niche consumer preferences, cultural differences, and global market standards.

The internal business process perspective captures efficiency across innovation, operations, and after-sales service (Kaplan & Norton, 2000). Yet, SMEs often rely more on operational efficiency than large-scale innovation due to resource limitations. The learning and growth perspective emphasizes human resources, technology, and organizational culture, with indicators such as employee satisfaction, retention, and productivity (Kaplan & Norton, 1996; Mulyadi, 2001). For SMEs, this is best achieved through incremental capability building, including training in production, marketing, and exporting. Thus, while the four perspectives provide a robust framework, the challenge lies in contextualizing BSC indicators to SME realities.

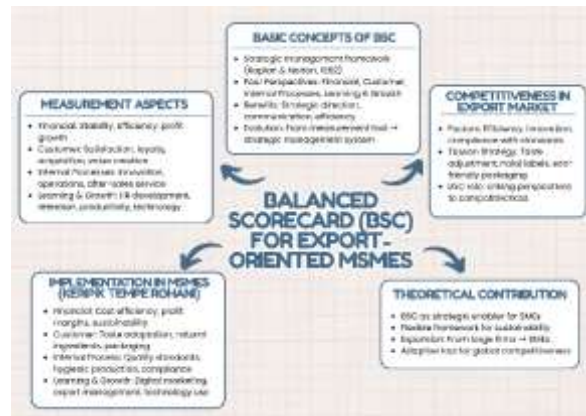
### ***Implementation of the Balanced Scorecard in MSMEs***

Although Kaplan & Norton (1996) and Mulyadi (2001) highlight the benefits of BSC for performance management, empirical studies on SMEs remain limited. Large corporations often use the BSC to enhance strategic learning and alignment, but SMEs apply it under resource constraints and survival pressures. For enterprises such as Keripik Tempe Rohani, BSC adoption facilitates integration between financial discipline, customer orientation, process control, and human resource development. For example, financial strategies focus on cost efficiency and stable cash flow; customer strategies emphasize responsiveness and packaging innovation; process strategies ensure quality control and compliance with export standards; and learning and growth strategies rely on digital marketing and technology adoption. In this sense, the BSC functions as a

flexible and adaptive system that links long-term goals with resource limitations, extending its applicability beyond large firms to export-oriented SMEs

### *Company Competitiveness in the Export Market*

Competitiveness in global markets is shaped by efficiency, innovation, and responsiveness to consumer needs (Porter, 1990). In the tempe chip industry, this includes product uniqueness, pricing, packaging, and distribution networks. Exporting to Taiwan, for instance, requires adapting flavors, ensuring halal certification, and adopting eco-friendly packaging. From the BSC perspective, the customer dimension addresses consumer preferences; internal processes guarantee export quality; and financial measures support competitive pricing (Kaplan & Norton, 1996; Mulyadi, 2001). While existing studies often highlight macro-level determinants such as trade policy or supply chains, they understate the role of firm-level strategic tools like the BSC. By integrating financial, customer, and process perspectives, the BSC operationalizes competitiveness in SMEs, helping them align internal capabilities with external demands.



**Figure 3. Mind Map Visualization Related to the Literature Review**

## **METHODOLOGY**

This study uses a qualitative descriptive case study approach, focusing on Keripik Tempe Rohani, a micro-business in Malang City that exports to Taiwan. This method was chosen because it enables in-depth exploration of managerial practices and Balanced Scorecard (BSC) implementation in complex real-world contexts (Creswell & Poth, 2018; Yin, 2018). Informants were selected through purposive sampling, consisting of the business owner, employees in marketing and production, and both domestic and international customers. This diversity allowed triangulation of perspectives, strengthening the credibility of findings (Miles et al., 2014).

Data were collected through interviews based on the four BSC perspectives, direct observation, and document analysis (financial records, sales data, export information, and promotional materials). To ensure validity, triangulation and member checking were applied (Flick, 2018; Lincoln & Guba, 1985). Meanwhile, data analysis was conducted manually using the interactive model of Miles & Huberman (1994), which consists of three stages: data reduction, data presentation, and conclusion drawing. The coding process was

carried out in stages: (1) open coding to identify initial themes, (2) axial coding to connect categories, and (3) selective coding to construct thematic narratives in line with the four BSC perspectives. This analysis is considered appropriate for organizing complex qualitative data, resulting in in-depth interpretations that are relevant to the theoretical framework (Bengtsson, 2016; Nowell et al., 2017).

Trustworthiness was maintained using Lincoln & Guba (1985) criteria: credibility, transferability, dependability, and confirmability (Korstjens & Moser, 2018; Noble & Smith, 2015). Finally, the research was carried out systematically, from problem identification and literature review to data collection, analysis, and report writing, ensuring contributions to both management accounting theory and SME export practices. With these stages, the research was conducted in accordance with internationally recognized qualitative research standards, so that the results could contribute to the development of management accounting theory as well as the practice of exporting MSMEs.

## RESULTS

### *Financial Perspective*

The findings show that Keripik Tempe Rohani places cost efficiency as a key principle in financial management through strict budget control, zero-waste practices, and reinvestment of profits. As the owner explained:

“We try to use funds as efficiently as possible, for example, by using a tempe cutting machine to speed up the production process and reduce the need for manual labor. We also use a centralized gas network to reduce energy costs.” (Owner, interview, 2025).

The business owner emphasized that the company chooses not to rely on external loans. All expansion and product innovation are financed with internal capital through profit reinvestment:

“If we can continue to allocate profits for reinvestment, such as increasing production capacity, opening new markets, or developing product variants, it will have a significant impact.” (Owner, interview, 2025).

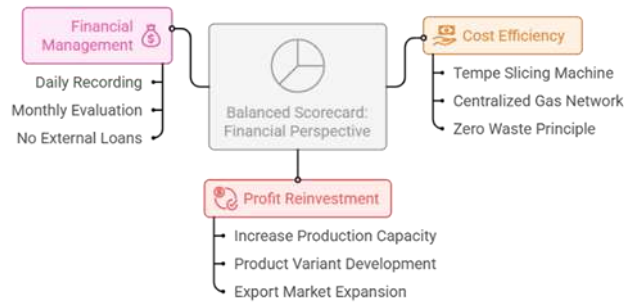
Simple financial documents show consistent daily transaction records, evaluated monthly through internal meetings. As the business owner explains:

“We record our finances every day... then every month, we hold an evaluation meeting with the finance team.” (Owner, interview, 2025).

This practice is in line with Benková et al. (2020), who state that the financial perspective in the Balanced Scorecard emphasizes not only profitability but also cash flow sustainability and cost efficiency. It also supports Malgwi & Dahiru (2014), who highlight efficiency-based financial management and reinvestment as adaptive strategies in MSMEs.

The contribution of this finding is to expand the management accounting literature by providing empirical evidence that the financial perspective in the BSC for exporting SMEs not only serves as an indicator of profit but also as a financial adaptation mechanism that strengthens business resilience in the global market. Rohani Tempe Chips' financial strategy focuses on three main elements—cost efficiency, profit reinvestment, and financial management—which together demonstrate financial independence and accountability.

Conceptually, this aligns with Benková et al. (2020), who emphasize efficiency and cash flow sustainability, and with Malgwi & Dahiru (2014), who identify reinvestment and efficiency as adaptive strategies in MSMEs. A summary of the field findings regarding the application of the financial perspective in the Balanced Scorecard at Keripik Tempe Rohani can be seen in Figure 4 below.



**Figure 4. Financial Perspective of BSC at Keripik Tempe Rohani**

### *Customer Perspective*

The results of a questionnaire distributed to 30 customers show that, in general, customers are satisfied with the performance of Keripik Tempe Rohani. Three sub-indicators in the Balanced Scorecard customer perspective, namely product and service attributes, company image, and customer relations, show positive values. The highest indicators for each sub-indicator are shown in the following table.

Table 1. Customer Perspective Questionnaire Results Based on Percentage

Sub-indicators	Indicators with the Highest Percentage	Percentage	Category
<b>Product and Service Attributes</b>	Product Price	60,61%	Satisfied
<b>Company Image</b>	Ability to Meet Customer Needs	57,58%	Satisfied
<b>Customer Relations</b>	Speed of Response in Resolving Issues	56,25%	Satisfied

Based on the results of a questionnaire conducted among customers of Keripik Tempe Rohani, the highest results for each sub-indicator show that the company plays a strong role in creating added value for consumers. This, in turn, can strengthen the company's competitive position in local and international markets. These findings are in line with the customer perspective, which reflects the company's ability to understand market needs and formulate value-added strategies to create customer loyalty and satisfaction.

In the product and service attributes sub-indicator, the product price ranked highest (60.61%). This indicates that most customers consider the price of tempe

chips commensurate with the quality received (value for money). As one consumer stated,

“The price of these tempeh chips is not too expensive, but they taste good and are consistent.” (Domestic customer, open questionnaire, 2025).

Furthermore, in the corporate image sub-indicator, the indicator with the highest score was the ability to meet customer needs, with a percentage of 57.58%. This shows that the company is considered capable of understanding consumer preferences and providing products that are relevant to market needs. Flavor variations, such as sweet and spicy and balado, are considered to be in line with trends, while the use of practical packaging increases the attractiveness of the product. One customer stated,

“When there are new products, they usually follow the trends. I feel that this company is quite innovative and always maintains quality.” (Customer, open questionnaire, 2025).

In the customer relations sub-indicator, the indicator with the highest score was speed of response in resolving issues, at 56.25%. The majority of customers were satisfied with the way the company handled complaints. Customer service was provided directly via WhatsApp and social media, with an average response time of less than 24 hours. This was confirmed by a marketing employee, who stated,

“If there are any complaints, we usually respond within 24 hours via WhatsApp or social media.” (Marketing employee, interview, 2025).

Customer testimonials also confirmed that,

“When I complained about the dented packaging, the admin responded immediately that same day and replaced it with a new product.” (Customer, open questionnaire, 2025).

Overall, these results show that domestic customers rate Keripik Tempe Rohani positively in three aspects: competitive product prices (60.61%), ability to meet customer needs (57.58%), and quick response in handling complaints (56.25%). These aspects build satisfaction and loyalty while becoming a foundation to strengthen competitiveness in broader markets.

### ***Internal Business Process Perspective***

The results show that Keripik Tempe Rohani implements the internal business process perspective as a foundation for creating value and maintaining competitiveness in the export market. Three main aspects are emphasized: product innovation, production efficiency, and after-sales service.

Product innovation is carried out based on market needs and consumer feedback. One production employee explained:

“We created several flavors based on customer feedback, such as the sweet and spicy flavor, which turned out to be more popular among Taiwanese consumers. We usually test them on a small scale before officially launching them.” (Production Employee, interview, 2025).

In addition to flavor diversification, packaging design was adjusted to be more modern and environmentally friendly, reflecting both functional and aesthetic considerations.

Production operations prioritize efficiency and consistency. The business owner highlighted:

"We use tempeh cutting machines and automatic packaging machines to speed up the process and produce neater and more hygienic results. In addition, we continue to implement the zero-waste principle so that not much raw material is wasted." (Owner, interview, 2025).

The company also switched from LPG cylinders to a centralized gas network to reduce costs and ensure stability. Quality is maintained through manual sorting, while distribution is controlled with strict delivery schedules. As noted by a marketing employee:

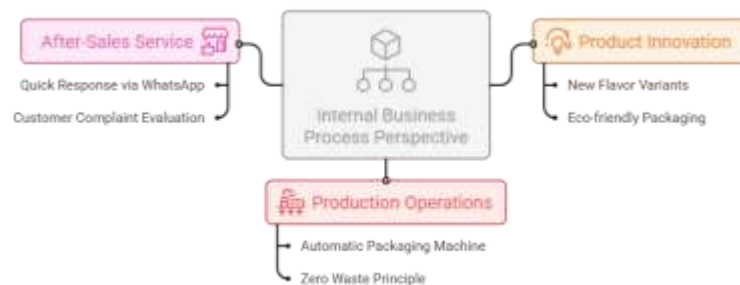
"We strictly regulate delivery schedules so that products reach distributors with their quality intact. Sometimes I monitor the delivery process directly to ensure there are no obstacles." (Marketing Employee, interview, 2025).

After-sales service focuses on responsiveness and customer trust. A sales administrator stated:

"If there are any complaints, they are usually handled on the same day via WhatsApp. We discuss them with the team, then immediately look for the best solution to maintain customer trust." (Sales Admin, interview, 2025).

Although the complaint system is not fully digitized, the company applies a practical and solution-oriented mechanism. Feedback is also used as material for continuous improvement in both production and marketing.

In summary, the internal business processes of Keripik Tempe Rohani are built on three pillars: market-driven innovation, efficient production supported by simple technology, and responsive after-sales service. These pillars collectively enhance product quality, efficiency, and customer satisfaction, thereby strengthening the company's position in the export market.



**Figure 5. BSC Internal Business Processes at Keripik Tempe Rohani Perspective on Learning and Growth**

Research findings show that Keripik Tempe Rohani places the perspective of learning and growth as a key factor in maintaining business sustainability and strengthening competitiveness in the export market. This perspective is manifested through three main aspects, namely participatory culture, human resource development, and employee loyalty and retention.

In terms of participatory culture, the company provides space for employees to express creative ideas, especially those related to product development and marketing strategies. Innovations in flavors, such as sweet and spicy and

international balado, mostly come from the ideas of young employees who are more attuned to consumer trends. The business owner emphasizes this openness:

"We are always open to feedback from employees. If there are ideas for new flavors, we usually discuss them immediately during briefings. Some flavor innovations actually come from them, not from me." (Owner, interview, 2025).

This is reinforced by production employees who add that the discussion process is informal but routine:

"At every briefing, there is usually a session for sharing ideas. If an idea is considered good, it is immediately tested on a small scale." (Production Employee, interview, 2025).

In terms of human resource development, the company still relies on informal training through on-the-job training. Senior employees guide new employees in terms of production standards, hygiene, and packaging. Although there are no formal training modules, this pattern is quite effective in building practical skills. A senior employee stated:

"When there are new employees, we usually teach them directly in the field. This way, they quickly get used to the applicable standards." (Senior Employee, interview, 2025).

In addition, the company utilizes simple technology such as WhatsApp Groups to convey policies, production targets, or work schedules, so that coordination runs effectively even without a formal digital management system.

In terms of employee loyalty and retention, the company has succeeded in keeping employee turnover low. The family-like work atmosphere, flexibility for older employees, and the involvement of senior employees in decision-making strengthen the sense of ownership. A sales administrator emphasized:

"On average, employees here have been working for a long time, and few leave. The atmosphere is like family, so they feel at home." (Sales Administrator, interview, 2025).

Based on observations, this loyalty is also influenced by a sense of togetherness in the work environment at Sentra Industri Tempe Malang, where the company is located. Fierce competition among business players has actually become a positive incentive to continue adapting, learning, and innovating.

Thus, the results of the study show that the perspective of learning and growth at Keripik Tempe Rohani has been implemented through a participatory culture, experience-based learning, and high employee loyalty. Although the formal reward system and digitization of human resource management are still limited, the foundation of a collaborative work culture has become an important asset for the sustainability of innovation and the company's export competitiveness. Figure 6 below presents a synthesis of field findings related to organizational learning and innovation strategies applied in the learning and growth perspective.

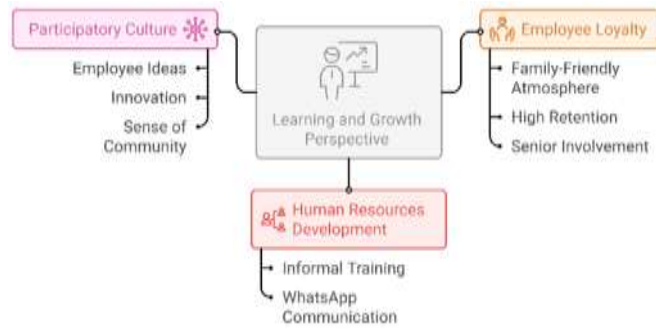


Figure 6. Learning and Growth Perspective of BSC at Keripik Tempe Rohani

## DISCUSSION

### *Financial Perspective*

The findings of this study indicate that Keripik Tempe Rohani prioritizes cost efficiency, profit reinvestment, and financial management discipline as the main pillars of its Balanced Scorecard (BSC) financial perspective. This approach shows that exporting MSMEs tend to favor conservative but sustainable strategies, namely by avoiding dependence on external loans and choosing to reinvest profits as the main source of expansion funding. This strategy is in line with the findings of Malgwi & Dahiru (2014), which emphasize the importance of financial efficiency and long-term planning for small businesses in facing market uncertainty.

However, this pattern differs from the practices often found in large companies, where financial leverage and access to external financing are important instruments in accelerating expansion (Benková et al., 2020). This finding expands the literature by showing that, in the context of exporting MSMEs in developing countries, a self-reinvestment-based financial strategy is more realistic and adaptive than reliance on external financing.

From a management accounting perspective, the cost efficiency strategy pursued through the use of tempe cutting machines, centralized gas networks, and the application of zero-waste principles reflects cost control practices that are in line with the BSC objective of increasing company value (Kaplan & Norton, 1996; Rekunen et al., 2024). This supports the argument that efficiency is not only an operational aspect, but also a strategic decision that can determine the success of exports, especially in markets with tight profit margins such as Taiwan.

Furthermore, the company's daily recording and monthly financial evaluation practices reflect the importance of real-time financial monitoring in decision making. This is consistent with the study by Usman et al. (2023), which shows that financial accountability and regular financial reporting are key factors in enhancing the credibility of MSMEs in the eyes of international partners. Thus, the BSC financial perspective in this case not only serves as a performance measurement tool but also as a mechanism for strengthening financial governance at the MSME level.

The theoretical contribution of this discussion is to broaden the understanding of the adaptation of the BSC financial perspective in the context of exporting MSMEs. Whereas previous literature has placed greater emphasis on value creation for shareholders (Benková et al., 2020; Kaplan & Norton, 2000), this study shows that for MSMEs, value creation is also achieved through risk control,

cost efficiency, and independent reinvestment. In practical terms, these findings imply that government policies and supporting institutions should encourage alternative funding models such as research grants, production machinery subsidies, or energy efficiency incentives, rather than emphasizing access to loans, which often become a burden for MSMEs.

### ***Customer Perspective***

The results of the study show that Rohani Tempe Chips customers give positive ratings to three main indicators, namely product price (60.61%), ability to meet customer needs (57.58%), and speed of response in resolving problems (56.25%). These three indicators reflect the company's strategic role in creating added value for consumers while strengthening its position in an increasingly competitive market.

In terms of product price, these findings show that the company's pricing strategy is considered capable of creating a balance between affordability and quality. Consumers consider the price paid to be commensurate with the quality of the product received. This supports Mulyadi (2001) view, which emphasizes that competitive prices are a key factor in increasing competitiveness, especially in the snack food industry with high demand elasticity.

From the aspect of corporate image, the ability to meet customer needs emerged as the most dominant indicator, showing that the company can read market preferences through innovation, packaging, and consistent quality. These results are in line with the Balanced Scorecard theory by Kaplan & Norton (1996), which emphasizes the importance of the customer perspective in building reputation and competitive advantage. Research by Horngren et al. (2012) adds that a deep understanding of customer expectations can increase company value in a sustainable manner. Herlambang (2017) further confirms that market orientation and product innovation jointly improve MSME performance.

In customer relations, response speed received the highest score, indicating an adaptive service system through WhatsApp and social media. This finding is in line with the Balanced Scorecard principle, which emphasizes customer satisfaction as a prerequisite for loyalty (Kaplan & Norton, 1992). Malgwi & Dahiru (2014) also emphasize that effective customer relationship management can strengthen consumers' emotional attachment to a brand. This finding is supported by case studies showing that the use of Instagram and WhatsApp enables MSMEs to respond to customers quickly and personally, thereby increasing customer satisfaction and loyalty (Santoso & Saptaria, 2025).

These findings indicate that Keripik Tempe Rohani has successfully maintained a balance between product quality, positive image, and responsive customer service. These results not only support the Balanced Scorecard concept in assessing the customer perspective but also align with the latest literature emphasizing the role of innovation, competitive pricing, and customer relationships in building the competitive advantage of MSMEs in the global era (Kaplan & Norton, 2004). This provides a strong foundation to strengthen loyalty domestically and expand into export markets such as Taiwan.

### *Internal Business Process Perspective*

The findings of this study indicate that Keripik Tempe Rohani places product innovation, production efficiency, and after-sales service as the main pillars in the BSC internal business process perspective. This approach proves that for export-oriented MSMEs, competitive advantage does not only depend on pricing strategies and product quality, but also on adaptive and integrated internal process management.

First, in terms of product innovation, the strategy of developing flavor variants and adjusting packaging is consistent with the literature that emphasizes the importance of continuous innovation as a key factor in global competitiveness (Kaplan & Norton, 2000; Porter, 1990). While large companies usually innovate through formal research units, MSMEs such as Keripik Tempe Rohani rely on direct feedback from customers and employee creativity. This is in line with the findings of Octaviana et al. (2023) that the application of BSC in MSMEs often places market-based innovation as the main strategy due to limited resources for formal research.

Second, in terms of production operations, efficiency through the use of automatic packaging machines, the zero-waste principle, and the use of a centralized gas network demonstrate quality control practices consistent with the concept of lean production in BSC (Kaplan & Norton, 1996; Rekunen et al., 2024). These findings reinforce Mulyadi (2001) argument that the application of BSC in MSMEs can encourage the optimization of resource allocation through cost efficiency and quality improvement. The difference with large companies that rely on full automation is that these MSMEs combine simple technology with the manual skills of their workforce. This demonstrates the flexibility of BSC adaptation on a smaller business scale, which, according to Benková et al. (2020), is one of the advantages of MSMEs in facing a dynamic market.

Third, in terms of after-sales service, quick responses to customer complaints via WhatsApp and social media are a practical application of the principle of value creation in BSC. Although not yet digitized in a formal CRM system, this approach is effective in maintaining customer loyalty and enhancing the company's image. This is in line with the findings of Horngren et al. (2012) that customer service quality is a key indicator of business strategy success, especially in export markets that are highly concerned with consumer satisfaction. Furthermore, Usman et al. (2023) emphasize that customer involvement in the service improvement process is an important part of a BSC-based sustainability strategy.

Theoretically, these findings expand the literature by showing how the internal business process perspective of BSC can be adapted by exporting SMEs in developing countries, whereas the studies by Kairu et al. (2013) and Kaplan & Norton (2000) focus more on large companies or the service sector, this study shows that SMEs can achieve efficiency and innovation through a combination of simple technology, employee experience, and informal digital communication, thus supporting Pirogova et al. (2020) argument that the success of BSC implementation is determined by an organization's ability to align indicators with internal capacity and market needs. Practically, these results imply that MSME

assistance strategies should focus on strengthening market-based product innovation, providing access to simple production technologies, and digitizing affordable customer services, where government policies and business incubators can be directed towards subsidizing production equipment, innovation training, and developing digital-based customer communication platforms. so that the internal business process perspective of the BSC functions not only as a measuring tool but also as a strategic framework that supports the sustainable competitiveness of export-oriented MSMEs.

### ***Perspective on Learning and Growth***

The findings of this study indicate that Keripik Tempe Rohani views the perspective of learning and growth as an important pillar for supporting sustainable innovation and maintaining export competitiveness. This strategy is realized through three main aspects, namely participatory culture, human resource development, and employee loyalty.

First, in terms of participatory culture, the company's openness to employee ideas demonstrates the application of the principle of employee empowerment, which emphasizes the importance of workforce involvement in the decision-making process. This is in line with Kaplan & Norton (1996) view that the learning and growth perspective requires organizations to build an environment that supports creativity and participation. In MSMEs, employee-based innovation has proven to be capable of producing product variants that are relevant to international market tastes. This finding reinforces the argument of Pirogova et al. (2020), who assert that organizations with a participatory culture have a greater capacity to adapt to global market changes.

In terms of human resource development, on-the-job training serves as an experience-based learning strategy. Although informally conducted and not systematically documented, it has proven effective in transferring essential technical skills to new employees. This supports the views of Mulyadi (2001) and Horngren et al. (2012) that in MSMEs, learning is often done practically and directly in the field, unlike large companies that have formal training programs. Thus, the results of this study expand the literature by showing that in conditions of limited resources, experience-based training can be an adaptive alternative to improve human resource capabilities.

Third, in terms of employee loyalty, high retention rates and a family-like work atmosphere demonstrate the important contribution of organizational culture to business sustainability. This condition is in line with the findings of Usman et al. (2023), who state that the successful implementation of BSC in MSMEs is also determined by the quality of relationships between employees and their sense of belonging to the company. High loyalty not only reduces recruitment costs but also increases operational stability because experienced workers remain. In addition, the involvement of senior employees in strategic decision-making indicates a participatory system that strengthens a sense of collective responsibility.

Theoretically, these findings broaden the understanding of the adaptation of the BSC learning and growth perspective in the context of export SMEs, where previous literature emphasized the importance of formal indicators such as

employee training and productivity levels (Benková et al., 2020; Kaplan & Norton, 2000), this study shows that in SMEs, learning can be realized through simple mechanisms such as routine briefings, informal mentoring, and communication based on inexpensive technology (e.g., WhatsApp Group), thus confirming the view of Rekunen et al. (2024) that BSC indicators must be adapted to organizational characteristics in order to function effectively. Practically, this discussion implies that strengthening the learning and growth perspective in export SMEs requires support in the form of more structured formal training programs, performance-based reward systems, and digitization of HR management, where the government and supporting institutions can play a role by providing export training, standard learning modules, and digital platforms that are easily accessible to MSMEs.

## CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the study, it can be concluded that the implementation of the Balanced Scorecard at Perusahaan Keripik Tempe Rohani has been effective and integrated across all perspectives. From a financial perspective, the company has successfully implemented efficient budget management, utilized production technology to reduce costs, and implemented a profit reinvestment strategy without relying on external loans. Consistent financial recording and routine evaluation support data-driven decision making and maintain cash flow stability.

From a customer perspective, the company is able to maintain competitive product prices and a strong brand image, thereby building customer loyalty in domestic and international markets. In addition, the company is also able to maintain quality and provide fast and responsive service to customers needs. From an internal business process perspective, the company continuously innovates its products, manages production operations based on the principles of efficiency and zero-waste, and provides fast and communicative after-sales service. The early adoption of information technology has also increased transaction speed and customer convenience.

From a learning and growth perspective, the company fosters a participatory and collaborative work culture, encourages creative ideas from employees, and conducts experience-based training. The involvement of senior employees in decision-making strengthens their sense of ownership, while the family-like work environment supports employee loyalty. Although the performance-based reward system and digitalization of HR management can still be improved, the foundation of a collective learning culture has been well established. Overall, the four perspectives of the Balanced Scorecard support each other and contribute to improving the competitiveness of Perusahaan Keripik Tempe Rohani in the local, national, and international markets, as well as strengthening its position in exports to Taiwan.

Theoretically, this study makes an important contribution to the understanding that BSC implementation can be adapted to MSMEs that focus on exports. These findings reinforce the concept that a BSC perspective-based approach can help companies plan and evaluate strategies more systematically and increase competitiveness in the global market. BSC implementation also

provides insights into the importance of balancing internal efficiency and innovation, as well as cost and quality, to achieve long-term success. In addition to contributing to theory development, the research results are also relevant to business practice. Keripik Tempe Rohani can strengthen its Balanced Scorecard implementation by utilizing technology, developing product innovations, and optimizing internal business processes to maintain competitiveness in the export market, particularly in Taiwan. For other SMEs, BSC implementation can be used as a strategic reference, so that business strategies can be designed more measurably and sustainably.

### **FURTHER STUDY**

This study introduces novelty by applying the Balanced Scorecard (BSC) to export-oriented MSMEs in the snack food sector, particularly *Keripik Tempe Rohani*, which has penetrated the Taiwanese market. Unlike prior research focusing on large firms or services, this study maps the four BSC perspectives on micro enterprises facing global competition, with a rare geographical focus on Indonesian MSMEs and East Asian export markets. The integration of qualitative and quantitative indicators, along with cultural adaptation and consumer preferences, enriches the BSC framework. Findings show that aligning BSC indicators with international market needs, logistics efficiency, food quality standards, and product innovation flexibility enhances MSME competitiveness under strict export requirements.

Further research is suggested to test BSC in other SME sectors, such as fashion or agribusiness, using quantitative longitudinal methods to assess performance before and after implementation. Future model development may incorporate sustainability and digitalization perspectives, while comparative studies in ASEAN could reveal regulatory, cultural, and technological differences. Additionally, the role of government policy, geopolitical uncertainty, and global crises should be considered as moderating variables influencing BSC effectiveness in export-oriented MSMEs.

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