

DETERMINING PRIORITY STRATEGIES TO IMPROVE MSME PERFORMANCE USING AHP ANALYSIS

Annuridya Rosyidta Pratiwi Octasyilva^{*1}, Lilik Noor Yuliati^{**}, Hartoyo^{***}

^{*})Department of Management, Indonesian Institute of Technology

Jl. Raya Puspitek, Setu, Serpong, Kota Tangerang Selatan, Banten 15314, Indonesia

^{**})Department of Family and Consumer Sciences, Faculty of Human Ecology, IPB University

Jl. Kamper, IPB Campus Dramaga, Kabupaten Bogor, Jawa Barat 16680

^{***})School of Business, IPB University

Jl. Pajajaran, Bogor 16151, Indonesia

Abstract

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Background: Micro and medium enterprises are the backbone of the economy, contributing more than fifty per cent of the GDP in various countries. However, many SMEs that are difficult to develop cannot even exist in a dynamic business climate.

Purpose: Research is necessary to determine priority strategies for improving SMEs performance.

Design/methodology/approach: This study used the AHP methodology, with respondents totaling five experts in their fields. The hierarchy in AHP analysis was divided into four levels: Objectives, Factors, Actors, and Alternatives.

Findings/results: Based on the results of the analysis, the factors that played a role in the strategy of improving SMEs' performance were the Innovativeness factor, the actor that played the most significant role was SMEs, and the top priority strategy to improve SMEs' performance was to increase the innovative and proactive nature of SMEs through one-on-one mentoring.

Conclusion: This comprehensive analysis reveals that fostering growth in SMEs necessitates a multifaceted approach. Cultivating a proactive and inventive mindset through personalized mentoring and encouraging the pursuit of new opportunities are crucial. Furthermore, enhancing adaptability by facilitating exposure to larger business ecosystems through company visits enables SMEs to remain agile and informed. Finally, strengthening digital marketing skills and ensuring product quality are paramount for successful implementation of growth strategies. These findings underscore the importance of a targeted yet diverse approach to empower SMEs, aligning perfectly with the overarching goal of bolstering their performance and ensuring their sustained success.

Originality/value (State of the art): While existing literature acknowledges the importance of various factors in SME success, this research provides a novel contribution by: Utilizing AHP: This robust methodology allows for a structured and quantifiable prioritization of factors influencing SME performance, moving beyond descriptive analyses. Expert-Informed Insights: By incorporating the expertise of five field specialists, the study ensures practical relevance and nuanced understanding of the SME landscape. Focus on Proactive Innovation: The findings highlight the crucial role of fostering a proactive and inventive mindset among SME owners as a key driver of performance improvement.

Keywords: AHP, MSME performance, SMEs performance, SME's, priority strategies

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¹ Corresponding author:
Email: annuridya@yahoo.com

INTRODUCTION

The volume of SMEs in the business world exceeds 70% of all current businesses (OECD, 2019) with SMEs in Indonesia accounting for 99.99% of all business players in Indonesia, or 56.54 million units (Bank Indonesia dan LPPI, 2015). In the territory of Organization for Economic Co-operation and Development (OECD) countries, SMEs represent practically the entire business community, accounting for over 70% of total employment and contributing between 50% and 60% to income (OECD/ERIA, 2018). SMEs have contributed up to 95% of all businesses in OECD nations, even during the 2009 economic recession (Lee & Kim, 2019). Due to a large number of failing firms, it is essential to investigate a business's performance (SME). According to the GEM 2019 report (Bosma & Kelley, 2019) the large number of enterprises that cease operations can be attributed to a variety of factors, such as the business not being successful, the business being sold, bureaucratic issues, and others.

SMEs have been shown to play a significant and critical role, but they also face several challenges to continue to exist and even thrive (Amir et al. 2016). Several studies have identified essential concerns (problems) of SMEs to survive and flourish, including human resources/social capital/norms (Bartlett & Bukvič, 2001; Canada, 2018; Nawangpalupi et al. 2015; Octasyilva et al. 2022; Rafiki, 2020) marketing (Irjayanti & Azis, 2012; Octasyilva et al. 2021), low productivity (Amir et al. 2016), lack of management capabilities (Bodlaj et al. 2020; Moyle et al. 2020). Also, MSMEs have weaknesses in a lack of competence, capacity, knowledge and ability to adapt. Their failure to adapt (in the digital era) makes them late in updating their potential and opportunities to develop their business. They are also often hampered by high investment costs in developing their business, especially those related to technology and digitalization (OECD, 2019).

Given the significance of SMEs to the national economy, it would be a tragedy if this sector could not be optimally optimized. To optimize the function of SMEs, one factor that must be examined is that their performance needs to be optimally optimized. One factor that must be examined is their performance in optimizing the function of SMEs. A firm's performance is the ability of a business to determine the success rate of a company over a specific time period (Salisu et al. 2017). Even though the function of SMEs is vital, their

development since 2015 (Kementrian Koperasi dan UKM Republik Indonesia, 2019) has been unbalanced (the development of SMEs tends to plateau), such that these SMEs cannot contribute optimally to overcoming different economic and social challenges in Indonesia. SME performance can only be optimized with a lack of competence, capacity, knowledge, and skills on the part of SME players to adapt and run their businesses (OECD, 2019). In truth, the skills referred to in this context are widely dynamic and viewed as the procedures that enable a company to attain excellent performance (Wilden et al. 2013). Some abilities can impact the operation of a business, such as managerial, organizational, innovation, adaptability, and dynamic ability. Management Ability, Business Process Capability (Ali et al. 2017; Ict, 2003; Kor & Mesko, 2013; Nurmadewi & ER, 2019; Van Den Bosch & Van Wijk, 2000; Zhang & Merchant, 2020). External and internal variables influence the development of these abilities. Adaptive and marketing capabilities are the dynamic capabilities used in this study, based on past research. This research aims to develop alternative techniques to improve SMEs based on factors that influence SME performance.

Many factors can influence the success of SMEs from the inside (entrepreneur orientation), including risk-taking, innovativeness, and proactivity. Innovativeness refers to the capacity of micro, small, and medium-sized enterprises (SMEs) to implement innovative and original ideas and carry out due diligence activities, such as developing new products, processes, suppliers, and raw materials. Innovativeness is also viewed as one of the essential elements of entrepreneurship that provides the values that businesses desire while attracting new modifications or combinations via unique ideas and approaches (Octasyilva et al. 2022). A second sign is proactivity. Proactivity is the capacity to make strategic decisions in a progressive path to dominate the market by discovering and exploiting market opportunities and recognizing market changes before other rivals. This is essential for establishing a competitive edge and sustaining projects by identifying new possibilities based on future demands and creating and introducing new products and services to the market. An entrepreneur must have technical and management expertise to identify new company prospects while monitoring market and societal shifts (Cho & Lee, 2018; Gunasekaran et al. 2011; Darmi et al. 2022; Korneeva & Strielkowski, 2023; S. Zhao & Zhu, 2017).

Social capital is the source of the external influences that influence dynamic capacity. Social capital is a collection of relationship-based resources, including social interaction, social bonds, relationships of trust, and value systems, that support behavior in certain social circumstances (Fukuyama, 1995). In the context of SMEs, social capital is an important element in forming social bonds and interactions in an institutional association so that each SME can support one another, particularly in terms of sharing knowledge about the design process and products in order to enhance the innovation capabilities of SME owners. Existing ideas and conventions promote knowledge-sharing behaviors based on cognitive and communication abilities. Social ties involving SMEs that can give access to important resources such as knowledge, influence, and solidarity result in self-assurance, solidarity, and the facilitation of business operations. Intention (motivation), social capital, financial innovation (crowdfunding), networking, trust, selling capability, pricing capability, employee compensation, marketing ability, entrepreneurial orientation, innovative capacity, dynamic capability, public intervention (Marketing, credit, training, innovation and export support, as well as tax simplification), managerial skill, and adversity are some predictors of company performance that have been studied in the past.

To achieve success, SMEs need to incorporate these factors into their strategic planning and daily operations. By cultivating a culture of innovation, SMEs can encourage their employees to think outside the box, embrace change, and continually look for ways to improve products, services, and processes. Proactive steps can include market research, staying up to date on industry developments, and establishing contingency plans to mitigate risks. Additionally, cultivating strong relationships within the business community and actively engaging with customers can increase SMEs' social capital, creating an environment that supports growth and sustainability (Korneeva & Strielkowski, 2023; Wang et al. 2021; F. Zhao, 2014; S. Zhao & Zhu, 2017).

In the next section, we will examine specific strategies and best practices that SMEs can employ to leverage innovation, proactiveness, and social capital to succeed in a competitive business landscape. This is a novelty to fill the research gap in previous research (Fadzil & Rashid, 2022; Wang et al. 2021)

Dynamic Capability

Dynamic capacity is an organizational process or strategy through which a business creates new resource configurations in response to market demands (Etemad, 2009). Such dynamic capacities need that firms develop procedures that let them alter procedures, products, and even markets over time. The sorts of capabilities required to enhance performance, specifically:

1. Adaptive capacity is a company's ability to modify its understanding of business market expectations by recognizing and preserving its core capabilities, resources, and other organizational processes (Eshima & Anderson, 2017). In addition to absorptive capability, Biedenbach and Müller (2012) assert that adaptive capability is the ability to detect and capitalize on developing market possibilities, making it a substantial contributor to performance. Ali et al. (2017) state adaptive capabilities can guide how companies interact with external entities, such as customer, competitor, and technology market scanning, as well as help manage and reshape internal entities, such as change management and resilience and time-bound availability based both on the company's capabilities and the nature of environmental change.
2. A marketing capability is a series of integrative activities designed to apply collective knowledge, skills, and company resources to market needs related to business, thereby enabling a business to add value to goods and services, meet competitive demands, and improve company performance (Chahal & Kaur, 2013). Xin et al. (2020) discovered that marketing capability influences the formation of new products (innovation). This is due to marketing capabilities that enable companies to predict changes on the demand side (having market knowledge) and how the market develops, as well as establishing and maintaining long-lasting relationships with customers, suppliers, and channel members in social networks.

Social Capital

Social capital improves a company's performance (Akintimehin et al. 2019). The concept of social capital was conceived on the premise that a society cannot exist and modified to solve its numerous problems. In order to overcome these issues, which in this instance include economic issues, there is a need for good community unity and cooperation from all involved parties (Syahra,

2003). Social capital is intrinsic to humans, so a lack of social capital will result in numerous value conflicts and a lack of trust. The significance of this social capital contributes to improved development.

Social networks, civic involvement, reciprocity standards, and shared ideas are some of the key components of the social capital concept centered on interpersonal relationships. According to a general definition, social capital is the totality of rules, values, and beliefs, as well as the networks, social ties, and shared institutions that encourage collaboration and group action for mutual gain. It is a full multidimensional notion with various dimensions, types, and measurement levels. Social capital typically comes in the following forms: horizontal and vertical; strong and weak; bonding, bridging, and connecting. In terms of a social perspective, it can be measured and examined on an individual and group level, as well as at the micro, meso, and macro levels in terms of a geographical perspective.

Entrepreneur Orientation

The idea of an entrepreneurial approach is called entrepreneur orientation (EO). SME players who are also proprietors and whose personal traits and inclinations affect the development of their business. "EO" is a strategic stance that illustrates how a corporation subtly and overtly selects a competitive strategy. In other words, EO is the owner or manager's company's method, practice, and manner of making decisions when engaging in entrepreneurial activity (Diabate et al. 2019). Entrepreneurial orientation concerns ideas, methods, actions, and choices made to produce something new that complements prior efforts. Entrepreneur orientation, also known as entrepreneurial orientation, is a critical factor that influences the performance of small and medium-sized enterprises. It encompasses various dimensions such as innovativeness, proactiveness, risk-taking, and competitive aggressiveness. Scholars have extensively studied the impact of EO on SME performance, and it has been identified as a key differentiator between successful and less successful SMEs (Lestari et al. 2018; Musawa & Ahmad, 2018).

One study conducted in emerging economies found a strong relationship between EO dimensions and SME performance (Avlonitis & Salavou, 2007). The study, which focused on SMEs in the manufacturing industry

in Iran, used a dataset of 150 SMEs to examine the relationship between EO and financial performance (Wales, 2016). The findings of this study confirmed a positive relationship between EO dimensions and SME financial performance (Jalali et al. 2013). Another empirical study conducted in Austria analyzed the impact of customer orientation and entrepreneurial orientation on SME growth (Eggers et al. 2013). This study found a positive relationship between EO and SME growth, indicating that SMEs with high levels of EO are more likely to experience growth. These findings highlight the importance of EO as a crucial factor influencing SME performance.

Innovativeness within EO refers to the ability of entrepreneurs to introduce new products, services, or processes to the market. Proactiveness, on the other hand, involves a forward-thinking approach to identifying and capitalizing on opportunities before competitors. Risk-taking is an essential dimension of EO as it reflects the willingness of entrepreneurs to take calculated risks in pursuit of business growth. Lastly, competitive aggressiveness pertains to the assertiveness and assertive strategies employed by entrepreneurs to gain a competitive edge in the market (Mariani & Anom, 2020; Solikahan & Mohammad, 2019).

Research has shown that SMEs with a strong EO tend to outperform their counterparts with lower EO. This is due to their ability to adapt to changing market conditions, identify and exploit new opportunities, and challenge the status quo. Understanding the impact of EO on SME performance is crucial for entrepreneurs, policymakers, and business advisors as it provides valuable insights into the drivers of SME success. Entrepreneurial orientation has been identified as a critical factor influencing the performance of small and medium-sized enterprises (Musawa & Ahmad, 2018).

METHODS

In order to comprehend, go deeper, and identify a research problem, this research was conducted as a multi-method study that began with a literature evaluation of prior research relevant to the research objectives. Understanding concepts, definitions, and the connections between constructs helped combine variables from different theories and identify research gaps. Later, with responses from SME experts, an

analytical model was carried out by creating a hierarchy utilizing AHP to formulate plans to improve SME performance. AHP was a thorough decision-making method that considered qualitative and quantitative factors (Sasongko et al. 2017). After confirming the AHP model, an expert was consulted for advice. A statement questionnaire for experts to complete was then created based on the final AHP model.

The group of respondents, who were considered capable of developing alternative ways for enhancing the performance of SMEs, was used as a source of information to answer the objectives. Online data collection was conducted using the Zoom program in 2022. A closed- and open-ended questionnaire was utilized in this study to examine the current SME phenomenon. Specialists from a variety of fields, including academia, industry, and policymaking, offered suggestions for SME performance enhancement methods. In Table 1, the experts consulted for this investigation were listed.

Table 1. Expert Respondents in determining alternative strategies for improving SME performance.

Expert Respondents
Head of the Cooperatives and SMEs Office (Government)
E commerce
Chairman of the SME's community
Banks that handle SME loans
SME's

Analytical Hierarchy Process

Process hierarchy analytics (AHP) was an approach to studying problems in the social sciences and other areas (Kim et al. 2018; Singh, 2016). Alternative solutions to improve the performance of SMEs were developed utilizing process hierarchy analytics (AHP) approaches and the analysis of expert opinions. AHP was initially introduced by Saaty (Saaty, 1990). AHP could interpret complex multi-criteria situations that were unstructured and had several levels into a hierarchy that referred to a single specified aim (Huang & Yang, 2000; Saaty, Thomas - Process, 1980).

The three recognized principles of decomposition, wise pairwise comparison, and priority synthesis formed the foundation of AHP (Singh, 2016). AHP was used to address various problems due to its adaptability and pragmatic approach.

Step 1: Identifying the primary issue or goal of choice became the first step. This entailed breaking the issue down into its component elements. The top level of the hierarchy was made up of objectives, the middle level was made up of criteria and sub-criteria, and the bottom level was made up of decision options.

Step 2: Pairs of comparisons. At this point, each component's significance in decision-making was compared to the others. The 9-point scale that Saaty devised (Saaty, 1980) was utilized in this comparison to blend subjectivity, experience, and knowledge intuitively and naturally. As a result, only professionals could gather AHP respondents.

Step 3: The relative weight (or priority vector) of an element at each level of the hierarchy was calculated. To do this, each column's element was divided by the number of its columns, the elements in each resulting row were summed, and then the resulting number was divided by the number of elements in the row to obtain the eigenvector. The hierarchy's coherence was tested. The assessment had to be redone if it failed to fulfill the IR requirement of 0.1. The consistency analysis was performed using the consistency ratio value, which was manually determined by a formula, and the inconsistency index value, which was present in the analysis output table (Saaty, Thomas - Process, 1980):

$$CR = CI / RI$$

Note: CR (consistency ratio); CI (inconsistency index); RI (random index)

After conducting the pairwise comparisons, priority scores were derived for each criterion and alternative. These scores provided a quantitative measure of the relative importance of the criteria and the potential impact of each strategy on improving the performance of MSMEs. The prioritization process facilitated the identification of the most critical strategies that should be considered for implementation.

Based on Figure 1, the Analytical Hierarchy Process (AHP) framework is used to make multi-criteria decisions by considering the hierarchy of relevant factors. In improving MSME performance, the following explains the AHP framework in 4 levels: Level 1: AHP Objectives - MSME Performance Improvement Strategy. At this level, the main objective of AHP is set, namely, a strategy to improve the

performance of MSMEs. It is the highest level in the hierarchy and the decision-making process's primary focus. Level 2: Factors Affecting MSME Performance. At this level, factors that significantly influence the performance of MSMEs are identified. Level 3: Actors Most Instrumental in Improving MSME Performance. At this level, actors who have a crucial role in improving MSME performance are considered. Level 4: Alternative Priorities for MSME Performance Improvement Strategies. This is the lowest level in the hierarchy, where various alternative strategies to improve MSME performance are evaluated and prioritized.

RESULTS

Several parties were concerned with strategies to enhance the performance of SMEs. This was because more than fifty percent of the gross domestic product was generated by micro, small, and medium-sized businesses. Anwar (2018) highlighted that every aspect of the SME business had to be aware of the changes that occurred in order to decide the most effective means of achieving the desired objectives. Increasingly, Alberti et al. (2018) noted that SMEs would concentrate on defending themselves against dynamic environmental conditions if they were aware of those conditions.

Enhancing the performance of micro, small, and medium-sized enterprises (SMEs) necessitated designing effective strategies to achieve definite and quantifiable objectives. Formulating a crucial component of a plan that had been analyzed and appraised by numerous stakeholders yielded an effective approach. In this situation, the Analytical Hierarchy Process (AHP) obtained the most effective plan suggestions by ranking actors, elements, and alternatives. Munthafa et al. (2017) explained that in formulating strategies, consideration had to be given to the structure of the hierarchy and the validity and tolerance of its inconsistencies; therefore, the AHP approach was the most effective method for formulating strategies and making decisions.

Saaty (1990) stated that the design of strategies with AHP involved three stages: 1) constructing a hierarchy of models, 2) assessing criteria and alternatives, and 3) finding alternatives. In this study, there were four layers of the model hierarchy. Level 1 related to aims or objectives, level 2 related to factors, level 3 related to actors, and level 4 related to alternative strategies. The determination of level 1 was based on developing the strategy for enhancing the performance of SMEs by the highest priorities identified by experts. Level 2 was derived from the findings of structural equation modeling processing that took variables with a major influence into account. Level 3 determined which players played a significant role in enhancing the performance of SMEs, while level 4 was determined by conversations with experts before interviews with AHP respondents.

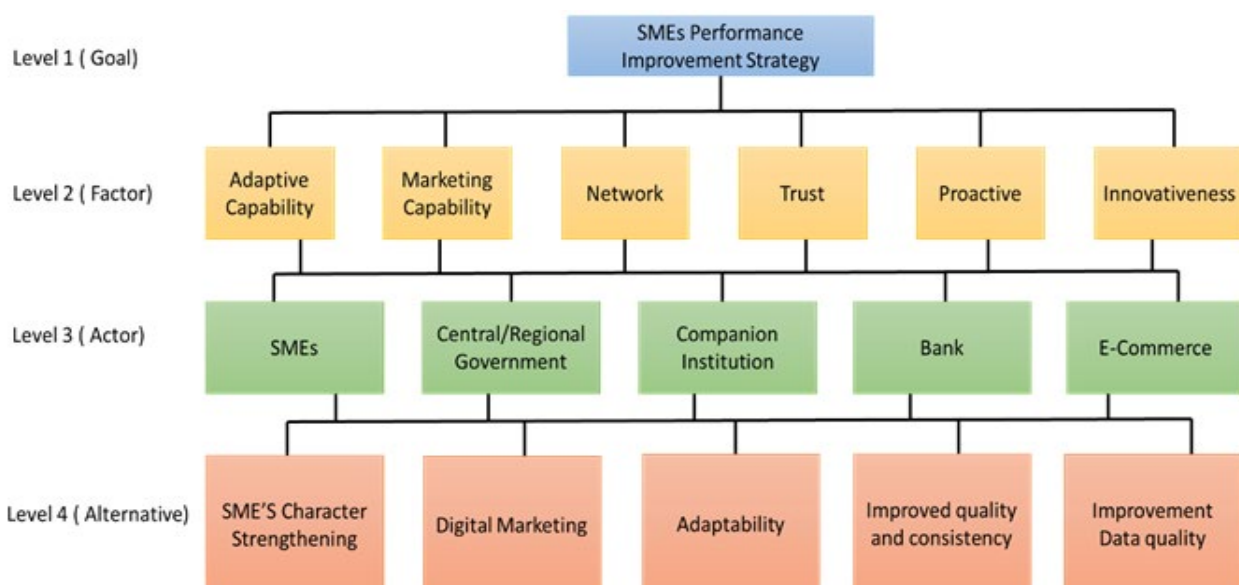


Figure 1. Research framework

The AHP analysis consists mostly of horizontal and vertical stages, with the horizontal step defining the initial stage associated with each level's priority. The vertical step is meant for the final phase of establishing the optimal choice for the horizontal step's average value. Each level's description and analysis are offered as follows:

Factor Priority

Prioritizing a factor was essential when each element could be used to increase performance. According to the table, the inconsistency value was 0.00923, indicating that the model developed by experts could be sustained and encouraged. It was well recognized that innovativeness was the strategy's most significant aspect for increasing SMEs' performance (0.254). This condition suggested that innovativeness played a role and needed to be enhanced to increase the performance of SMEs and sustain the highest performance. Additionally, it was anticipated that introducing new equipment would enhance the performance of SMEs. Furthermore, the network was the second priority with a value of 0.188, indicating that SMEs, as small business units, required social capital assistance to develop, followed by trust, marketing capability, proactiveness, and adaptive capability. Table 2 contained the reported data.

Actor priority

Actors can be viewed as subjects who carry out actions and participate in their processes. SME players must possess and cultivate all the critical factors for enhancing SME performance; this suggests that, in general, improving SME performance must begin from the inside, i.e., with the actors themselves. The government, as a regulator, receives the second-highest score, 0.274, due to the perception that its policies can

improve the performance of SMEs. This conclusion indicates that the government's role is expected to be able to encourage SMEs to continue to care and be aware of the situation, which is typically accomplished through socialization or entrepreneurship seminars. Companion institutions have the third-highest value (0.216), and this requirement is met when the accompanying institution seeks to assist SMEs in differentiating themselves to develop market competitiveness. Banking has value (0.104), as banks impose numerous requirements for lending that necessitate a proactive stance from SMEs, such as the completion of administrative and financial filings. The central government has the second-highest value on the network.

This suggests that the second most important factor in the strategy for improving the performance of SMEs is heavily influenced by the central government as a regulator that is expected to create an efficient SME business ecosystem. Table 3 provides exhaustive information regarding the priority of actors.

Alternative Priority

Alternative priorities were associated with implementing initiatives to enhance the performance of SMEs. It was known that the inconsistency value for each component was below 10 percent or 0.1, indicating that alternative priorities could be a useful proposal when choosing strategy priorities. The data indicated that 'Strengthening the character of SME actors in attempting new things and actively through one-on-one help' offered the greatest value compared to other options. This was because, without a strong character, SME performers would find it difficult to confront numerous existing obstacles. Additionally, the innovativeness element was recognized as a significant contributor to SME performance.

Table 2. Priority of factors to improve

Factor	Score	Priority	Inconsistencies
Innovativeness	0,254	1	0.00923
Network	0.188	2	
Trust	0.175	3	
Marketing Capability	0.160	4	
Proactiveness	0.115	5	
Adaptive Capability	0.109	6	

According to AHP's investigation, mentoring and cooperative training were the second most important alternative method to enhance digital marketing capabilities. This method was directly tied to multiple actors (SME actors, government, e-commerce, supporting institutions, and banks) for whom training, help, and cooperation were required to develop SME marketing capabilities. Improving the marketing capacities of SMEs had to be complemented by an alternative third-priority strategy, namely enhancing the ability to respond to environmental changes via company visits and accessing diverse communities to learn about the most recent business developments.

The fourth alternative strategy priority was to increase the quality and consistency of micro, small, and medium-sized enterprise (SME) players so they could enter and thrive in large corporations and e-commerce. Even though this was the fourth priority, it was crucial to complete, as, with continual progress, SME players would be able to continue because new competitors would always be superior. The fifth alternative strategy, with the government as the main actor, focused on data or 'Improving the quality of government data,' with a value of 0.11 as the most recent alternative strategy because improving data quality was a long-term program that would consume time, energy, and resources. Even though this was a long-term program, it had to be implemented since, with the correct database, many government projects would be off-target once the development goal was met. This solution was chosen because the government had to have precise data to make effective rules and policies. Tabulated information was presented in its entirety in Table 4.

Based on the calculations performed in the three preceding sections, it could serve as a foundation for calculating priorities using a vertical approach. The outputs of expert selection software were analysis computations. On the other hand, this was intended to aid in developing an effective organizational strategy to enhance the performance of SMEs. Figure 1 illustrated the outcomes of the calculations.

At each level, Figure 2 illustrated that there were distinct value disparities. In the level 2 group (factors), the sequential values of the lowest high were known to be 1) Innovativeness, 2) Trust, 3) Network, 4) Adapting capability, 5) Marketing capability, and 6) Proactivity. To increase the performance of SMEs, innovativeness was viewed as the most important component to control. When referring to indicators, it was understood that innovativeness might take the shape of generating new products, services, processes, technologies, and models. It was strongly associated with the aspiration to grow gradually and over time. It was common knowledge that innovativeness began with 1) obtaining ideas from internal and external sources, 2) engaging in original or modified development activities, and 3) adapting to the conditions that arose in the process of innovating. SMEs with innovativeness had a greater chance of developing and contributing more to business development (Hilmi et al. 2011). On the other hand, stakeholders had to resolve issues relating to the development of products, processes, habits, and finances within the business being run. Innovativeness' natural and well-managed character could generate a competitive advantage and increase human capital superior to that of the vast majority of companies (Ismail & Alam, 2019). Two studies described how innovativeness was a crucial aspect that had to be handled to gradually enhance the performance of SMEs.

Table 3. Priority of alternative actors

Factor	Score	Priority	Inconsistencies
SMEs	0,291	1	0.00923
Central/Regional Government	0.274	2	
Companion Institution	0.216	3	
Bank	0.104	5	
E Commerce / Large Companies	0.116	4	
Adaptive Capability	0.109	6	

Table 4. Priorities of alternative strategies

Alternative	Score	Priority	Inconsistencies
SME'S Character Strengthening	0,328	1	0.02
Digital Marketing	0.249	2	
Adaptability	0.186	3	
Improved quality and consistency	0.127	4	
Improvement Data quality	0.110	5	
Adaptive Capability	0.109	6	

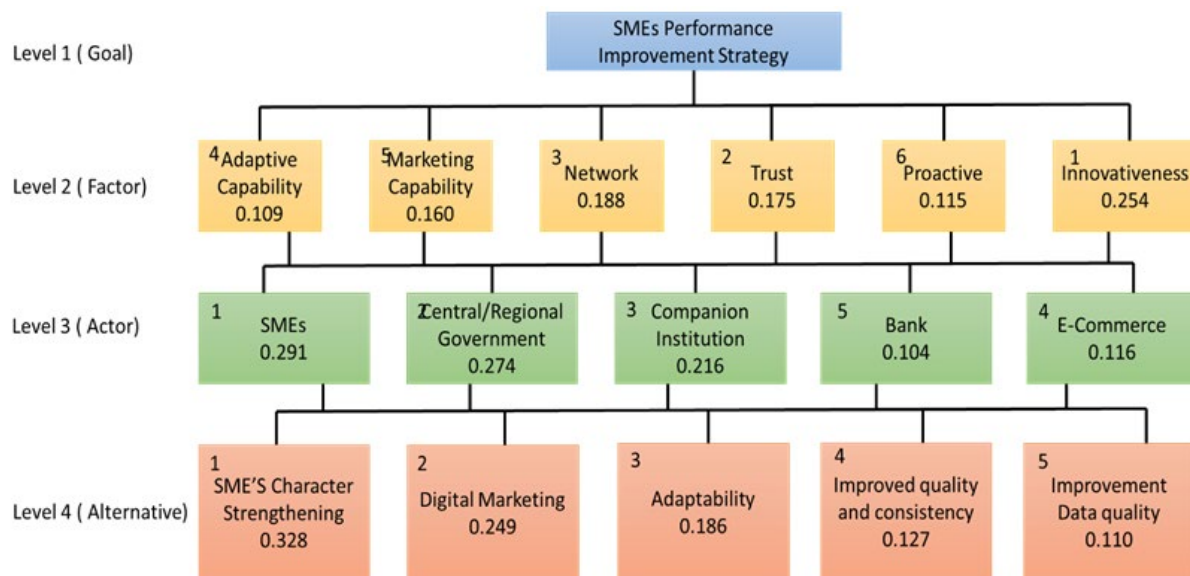


Figure 2. Illustrates the outcomes of the calculations.

Level 3 displayed, in order of importance, the most important actors in the performance development strategy: 1) SME players, 2) Government, 3) Assistive institutions, 4) Banks, and 5) E-Commerce. It was common knowledge that a strategy for enhancing the performance of SMEs could be effective if it began with the SMEs themselves. This was due to the fact that the main activities would directly touch these SME actors. If SME actors could successively implement priorities with dedication and consistency, astonishing achievements would be realized. Some actors might not have been directly involved and served solely as success drivers, but this did not imply that they were unimportant. Additional actors were required to complete the formation of a sustainable SME ecosystem. On the other hand, SME actors had to fully measure and analyze performance. Measuring the success of micro, small, and medium-sized enterprises (SMEs) required the establishment of financial, market, and entrepreneurial (human resources) performance (Rita & Thren, 2019). Hadiyati and Mulyono (2017) emphasized that the performance of good and developing SMEs

had to be measured based on 1) the support of good skills and competences, 2) business and management capabilities, and 3) the availability of money and data.

Level 4 related to alternative techniques, and it was understood that, in order: 1) Developing the character of SME actors through one-on-one coaching to actively try new things; 2) Increasing digital marketing capabilities through mentoring and cooperation training; 3) Improving the quality and consistency of SME actors so that they could enter and survive in large companies or e-commerce. Mentoring was an acknowledged necessity for enhancing the moral fiber of micro, small, and medium-sized enterprises. For professional performers to have constant traits, it was necessary to bolster their character from within and provide them with coaching. Business activities could function smoothly if the actor understood the learning process (Alberti et al. 2018), wherein a companion from a team of specialists was required to provide input and new perspectives in order to respond to arising situations. Mentoring activities were associated with the transfer of

skills and business acumen; consequently, in order for the firm to flourish, aid from specialists (professionals) who comprehended the business system was required.

The AHP framework provided a systematic and structured approach to evaluating and identifying the most critical areas for improvement within an MSME. By incorporating AHP analysis into the decision-making process, MSME owners and stakeholders could strategically allocate resources and efforts towards the most impactful strategies for enhancing overall performance. This approach allowed for a comprehensive assessment of the potential benefits and risks associated with each strategy, enabling informed decision-making based on data-driven insights. By using the AHP analysis, MSMEs could prioritize the strategies that would have the greatest impact on their performance. Furthermore, the AHP analysis took into consideration both quantitative and qualitative factors, allowing for a holistic evaluation of the different strategies. The AHP analysis provided a framework for MSMEs to effectively prioritize their strategies by considering various factors such as market conditions, owner preferences, and available resources (Merlinda & Widjaja, 2020). Additionally, the AHP analysis also took into account the perspectives and expertise of different stakeholders involved in the decision-making process. Overall, the AHP analysis was a valuable tool for MSMEs to determine priority strategies for improving their performance. The AHP analysis allowed the decision-maker to systematically evaluate and prioritize strategies for improving MSME performance by considering various factors and utilizing pairwise comparisons (Bae, Gupta, Mau, 2021; Istianingsih et al. 2022; Yang, 2022).

Managerial Implication

For micro, small, and medium-sized enterprises to expand and succeed, their strategy must be strengthened (Rana & Choudhary, 2019). The practical ramifications of implementing this method are personalized support to MSME participants, which includes guidance and counseling, to enhance their skills and self-assurance in experimenting with new endeavors. Engage in frequent company visits to diverse areas to be updated on the most recent business advancements and adjust to environmental shifts. Provide digital marketing training and guidance to micro, small, and medium enterprises (MSMEs). Enhanced their digital marketing capabilities by providing mentoring and

training to assist MSMEs in enhancing their online presence and expanding their consumer base. 3. Enhancing the competence and uniformity of MSME participants to equip them with the requisite expertise and assets for competing against larger enterprises or in electronic commerce. 4. Enhance the accuracy and reliability of government data to guarantee that regulations and policies are specifically tailored and efficiently assist micro, small, and medium enterprises (MSMEs). To execute these practical consequences, it is imperative to collaborate with many stakeholders, such as government agencies, business associations, educational institutions, and industry specialists.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Comprehensive analysis, which involved personal mentoring, company visits, and training programs, found that the key strategy was to foster a proactive and inventive mindset among small and medium-sized enterprise (SME) owners. This entailed mentoring them to enthusiastically embrace novel prospects and proactively pursue commercial acumen and connections. Later on, it was discovered that the capacity of small and medium-sized enterprises (SMEs) to adjust to alterations in their surroundings and the market had a noteworthy impact. The adaptability was enhanced by arranging company visits, which enabled small and medium-sized enterprises (SMEs) to connect with larger business groups and stay updated on the most recent developments. Ultimately, SME actors had to strengthen their digital marketing skills and improve the consistency and quality of their products to implement the tactics listed. In summary, the findings validated the need to employ a focused and diverse approach to foster the growth of small and medium-sized organizations (SMEs). This approach aligned with the goal of investigating techniques to enhance the performance of these businesses.

Recommendations

Subsequent studies might expand on our study by investigating the enduring impacts of these tactics on the performance of small and medium-sized enterprises (SMEs) in different economic environments. Furthermore, there is a chance to examine the influence of technology integration on small and medium-sized

enterprises (SMEs), particularly in artificial intelligence and machine learning, to discover valuable information on improvements in efficiency and competitive benefits. An area of study that shows promise is the impact of formal education and ongoing professional development on company growth and innovation among SME actors. In addition, the potential of government policies and incentives to enhance the effect of these techniques on the resilience and growth of small and medium-sized enterprises (SMEs) could also make useful contributions to the existing body of work. Researchers may also explore cross-cultural studies to get insight into the varying efficacy of these tactics in different areas and socio-economic contexts.

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REFERENCES

- Akintimehin OO, Eniola AA, Alabi OJ, Eluyela DF, Okere W, Ozordi E. 2019. Social Capital and Its Effect On Business Performance In The Nigeria Informal Sector. *Heliyon*. 5(7). <https://doi.org/10.1016/j.heliyon.2019.e02024>
- Alberti FG, Ferrario S, Pizzurno E. 2018. Resilience: Resources And Strategies Of Smes In A New Theoretical Framework. *International Journal of Learning and Intellectual Capital*. 15(2): 165-188. <https://doi.org/10.1504/IJLIC.2018.10010129>
- Avlonitis GJ, Salavou HE. 2007. Entrepreneurial Orientation Of Smes, Product Innovativeness, And Performance. *Journal of Business Research*. 60(5): 566-575 <https://doi.org/10.1016/j.jbusres.2007.01.001>
- Bae K, Gupta A, Mau RFL. 2021. Comparative Analysis Of Airline Financial And Operational Performances : a Fuzzy TOPSIS Integrated Approach. *Decision Science Letters*. 10(2021): 361-374. <https://doi.org/10.5267/j.dsl.2021.2.002>
- Bank Indonesia dan LPPI. 2015. Profil Bisnis Usaha Mikro, Kecil dan Menengah (UMKM). *Bank Indonesia Dan LPPI*, 18-20.
- Bosma N, Kelley D. 2019. Global Entrepreneurship Monitor: Global Report 2018/2019. In *Global Entrepreneurship Monitor*. <http://www.gemconsortium.org/report/50012>
- Darmi T, Nuryakin N, Mujtahid IM. 2022. Social Capital Analysis in Small and Micro Enterprises (SMEs) Management during the Covid-19 Pandemic. *JKAP (Jurnal Kebijakan Dan Administrasi Publik)*. 26(1): 47-58. <https://doi.org/10.22146/jkap.67459>
- Diabate A, Sibiri H, Wang L, Yu L. 2019. Assessing Smes' Sustainable Growth Through Entrepreneurs' Ability And Entrepreneurial Orientation: An Insight Into Smes In Côte d'Ivoire. *Sustainability (Switzerland)*: 11(24). <https://doi.org/10.3390/su11247149>
- Eggers F, O'Dwyer M, Kraus S, Vallaster C, Guldenberg S. 2013. The Impact Of Brand Authenticity On Brand Trust And SME Growth: A CEO Perspective. *Journal of World Business*. 48(3): 340-348. <https://doi.org/10.1016/j.jwb.2012.07.018>
- Eshima Y, Anderson BS. 2017. Firm Growth, Adaptive Capability, And Entrepreneurial Orientation. *Strategic Management Journal*. 38(3): 770-779. <https://doi.org/10.1002/smj.2532>
- Etemad H. 2009. Internationalization of Small and Medium-sized Enterprises: A Grounded Theoretical Framework and an Overview. *Canadian Journal of Administrative Sciences / Revue Canadienne Des Sciences de l'Administration*. 21(1): 1-21. <https://doi.org/10.1111/j.1936-4490.2004.tb00319.x>
- Fadzil SM, Rashid MF. 2022. A Design Framework For Smes Resilience In Malaysia. *IOP Conference Series: Earth and Environmental Science*. 1082(1): 012006. <https://doi.org/10.1088/1755-1315/1082/1/012006>
- Fukuyama, F. (1995). Social Capital and the Global Economy. *Foreign Affairs*. 74(5): 89-103. <https://doi.org/10.2307/20047302>
- Gunasekaran A, Rai BK, Griffin M. 2011. Resilience And Competitiveness of Small and Medium Size Enterprises: An Empirical Research. *International Journal of Production Research*. 49(18): 5489-5509. <https://doi.org/10.1080/00207543.2011.563831>
- Hilmi MF, Ramayah T, Mustapha Y. 2011. Innovativeness and Performance of Small and Medium Enterprises: Malaysian Perspectives. *International Journal of Knowledge, Culture and Change Management*. 10(12): 105-114.

- <https://doi.org/10.18848/1447-9524/CGP/v10i12/50073>
- Huang JB, Yang C. 2000. A decision model for IS outsourcing. *International Journal of Information Management*. 20(3): 225–239. [https://doi.org/10.1016/S0268-4012\(00\)00007-4](https://doi.org/10.1016/S0268-4012(00)00007-4)
- Ismail MD, Alam SS. 2019. Innovativeness and Competitive Advantage among Small and Medium Enterprise Exporters: Evidence from Emerging Markets in South East Asia. *The South East Asian Journal of Management*. 13(1): 74–91. <https://doi.org/10.21002/seam.v13i1.9872>
- Istianingsih N, AlHidayat N, Maros A, Hasdani H. 2022. Determination of MSMES Competitiveness Attributes Using the Analytical Hierarchy Process Method. *International Journal of Islamic Business and Management Review*. 2(2): 163–173. <https://doi.org/10.54099/ijibmr.v2i2.369>
- Jalali A, Jaafar M, Thurasamy R. 2013. Influence of Entrepreneurial Orientation On The Financial Performance: evidence from SMEs in Iran. *Middle East J. of Management*. 1(2), 168-185. <https://doi.org/10.1504/MEJM.2013.057263>
- [KEMENKOP UKM] Kementerian Koperasi dan UKM Republik Indonesia. 2019. Data Pelaku UMKM di Indonesia. *Kementerian Koperasi Dan UKM Republik Indonesia, 1*, 2018–2019.
- Kim B, Kim H, Jeon Y. 2018. Critical Success Factors of a Design Startup Business. *Sustainability (Switzerland)*. 10(9): 1–15. <https://doi.org/10.3390/su10092981>
- Korneeva E, Strielkowski W. 2023. The Role of The Information and Communication Technologies in The Institutional And Economic Sustainability Of The Post-Pandemic Small And Medium Enterprises. *Terra Economicus*. 21(1): 80–93. <https://doi.org/10.18522/2073-6606-2023-21-1-80-93>
- Lestari ER, Ardianti FL, Rachmawati L. 2018. Firm Performance Model in Small and Medium Enterprises (SMEs) based on Learning Orientation and Innovation. *IOP Conference Series: Earth and Environmental Science*. 13(2018): 012027. <https://doi.org/10.1088/1755-1315/131/1/012027>
- Mariani WE, Anom IGA. 2020. The Characteristic of Business Incubator Tenant. *Proceedings of the 3rd International Conference on Research of Educational Administration and Management (ICREAM 2019)*. 2019 Jul 17; Bandung, Indonesia. <https://doi.org/10.2991/assehr.k.200130.194>
- Merlinda S, Widjaja SUM. 2020. Revitalization Strategy of Traditional Markets: A Case Study in Malang. *Proceedings of the 4th Padang International Conference on Education, Economics, Business and Accounting (PICEEBA-2 2019)*. 2019 Nov 17; Padang, Indonesia. <https://doi.org/10.2991/aebmr.k.200305.098>
- Munthafa AE, Mubarak H. 2017. Penerapan Metode Analytical Hierarchy Process Dalam Sistem Pendukung Keputusan Penentuan Mahasiswa Berprestasi. *Jurnal Siliwangi*. 3(2): 192–201. <https://doi.org/10.37058/jssainstek.v3i2.355>
- Musawa MS, Ahmad K. 2018. A Conceptual Framework for the Influence of Entrepreneurial Orientation and Environmental Dynamism on Marketing Innovation Performance in SMEs. *Business and Economics Journal*. 09(03). <https://doi.org/10.4172/2151-6219.1000361>
- Munyawarara N, Govender KK. 2020. Entrepreneurial Social Capital Support on the Growth of Small Holder Rural Farmers: Augmenting Livelihoods in Honde Valley, Zimbabwe. *International Research Journal of Science and Technology*. 1(3): 230–235. <https://doi.org/10.46378/irjst.2020.010307>
- [OECD] Organization of Economic Co-operation and Development. 2018. *SME Policy Index: ASEAN 2018: Boosting Competitiveness and Inclusive Growth, Growth Economic and Enterprise Trends in Southeast Asia*. Paris: OECD.
- [OECD] Organization of Economic Co-operation and Development. 2019. *OECD SME and Entrepreneurship Outlook 2019*. Paris: OECD.
- Rita MR, Thren AT. 2019. A Three-Dimensional Model of MSME Performance: an Agenda For Further Research. *BISMA (Bisnis Dan Manajemen)*. 12(1): 1-14. <https://doi.org/10.26740/bisma.v12n1.p1-14>
- Saaty TL. 1980. *The Analytical Hierarchy Process: Planning, Priority Setting, Resource Allocation*. New York (NY): McGraw-Hill International Book Company.
- Saaty TL. 1990. The Analytic Hierarchy Process in Conflict Management. *International Journal of Conflict Management*. 1(1): 47–68. <https://doi.org/10.1108/eb022672>
- Salisu B, Abu-Bakr LJ, Rani SHA. 2017. The Influence of Marketing Capability on Firm Performance: An Empirical Evidence from Nigeria. *European*

- Journal of Business and Management*. 9(32): 147–154.
- Sasongko A, Astuti IF, Maharani S. 2017. Pemilihan Karyawan Baru Dengan Metode AHP (Analytic Hierarchy Process). *Informatika Mulawarman : Jurnal Ilmiah Ilmu Komputer*. 12(2): 88-93. <https://doi.org/10.30872/jim.v12i2.650>
- Singh AK. 2016. Competitive Service Quality Benchmarking in Airline Industry Using AHP. *Benchmarking: An International Journal*. 23(4): 768-791. <https://doi.org/10.1108/BIJ-05-2013-0061>
- Solikahan EZ, Mohammad A. 2019. Development of Entrepreneurial Orientation. *International Journal of Applied Business and International Management*. 4(1): 31–37. <https://doi.org/10.32535/ijabim.v4i1.380>
- Syahra R. 2003. Modal Sosial: Konsep dan Aplikasi. *Jurnal Masyarakat Dan Budaya*. 5(1): 1–22. <https://doi.org/10.14203/jmb.v5i1.256>
- Wales WJ. 2016. Entrepreneurial orientation: A review and Synthesis of Promising Research Directions. *International Small Business Journal: Researching Entrepreneurship*. 34(1): 3–15. <https://doi.org/10.1177/0266242615613840>
- Wang M., Mühlbacher H, Wittmann X, Perrett P. 2021. Dynamic Collaboration Between Small- and Medium-Sized Enterprises from Highly Dissimilar Markets. *European Management Journal*. 39(2): 185–200. <https://doi.org/10.1016/j.emj.2020.06.004>
- Wilden R, Gudergan SP, Nielsen BB, Lings I. 2013. Dynamic Capabilities and Performance: Strategy, Structure and Environment. *Long Range Planning*. 46(1–2): 72–96. <https://doi.org/10.1016/j.lrp.2012.12.001>
- Yang J. 2022. Performance Evaluation of Accounting Business Process Reengineering Based on AHP Optimization DEA Model. *Wireless Communications and Mobile Computing*. 2022(1): 1–10. <https://doi.org/10.1155/2022/7755842>
- Zhao F. 2014. A Holistic and Integrated Approach to Theorizing Strategic Alliances of Small and Medium-sized Enterprises. *Business Process Management Journal*. 20(6): 887–905. <https://doi.org/10.1108/BPMJ-01-2013-0004>
- Zhao S, Zhu Y. 2017. The Influence of Social Capital on Small Micro-manufacturing Venture in China. *MATEC Web of Conferences*. 100 (2017): 04013. <https://doi.org/10.1051/mateconf/201710004013>