

Strategic Foresight and Entrepreneurial Orientation in Enhancing Business Adaptability for Navigating Uncertainty in Food and Beverage SMEs

*Business Adaptability
for Uncertainty
Navigation*

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ABSTRACT

Rising market, technological, and environmental uncertainties challenge Micro, Small, and Medium Enterprises (MSMEs) in the food and beverage sector, making strategic foresight and entrepreneurial orientation essential for adaptability and competitiveness. This study aims to examine the effects of strategic foresight and entrepreneurial orientation on business adaptability in navigating uncertainty among food and beverage MSMEs in Jakarta. A quantitative approach with a cross-sectional survey design was employed. Data were collected from 100 MSME owners or managers using a structured questionnaire and analyzed using structural equation modeling–partial least squares. The results indicate that strategic foresight has a significant positive effect on business adaptability, while entrepreneurial orientation strengthens innovation, proactiveness, and organizational resilience. Furthermore, business adaptability is found to mediate the relationship between strategic foresight and the ability of MSMEs to navigate business uncertainty. These findings highlight the importance of integrating foresight and entrepreneurial orientation as dynamic capabilities to enhance MSME resilience. This study contributes theoretically to the dynamic capabilities perspective and provides practical insights for business practitioners and policymakers in strengthening the adaptive capacity of food and beverage MSMEs amid an increasingly uncertain business environment.

Keywords: *Business Adaptability, Business Uncertainty, Entrepreneurial Orientation, Food and Beverage SMEs, Strategic Foresight.*

INTRODUCTION

Increased business uncertainty due to market changes, technological disruptions, and external environmental dynamics has become an increasingly complex challenge for small and medium-sized businesses that have a high dependence on external conditions. This situation is particularly felt in the food and beverage sector, where demand volatility, rapidly changing consumer trends, and limited strategic resources often make it difficult for business actors to formulate long-term strategies (Odeyemi et al., 2024). In this context, the organization's ability to read the direction of change and prepare anticipatory steps is an important factor for business sustainability. Strategic foresight is seen as a crucial managerial approach to increasing business resilience through scalable and adaptive future projection-based planning.

In addition to the ability to anticipate change, entrepreneurial orientation plays a crucial role in strengthening organizational capacity to face uncertainty (Zighan et al., 2022). Entrepreneurial orientation, characterized by innovativeness, proactiveness, and risk-taking, enables organizations to navigate dynamic business environments (Corrêa et al., 2022). For food and beverage MSMEs, which face intense competitive pressure and rapid shifts in consumer preferences, the combination of strategic foresight and

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entrepreneurial orientation constitutes an adaptive strategy that enhances competitiveness and resilience amid uncertainty. Prior research indicates that foresight strategies contribute to improved innovation capabilities and strategic decision-making (Monteiro & Dal Borgo, 2023), while entrepreneurial orientation has been shown to foster opportunity creation and strengthen crisis resilience (Suder, 2024). However, much of this research has been conducted in large firms or developed country contexts with adequate resource support, limiting its applicability to resource-constrained MSMEs in emerging markets. Studies examining how strategic foresight and entrepreneurial orientation interact within MSMEs, particularly in the food and beverage sector in countries like Indonesia, remain limited. Constraints related to capital, managerial capacity, and rapidly changing external environments highlight the need to better understand how these two approaches can work synergistically to enhance organizational resilience. This study addresses this gap by exploring how the combined effects of strategic foresight and entrepreneurial orientation improve adaptability in the face of high business uncertainty.

In the Indonesian context, MSMEs play a vital role in the national economic structure and are the main engine of growth in urban areas (Setiowati, 2025). However, dependence on domestic market conditions and weak strategic planning make it difficult for many business actors to face sudden changes such as the global economic crisis or shifts in consumption trends. Therefore, a strategic management model is needed that is able to combine visionary thinking skills with entrepreneurial spirit so that MSMEs, especially in the food and beverage sector, can adapt more effectively to the dynamics of business uncertainty.

The relationship between strategic foresight and entrepreneurial orientation can be explained through the perspective of dynamic capability theory, which emphasizes the importance of an organization's ability to perceive, capture, and reconfigure resources in the face of change (Muneeb et al., 2023). Strategic foresight helps organizations recognize signals of change early, while entrepreneurial orientation allows organizations to respond innovatively and quickly to those changes. The integration of the two is believed to form business adaptability, the ability to dynamically adjust business strategies and operations, which is key in navigating uncertainty in the highly volatile food and beverage sector.

Kamaldeen (2024) has also shown that the ability to navigate uncertainty depends not only on internal organizational factors but also on the interconnectedness between actors in the business ecosystem. In the context of an urban business ecosystem such as Jakarta, interaction between business actors, supporting institutions, and local governments plays an important role in strengthening the collective capacity to adapt to environmental changes. Therefore, this study not only examines internal factors such as foresight and entrepreneurial orientation, but also pays attention to the dynamic influence of the external environment in the food and beverage sector. Based on this background, this study aims to analyze the influence of strategic foresight and entrepreneurial orientation on business adaptability in navigating business uncertainty in food and beverage MSME actors in Jakarta. This approach is important to understand how anticipatory strategies and entrepreneurship orientation can work synergistically in strengthening business competitiveness and resilience in the midst of an uncertain environment.

LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

The Effect of Strategic Foresight on Business Adaptability

Strategic foresight is grounded in an organization's capability to anticipate future developments and utilize this understanding as a foundation for strategic decision-making (Fergnani, 2022). Rather than merely predicting future conditions, foresight emphasizes the systematic identification of emerging trends, potential risks, and alternative scenarios that enable organizations to manage uncertainty more effectively. Sjöholm (2021) highlights that strategic foresight also involves strengthening internal learning and adaptive capacities, allowing organizations to continuously adjust to dynamic external environments. Within this framework, foresight provides a strategic direction for future change, while entrepreneurial orientation plays a complementary role by translating

foresight insights into concrete, innovative, and adaptive actions (Badollahi et al., 2021). In the context of food and beverage MSMEs, strategic foresight supports visionary resource management, such as anticipating culinary trends, adopting digital marketing, and responding to evolving consumer lifestyles, thereby fostering long-term competitiveness and sustainability amid increasing uncertainty.

Empirical studies consistently support the strategic value of foresight in enhancing organizational outcomes. Fathi et al. (2021) demonstrate that strategic foresight has a significant positive effect on firm performance and competitive advantage, particularly in environments characterized by volatility and rapid change. Similarly, Nyuur et al. (2015) find that foresight capabilities, including environmental scanning, network development, industry analysis, and strategic planning, exert a strong direct influence on SMEs' ability to adapt products and services to market and customer needs. These findings underscore the importance of foresight as a dynamic capability that strengthens strategic adaptability.

H1: Strategic foresight has a positive and significant effect on business adaptability.

The Effect of Entrepreneurial Orientation on Business Adaptability

Entrepreneurial orientation refers to an organizational mindset that emphasizes innovativeness, proactiveness, and a willingness to take calculated risks in responding to market opportunities and challenges (Iyiola et al., 2023). This orientation shapes how firms sense changes in their environment and mobilize internal resources to respond effectively. Cheng et al. (2025) suggest that entrepreneurial orientation not only enhances business performance but also strengthens an organization's capacity to adapt under uncertainty. Innovativeness enables firms to generate new value and adjust offerings, proactiveness allows early responses to environmental shifts, and risk-taking supports experimentation despite uncertainty. As such, entrepreneurial orientation is closely linked to business adaptability, as it equips firms with the behavioral and strategic flexibility needed to realign strategies, processes, and products in dynamic markets.

Empirical evidence consistently supports the positive effect of entrepreneurial orientation on adaptability and resilience. Zighan et al. (2022) find that entrepreneurial orientation mobilizes SMEs' resilience, enabling them to survive major disruptions and external threats. Tunçalp (2025) further argues that the combination of visionary planning and entrepreneurial action allows firms not only to withstand uncertainty but also to create new growth opportunities. At the firm level, Savitri and Syahza (2021) demonstrate that entrepreneurial orientation enhances innovation through creativity, proactive marketing, flexibility, and risk-taking, while Rofiaty et al. (2022) show a direct and positive relationship between entrepreneurial orientation, adaptive innovation, and firm performance. In the food and beverage MSME sector, entrepreneurial orientation is particularly critical for overcoming capital limitations, expanding market access, and fostering continuous product and service innovation. MSMEs with strong entrepreneurial orientation tend to be more resilient and adaptable, enabling them to sustain operations in volatile business environments (Susilawati, 2024).

H2: Entrepreneurial orientation has a positive and significant effect on business adaptability.

The Effect of Business Adaptability on Business Uncertainty Navigation

Business uncertainty represents a critical challenge for contemporary organizations, particularly small and medium-sized enterprises in the food and beverage sector that operate in highly dynamic and volatile markets (Suryani & Dwiputra, 2025). Uncertainty emerges when organizations encounter difficulties in anticipating external changes that influence strategic direction and policy decisions (Gitelman et al., 2021). In such contexts, business adaptability becomes a central organizational capability, reflecting the ability to adjust strategies, processes, and resource configurations in response to environmental turbulence (Kurtz & Varvakis, 2016). Rather than relying solely on large-scale

investments or advanced technologies, firms often respond to uncertainty through creative and flexible adaptations to existing resource constraints (Shelomentsev et al., 2021). Adaptive capacity enables businesses to sense environmental signals, reconfigure operations, and maintain alignment with shifting market conditions, thereby supporting effective navigation of uncertainty (Ansel, 2017; Ahmad, 2024).

Empirical studies underline the importance of adaptability in enabling firms to manage and navigate uncertain environments. Ahmad et al. (2024) demonstrate that adaptive businesses continuously monitor market developments, anticipate emerging opportunities driven by customer needs, and innovate proactively to sustain competitive advantage. In addition, collaborative and adaptive approaches allow MSMEs to respond more effectively to market changes, engage in joint innovation, and preserve business sustainability under conditions of high environmental uncertainty (Permatasari & Praswati, 2024). Within the food and beverage MSME context, uncertainty is intensified by rapid changes in consumer preferences, volatility in raw material prices, and digital disruptions that reshape consumption patterns. Consequently, business adaptability functions as a key mechanism that transforms environmental challenges into manageable strategic responses. Firms with higher adaptability are better positioned to navigate uncertainty, sustain operational continuity, and enhance long-term competitiveness in increasingly unpredictable business environments.

H3: Business adaptability has a positive and significant effect on business uncertainty navigation.

Business Adaptability as Mediating Variable

Business adaptability represents a dynamic organizational capability that enables firms to translate strategic orientations into effective responses under environmental uncertainty. Rather than functioning as an isolated outcome, adaptability acts as an intermediate mechanism through which strategic foresight and entrepreneurial orientation exert their influence on business uncertainty navigation. Strategic foresight equips organizations with anticipatory insights regarding future trends, risks, and alternative scenarios (Sjöholm, 2021; Fergnani, 2022). However, these insights only become strategically valuable when firms possess sufficient adaptive capacity to realign strategies, reconfigure resources, and adjust operations accordingly. In this sense, business adaptability serves as the conduit that transforms foresight-based knowledge into concrete organizational actions, allowing firms to respond flexibly to volatile market conditions (Nyuur et al., 2015; Shelomentsev et al., 2021).

Similarly, entrepreneurial orientation enhances business uncertainty navigation primarily through its effect on adaptability. Innovativeness, proactiveness, and risk-taking foster experimentation and strategic flexibility, but their impact on navigating uncertainty is realized when firms are able to adapt structures, processes, and offerings in response to change (Iyiola et al., 2023; Cheng et al., 2023; Cheng et al., 2025). Empirical evidence shows that entrepreneurial orientation strengthens resilience and adaptive innovation, enabling SMEs to survive disruptions and create new growth opportunities (Zighan et al., 2022; Rofiaty et al., 2022). Adaptive firms are better positioned to monitor environmental shifts, anticipate customer-driven opportunities, and respond proactively to uncertainty (Ahmad et al., 2024; Permatasari & Praswati, 2024; Hunziker & Blankenagel, 2024). Therefore, business adaptability plays a pivotal mediating role, linking both strategic foresight and entrepreneurial orientation to effective business uncertainty navigation, particularly in highly volatile sectors such as food and beverage MSMEs.

H4: Business adaptability mediates the effect of strategic foresight on business uncertainty navigation.

H5: Business adaptability mediates the effect of entrepreneurial orientation on business uncertainty navigation.

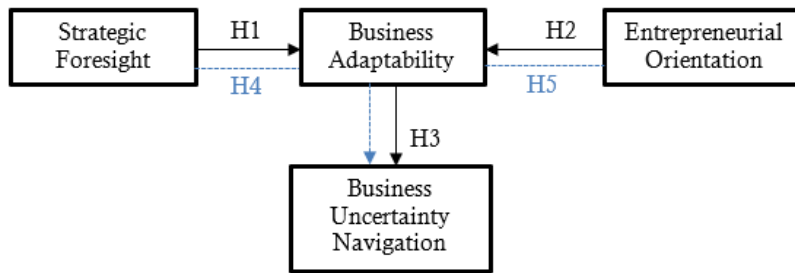


Figure 1. Research Framework

Figure 1 shows that this research framework proposes that strategic foresight and entrepreneurial orientation enhance business adaptability, which in turn strengthens MSMEs' ability to navigate business uncertainty. Strategic foresight is hypothesized to positively affect business adaptability (H1), while entrepreneurial orientation is also expected to have a positive effect on business adaptability (H2). Business adaptability is then hypothesized to directly improve business uncertainty navigation (H3). Moreover, business adaptability is proposed as a mediating variable, mediating the effect of strategic foresight on business uncertainty navigation (H4) and mediating the effect of entrepreneurial orientation on business uncertainty navigation (H5).

RESEARCH METHODS

This study employs a quantitative associative approach with a cross-sectional survey design to examine the relationships among strategic foresight, entrepreneurial orientation, business adaptability, and business uncertainty navigation within the food and beverage MSME sector. This approach is appropriate for testing empirical relationships between variables and generating generalizable findings. The cross-sectional design enables the analysis of MSME actors' current strategic responses to business uncertainty within a defined period.

The study population comprises MSMEs operating in the food and beverage sector in the DKI Jakarta region. A non-probability purposive sampling technique was applied using three criteria: respondents must be the business owner or primary manager, the enterprise must have been operating for at least two years, and the business must be actively engaged in the food and beverage industry. Based on these criteria, 100 MSME actors were selected as respondents. This sample size meets the minimum requirements for analysis using Partial Least Squares–Structural Equation Modeling (PLS-SEM), which is suitable for studies involving moderate sample sizes and complex models.

Data were collected using a structured questionnaire measured on a five-point Likert scale ranging from 1 strongly disagree to 5 strongly agree, as suggested by Alabi and Jelili (2023). The instrument measured four main constructs. Strategic foresight was operationalized through dimensions of environmental scanning, scenario planning, and strategic visioning, capturing the ability of business actors to anticipate trends and formulate future-oriented strategies. Entrepreneurial orientation was measured through innovativeness, proactiveness, and risk-taking, reflecting the extent to which MSMEs demonstrate creativity, initiative, and willingness to engage with business risks. Business uncertainty navigation served as the outcome variable, assessing MSMEs' ability to respond effectively to uncertainty through agile decision-making and adaptive actions. Business adaptability was included as a mediating variable, measured by indicators of adaptability to change, strategic flexibility, and operational resilience, and was intended to explain how strategic foresight and entrepreneurial orientation are translated into effective uncertainty navigation.

Prior to the main data collection, a pilot test involving 30 respondents was conducted to ensure the clarity and consistency of the questionnaire items. Following validation, the questionnaire was distributed both online via Google Forms and directly to MSME actors across several areas in Jakarta over a four-week period. The collected data were screened

for missing values and outliers, and descriptive analysis was conducted to assess data distribution before proceeding to model testing by Tong and Tortora (2022).

Data analysis was performed using PLS-SEM with SmartPLS version 4.0 by Fauzi (2022). The analysis followed a two-stage procedure. First, the measurement model was evaluated to assess convergent validity, discriminant validity, and internal consistency reliability using factor loadings, composite reliability, and related criteria. Second, the structural model was assessed to test the hypothesized relationships through path coefficients, t-statistics, and p-values at a 0.05 significance level. The explanatory power and predictive relevance of the model were further examined using R² and f².

RESULTS

This section presents the results of the data analysis conducted using the SEM-PLS approach, focusing on the evaluation of both the measurement model and the structural model. The analysis begins with an assessment of the measurement model to ensure the adequacy of the constructs and indicators used in this study, including tests of convergent validity, discriminant validity, internal consistency reliability, and collinearity. Establishing the validity and reliability of the measurement model is a crucial prerequisite before interpreting the structural relationships among constructs.

Table 1. Measurement Model

Construct	Indicator	Outer Loading	CA	rho_A	rho_C	AVE
Business Adaptability (BA)	BA1	0.939	0.920	0.921	0.949	0.862
	BA2	0.916				
	BA3	0.931				
Business Uncertainty Navigation (BU)	BU1	0.915	0.907	0.909	0.941	0.843
	BU2	0.924				
	BU3	0.915				
Entrepreneurial Orientation (EO)	EO1	0.913	0.901	0.919	0.938	0.834
	EO2	0.917				
	EO3	0.910				
Strategic Foresight (SF)	SF1	0.927	0.878	0.891	0.921	0.795
	SF2	0.871				
	SF3	0.876				

Based on Table 1, the entire loading factor value is above 0.70, and there is no indicator indicating a low or problematic value. This shows that each statement item has represented its construct well. Thus, each indicator can be said to be valid for measuring the latent variables established in the research model. Cronbach’s Alpha and Composite Reliability values of the entire construct are above 0.70, indicating excellent internal reliability. In addition, the AVE value of each construct is greater than 0.50, which indicates that the latent variable is able to explain more than half of the variance of its indicators. Thus, all constructs are declared reliable and meet the criteria of convergent validity.

Table 2. Fornell-Larcker Criterion

Variable	BA	BU	EO	SF
Business Adaptability (BA)	0.929			
Business Uncertainty Navigation (BU)	0.744	0.918		
Entrepreneurial Orientation (EO)	0.610	0.503	0.913	
Strategic Foresight (SF)	0.394	0.239	-0.096	0.892

Table 2 presents the Fornell–Larcker criterion used to evaluate discriminant validity among the study constructs. The square root of the Average Variance Extracted (AVE), shown on the diagonal, is higher for each construct than its correlations with other constructs, indicating satisfactory discriminant validity. Business adaptability shows the

highest diagonal value of 0.929, followed by business uncertainty navigation at 0.918, entrepreneurial orientation at 0.913, and strategic foresight at 0.892. Although business adaptability is relatively strongly correlated with business uncertainty navigation at 0.744 and with entrepreneurial orientation at 0.610, these correlations remain lower than the respective diagonal values. The results confirm that each latent variable is empirically distinct and measures a unique construct, thereby supporting the adequacy of the measurement model.

Table 3. Collinearity (VIF) Test

Variable	Indicator	VIF
Business Adaptability (BA)	BA1	3.832
	BA2	3.019
	BA3	3.460
Business Uncertainty Navigation (BU)	BU1	2.989
	BU2	3.260
	BU3	2.752
Entrepreneurial Orientation (EO)	EO1	3.185
	EO2	2.528
	EO3	2.990
Strategic Foresight (SF)	SF1	2.226
	SF2	2.657
	SF3	2.419

Table 3 reports the results of the collinearity test using the Variance Inflation Factor (VIF) values for all indicators in the measurement model. The VIF values for business adaptability indicators range from 3.019 to 3.832, while those for business uncertainty navigation range from 2.752 to 3.260. Entrepreneurial orientation indicators show vif values between 2.528 and 3.185, and strategic foresight indicators range from 2.226 to 2.657. All VIF values are below the commonly accepted threshold of 5.0, indicating that multicollinearity is not a concern in the model. These results suggest that each indicator contributes unique information to its respective construct without excessive overlap with other indicators, thereby supporting the robustness and stability of the measurement model.

Table 4. R-Square (R²)

Variable	R ²	Adjusted R ²	F ²
Business Adaptability	0.579	0.570	1.006
Business Uncertainty Navigation	0.553	0.549	1.238

According to Table 4, the R² value of 0.579 indicates that the combination of strategic foresight and entrepreneurial orientation is able to explain 57.9% of the variation in business adaptability. Meanwhile, an R² of 0.553 indicates that business adaptability explains 55.3% of the variation in business uncertainty navigation. This value is moderate-strong, indicating that the model has a good ability to explain the phenomenon being studied. The value of F² is entirely above 0.35, indicating a large effect on each relationship. This indicates that Business Adaptability has an important role in explaining the organization's ability to navigate uncertainty, while entrepreneurial orientation and strategic foresight have a strong influence on improving business adaptability.

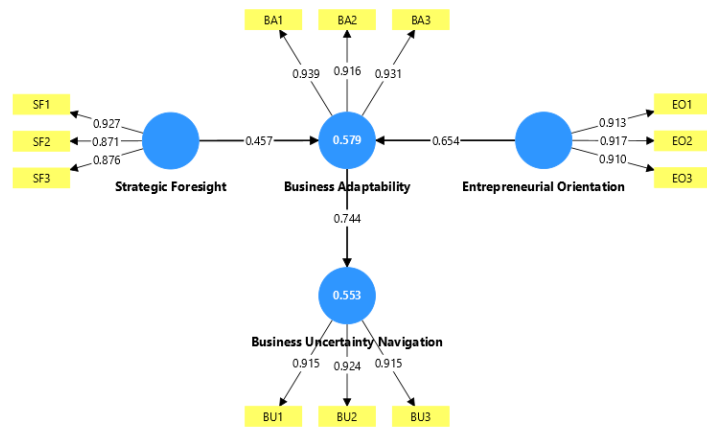


Figure 2. The SEM-PLS Model

Figure 2 presents a PLS-SEM model illustrating the relationships among constructs and their indicators. Each latent construct, strategic foresight, entrepreneurial orientation, business adaptability, and business uncertainty navigation, is measured by its respective indicators, all of which exhibit high loading factors, indicating that the indicators are valid and adequately represent their underlying constructs. The analysis results reveal that strategic foresight has a positive effect on business adaptability, and similarly, entrepreneurial orientation contributes positively to business adaptability. Furthermore, business adaptability exerts a positive influence on the organization's ability to navigate business uncertainty. In other words, the higher an organization's capacity for strategic foresight and adoption of entrepreneurial orientation, the greater its ability to adapt and effectively manage uncertainty in the business environment.

Table 5. Path Coefficients (Bootstrapping)

Structural Path	Original Sample (β)	Sample Mean	Standard Deviation	t-statistic	p-value
Business Adaptability \rightarrow Business Uncertainty Navigation	0.744	0.742	0.048	15.425	< 0.001
Entrepreneurial Orientation \rightarrow Business Adaptability	0.654	0.652	0.056	11.647	< 0.001
Strategic Foresight \rightarrow Business Adaptability	0.457	0.458	0.055	8.302	< 0.001

Table 5 summarizes the bootstrapping results of the structural model, showing that all hypothesized relationships are positive and statistically significant. Business adaptability has a strong effect on business uncertainty navigation ($\beta = 0.744$; $t = 15.425$; $p < 0.001$), indicating that MSMEs with higher adaptive capabilities are more capable of anticipating and responding to uncertain and dynamic business conditions. In addition, entrepreneurial orientation significantly influences business adaptability ($\beta = 0.654$; $t = 11.647$; $p < 0.001$), demonstrating that innovative, proactive, and risk-taking behaviors enhance firms' ability to adjust to change. Strategic foresight also shows a significant positive impact on business adaptability ($\beta = 0.457$; $t = 8.302$; $p < 0.001$), emphasizing the role of forward-looking perspectives and long-term strategic planning in strengthening organizational adaptability. Collectively, these findings confirm that entrepreneurial orientation and strategic foresight are key drivers of business adaptability, which functions as a central mechanism enabling MSMEs to navigate business uncertainty effectively.

Table 6. Indirect Effects

Structural Path	Original Sample (β)	t-statistic	p-value
Strategic Foresight \rightarrow Business Adaptability \rightarrow Business Uncertainty Navigation	0.340	7.609	< 0.001
Entrepreneurial Orientation \rightarrow Business Adaptability \rightarrow Business Uncertainty Navigation	0.340	7.096	0.000

Table 6 presents the results of the indirect effect analysis, which examines the mediating role of business adaptability in the relationship between strategic foresight, entrepreneurial orientation, and business uncertainty navigation. The results indicate that business adaptability significantly mediates the effect of strategic foresight on business uncertainty navigation, with an indirect effect coefficient of $\beta = 0.340$, a t-statistic of 7.609, and a p-value below 0.001. This finding suggests that strategic foresight enhances MSMEs' ability to navigate business uncertainty primarily by strengthening their adaptive capacity, rather than through a direct pathway alone. Similarly, entrepreneurial orientation also shows a significant indirect effect on business uncertainty navigation through business adaptability, with an indirect effect coefficient of $\beta = 0.340$, a t-statistic of 7.096, and a p-value of 0.000. This result confirms that entrepreneurial orientation contributes to uncertainty navigation by first fostering adaptability, which then enables MSMEs to respond more effectively to environmental volatility. These findings demonstrate that business adaptability functions as a critical mediating mechanism that translates strategic foresight and entrepreneurial orientation into effective navigation of business uncertainty.

DISCUSSION

The findings indicate that strategic foresight and entrepreneurial orientation significantly enhance business adaptability, thereby strengthening the ability of food and beverage MSMEs in Jakarta to navigate business uncertainty. Strategic foresight has a positive effect on adaptability ($\beta = 0.457$, $p < 0.001$), while entrepreneurial orientation exerts an even stronger influence ($\beta = 0.654$, $p < 0.001$). Business adaptability also directly impacts uncertainty navigation ($\beta = 0.744$, $p < 0.001$) and serves as a key mediating mechanism (β mediation = 0.340 and 0.609, $p < 0.001$). These results align with previous studies showing that strategic foresight enhances organizational resilience in uncertain environments and that entrepreneurial orientation promotes flexibility and adaptive capacity in business operations (Yandi et al., 2024).

The positive relationship between strategic foresight and business adaptability reinforces the argument that anticipatory capability is a fundamental source of organizational resilience. Strategic foresight enables firms to systematically identify trends, risks, and opportunities through environmental scanning, scenario planning, and strategic visioning (Iden et al., 2017; Alnajem et al., 2024). As emphasized by Alnajem et al. (2024), foresight goes beyond forecasting by fostering organizational learning and adaptive capacity. In the food and beverage MSME context, foresight encourages business actors to anticipate shifts in consumer preferences, digital innovations, and evolving consumption patterns, thereby supporting proactive and flexible strategic responses. With strong foresight capabilities, MSMEs can better align resources and strategies with future market dynamics rather than reacting defensively to change.

Entrepreneurial orientation is also shown to be a major driver of business adaptability. The high coefficient value ($\beta = 0.654$) indicates that innovation, proactiveness, and risk-taking substantially strengthen organizational resilience in the face of environmental turbulence. Entrepreneurially oriented MSMEs are more likely to experiment with new products, adopt alternative business models, and respond swiftly to emerging opportunities (Yandi et al., 2024). These findings are consistent with Khan et al. (2021), who argue that entrepreneurial orientation enhances strategic flexibility and crisis-handling capacity. In this sense, entrepreneurial orientation acts as an executive force that translates foresight-based insights into concrete adaptive actions, thereby reinforcing competitiveness and survival in dynamic markets.

The mediation analysis further highlights the central role of business adaptability. The significant indirect effects of strategic foresight on business uncertainty navigation through adaptability ($\beta = 0.340$, $t = 7.096$, $p = 0.000$) and of entrepreneurial orientation through adaptability ($\beta = 0.486$, $t = 9.275$, $p = 0.000$) indicate that adaptability is a crucial

bridge that converts strategic and entrepreneurial capabilities into effective uncertainty navigation. These results align with dynamic capabilities theory, which posits that resilient organizations must be able to sense opportunities, seize them, and reconfigure internal resources in response to environmental change (Evayani et al., 2022). For food and beverage MSMEs, adaptability enables flexible adjustments in production, marketing, and resource allocation when facing market disruptions or technological shifts.

The combined explanatory power of strategic foresight and entrepreneurial orientation is reflected in R^2 values of 0.579 for business adaptability and 0.553 for business uncertainty navigation, indicating that over half of the variance in these capabilities is explained by the model. Strategic foresight provides long-term direction, while entrepreneurial orientation drives innovation and risk-taking, and their interaction strengthens adaptive capacity, improving MSMEs' ability to cope with uncertainty (Fahim & Indiran, 2024; Li & Abdullah, 2024). This aligns with prior studies showing that integrating foresight and entrepreneurial orientation fosters strategic agility and organizational learning (Alborathy et al., 2023) and extends dynamic capabilities theory in the food and beverage MSME context (Larsen et al., 2022; Suryani & Dwiputra, 2025).

CONCLUSION

This study concludes that strategic foresight and entrepreneurial orientation are key determinants of business adaptability, which subsequently strengthens the ability of food and beverage MSMEs in Jakarta to navigate business uncertainty. The SEM-PLS results confirm that both strategic foresight and entrepreneurial orientation have significant and positive direct effects on adaptability, while business adaptability serves as an important mediating mechanism connecting these strategic orientations to uncertainty navigation. These findings indicate that MSMEs with a forward-looking perspective, long-term strategic awareness, and entrepreneurial behaviors such as innovativeness, proactiveness, and risk-taking are better positioned to respond to environmental turbulence and external disruptions. Business adaptability thus emerges not only as an outcome of strategic capabilities but as a dynamic process that transforms foresight and entrepreneurial orientation into sustainable competitive advantages.

This research contributes to the extension of dynamic capabilities theory in the MSME context, particularly within the highly volatile food and beverage sector. The interaction between strategic foresight and entrepreneurial orientation forms a set of dynamic capabilities that enable organizations to sense changes, seize opportunities, and reconfigure resources under uncertainty. The findings highlight important implications for practitioners and policymakers. Strengthening foresight competencies and strategic entrepreneurship through training programs, mentoring, collaborative platforms, and supportive policies can enhance MSMEs' adaptive capacity. Such initiatives can help business actors anticipate future changes while remaining flexible and innovative in their operational and strategic decisions.

Despite its contributions, this study has several limitations. The use of a cross-sectional design restricts the ability to capture dynamic changes in foresight, entrepreneurial orientation, and adaptability over time. Future research is therefore encouraged to adopt longitudinal approaches. In addition, the sample is limited to 100 MSMEs in Jakarta, which may constrain the generalizability of the findings to other regions. Future studies could also incorporate external factors such as policy support, digital technology adoption, and business networks to provide a more comprehensive understanding of MSME resilience.

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