

The Impact of Inclusive Leadership on Organizational Resilience Mediated by Strategic Agility and Innovation Capability in MSMEs

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ABSTRACT

This study aims to analyze the impact of inclusive leadership on organizational resilience by examining the mediating roles of strategic agility and innovation capability among micro, small, and medium enterprises (MSMEs) in the food and beverage sector in Batam City, Riau Islands Province. This research employed a quantitative explanatory approach with a cross-sectional design. The sample comprised 250 MSME owner-managers selected through purposive sampling. Data were collected using questionnaires distributed online via Google Forms, WhatsApp, and email, as well as offline through direct field visits. Data were analyzed using Structural Equation Modeling with AMOS 29, while mediation effects were tested using the Sobel test. The findings indicate that inclusive leadership has a positive and significant effect on strategic agility and innovation capability, but does not exert a direct effect on organizational resilience. Strategic agility also does not significantly affect organizational resilience and fails to mediate the relationship between inclusive leadership and organizational resilience. In contrast, innovation capability has a positive and significant effect on organizational resilience and significantly mediates the relationship between inclusive leadership and organizational resilience. These findings highlight the importance of inclusive leadership in fostering innovation as the primary pathway for strengthening MSME resilience in a turbulent business environment. The study supports Dynamic Capabilities Theory by showing that organizational resilience is more effectively built through operational innovation capability than through strategic agility alone and provides a basis for designing more sustainable regional MSME development programs.

Keywords: Inclusive Leadership, Organizational Resilience, Strategic Agility, Innovation Capability, Dynamic Capabilities Theory.

INTRODUCTION

Organizational resilience has become a central construct in determining organizational survival and performance in increasingly volatile, uncertain, complex, and ambiguous (VUCA) business environments (Adomako et al., 2022). For MSMEs, external volatility, resource constraints, and dependence on ecosystem networks require organizations not only to survive but also to transform proactively. Because organizational resilience involves innovation and adaptive resource management, strategic agility emerges as an important element that enables organizations to respond to change quickly and effectively. The capacity to adapt strategically and flexibly to external uncertainty not only strengthens competitiveness but also ensures that firms can optimize opportunities that arise amid continuous market turbulence (Musa & Enggarsyah, 2025; Teece, 2018). This perspective emphasizes that agility is not merely a reactive response, but an integrated capability involving environmental sensing, organizational flexibility, and rapid strategic execution (Teece, 2018). Colclough et al. (2019) show that strategic agility is positively associated with organizational performance and can help firms achieve sustainable competitive advantage even under extreme environmental pressure. Research on MSMEs likewise indicates that strategic agility is important for transitioning toward more flexible and adaptive business models, especially during global crises. Within organizational settings, prior studies report positive relationships among an agile mindset, innovation capability, and organizational performance (Adomako et al., 2022; Chan et al., 2019; Mollah

et al., 2024). As agile thinking becomes increasingly important for improving organizational performance, innovation capability becomes a key factor in supporting such strategic flexibility. Innovation capability is generally understood as the organization's ability to detect innovation opportunities, develop ideas, transform them into valuable products, processes, or business models, and initiate internal and external collaborative actions to achieve competitive advantage (García-Valenzuela et al., 2023).

In the effort to create organizational resilience, inclusive leadership becomes a vital enabling factor. Inclusive leadership not only facilitates effective collaboration within teams, but also ensures that diverse perspectives and ideas are empowered, thereby encouraging more creative and adaptive decision-making processes. Inclusive leadership can be understood as a leadership style that promotes participation, empowerment, and the inclusion of team members from diverse backgrounds, thereby creating a work environment that values differences in identity, experience, and perspective (Gupta et al., 2022; Javed et al., 2021). Inclusive leadership has been examined across service, manufacturing, hospitality, finance, and public-sector settings. Prior studies indicate that inclusive leadership enhances innovation and team performance across cultures (Huynh et al., 2024; Javed et al., 2019; Qi et al., 2019).

MSMEs in the Riau Islands play a crucial role in the local economy, contributing substantially to employment and regional economic output. MSMEs are the backbone of the Indonesian economy, accounting for approximately 61% of national GDP and absorbing 97% of the workforce (Coordinating Ministry for Economic Affairs of the Republic of Indonesia, 2023). MSMEs in the Riau Islands have experienced notable growth. In 2025, the number of MSMEs in the province reached 13,658 units (Riau Islands Office of Cooperatives and SMEs, 2025), with the highest concentration in Batam City. According to BPS Kepri (2025), MSME revenue in the Riau Islands reached IDR 2.96 trillion, with the food and beverage (F&B) sector contributing 43.95%. MSME expenditure reached IDR 1.42 trillion, of which the largest share was also dominated by the F&B sector at 54.92%.

MSMEs in the Riau Islands face major challenges in maintaining organizational resilience amid economic uncertainty, rapid market shifts, and intensifying competitive pressure. Although inclusive leadership has been shown to foster participation, collaboration, and trust, few studies have examined its role in depth within the context of MSMEs in island regions characterized by limited access to resources and business networks. In addition, MSMEs' ability to adapt quickly through strategic agility and to develop innovation varies considerably, making it necessary to investigate how these two factors mediate the relationship between inclusive leadership and organizational resilience.

A number of previous studies have highlighted the importance of MSME responses to crises and post-pandemic disruptions, including the need to strengthen adaptive strategies and leverage technology. Sharma et al. (2024), for example, used a global bibliometric review to map MSME barriers and strategic responses during the pandemic, but did not test a causal model integrating inclusive leadership, dynamic capabilities (strategic agility and innovation capability), and their impact on organizational resilience in the Indonesian MSME context. On the other hand, AlMulhim & Mohammed (2023), in the Saudi Arabian telecommunications sector, confirmed the role of inclusive leadership in encouraging innovative work behavior, yet their analysis remained focused on behavior and organizational climate, without explicitly linking this mechanism to MSME organizational resilience. Accordingly, this study fills an important gap by empirically testing a dual-mediation model linking inclusive leadership to organizational resilience through strategic agility and innovation capability among MSMEs in the Riau Islands, a context characterized by logistical challenges, geographic fragmentation, and varying levels of digital infrastructure. The originality of this study lies in three aspects. First, it integrates inclusive leadership with Dynamic Capabilities Theory by positioning MSME owner-managers' inclusive practices as microfoundations of sensing, seizing, and reconfiguring capabilities. Second, it compares two mediating routes—strategic agility and innovation capability—rather than assuming that all dynamic capabilities have the same contribution to resilience. Third, it tests the model in archipelagic MSMEs in Batam, where resource constraints, cross-border competition, logistics, digital readiness, and business legality issues make resilience formation different from large-firm or mainland settings.

The urgency of this study stems from the increasing environmental pressure associated with VUCA conditions. Under such circumstances, organizational resilience can no longer be understood merely as the ability to survive;

rather, it should be viewed as a strategic capability to respond to shocks, restore performance, and transform through learning and continuous renewal. For MSMEs, resilience is particularly critical because limited resources and business scale make them more vulnerable to shifts in demand, supply-chain disruptions, regulatory change, and competitive pressure. The context of the Riau Islands—especially Batam City reinforces this urgency. As an archipelagic border economy and one of Indonesia’s cross-border economic gateways, the region places MSMEs in a distinctive market environment marked by competition from cheaper imported products, fluctuating demand, and growing expectations regarding service quality and speed. Although various initiatives by local government, Bank Indonesia, and other stakeholders have sought to strengthen MSMEs for example through digital marketing training—the need to build more structured resilience remains high, particularly with regard to digital infrastructure, market access, and organizational adaptability.

Theoretically, this study is important because it offers a strategic explanation of how leadership functions as a microfoundation for organizational capability formation. The research model positions inclusive leadership as a managerial resource or capability that is expected to shape strategic agility and innovation capability as dynamic capabilities, which in turn influence organizational resilience. In other words, this study goes beyond direct relationships by testing causal pathways through mediating variables in order to answer how and why organizational resilience is formed, in line with the need in strategic management research to open the “black box” of adaptive advantage creation. The contribution to knowledge is therefore not only the confirmation of direct relationships among variables, but also the clarification of the mechanism through which inclusive leadership becomes consequential for resilience. By comparing the non-significant strategic agility pathway with the significant innovation capability pathway, this study refines the application of Dynamic Capabilities Theory in MSMEs and shows which capability is more decisive under conditions of limited slack resources.

From a practical standpoint, this study is relevant because MSME actors need operational strategic guidance for building resilience. If organizational resilience is shown to be more strongly shaped by innovation or particular forms of agility, owner-managers can prioritize the most impactful interventions, such as strengthening inclusive leadership practices and building routine innovation mechanisms. For local governments and other stakeholders, the results can serve as a basis for designing more targeted MSME assistance programs that go beyond expanding technology adoption and instead strengthen the organizational capabilities most relevant to long-term resilience. The practical contribution is directed toward two groups. For MSME owner-managers, the findings provide a basis for prioritizing inclusive leadership practices that generate concrete innovation routines, such as customer feedback sessions, small-scale product trials, digital promotion experiments, and supplier collaboration. For local government and MSME support institutions, the findings provide evidence for designing assistance programs that move beyond generic training and focus on capability building, business legality, innovation incubation, digital market access, and university–industry mentoring.

LITERATURE REVIEW

Dynamic Capabilities Theory

Dynamic Capabilities Theory is a framework for understanding how organizations adapt and thrive in environments characterized by rapid and unpredictable change. The concept was first introduced by Teece et al. (1997). In this context, dynamic capabilities are defined as an organization’s ability to integrate, build, and reconfigure internal and external competencies in response to rapidly changing environments (Eisenhardt & Martin, 2000). In general, the theory emphasizes the importance of flexibility and adaptability in sustaining competitiveness in highly dynamic markets. Eisenhardt and Martin (2000) explain that dynamic capabilities encompass organizational processes that enable adaptation under uncertainty. These capabilities are particularly important in the context of small and medium-sized enterprises, especially during uncertain periods such as the COVID-19 pandemic. Prior research shows that MSMEs that are able to adapt to environmental changes demonstrate greater resilience (Valenzuela et al., 2023).

Within this theoretical perspective, recent resilience literature distinguishes between the existence of capabilities and their effective deployment. Organizational resilience can be understood as a meta-capability that unfolds through anticipation, coping, and adaptation (Duchek, 2020), whereas dynamic capabilities explain how firms integrate and reconfigure resources across these stages. This distinction is important for MSMEs because the

ability to sense market changes does not automatically produce resilience unless it is converted into routines, resource redeployment, and innovation outcomes.

Dynamic capabilities are closely related to organizational resilience because both emphasize the importance of adaptation to environmental change. Sharma et al. (2024) argue that MSMEs with stronger dynamic capabilities are better able to survive and recover from crises through innovation capability and strategic agility. Abid et al. (2024) also show that, despite resource limitations, strengthening dynamic capabilities enables MSMEs to remain competitive. Meanwhile, Hamid et al. (2022) emphasize that the integration of strategic agility and innovation capacity simultaneously strengthens long-term organizational resilience. Thus, this theory provides a logical basis for arguing that inclusive leadership, by fostering strategic agility and innovation capability, contributes to stronger organizational resilience.

Organizational Resilience

Resilience includes not only the ability to withstand adverse conditions, but also the ability to innovate and exploit opportunities that emerge from challenges. For MSMEs, organizational resilience is particularly important because of their inherent vulnerability. These businesses often operate with limited resources and face higher risks from economic downturns, market fluctuations, and unexpected crises such as the COVID-19 pandemic (García-Valenzuela et al., 2023; Njaramba & Olukuru, 2025). Accordingly, MSME resilience can be viewed as a multifaceted capability that includes strategic agility, innovative adaptation, and operational flexibility (Hamid et al., 2022; Sharma et al., 2024; Velu et al., 2019).

Capability-based resilience literature also emphasizes cognitive, behavioral, and contextual conditions. Lengnick-Hall et al. (2011) argue that resilience depends on employees' ability to notice changes, improvise, and coordinate responses, while Bhamra et al. (2011) show that resilience research connects preparedness, continuity, recovery, and learning. For MSMEs, these elements are often embedded in owner-manager decisions and informal routines; therefore, resilience should be examined together with leadership practices and innovation routines rather than as a stand-alone outcome.

In the current context, organizational resilience in MSMEs can be understood as the capacity not only to recover from setbacks, but also to emerge stronger through strategic innovation and the integration of digital solutions. This perspective aligns with the growing recognition that resilience is about finding ways to thrive amid adversity, including by building a culture of continuous learning and adaptability, improving leadership practices, and fostering collaborative networks (Adomako et al., 2022; Carfora et al., 2021; Chang et al., 2023). As the business landscape becomes increasingly unpredictable, the definition of organizational resilience must therefore be dynamic and aligned with contemporary digital economic realities, emphasizing not only survival but also proactive adaptation and innovation.

Strategic Agility

Strategic agility refers to an organization's ability to rapidly adjust its strategies and operations in response to changing market conditions and fluctuating environmental demands. A constantly changing business environment requires MSMEs not only to rely on rigid long-term strategies, but also to develop mechanisms that enable them to shift direction quickly when faced with opportunities or threats.

Strategic agility is commonly conceptualized through strategic sensitivity, leadership unity, and resource fluidity (Doz & Kosonen, 2010). The first two dimensions may be feasible for MSMEs because owner-managers can communicate directly with employees and customers. Resource fluidity, however, is often more difficult because MSMEs have limited capital, labor specialization, and digital infrastructure. This theoretical distinction explains why agility may be necessary for adaptation but may not always be sufficient to produce organizational resilience.

More specifically, for MSMEs, strategic agility means the ability to formulate and implement flexible strategies in response to challenges such as cost pressures, changing consumer preferences, and unexpected crises (Troise et al., 2022; Wided, 2022). The pandemic clearly demonstrated that businesses lacking strategic agility struggled

to survive, whereas firms able to adjust their operating models—for example by moving to digital platforms or modifying their supply chains—were able to identify new opportunities during the crisis. In the current era, digital technology integration and the use of big data analytics in business models are recognized as key strategies for strengthening both resilience and agility (Ciasullo et al., 2022; Hokmabadi et al., 2024). The digital transformation process enables MSMEs not merely to withstand shocks, but also to exploit new opportunities arising from technological and socio-economic change (Ciasullo et al., 2022; Xu et al., 2022). MSMEs in the retail sector that use e-commerce and social media, for instance, can expand their markets significantly—even globally—without opening physical branches.

Studies in sustainable tourism and tourism-firm resilience are useful as comparative evidence because they show how dynamic capabilities support resilience in service businesses facing shocks (Wided, 2022; Prayag et al., 2024). However, the present study extends this discussion to food and beverage MSMEs outside formal tourism destinations, where resilience is shaped by informality, legality, local supply chains, and day-to-day market experimentation.

The implementation of strategic agility in MSMEs may involve various practical strategies. For example, in response to changing consumer preferences, MSMEs may develop new products that better match market needs or make competitive price adjustments (Marquès, 2017). In marketing, the use of digital platforms such as social media, online marketplaces, and mobile applications allows more targeted and efficient promotion. Operationally, the use of inventory management software and sales analytics can support faster, data-driven decision-making.

Innovation Capability

Innovation capability is the capacity of a firm to develop and implement new ideas, products, processes, and systems that stimulate creativity and enhance market competitiveness (García-Valenzuela et al., 2023; Garrido-Moreno et al., 2024). This capability is highly relevant in the current era of globalization and rapid digitalization, in which shifts in consumer preferences and technological advances occur at great speed (García-Valenzuela et al., 2023; Hokmabadi et al., 2024). Dynamic innovation capability—such as the ability to understand and quickly adapt to market change—becomes a key determinant of business success and resilience under intense competition (García-Valenzuela et al., 2023; Garrido-Moreno et al., 2024). Recent studies on dynamic capabilities and resilience show that innovation capability functions as a conversion mechanism: it transforms market knowledge into new products, processes, service delivery models, and marketing practices (García-Valenzuela et al., 2023; Garrido-Moreno et al., 2024). In small firms, this conversion is especially important because innovation is often incremental and low-cost, such as menu redesign, packaging improvement, digital ordering, supplier substitution, and customer feedback-based product trials.

Building sustainable innovation capability in MSMEs means making innovation part of organizational culture. Organizations that support creativity and employee involvement in innovation processes are more likely to generate solutions that are relevant to market needs (Arranz et al., 2020). This requires a work environment that encourages experimentation, treats failure as part of learning, and rewards employees' contributions of ideas. In the MSME context, such an innovative culture can be fostered through open communication, continuous training, and the empowerment of employees to take initiative. Beyond culture, leadership also plays a vital role in directing and strengthening innovation capability. MSME leaders need a long-term vision that promotes innovation, along with the ability to manage the risks associated with it. Effective leaders can inspire teams, facilitate collaboration, and ensure that each innovation aligns with the firm's strategic objectives. Leaders who proactively seek new opportunities and motivate their teams to keep learning create a climate that is conducive to sustained innovation.

Innovation capability is also closely related to business resilience. In uncertain environments, such as economic crises or supply-chain disruptions, innovation can become both a survival strategy and a growth mechanism. Innovative MSMEs can quickly alter their products, services, or business models in order to adapt to new conditions. During the COVID-19 pandemic, for example, many MSMEs that had previously depended entirely on offline sales shifted to online channels and even developed new products suited to the situation, such as cloth masks and hand sanitizers.

Inclusive Leadership

Inclusive leadership is a leadership concept that emphasizes the creation of a work environment that empowers, embraces, and values all team members regardless of differences in background, perspective, or individual potential. At its core, inclusive leadership recognizes that each person brings unique value that can contribute to the achievement of organizational goals. Inclusive leaders have been shown to create organizational cultures that respect employees' uniqueness while encouraging effective integration and socialization, particularly for newcomers from diverse backgrounds (Dai & Fang, 2023). In practice, this not only improves workplace comfort but also strengthens a sense of belonging and collaboration among team members. Inclusive leadership is theoretically relevant as a microfoundation of Dynamic Capabilities Theory because it creates psychological safety, openness, and participation that allow knowledge to surface and be recombined. Nembhard and Edmondson (2006) define leader inclusiveness as words and actions that invite and appreciate others' contributions, while Carmeli et al. (2010) show that openness, accessibility, and availability encourage employee involvement in creative tasks through psychological safety. For MSMEs, this means that inclusive leadership can turn employees' day-to-day observations into innovation inputs.

One of the main objectives of inclusive leadership is to cultivate employees' sense of belonging. Such belonging makes employees feel involved in decision-making, gives them the opportunity to express their opinions, and assures them that their voices are heard by leaders. Research by AlMulhim and Mohammed shows that a greater degree of leadership inclusiveness can strengthen employees' innovative behavior because they feel socially involved in the organization. This social involvement positively affects innovation performance (AlMulhim & Mohammed, 2023). In other words, when employees feel appreciated and trusted, they are more likely to develop creative ideas that benefit the firm.

The application of inclusive leadership in MSMEs has several strategic dimensions. First, leaders need effective communication skills to reach all team members fairly, regardless of background or position. Second, leaders should build real participatory mechanisms, such as open idea forums or group discussions, so that employees feel heard. Third, leaders need awareness of potential biases in decision-making processes so that corrective steps can be taken to ensure equal opportunities for employee development (Lee & Shin, 2025).

Inclusive leadership can also serve as a catalyst for collaborative innovation. In dynamic MSME environments, collaboration among diverse team members can generate solutions that are more creative and more responsive to market needs. In new product development, for example, perspectives from different cultural and experiential backgrounds can enrich product design and improve appeal to broader market segments. Through an inclusive approach, leaders encourage employees to learn from one another and combine their expertise to achieve optimal results.

Accordingly, this study advances the inclusive leadership literature by shifting the emphasis from individual innovative behavior to organizational-level resilience. In the MSME context, inclusive leadership is expected to matter not merely because it makes employees feel valued, but because it creates the social conditions through which ideas are transformed into dynamic capabilities and resilience outcomes.

Based on the preceding discussion, the conceptual framework proposed in this study is presented in Figure 1.

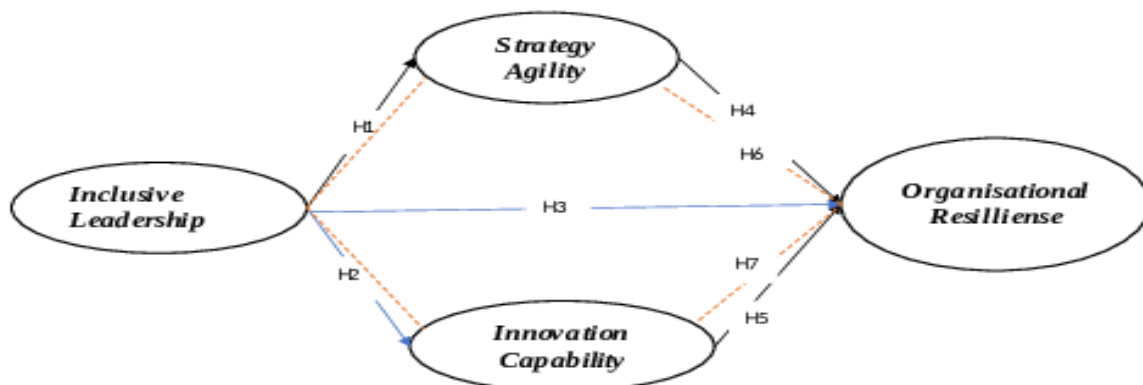


Figure 1. Conceptual Framework

RESEARCH METHOD

Research Design

This study is quantitative research using an explanatory approach intended to test causal relationships among variables through data collection and analysis at a single point in time, consistent with a cross-sectional design. This method is intended to understand and explain the influence that may occur between independent and dependent variables in a broader context, such as the effect of inclusive leadership on employees' psychological resilience (Li & Peng, 2023) or the impact of big data analytics capability on small and medium enterprise resilience (Ciasullo et al., 2022).

Sample

This study was conducted in the Riau Islands Province with a primary focus on Batam City. Batam was selected because it is the largest economic hub in the province and has a high concentration of MSMEs. In the food and beverage sector, culinary businesses in Batam account for approximately 75–80% of local MSME activity (Kompas.com, 2025). This sector is also one of the major absorbers of labor, meaning that strengthening MSME organizational resilience in Batam has direct implications for regional economic stability (BPS Kepri, 2024).

The study population consisted of MSMEs in the Riau Islands operating in the food and beverage sector, including those located in Batam. Based on data from the Office of Cooperatives in 2025, the number of MSMEs operating in the food and beverage sector in the Riau Islands reached 12,549 units.

The sample was determined using purposive sampling, a sampling technique based on specific criteria relevant to the study objective. Respondents were MSME managers, including owners, managers, and individuals carrying out managerial functions. The minimum sample size was calculated using G*Power 3.1 through an a priori power analysis for the F test—linear multiple regression (fixed model, R^2 deviation from zero). The parameters used were effect size $f^2 = 0.15$ (medium), $\alpha = 0.05$, power = 0.95, and 19 predictors, resulting in a minimum required sample of 217 respondents. Following Kang (2021), an a priori sample calculation helps avoid underpowered or overpowered studies while maintaining research efficiency and validity. To anticipate possible drop-out, the sample size was increased by 10%, producing a minimum recruitment target of 238 respondents.

Data Collection Method

The primary data collection method used in this study was a questionnaire developed as the main research instrument, employing a five-point Likert scale. The questionnaire was distributed using a mixed-mode approach: online through Google Forms and social media platforms such as WhatsApp and email, and offline through direct visits to MSME locations. This mixed approach was intended to maximize respondent reach among MSMEs in the Riau Islands.

Data Analysis Method

AMOS-based Structural Equation Modeling (SEM) was used as the main approach for data analysis. SEM is also known as the analysis of covariance structures and is often referred to as a causal model (Blunch, 2012). In accordance with the model developed in this study, the analytical tool employed was SEM implemented using IBM SPSS AMOS 29 (Byrne, 2013).

Before conducting SEM with AMOS, the required analytical assumptions were examined. The final stage of testing was to determine whether the proposed hypotheses were supported based on the probability (P) value in the regression weights output. A hypothesis was accepted when $P < 0.05$ and rejected when $P > 0.05$. The C.R. values are reported as part of the AMOS output, but the interpretation of statistical significance in this study refers to the P value as the primary decision criterion. In this study, mediating effects were examined using the Sobel test. The indirect effect was interpreted based on the probability value generated from the Sobel test; an

indirect effect was considered significant when $P < 0.05$. No separate t-test procedure was applied because the significance of structural paths and indirect effects was determined from their respective P values.

RESULTS AND DISCUSSION

This section presents the survey data obtained from respondents. All 250 questionnaires distributed online to MSMEs were returned and completed. Descriptive analysis was used to explain respondent characteristics, while SEM-AMOS analysis was used to test the hypotheses proposed in this study.

Table 1. Respondent Characteristics

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	151	60.4
	Female	99	39.6
Age	Under 30 years	55	22.0
	30–35 years	60	24.0
	36–40 years	48	19.2
	41–50 years	42	16.8
	50 years or older	45	18.0
Highest education	Junior high school or equivalent	15	6.0
	Senior high school or equivalent	107	42.8
	Master’s degree (S2)	30	12.0
	Bachelor’s degree (S1)	98	39.2
Years in operation	3 years	74	29.6
	4–5 years	102	40.8
	6–10 years	51	20.4
	> 11 years	23	9.2
Number of employees	10 employees	175	70.0
	11–20 employees	44	17.6
	21–30 employees	31	12.4
Estimated annual turnover	< IDR 300 million	156	62.4
	IDR 300 million – IDR 2.5 billion	66	26.4
	IDR 2.5 billion – IDR 10 billion	28	11.2
Halal certification	Already obtained	23	9.2
	Not yet obtained	227	90.8
NIB (Business Identification Number)	Already obtained	138	55.2
	Not yet obtained	112	44.8
	Total (valid)	250	100.0
PIRT (Home Industry Food Permit)	Already obtained	25	10
	Not yet obtained	225	90

Based on the descriptive analysis of 250 respondents, the majority of business owners were male, totaling 151 respondents (60.4%), while 99 respondents (39.6%) were female. In terms of age, the largest group fell within the 30–35-year age range, comprising 60 respondents (24.0%), followed by respondents under 30 years of age with 55 respondents (22.0%). Regarding educational background, most respondents had completed senior high school or equivalent education (107 respondents; 42.8%), followed by bachelor’s degree holders (98 respondents; 39.2%). Most businesses had been operating for 4–5 years, employed around 10 workers, and generated annual turnover below IDR 300 million. In terms of business legality, most respondents had not yet obtained halal certification or PIRT, although more than half had already obtained an NIB. These findings indicate that the respondent profile is dominated by small-scale MSMEs with business legality that still needs improvement.

Table 2. Validity and Reliability Test Results

Statement item	Standard loading	Composite Reliability	Variance Extracted	Remark
Inclusive Leadership		0.95	0.53	Reliable
IL3	0.651			Valid
IL4	0.612			Valid
IL5	0.659			Valid
IL6	0.633			Valid
IL7	0.683			Valid
IL8	0.663			Valid
IL9	0.673			Valid
Strategic Agility		0.95	0.87	Reliable
SA1	0.895			Valid
SA2	0.867			Valid
SA3	0.890			Valid
Innovation Capability		0.98	0.51	Reliable
IC1	0.623			Valid
IC2	0.605			Valid
IC3	0.643			Valid
IC4	0.647			Valid
IC5	0.742			Valid
IC6	0.772			Valid
IC7	0.611			Valid
IC8	0.662			Valid
IC9	0.686			Valid
IC10	0.723			Valid
Organizational Resilience		0.98	0.61	Reliable
OR1	0.698			Valid
OR2	0.721			Valid
OR3	0.663			Valid

OR4	0.702			Valid
OR5	0.733			Valid
OR6	0.688			Valid
OR7	0.715			Valid
OR8	0.714			Valid
OR9	0.763			Valid

Based on the construct validity and reliability test results, all research variables met acceptable measurement criteria. The IL variable had a Composite Reliability (CR) value of 0.95 and a Variance Extracted (VE) value of 0.53, indicating good reliability. All indicators of the IL variable—IL3 to IL9—had loading factor values above 0.60 and were therefore considered valid. The SA variable also produced excellent results, with a CR of 0.95 and a VE of 0.87, and all indicators from SA1 to SA3 were valid because their loading factors exceeded 0.70.

Furthermore, the IC variable had a CR of 0.98 and a VE of 0.51, showing that this construct is reliable. All IC indicators, from IC1 to IC10, had loading factor values above 0.60 and were therefore valid. Likewise, the OR variable had a CR of 0.98 and a VE of 0.61, indicating very good construct reliability. All OR indicators from OR1 to OR9 also had loading factor values above the required minimum threshold and were therefore considered valid.

The structural model was then evaluated by assessing overall model fit (goodness of fit). This stage was intended to demonstrate that the measurement instrument met convergent validity criteria and was statistically adequate before proceeding to structural model testing and hypothesis testing.

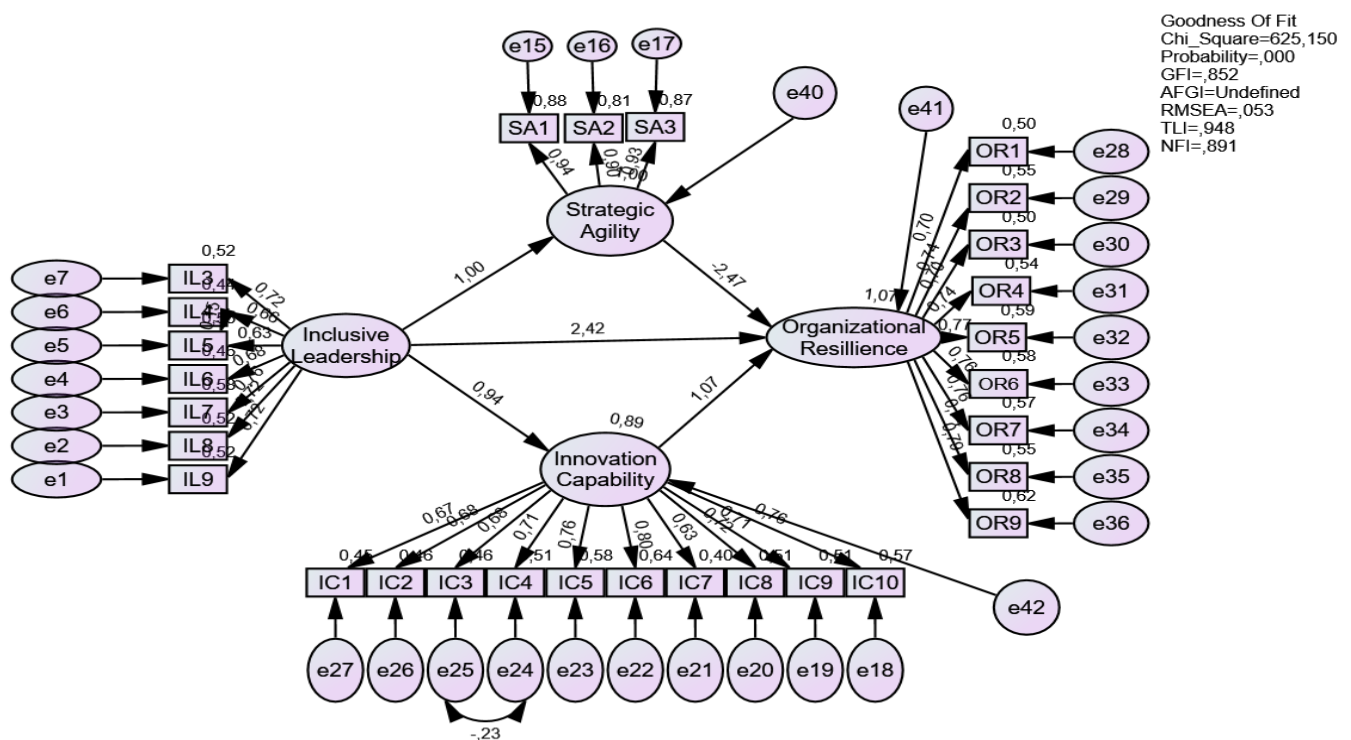


Figure 2. CFA Measurement of the Structural Model

Based on the Goodness of Fit results, the research model demonstrates an acceptable level of fit. The Chi-Square value of 625.150 with a probability value of 0.000 indicates that the model has not achieved perfect fit. However, RMSEA of 0.053 and TLI of 0.948 satisfy the criteria for good fit. Meanwhile, GFI of 0.852 and NFI of 0.891 fall into the marginal fit category. Thus, the model is appropriate for further analysis, even though several indices are not yet fully ideal.

Table 3. Squared Multiple Correlations Test Results

Variable	Estimate
Innovation Capability	0.893
Strategic Agility	0.995
Organizational Resilience	0.872

The Squared Multiple Correlations results show that Innovation Capability has a value of 0.893, meaning that 89.3% of its variance can be explained by the model. Strategic Agility has a value of 0.995, meaning that 99.5% of its variance can be explained by the model. Organizational Resilience has a value of 0.872, indicating that 87.2% of its variance is explained by the model. Overall, the model demonstrates very strong explanatory power for the endogenous variables under study.

Table 4. Direct Effect Hypothesis Test Results

Hypothesis	Estimate	S.E.	C.R.	P	Result
H1 Strategic Agility <--- Inclusive Leadership	1.148	0.078	14.721	0.000	Supported
H2 Innovation Capability <--- Inclusive Leadership	1.128	0.098	11.466	0.000	Supported
H3 Organizational Resilience <--- Inclusive Leadership	2.526	8.795	0.287	0.774	Not supported
H4 Organizational Resilience <--- Strategic Agility	-2.249	7.601	-0.296	0.767	Not supported
H5 Organizational Resilience <--- Innovation Capability	0.938	0.151	6.203	0.000	Supported

The hypothesis testing results were interpreted based on the P values. H1 and H2 are supported because Inclusive Leadership significantly affects Strategic Agility ($P < 0.001$) and Innovation Capability ($P < 0.001$). H5 is also supported because Innovation Capability significantly affects Organizational Resilience ($P < 0.001$). In contrast, H3 and H4 are not supported because the effect of Inclusive Leadership on Organizational Resilience ($P = 0.774$) and the effect of Strategic Agility on Organizational Resilience ($P = 0.767$) are not statistically significant. Thus, of the five hypotheses proposed, three are supported and two are not supported.

The mediation test results for strategic agility between inclusive leadership and organizational resilience are presented in Figure 3, whereas the mediation test results for innovation capability between inclusive leadership and organizational resilience are presented in Figure 4.

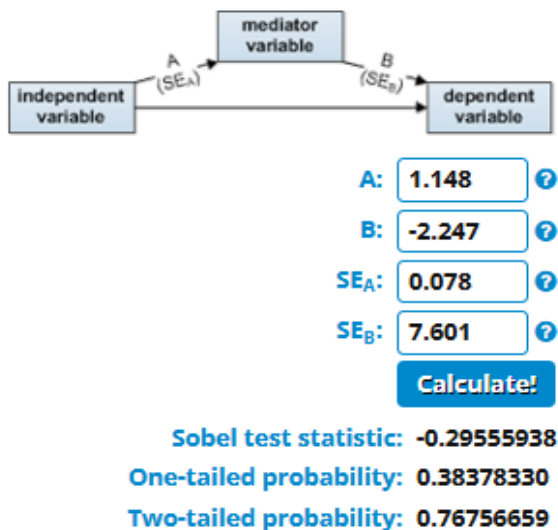


Figure 3. Sobel Test Result for Strategic Agility Mediation

The Sobel test results show that Strategic Agility does not mediate the effect of Inclusive Leadership on Organizational Resilience because the two-tailed probability value is 0.768, which is greater than 0.05. Therefore, the indirect effect is not statistically significant, and the mediation hypothesis is not supported in this study.

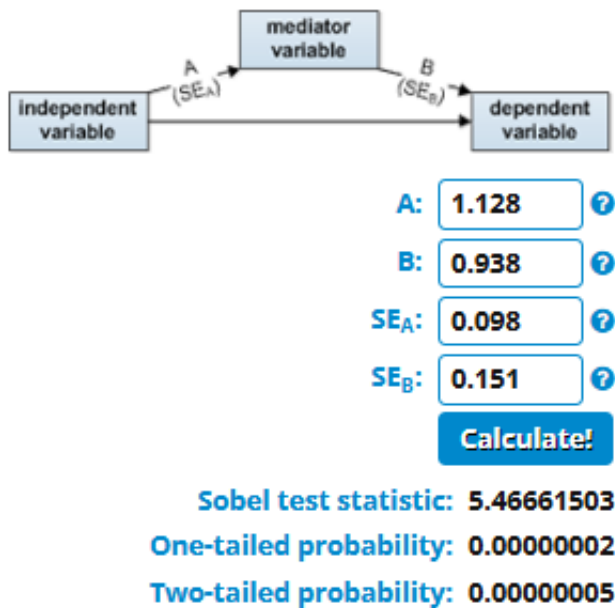


Figure 4. Sobel Test Result for Innovation Capability Mediation

The Sobel test results show that Innovation Capability mediates the effect of Inclusive Leadership on Organizational Resilience because the two-tailed probability value is 0.00000005, which is smaller than 0.05. This means that the indirect effect is statistically significant, and the mediation hypothesis is therefore supported in this study.

DISCUSSION

The results show that Inclusive Leadership has a positive and significant effect on Strategic Agility and Innovation Capability, but no direct effect on Organizational Resilience. This pattern is important because it suggests that, in the MSME context, inclusive leadership primarily operates as a trigger for capability development rather than as a direct determinant of organizational resilience. From the perspective of Dynamic Capabilities Theory (DCT), leadership can be understood as a microfoundation that strengthens sensing and seizing processes, because inclusive leaders tend to open information flows, value members' contributions, and create a safe climate for expressing ideas. As a consequence, organizations become better able to recognize change and are more prepared to develop strategic and innovative responses. This finding is in line with the view that dynamic capabilities are built through managerial and organizational processes that enable firms to recognize opportunities, mobilize resources, and continuously renew their competence base (Teece et al., 1997; Teece, 2016). The result is also consistent with previous studies showing that inclusive leadership enhances psychological safety, creative engagement, and employees' innovative behavior, which in turn strengthen organizational capacity for adaptation and innovation (Nembhard & Edmondson, 2006; Carmeli et al., 2010; Qi et al., 2019; Wang et al., 2021).

The significant effect of Inclusive Leadership on Strategic Agility indicates that open, accessible, and participative leadership makes organizations more sensitive to change and better prepared to formulate strategic responses. In the strategic agility literature, this capability is typically supported by strategic sensitivity, leadership unity, and resource fluidity (Doz & Kosonen, 2010). From a DCT standpoint, this relationship is logical because inclusive leaders enrich opportunity sensing and strategic alignment. However, when Strategic Agility was tested against Organizational Resilience, the effect was not significant. This means that, in the context of predominantly micro and small MSMEs, strategic agility does not automatically translate into organizational resilience. Theoretically, this finding suggests that agility is insufficient when it is not followed

by effective reconfiguring capability. Firms may be quick to read change and make decisions, but when resources are limited, such changes may remain short-term responses and fail to become stable resilience. This result differs from other SME studies that find strategic agility can strengthen organizational resilience, especially when accompanied by strategic orientation and adequate execution support (Nuwan et al., 2024). It is also not fully aligned with evidence that strategic agility improves SME performance in dynamic markets (Adomako et al., 2022). The divergence may stem from the context of this study, which is dominated by resource-constrained MSMEs, making the resource fluidity dimension more difficult to realize in practice.

The strongest finding in the model is that Innovation Capability has a positive and significant effect on Organizational Resilience. This suggests that MSME resilience is not primarily built through abstract strategic postures, but through concrete capabilities to create, test, and implement improvements in products, processes, services, and marketing approaches. Within the DCT framework, innovation capability is a concrete manifestation of sensing, seizing, and reconfiguring processes, because innovation enables organizations to convert learning into new solutions that are relevant to environmental change. In other words, resilience emerges when organizations do not merely understand change, but can also transform that knowledge into actions with economic and operational value. This finding is consistent with studies that place innovation and resilience among the key dynamic capabilities in turbulent environments, as well as with SME research emphasizing the importance of innovation capability for sustaining business continuity in high-risk contexts (Garrido-Moreno et al., 2024; Zahoor et al., 2024). More recent SME research also suggests that innovation functions as a transmission mechanism linking internal capabilities to organizational endurance and long-term advantage (Teece et al., 2016; Teece, 2016).

Overall, the mediation test results reinforce this interpretation. Strategic Agility does not mediate the effect of Inclusive Leadership on Organizational Resilience, whereas Innovation Capability mediates this relationship significantly. This means that the effect of inclusive leadership on MSME resilience operates primarily through the innovation pathway. Substantively, inclusive leaders create spaces for dialogue, trust, and openness to ideas; however, organizational resilience is only truly formed when that climate is converted into executable innovation. Thus, this study shows that, in the MSME context, the most effective path from leadership to resilience is through innovation capability rather than strategic agility. From the DCT perspective, these findings confirm that not all adaptive capabilities carry the same weight; in small organizations with limited slack resources, operational innovation capability is more closely associated with resilience formation than agility, which requires greater resource fluidity. This finding also extends prior research on inclusive leadership, because the positive relationship between inclusive leadership and innovation—previously documented mostly at the individual behavioral level—is shown here to be relevant at the level of organizational resilience as well.

Theoretically, this study strengthens Dynamic Capabilities Theory by showing that, in the MSME context, organizational resilience is more effectively explained by innovation capability than by strategic agility alone. In other words, this study not only supports DCT, but also clarifies the sequence of the mechanism: Inclusive Leadership → Innovation Capability → Organizational Resilience. The findings position inclusive leadership as a microfoundation for dynamic capability formation while also showing that strategic agility is more contingent and does not always lead to resilience.

The main theoretical contribution is therefore the identification of an asymmetric capability mechanism. Inclusive leadership strengthens both strategic agility and innovation capability, but only innovation capability becomes a statistically meaningful bridge to resilience. This finding contributes to Dynamic Capabilities Theory by showing that dynamic capabilities should not be treated as interchangeable; in resource-constrained MSMEs, capabilities that directly generate implementable improvements have stronger explanatory power than capabilities that primarily describe strategic responsiveness.

From a managerial perspective, MSME leaders need to focus inclusive leadership practices on establishing simple but consistent innovation routines, such as weekly idea forums, customer evaluation, small-scale product trials, and experimentation with marketing channels. These findings also highlight that rapid response alone is not enough; resilience requires the capability to transform ideas into implementable improvements. Therefore, MSME owner-managers need to build innovation mechanisms that are low-cost, documented, and repetitive rather than relying solely on improvisation during crises.

From a policy standpoint, government agencies and MSME support institutions should not stop at generic leadership or digitalization training programs. More relevant programs are those that directly connect leadership, innovation, and business resilience, such as product innovation incubation, facilitated market experimentation, business legality assistance, and stronger networking with suppliers, communities, and universities.

For local governments, the results imply that MSME resilience programs should combine leadership development with innovation infrastructure. Relevant interventions include product and packaging clinics, halal and PIRT legality facilitation, digital catalog and marketplace onboarding, small-grant schemes for product trials, and partnerships with universities for mentoring and evaluation. For business actors, the findings imply that inclusive leadership should be translated into documented innovation routines so that resilience does not depend only on improvisation during crises.

Future studies should employ longitudinal designs so that changes in innovation capability, agility, and resilience can be observed as processes rather than as single snapshots. In addition, mediation analysis should use bootstrapping to obtain stronger estimates of indirect effects. Other important research agendas include testing moderators such as business size, slack resources, digital readiness, and environmental dynamism. Future research should also decompose strategic agility into its underlying dimensions, especially resource fluidity, to determine which dimensions most strongly shape resilience in MSMEs.

This study has several limitations. First, the cross-sectional design restricts the interpretation of long-term causal relationships. Second, the use of self-reported questionnaire data may introduce perceptual bias. Third, the research context is limited to MSMEs in a specific region, so the findings should be generalized cautiously. Fourth, mediation was tested using the Sobel test; future studies should use bootstrapping for more robust indirect effect estimation. Fifth, the measurement of strategic agility in the MSME context may not fully capture resource reconfiguring aspects, which are central to resilience formation.

CONCLUSION

This study concludes that Inclusive Leadership significantly enhances Strategic Agility and Innovation Capability, but does not directly affect Organizational Resilience. Strategic Agility also does not significantly enhance resilience. In contrast, Innovation Capability emerges as a strong direct determinant of Organizational Resilience. The mediation results further confirm that the effective pathway from leadership to organizational resilience operates through Innovation Capability rather than through Strategic Agility. Thus, in the MSME context, organizational resilience is more likely to be built when inclusive leadership is translated into concrete, consistent, and executable innovation capability. The originality of the study is reflected in its dual-mediation model and its focus on archipelagic food and beverage MSMEs. Theoretically, it clarifies the role of inclusive leadership as a microfoundation of Dynamic Capabilities Theory, while practically it indicates that government and MSME actors should prioritize innovation capability as the most actionable pathway for strengthening resilience.

REFERENCES

1. Abid, N., Ceci, F., & Aftab, J. (2024). Attaining sustainable business performance under resource constraints: Insights from an emerging economy. *Sustainable Development*, 32(3), 2031–2048. <https://doi.org/10.1002/sd.2763>
2. Adomako, S., Amankwah-Amoah, J., Donbesuur, F., Ahsan, M., Danso, A., & Uddin, M. (2022). Strategic agility of SMEs in emerging economies: Antecedents, consequences and boundary conditions. *International Business Review*, 31(6), 102032. <https://doi.org/10.1016/j.ibusrev.2022.102032>
3. AlMulhim, A. F., & Mohammed, S. M. (2023). The impact of inclusive leadership on innovative work behavior: a mediated moderation model. *Leadership and Organization Development Journal*, 44(7), 907–926. <https://doi.org/10.1108/LODJ-05-2023-0224>
4. Arranz, N., Arroyabe, M., Li, J., & Fernandez de Arroyabe, J. C. (2020). Innovation as a driver of eco-innovation in the firm: An approach from the dynamic capabilities theory. *Business Strategy and the Environment*, 29(3), 1494–1503. <https://doi.org/10.1002/bse.2448>

5. Bhamra, R., Dani, S., & Burnard, K. (2011). Resilience: The concept, a literature review and future directions. *International Journal of Production Research*, 49(18), 5375–5393. <https://doi.org/10.1080/00207543.2011.563826>
6. Blunch, N. (2012). Introduction to Structural Equation Modelling Using SPSS and AMOS. In *Introduction to Structural Equation Modelling Using SPSS and AMOS*. <https://doi.org/10.4135/9781446249345>
7. BPS Kepri. (2024). Provinsi Kepulauan Riau Dalam Angka 2024. Badan Pusat Statistik Provinsi Kepulauan Riau.
8. BPS Kepri. (2025). Profil Industri Mikro dan Kecil Provinsi Kepulauan Riau 2024. Badan Pusat Statistik Provinsi Kepulauan Riau.
9. Byrne, B. M. (2013). Structural Equation Modeling With AMOS. In *Structural Equation Modeling With AMOS*. <https://doi.org/10.4324/9781410600219>
10. Carmeli, A., Reiter-Palmon, R., & Ziv, E. (2010). Inclusive leadership and employee involvement in creative tasks in the workplace: The mediating role of psychological safety. *Creativity Research Journal*, 22(3), 250–260. <https://doi.org/10.1080/10400419.2010.504654>
11. Carfora, A., Scandurra, G., & Thomas, A. (2021). Determinants of environmental innovations supporting small- and medium-sized enterprises sustainable development. *Business Strategy and the Environment*, 30(5), 2621–2636. <https://doi.org/10.1002/bse.2767>
12. Chan, C. M. L., Teoh, S. Y., Yeow, A., & Pan, G. (2019). Agility in responding to disruptive digital innovation: Case study of an SME. *Information Systems Journal*, 29(2), 436–455. <https://doi.org/10.1111/isj.12215>
13. Chang, A., Lee, T. S., Lee, H. M., & Wang, J. (2023). The Influence of Responsible Leadership on Strategic Agility: Cases from the Taiwan Hospitality Industry. *Sustainability (Switzerland)*, 15(3), 1–15. <https://doi.org/10.3390/su15032760>
14. Ciasullo, M. V., Montera, R., & Douglas, A. (2022). Building SMEs' resilience in times of uncertainty: the role of big data analytics capability and co-innovation. *Transforming Government: People, Process and Policy*, 16(2), 203–217. <https://doi.org/10.1108/TG-07-2021-0120>
15. Colclough, S. N., Moen, Ø., Hovd, N. S., & Chan, A. (2019). SME innovation orientation: Evidence from Norwegian exporting SMEs. *International Small Business Journal: Researching Entrepreneurship*, 37(8), 780–803. <https://doi.org/10.1177/0266242619870731>
16. Coordinating Ministry for Economic Affairs of the Republic of Indonesia. (2023, August 24). Dorong UMKM naik kelas dan go export, pemerintah siapkan ekosistem pembiayaan yang terintegrasi.
17. Dai, X., & Fang, Y. (2023). Does inclusive leadership affect the organizational socialization of newcomers from diverse backgrounds? The mediating role of psychological capital. *Frontiers in Psychology*, 14(April), 1–10. <https://doi.org/10.3389/fpsyg.2023.1138101>
18. Doz, Y. L., & Kosonen, M. (2010). Embedding strategic agility: A leadership agenda for accelerating business model renewal. *Long Range Planning*, 43(2–3), 370–382. <https://doi.org/10.1016/j.lrp.2009.07.006>
19. Duchek, S. (2020). Organizational resilience: A capability-based conceptualization. *Business Research*, 13(1), 215–246. <https://doi.org/10.1007/s40685-019-0085-7>
20. Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21(10–11), 1105–1121. [https://doi.org/10.1002/1097-0266\(200010/11\)21:10/11<1105::AID-SMJ133>3.0.CO;2-E](https://doi.org/10.1002/1097-0266(200010/11)21:10/11<1105::AID-SMJ133>3.0.CO;2-E)
21. García-Valenzuela, V. M., Jacobo-Hernandez, C. A., & Flores-López, J. G. (2023). Dynamic Capabilities and Their Effect on Organizational Resilience in Small and Medium-Sized Commercial Enterprises. *Management and Marketing*, 18(4), 496–514. <https://doi.org/10.2478/mmcks-2023-0027>
22. Garrido-Moreno, A., Martín-Rojas, R., & García-Morales, V. J. (2024). The key role of innovation and organizational resilience in improving business performance: A mixed-methods approach. *International Journal of Information Management*, 77, 102777. <https://doi.org/10.1016/j.ijinfomgt.2024.102777>
23. Gupta, S., Nawaz, N., Tripathi, A., Arif Chaudhry, S., & Agrawal, K. (2022). Impact of Inclusive Leadership on Innovation Performance During Coronavirus Disease 2019 Outbreak: Mediating Role of Employee Innovation Behavior and Moderating Role of Psychological Empowerment. *Frontiers in Psychology*, 13(August), 1–14. <https://doi.org/10.3389/fpsyg.2022.811330>

24. Hamid, N. A., Ismail, I. S., Yunus, N., Jali, M. N., & Rosly, A. S. (2022). Taxpayer Perceptions of Tax Awareness, Tax Education, and Tax Complexity among Small and Medium Enterprises in Malaysia: A Quadrant Analysis Approach. *Universal Journal of Accounting and Finance*, 10(1), 231–242. <https://doi.org/10.13189/ujaf.2022.100124>
25. Hokmabadi, H., Rezvani, S. M. H. S., & de Matos, C. A. (2024). Business Resilience for Small and Medium Enterprises and Startups by Digital Transformation and the Role of Marketing Capabilities—A Systematic Review. *Systems*, 12(6), 220. <https://doi.org/10.3390/systems12060220>
26. Huynh, T. N., Van Nguyen, P., Doan, N. P., Tran, K. T., & Nguyen, T. C. (2024). Navigating challenges in Vietnamese enterprises: An examination of the interplay between environmental regulations, organizational innovation, resilience, learning support, and performance. *PLoS ONE*, 19(12). <https://doi.org/10.1371/journal.pone.0313075>
27. Javed, B., Fatima, T., Khan, A. K., & Bashir, S. (2021). Impact of Inclusive Leadership on Innovative Work Behavior: The Role of Creative Self-Efficacy. *Journal of Creative Behavior*, 55(3), 769–782. <https://doi.org/10.1002/jocb.487>
28. Javed, B., Naqvi, S. M. M. R., Khan, A. K., Arjoon, S., & Tayyeb, H. H. (2019). Impact of inclusive leadership on innovative work behavior: The role of psychological safety. *Journal of Management and Organization*, 25(1), 117–136. <https://doi.org/10.1017/jmo.2017.3>
29. Kang, H. (2021). Sample size determination and power analysis using the G*Power software. *Journal of Educational Evaluation for Health Professions*, 18, 17. <https://doi.org/10.3352/jeehp.2021.18.17>
30. Kompas.com. (2025, January 20). PLUT Batam bina 1.800 pelaku UMKM, 80 persen sektor kuliner.
31. Lee, K., & Shin, H. C. (2025). Effect of inclusive leadership on the diversity sensitivity and innovative behavior of hotel employees. *Social Behavior and Personality*, 53(2). <https://doi.org/10.2224/sbp.14102>
32. Lengnick-Hall, C. A., Beck, T. E., & Lengnick-Hall, M. L. (2011). Developing a capacity for organizational resilience through strategic human resource management. *Human Resource Management Review*, 21(3), 243–255. <https://doi.org/10.1016/j.hrmr.2010.07.001>
33. Li, X., & Peng, P. (2023). Does inclusive leadership foster employee psychological resilience? The role of perceived insider status and supportive organizational climate. *Frontiers in Psychology*, 14, 1127780. <https://doi.org/10.3389/fpsyg.2023.1127780>
34. Marquès, A. A. A. B. P. (2017). Strategic Agility driven business model renewal. In *The Electronic Library* (Vol. 34, Issue 1).
35. Mollah, M. A., Ibrahim, Masud, A. Al, & Chowdhury, M. S. (2024). How does digital leadership boost competitive performance? The role of digital culture, affective commitment, and strategic agility. *Heliyon*, 10(23), e40839. <https://doi.org/10.1016/j.heliyon.2024.e40839>
36. Musa, S., & Enggarsyah, D. T. P. (2025). Absorptive capacity, organizational creativity, organizational agility, organizational resilience and competitive advantage in disruptive environments. *Journal of Strategy and Management*, 18(2), 303–325. <https://doi.org/10.1108/JSMA-10-2023-0265>
37. Nembhard, I. M., & Edmondson, A. C. (2006). Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organizational Behavior*, 27(7), 941–966. <https://doi.org/10.1002/job.413>
38. Njaramba, F., & Olukuru, J. (2025). Surviving a crisis: A multilevel model of leadership styles, employees' psychological capital and organizational resilience. *PLoS ONE*, 20(2 February), e0318515. <https://doi.org/10.1371/journal.pone.0318515>
39. Nuwan, N., Shukri, M., & Khatibi, A. (2024). Managerial strategies for organisational resilience in SME sector. *International Journal of Research and Scientific Innovation*, 11(1), 385–404. <https://doi.org/10.51244/IJRSI.2024.1101030>
40. Qi, L., Liu, B., Wei, X., & Hu, Y. (2019). Impact of inclusive leadership on employee innovative behavior: Perceived organizational support as a mediator. *PLoS ONE*, 14(2), 1–14. <https://doi.org/10.1371/journal.pone.0212091>
41. Prayag, G., Jiang, Y., Chowdhury, M., Hossain, M. I., & Akter, N. (2024). Building dynamic capabilities and organizational resilience in tourism firms during COVID-19: A staged approach. *Journal of Travel Research*, 63(3), 713–740. <https://doi.org/10.1177/00472875231164976>
42. Riau Islands Office of Cooperatives and SMEs. (2025). MSME data by sector in Riau Islands Province. Riau Islands Provincial Government.

43. Sharma, G. D., Kraus, S., Talan, A., Srivastava, M., & Theodoraki, C. (2024). Navigating the storm: the SME way of tackling the pandemic crisis. *Small Business Economics*, 63(1), 221–241. <https://doi.org/10.1007/s11187-023-00810-1>
44. Teece, D. J. (2018). Dynamic capabilities as (workable) management systems theory. *Journal of Management and Organization*, 24(3), 359–368. <https://doi.org/10.1017/jmo.2017.75>
45. Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z)
46. Teece, D., Peteraf, M., & Leih, S. (2016). Dynamic capabilities and organizational agility: Risk, uncertainty, and strategy in the innovation economy. *California Management Review*, 58(4), 13–35. <https://doi.org/10.1525/cmr.2016.58.4.13>
47. Troise, C., Corvello, V., Ghobadian, A., & O'Regan, N. (2022). How can SMEs successfully navigate VUCA environment: The role of agility in the digital transformation era. *Technological Forecasting and Social Change*, 174, 121227. <https://doi.org/10.1016/j.techfore.2021.121227>
48. Velu, S. R., Al Mamun, A., Kanesan, T., Hayat, N., & Gopinathan, S. (2019). Effect of information system artifacts on organizational resilience: A study among Malaysian SMEs. *Sustainability (Switzerland)*, 11(11), 3177. <https://doi.org/10.3390/su11113177>
49. Wang, H., Chen, M., & Li, X. (2021). Moderating multiple mediation model of the impact of inclusive leadership on employee innovative behavior. *Frontiers in Psychology*, 12, 666477. <https://doi.org/10.3389/fpsyg.2021.666477>
50. Wided, R. (2022). Achieving sustainable tourism with dynamic capabilities and resilience factors: A post disaster perspective case of the tourism industry in Saudi Arabia. *Cogent Social Sciences*, 8(1). <https://doi.org/10.1080/23311886.2022.2060539>
51. Xu, G., Hou, G., & Zhang, J. (2022). Digital Sustainable Entrepreneurship: A Digital Capability Perspective through Digital Innovation Orientation for Social and Environmental Value Creation. *Sustainability (Switzerland)*, 14(18), 11222. <https://doi.org/10.3390/su141811222>
52. Zahoor, N., Arslan, A., Miri, D., & Khan, Z. (2024). Organizational resilience, innovation capabilities, and SME performance in high-risk contexts. In *Business and Management in Asia: Disruption and Change* (pp. 171–186). Springer Nature Singapore. https://doi.org/10.1007/978-981-99-9371-0_11
53. Zaniarti, S., Veronica, S., & Arvi Arsyntania, R. (2022). The Effect of Financial Literacy on the Sustainability of Micro, Small, and Medium Enterprises with Access to Finance as a Mediating Variable. *The International Journal of Management Science and Business Administration*, 9(1), 17–31. <https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.91.1002>