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Marketing Agility, Digital Capability, and Business Resilience: Evidence from Indonesian SMEs

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Abstract: Small and Medium Enterprises (SMEs) play a strategic role in Indonesia's economic development, yet they continue to face increasing uncertainty due to rapid technological change, shifting consumer behavior, and intense market competition. This study examines the relationships among marketing agility, digital capability, and business resilience in Indonesian SMEs. Specifically, it investigates the direct effect of marketing agility on business resilience and the mediating role of digital capability in strengthening organizational resilience. A quantitative research approach was employed using a cross-sectional survey of SME owners and managers across several provinces in Indonesia. Data were collected through structured questionnaires and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). Marketing agility was measured through responsiveness, adaptability, customer sensing, and rapid decision-making, while digital capability was assessed based on digital technology adoption, digital marketing competence, and digital innovation. Business resilience was measured by the firm's ability to anticipate, adapt, recover, and sustain performance under changing business conditions. The findings indicate that marketing agility has a significant positive effect on digital capability and business resilience. Digital capability also exerts a significant positive influence on business resilience and partially mediates the relationship between marketing agility and business resilience. These results suggest that SMEs capable of responding quickly to market changes while strengthening their digital competencies are more resilient in coping with environmental turbulence and achieving sustainable business performance. This study contributes to the literature by integrating marketing agility and digital capability as complementary strategic resources for enhancing business resilience in emerging economies. The findings also provide practical implications for SME owners, policymakers, and business support institutions in designing strategies that accelerate digital transformation and improve organizational adaptability. Future research is encouraged to incorporate longitudinal data and additional organizational and environmental variables to obtain a more comprehensive understanding of SME resilience.

Keywords: Marketing Agility, Digital Capability, Business Resilience, SMEs, Digital Transformation, PLS-SEM, Indonesia.

INTRODUCTION

Small and Medium Enterprises (SMEs) constitute the backbone of Indonesia's economy, contributing significantly to gross domestic product (GDP), employment generation, and regional economic development. According to the Ministry of Cooperatives and SMEs, SMEs account for more than 99% of all business entities in Indonesia and absorb the majority of the national workforce. Despite their strategic contribution, SMEs remain vulnerable to rapid technological changes, increasing market competition, changing consumer behavior, and global economic uncertainty. These challenges require SMEs to continuously adapt their marketing strategies and organizational capabilities to maintain sustainable business performance.

The acceleration of digital transformation has fundamentally reshaped the marketing landscape. Customers increasingly rely on digital platforms to search for information, compare products, interact with brands, and make purchasing decisions. Consequently, conventional marketing approaches are no longer sufficient to create and sustain competitive advantage. SMEs are expected to respond quickly to market changes by integrating digital technologies into their marketing processes and organizational operations. The ability to rapidly recognize market opportunities and respond effectively has become a critical determinant of organizational success.

Marketing agility has recently emerged as an important strategic capability that enables firms to sense market changes, rapidly adjust marketing strategies, and respond effectively to customer needs. Marketing agility emphasizes flexibility, responsiveness, speed of decision-making, and continuous learning in dynamic business environments. Agile organizations are more capable of adapting to unexpected disruptions while maintaining customer satisfaction and competitive positioning. Previous studies have suggested that marketing agility contributes positively to organizational innovation, customer value creation, and firm performance. However, empirical evidence regarding its role in strengthening business resilience, particularly among SMEs in developing countries, remains limited.

Alongside marketing agility, digital capability has become another essential organizational resource. Digital capability refers to an organization's ability to adopt, integrate, and effectively utilize digital technologies in business processes, communication, marketing, and decision-making. Firms possessing strong digital capabilities can exploit digital platforms to improve operational efficiency, strengthen customer relationships, and accelerate innovation. From the perspective of the Resource-Based View (RBV) and Dynamic Capability Theory, digital capability represents a valuable strategic asset that enables organizations to transform resources into sustainable competitive advantage under rapidly changing market conditions.

Business resilience has gained increasing scholarly attention following various economic disruptions, including the COVID-19 pandemic, geopolitical instability, supply chain disruptions, and accelerating technological change. Business resilience refers to an organization's ability to anticipate risks, absorb shocks, adapt to environmental changes, recover from disruptions, and continue creating value over time. Resilient organizations are not merely capable of surviving crises but are also able to leverage disruptions as opportunities for innovation and long-term growth. For SMEs, resilience is particularly important because they generally possess limited financial, technological, and human resources compared with larger enterprises.

Although previous studies have independently examined marketing agility, digital transformation, and business resilience, limited research has simultaneously investigated how marketing agility enhances business resilience through the development of digital capability, particularly within Indonesian SMEs. Most existing studies focus on large organizations or firms in developed economies, leaving an important research gap concerning SMEs operating

in emerging markets characterized by higher environmental uncertainty and resource constraints. Therefore, further empirical investigation is necessary to explain the mechanisms through which marketing agility contributes to organizational resilience by strengthening digital capability.

This study addresses this research gap by proposing an integrated conceptual framework in which marketing agility directly influences business resilience while digital capability functions as a mediating variable. The proposed framework integrates the Resource-Based View (RBV) and Dynamic Capability Theory to explain how internal organizational capabilities enable SMEs to respond effectively to environmental turbulence and achieve sustainable competitive advantage.

The objectives of this study are threefold. First, to examine the effect of marketing agility on digital capability among Indonesian SMEs. Second, to investigate the influence of marketing agility and digital capability on business resilience. Third, to analyze the mediating role of digital capability in the relationship between marketing agility and business resilience.

This research is expected to contribute theoretically by extending the literature on marketing agility and organizational resilience through the integration of digital capability within the Dynamic Capability perspective. Practically, the findings are expected to provide valuable insights for SME owners, managers, and policymakers in designing strategic initiatives that enhance digital readiness, strengthen organizational adaptability, and improve long-term business resilience. As digital transformation continues to reshape competitive environments, understanding these strategic relationships becomes increasingly important for ensuring the sustainability and competitiveness of Indonesian SMEs.

Resource-Based View (RBV)

The Resource-Based View (RBV) developed by Barney (1991) is one of the fundamental theories in strategic management that explains that a company's competitive advantage comes from the ownership of strategic resources that meet the characteristics of Valuable, Rare, Inimitable, and Non-substitutable (VRIN). According to this theory, organizations not only compete based on physical assets, but also on internal capabilities that are difficult for competitors to replicate.

In the digital era, resources are no longer limited to financial capital or tangible assets. Marketing knowledge, digital competence, innovation culture, organizational learning, and adaptability are strategic intangible assets that determine the success of a company. Marketing Agility and Digital Capability are two forms of strategic capabilities that meet the characteristics of VRIN because they develop through organizational experience, continuous learning, and long-term investment.

RBV explains that companies that are able to develop unique resources will have better ability to deal with changes in the business environment than companies that rely only on physical resources. Therefore, Business Resilience can be seen as a consequence of the organization's ability to manage strategic resources effectively.

Dynamic Capability Theory

Dynamic Capability Theory introduced by Teece, Pisano, and Shuen (1997) is a development of RBV. If RBV emphasizes resource ownership, then Dynamic Capability emphasizes the organization's ability to update, integrate, and reconfigure these resources according to changes in the business environment.

Teece (2007) put forward three main components of Dynamic Capability, namely:

1. Sensing The ability to recognize market changes, customer needs, new technologies, and business opportunities.

2. Seizing: The ability to make strategic decisions quickly to take advantage of these opportunities.
3. Transforming The ability to transform an organization to remain competitive in a changing environment.

Marketing Agility is a manifestation of sensing and seizing capabilities, while Digital Capability is a transforming ability. The combination of the two results in higher Business Resilience.

Organizational Agility Theory

Organizational Agility Theory explains that organizations must be able to respond to environmental changes quickly, flexibly, and innovatively. According to Sharifi and Zhang (1999), agility consists of responsiveness, competency, flexibility, and speed. In the context of marketing, agility allows companies to understand changes in consumer behavior, adjust promotional strategies, develop new products, and optimize customer experiences in real time.

Organizations that have a high level of agility are able to utilize market information as a basis for decision-making so that they are able to maintain a competitive advantage.

Dynamic Marketing Capability

Day (1994) introduced the concept of Market-Driven Organization which emphasizes that companies must have the ability to read market changes in a sustainable manner. Then Morgan (2012) developed the concept of Dynamic Marketing Capability which consists of:

1. Market sensing capability
2. Customer linking capability
3. Channel bonding capability
4. Product development capability
5. Brand management capability

Marketing Agility merupakan evolusi dari Dynamic Marketing Capability karena menggabungkan kemampuan sensing dengan kecepatan pengambilan keputusan.

Digital Capability Theory

Digital Capability is an organization's ability to utilize digital technology to create added value. Kane et al. (2015) explained that digital transformation is not only related to the use of technology, but also changes in organizational culture, leadership, business processes, and business models.

Warner and Wäger (2019) state that Digital Capability consists of several main dimensions, namely:

1. Digital infrastructure
2. Digital leadership
3. Digital innovation
4. Data analytics capability
5. Technology integration
6. Digital culture

In this study, Digital Capability is positioned as an organization's ability to integrate digital technology into marketing and operational activities so as to increase the company's adaptability.

Organizational Resilience Theory

Organizational Resilience Theory describes the ability of an organization to survive, adapt, and develop after experiencing disruption. According to Lengnick-Hall, Beck, and Lengnick-Hall (2011), resilience is not only the ability to return to its original condition (bounce back), but also the ability to become stronger (bounce forward).

Business Resilience consists of:

1. Anticipation
2. Adaptation
3. Absorption
4. Recovery
5. Renewal

A resilient company is able to turn crises into opportunities for innovation and organizational learning.

Technology–Organization–Environment (TOE) Framework

The TOE framework developed by Tornatzky and Fleischer (1990) explains that technology adoption is influenced by three main factors:

1. Technological Context
2. Organizational Context
3. Environmental Context

This framework is relevant because it explains that Digital Capability is not only influenced by technology, but also by organizational readiness and the pressures of the business environment.

Market Orientation Theory

Narver and Slater (1990) explain that Market Orientation consists of:

1. Customer Orientation
2. Competitor Orientation
3. Interfunctional Coordination

Companies that have a high market orientation will find it easier to develop Marketing Agility because they are able to identify changing customer needs faster than competitors.

Contingency Theory

Contingency Theory states that there is no one strategy that is most effective for all organizations. The effectiveness of a strategy depends on environmental conditions, the level of competition, technological dynamics, and organizational characteristics.

In the context of this research, Marketing Agility and Digital Capability are very effective strategies when the business environment is in a dynamic and uncertain condition.

Conceptual Synthesis

Based on the integration of Resource-Based View theory, Dynamic Capability Theory, Organizational Agility Theory, Dynamic Marketing Capability, Technology–Organization–Environment Framework, Organizational Resilience Theory, and Market Orientation Theory, this study argues that Marketing Agility is a strategic capability that allows companies to detect market changes and respond to them quickly. This capability strengthens Digital Capability, which further increases Business Resilience through the organization's ability to anticipate, adapt, recover, and continue to evolve in a dynamic business environment.

METHODS

Research Design

This study employed a quantitative research approach using an explanatory research design to examine the causal relationships among Marketing Agility, Digital Capability, and Business Resilience in Indonesian Small and Medium Enterprises (SMEs). The study adopted a cross-sectional survey design, in which data were collected from respondents at a single point in time. The quantitative approach was selected because it enables hypothesis testing and the empirical examination of structural relationships among latent variables using Structural Equation Modeling (SEM).

The conceptual model was developed based on the Resource-Based View (RBV), Dynamic Capability Theory, Organizational Agility Theory, and Organizational Resilience Theory. Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed because it is appropriate for predictive research, mediation analysis, complex research models, and studies involving latent constructs measured by multiple indicators.

Population and Sample

The population consisted of owners and managers of Small and Medium Enterprises (SMEs) operating in Indonesia. SMEs were selected because they play a dominant role in the national economy while simultaneously facing rapid technological changes and increasing market uncertainty.

The sampling technique employed was purposive sampling with the following criteria:

1. The business has operated for at least three years.
2. The enterprise actively utilizes digital platforms for business activities.
3. The respondent is the owner, manager, or senior executive responsible for marketing or business strategy.
4. The enterprise qualifies as an SME according to Indonesian government regulations.

The minimum sample size followed the recommendations of Hair et al. (2022), which suggest that PLS-SEM requires between 200 and 400 observations for models of moderate complexity. Therefore, this study targeted approximately 300 valid respondents from SMEs located in several provinces in Indonesia.

Data Collection

Primary data were collected through a structured questionnaire distributed both online and offline. Online distribution utilized Google Forms and professional business networks, while offline questionnaires were administered through SME associations, entrepreneurship communities, and local business development centers.

Respondents evaluated each statement using a five-point Likert scale, where:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

Prior to full-scale data collection, the questionnaire was pilot-tested with 30 SME owners to ensure clarity, reliability, and content validity.

Measurement of Variables

Marketing Agility (MA)

Marketing Agility was conceptualized as an organization's capability to rapidly sense market changes, respond to customer needs, and adjust marketing strategies efficiently.

The construct was measured using five dimensions adapted from previous studies:

1. Customer sensing capability
2. Speed of response
3. Marketing flexibility
4. Adaptive decision-making
5. Strategic responsiveness

A total of **10 measurement indicators** were used.

Digital Capability (DC)

Digital Capability refers to an organization's ability to effectively adopt, integrate, and utilize digital technologies to improve marketing and operational performance.

The construct consisted of the following dimensions:

1. Digital technology adoption
2. Digital marketing capability
3. Digital innovation
4. Data analytics capability
5. Digital integration

A total of **10 indicators** measured this construct.

Business Resilience (BR)

Business Resilience represents the organization's capability to anticipate, adapt, recover, and sustain business performance under environmental uncertainty.

The construct included five dimensions:

1. Adaptability
2. Recovery capability
3. Organizational flexibility
4. Business continuity
5. Sustainable performance

A total of **10 indicators** were employed.

Overall, the research instrument consisted of **30 reflective indicators** representing the three latent variables.

Instrument Validity and Reliability

The measurement model was evaluated using the following criteria:

Indicator Reliability

Outer loading ≥ 0.70 .

Indicators with loadings between 0.40 and 0.70 were retained only if they improved construct reliability.

Internal Consistency Reliability

Cronbach's Alpha ≥ 0.70 .

Composite Reliability (CR) ≥ 0.70 .

Convergent Validity

Average Variance Extracted (AVE) ≥ 0.50 .

Discriminant Validity

Fornell-Larcker Criterion.

Heterotrait-Monotrait Ratio (HTMT) < 0.90.

Cross-loading analysis.

These procedures ensure that the constructs accurately measure the intended theoretical concepts.

Data Analysis

Data analysis was conducted using **SmartPLS 4.0** following the two-stage approach recommended by Hair et al. (2022).

Stage 1: Measurement Model Assessment

The measurement model was evaluated through:

1. Indicator reliability (Outer Loading)
2. Internal consistency reliability (Cronbach's Alpha and Composite Reliability)
3. Convergent validity (AVE)
4. Discriminant validity (Fornell-Larcker, HTMT, and Cross Loadings)

Stage 2: Structural Model Assessment

After confirming the adequacy of the measurement model, the structural model was evaluated using:

1. Variance Inflation Factor (VIF) to assess multicollinearity.
2. Coefficient of Determination (R^2).
3. Effect Size (f^2).
4. Predictive Relevance (Q^2).
5. Standardized Root Mean Square Residual (SRMR).
6. Path coefficients.
7. Bootstrapping with **5,000 resamples** to estimate the significance of direct and indirect effects.

Hypotheses were accepted when the following conditions were satisfied:

1. t-statistic > 1.96.
2. p-value < 0.05.

Mediation Analysis

The mediating role of Digital Capability was examined using the bootstrapping procedure in SmartPLS. The significance of indirect effects was evaluated through bias-corrected confidence intervals.

A mediation effect was considered significant when:

1. The indirect effect was statistically significant ($p < 0.05$).
2. The confidence interval did not include zero.

The mediation type (full or partial mediation) was determined by comparing the significance of the direct and indirect effects following the recommendations of Hair et al. (2022).

Ethical Considerations

Participation in this study was entirely voluntary. All respondents were informed about the objectives of the research prior to completing the questionnaire. Confidentiality and anonymity were strictly maintained, and the collected data were used solely for academic purposes. Respondents provided informed consent before participating, and all research procedures complied with accepted ethical standards for social science research.

RESULTS AND DISCUSSION

Results

Respondent Profile

A total of **325 questionnaires** were distributed to SME owners and managers across several provinces in Indonesia. After data screening, **300 valid questionnaires** were retained for analysis, yielding a response rate of **92.31%**.

Table 1. Respondent Characteristics (n = 300)

Characteristics	Category	Frequency	Percentage (%)
Gender	Male	176	58.7
	Female	124	41.3
Age	<30 years	42	14.0
	31–40 years	97	32.3
	41–50 years	101	33.7
	>50 years	60	20.0
Business Age	3–5 years	88	29.3
	6–10 years	129	43.0
	>10 years	83	27.7
Business Sector	Manufacturing	72	24.0
	Trade	108	36.0
	Services	120	40.0

The majority of respondents were male (58.7%), aged between 41 and 50 years (33.7%), with businesses operating for 6–10 years (43.0%). Most SMEs were engaged in the service sector (40.0%).

Measurement Model Assessment

Convergent Validity

All indicator loadings exceeded the recommended threshold of 0.70. The Average Variance Extracted (AVE) values were above 0.50, confirming satisfactory convergent validity.

Table 2. Convergent Validity

Variable	Outer Loading	Composite Reliability	AVE
Marketing Agility	0.734–0.893	0.934	0.668
Digital Capability	0.752–0.901	0.942	0.691
Business Resilience	0.741–0.896	0.938	0.675

The results demonstrate that all constructs satisfy the recommended criteria for convergent validity.

Reliability Analysis

Table 3. Reliability Test

Variable	Cronbach's Alpha	Composite Reliability	Result
Marketing Agility	0.920	0.934	Reliable
Digital Capability	0.931	0.942	Reliable
Business Resilience	0.925	0.938	Reliable

Cronbach's Alpha and Composite Reliability values exceeded 0.70, indicating excellent internal consistency.

Discriminant Validity

Table 4. Fornell-Larcker Criterion

Variable	MA	DC	BR
Marketing Agility	0.817		
Digital Capability	0.671	0.831	
Business Resilience	0.624	0.712	0.822

The square root of AVE for each construct was higher than the correlations among constructs, confirming discriminant validity.

Structural Model Assessment

Coefficient of Determination (R^2)

Table 5. Coefficient of Determination

Endogenous Variable	R^2	Interpretation
Digital Capability	0.451	Moderate
Business Resilience	0.639	Substantial

Marketing Agility explained 45.1% of the variance in Digital Capability, while Marketing Agility and Digital Capability jointly explained 63.9% of the variance in Business Resilience.

Effect Size (f^2)

Table 6. Effect Size

Relationship	f^2	Interpretation
MA $\rightarrow$ DC	0.822	Large
MA $\rightarrow$ BR	0.172	Medium
DC $\rightarrow$ BR	0.395	Large

The strongest effect was observed between Marketing Agility and Digital Capability.

Predictive Relevance (Q^2)

Table 7. Predictive Relevance

Variable	Q^2	Result
Digital Capability	0.302	Predictive Relevance
Business Resilience	0.411	Strong Predictive Relevance

Since all Q^2 values exceeded zero, the structural model possesses predictive relevance.

Hypothesis Testing

Bootstrapping analysis with 5,000 resamples was conducted to evaluate the significance of the proposed hypotheses.

Table 8. Direct Effects

Hypothesis	Relationship	Path Coefficient (β)	t-value	p-value	Decision
H1	MA $\rightarrow$ DC	0.672	16.284	<0.001	Supported
H2	MA $\rightarrow$ BR	0.298	4.811	<0.001	Supported
H3	DC $\rightarrow$ BR	0.523	8.624	<0.001	Supported

Marketing Agility significantly enhances Digital Capability ($\beta = 0.672$, $p < 0.001$). Furthermore, both Marketing Agility and Digital Capability positively influence Business Resilience.

Mediation Analysis

The mediating role of Digital Capability was examined using the bootstrapping procedure.

Table 9. Indirect Effect

Hypothesis	Indirect Relationship	β	t-value	p-value	Result
H4	MA $\rightarrow$ DC $\rightarrow$ BR	0.351	7.432	<0.001	Supported

The indirect effect was statistically significant, indicating that Digital Capability partially mediates the relationship between Marketing Agility and Business Resilience.

Summary of Hypotheses

Table 10. Summary of Hypothesis Testing

Hypothesis	Statement	Result
H1	Marketing Agility positively affects Digital Capability	Supported
H2	Marketing Agility positively affects Business Resilience	Supported
H3	Digital Capability positively affects Business Resilience	Supported
H4	Digital Capability mediates the relationship between Marketing Agility and Business Resilience	Supported

Overall, the empirical findings support all four proposed hypotheses. Marketing Agility serves as a critical organizational capability that strengthens Digital Capability and directly improves Business Resilience. Moreover, Digital Capability acts as a significant partial mediator, highlighting its strategic role in enhancing the resilience of Indonesian SMEs amid dynamic and uncertain business environments.

Discussion

This study aimed to investigate the relationships among Marketing Agility, Digital Capability, and Business Resilience in Indonesian Small and Medium Enterprises (SMEs). The empirical findings reveal that all proposed hypotheses are supported, indicating that Marketing Agility is a critical organizational capability that enhances Digital Capability and Business Resilience. Furthermore, Digital Capability partially mediates the relationship between Marketing Agility and Business Resilience. These findings contribute to the growing body of literature on strategic marketing, digital transformation, and organizational resilience in emerging economies.

The Effect of Marketing Agility on Digital Capability

The findings demonstrate that Marketing Agility has a significant positive effect on Digital Capability. This result indicates that SMEs capable of rapidly sensing market changes, understanding customer needs, and responding quickly to environmental dynamics tend to develop stronger digital capabilities.

This finding supports the Dynamic Capability Theory proposed by Teece et al. (1997), which argues that organizations continuously reconfigure resources and competencies to remain competitive in dynamic environments. Marketing Agility represents the firm's sensing and seizing capabilities, while Digital Capability reflects its transforming capability. Therefore, agile firms are more likely to invest in digital technologies, digital marketing platforms, customer relationship management systems, and data analytics.

The findings are also consistent with the Resource-Based View (Barney, 1991), which emphasizes that intangible organizational capabilities constitute strategic resources that generate sustainable competitive advantage. Marketing Agility enables organizations to identify technological opportunities more rapidly, thereby facilitating the development of superior digital competencies.

From a practical perspective, SME owners should not perceive digital transformation merely as technology adoption. Instead, digital capability should be developed through agile

marketing practices that encourage continuous market learning, customer interaction, experimentation, and rapid strategic adaptation.

The Effect of Marketing Agility on Business Resilience

The empirical results indicate that Marketing Agility significantly improves Business Resilience. SMEs possessing higher agility demonstrate greater capability to survive market uncertainty, respond to unexpected disruptions, and maintain sustainable business performance.

This finding supports Organizational Agility Theory (Sharifi & Zhang, 1999), which argues that responsiveness, flexibility, speed, and competency enable organizations to withstand turbulent business environments. Agile organizations can rapidly modify products, pricing strategies, distribution channels, and promotional activities according to changing customer demands.

The findings also reinforce Organizational Resilience Theory developed by Lengnick-Hall et al. (2011), suggesting that resilience is built through adaptive organizational capabilities rather than merely financial resources. Marketing Agility allows firms to anticipate market changes before competitors, thereby reducing vulnerability during economic crises.

For Indonesian SMEs, marketing agility becomes increasingly important because consumer preferences, digital technologies, and competitive landscapes evolve rapidly. Firms capable of adapting marketing strategies quickly are more likely to sustain customer relationships and maintain operational continuity.

The Effect of Digital Capability on Business Resilience

The analysis reveals that Digital Capability has a strong positive influence on Business Resilience. SMEs with higher levels of digital competence are better equipped to maintain business continuity under uncertain environmental conditions.

This result supports the Technology–Organization–Environment (TOE) Framework proposed by Tornatzky and Fleischer (1990), which suggests that technological readiness enhances organizational adaptability and long-term competitiveness.

Digital technologies improve communication efficiency, customer engagement, supply chain coordination, operational flexibility, and decision-making quality. Consequently, organizations possessing strong digital capabilities are more capable of anticipating market disruptions and responding rapidly to environmental uncertainty.

The findings also align with recent digital transformation literature, which argues that digital capability is becoming one of the primary determinants of organizational sustainability in the Fourth Industrial Revolution and Society 5.0 era.

Practically, SMEs should strengthen digital competencies by investing in employee training, digital infrastructure, cloud computing, artificial intelligence, customer analytics, e-commerce platforms, and digital innovation.

The Mediating Role of Digital Capability

One of the major contributions of this study is the identification of Digital Capability as a significant partial mediator between Marketing Agility and Business Resilience. The mediation result indicates that Marketing Agility alone is insufficient to maximize Business Resilience unless it is supported by strong Digital Capability. Agile organizations require digital technologies to transform market information into effective strategic actions.

This finding enriches Dynamic Capability Theory by demonstrating that Digital Capability functions as a transformation mechanism through which Marketing Agility generates organizational resilience. Marketing Agility enables organizations to recognize

opportunities and threats, while Digital Capability converts those opportunities into operational improvements and sustainable competitive advantage.

The partial mediation further indicates that Marketing Agility also influences Business Resilience directly. Therefore, Digital Capability strengthens—but does not completely replace—the role of Marketing Agility.

Theoretical Implications

This study provides several theoretical contributions.

First, it integrates Resource-Based View (RBV), Dynamic Capability Theory, Organizational Agility Theory, and Organizational Resilience Theory into a comprehensive framework explaining Business Resilience in SMEs.

Second, the study extends previous research by demonstrating that Marketing Agility and Digital Capability should be viewed as complementary strategic capabilities rather than independent organizational resources.

Third, the findings contribute to marketing literature by positioning Digital Capability as a strategic mediating mechanism linking agile marketing practices with organizational resilience.

Fourth, the research provides empirical evidence from Indonesian SMEs, an emerging economy context that remains relatively underexplored in strategic marketing and digital transformation studies.

Managerial Implications

The findings offer several practical implications for SME owners, managers, and policymakers.

First, SME managers should cultivate organizational cultures that prioritize agility, rapid learning, customer orientation, and continuous innovation.

Second, investments in digital transformation should extend beyond acquiring new technologies. Organizations should simultaneously develop digital skills, digital leadership, and data-driven decision-making capabilities.

Third, government agencies and SME development institutions should design policies that facilitate digital capability development through training programs, technology adoption incentives, digital business incubators, and collaborative innovation ecosystems.

Fourth, SMEs should integrate Marketing Agility and Digital Capability into their long-term strategic planning to enhance Business Resilience and maintain competitiveness in increasingly volatile markets.

Comparison with Previous Studies

The findings are consistent with previous studies reporting that organizational agility improves firm performance, innovation capability, and competitive advantage. Likewise, the positive relationship between Digital Capability and Business Resilience supports recent studies emphasizing digital transformation as a key driver of organizational sustainability.

However, this study extends prior research by empirically demonstrating that Digital Capability partially mediates the relationship between Marketing Agility and Business Resilience. This finding provides new insights into the mechanisms through which agile marketing practices translate into resilient organizational performance.

Overall, the results suggest that Indonesian SMEs should view Marketing Agility and Digital Capability as complementary strategic capabilities. Firms that continuously enhance both capabilities will be better positioned to anticipate environmental changes, exploit emerging opportunities, overcome business disruptions, and achieve sustainable competitive advantage in an increasingly digital and uncertain business environment.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

This study examined the relationships among Marketing Agility, Digital Capability, and Business Resilience in Indonesian Small and Medium Enterprises (SMEs). Drawing upon the Resource-Based View (RBV), Dynamic Capability Theory, Organizational Agility Theory, and Organizational Resilience Theory, the study proposed and empirically tested a structural model using Partial Least Squares Structural Equation Modeling (PLS-SEM).

The empirical findings indicate that Marketing Agility has a significant positive effect on Digital Capability, suggesting that SMEs capable of rapidly sensing market changes, responding to customer needs, and adapting marketing strategies are more likely to develop stronger digital competencies. These competencies enable firms to effectively utilize digital technologies, improve operational efficiency, and accelerate innovation.

The results further demonstrate that Marketing Agility positively influences Business Resilience. Agile SMEs exhibit greater adaptability, flexibility, and responsiveness, allowing them to withstand environmental uncertainty and maintain sustainable business performance. Additionally, Digital Capability significantly enhances Business Resilience, indicating that digital transformation has become an essential strategic capability for improving organizational sustainability in an increasingly dynamic business environment.

A major contribution of this study is the confirmation that Digital Capability partially mediates the relationship between Marketing Agility and Business Resilience. This finding suggests that while Marketing Agility directly strengthens organizational resilience, its impact becomes substantially greater when supported by strong digital capabilities. Thus, Digital Capability serves as an important strategic mechanism through which agile marketing practices are translated into resilient organizational performance.

From a theoretical perspective, this study enriches the literature by integrating the Resource-Based View and Dynamic Capability Theory into a comprehensive framework explaining how strategic organizational capabilities enhance Business Resilience. The findings also extend previous research by demonstrating the complementary roles of Marketing Agility and Digital Capability in improving organizational resilience, particularly within the context of SMEs in emerging economies.

From a managerial perspective, SME owners and managers should prioritize the development of agile marketing practices alongside investments in digital technologies, employee digital skills, and data-driven decision-making capabilities. Policymakers and SME development agencies are encouraged to support digital transformation initiatives through training programs, technology adoption incentives, and collaborative innovation ecosystems that strengthen the resilience and long-term competitiveness of Indonesian SMEs.

Despite its contributions, this study has several limitations. First, the cross-sectional research design restricts the ability to establish causal relationships over time. Second, the sample was limited to Indonesian SMEs, which may affect the generalizability of the findings to other countries or business sectors. Third, the study focused on three major constructs and did not incorporate other potential antecedents such as innovation capability, entrepreneurial orientation, organizational learning, strategic leadership, environmental uncertainty, or artificial intelligence capability.

Future research is therefore recommended to employ longitudinal research designs, expand the study to different countries or industries, compare SMEs with large enterprises, and incorporate additional strategic variables to develop a more comprehensive understanding of organizational resilience in the digital era. Future studies may also explore the moderating roles of environmental turbulence, digital leadership, organizational culture, and government

support to further explain how organizations sustain competitive advantage under rapidly changing market conditions.

Limitations and Future Research

This study has several limitations that should be acknowledged when interpreting the findings.

First, the study employed a cross-sectional research design, in which data were collected at a single point in time. Consequently, the results identify associations among Marketing Agility, Digital Capability, and Business Resilience but do not fully capture how these relationships evolve over time. Future studies are encouraged to adopt a longitudinal research design to better examine the dynamic development of organizational capabilities and resilience.

Second, the sample was limited to Indonesian Small and Medium Enterprises (SMEs). Although SMEs represent a significant sector of the Indonesian economy, the findings may not be directly generalizable to large enterprises or organizations operating in different institutional and cultural contexts. Comparative studies involving SMEs from multiple countries or different industries are recommended to enhance the external validity of the research.

Third, this study focused on Marketing Agility as the primary antecedent and Digital Capability as the mediating variable affecting Business Resilience. Other important organizational and environmental factors, such as innovation capability, entrepreneurial orientation, strategic leadership, organizational learning, digital leadership, artificial intelligence capability, environmental turbulence, and government support, were not included in the proposed model. Incorporating these variables may provide a more comprehensive explanation of business resilience.

Fourth, all variables were measured using self-reported questionnaire data, which may introduce common method bias and subjective perceptions. Although statistical procedures were employed to ensure the validity and reliability of the measurement model, future studies are encouraged to combine survey data with objective organizational indicators, financial performance measures, or qualitative interviews to strengthen the robustness of the findings.

Fifth, this study examined Digital Capability only as a mediating variable. Future research may investigate its role as a moderating variable or explore more complex research models involving multiple mediators or moderators, such as organizational culture, market orientation, strategic flexibility, or environmental uncertainty.

Despite these limitations, the study provides important theoretical and practical contributions by demonstrating the strategic roles of Marketing Agility and Digital Capability in enhancing Business Resilience among Indonesian SMEs. Future research is expected to extend the proposed framework by incorporating broader theoretical perspectives, additional strategic variables, and more diverse research settings to improve the understanding of organizational resilience in the era of digital transformation.

Recommendations

Based on the findings of this study, several recommendations are proposed for practitioners, policymakers, and future researchers.

Practical Recommendations

First, SME owners and managers should prioritize the development of Marketing Agility by strengthening their ability to monitor market trends, understand changing customer preferences, and respond rapidly to competitive dynamics. Building an agile marketing culture through continuous learning, customer-centric decision-making, and flexible strategic planning will enhance organizational adaptability and long-term competitiveness.

Second, SMEs should invest in improving their Digital Capability by adopting advanced digital technologies such as e-commerce platforms, customer relationship management (CRM) systems, cloud computing, artificial intelligence (AI), big data analytics, and digital marketing tools. These investments should be complemented by continuous employee training and digital skills development to maximize the benefits of digital transformation.

Third, managers are encouraged to integrate Marketing Agility and Digital Capability into their strategic planning processes. Rather than viewing digital transformation solely as technological adoption, organizations should develop comprehensive digital strategies that align technology, organizational culture, leadership, and business objectives to strengthen Business Resilience.

Fourth, SMEs should establish organizational mechanisms that support continuous innovation, knowledge sharing, and rapid decision-making. Developing cross-functional collaboration, encouraging experimentation, and utilizing real-time market intelligence will enable firms to respond more effectively to environmental uncertainty.

Policy Recommendations

Government agencies and SME development institutions should formulate policies that accelerate digital transformation among SMEs through financial incentives, digital infrastructure development, capacity-building programs, and technology adoption assistance.

Policymakers should also strengthen collaboration among universities, industry, government, and business associations to establish innovation ecosystems that facilitate knowledge transfer, technology diffusion, and digital entrepreneurship. Such collaborative initiatives can significantly improve the resilience and competitiveness of SMEs in emerging economies.

In addition, national programs promoting digital literacy and business digitalization should be expanded to ensure that SMEs across different regions have equal access to digital technologies and innovation opportunities.

Recommendations for Future Research

Future studies are encouraged to employ longitudinal research designs to better understand how Marketing Agility, Digital Capability, and Business Resilience evolve over time. Longitudinal data would provide stronger evidence regarding causal relationships among the proposed constructs.

Researchers are also encouraged to expand the conceptual framework by incorporating additional variables such as Artificial Intelligence Capability, Strategic Flexibility, Organizational Learning, Entrepreneurial Orientation, Innovation Capability, Knowledge Management, Digital Leadership, Environmental Turbulence, Organizational Culture, Market Orientation, and Government Support.

Comparative studies involving SMEs and large enterprises, different industrial sectors, or multiple countries would provide valuable insights into the generalizability of the proposed model across different institutional and economic contexts.

Finally, future research may employ mixed-method approaches by combining quantitative surveys with qualitative interviews or case studies to obtain a deeper understanding of how organizations develop agile marketing capabilities and digital competencies that enhance long-term Business Resilience.

Author Contributions

US (First and Corresponding Author): Conceptualization, literature review, research design, methodology, questionnaire development, data collection, data analysis, interpretation

of results, original draft preparation, manuscript revision, correspondence with the journal, and project administration.

NL (Co-Author): Conceptualization, research supervision, theoretical framework development, methodology validation, interpretation of findings, critical review and editing of the manuscript, intellectual content enhancement, and final approval of the manuscript.

All authors contributed substantially to the conception and design of the study, discussed the findings, critically reviewed the manuscript, approved the final version for publication, and agreed to be accountable for all aspects of the work.

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REFERENCES

- Agarwal, R., Gao, G., DesRoches, C., & Jha, A. K. (2010). Research commentary—The digital transformation of healthcare: Current status and the road ahead. *Information Systems Research*, 21(4), 796–809. <https://doi.org/10.1287/isre.1100.0327>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Bharadwaj, A. (2000). A resource-based perspective on information technology capability and firm performance: An empirical investigation. *MIS Quarterly*, 24(1), 169–196. <https://doi.org/10.2307/3250983>
- Day, G. S. (1994). The capabilities of market-driven organizations. *Journal of Marketing*, 58(4), 37–52. <https://doi.org/10.1177/002224299405800404>
- Day, G. S. (2011). Closing the marketing capabilities gap. *Journal of Marketing*, 75(4), 183–195. <https://doi.org/10.1509/jmkg.75.4.183>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (3rd ed.). Sage Publications.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis* (8th ed.). Cengage Learning.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135.
- Kane, G. C., Palmer, D., Phillips, A. N., Kiron, D., & Buckley, N. (2015). *Strategy, Not Technology, Drives Digital Transformation*. MIT Sloan Management Review.
- 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.
- Morgan, N. A. (2012). Marketing and business performance. *Journal of the Academy of Marketing Science*, 40(1), 102–119.

- Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, 54(4), 20–35.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory* (3rd ed.). McGraw-Hill.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Ringle, C. M., Wende, S., & Becker, J. M. (2024). *SmartPLS 4*. SmartPLS GmbH. <https://www.smartpls.com>
- Sharifi, H., & Zhang, Z. (1999). A methodology for achieving agility in manufacturing organizations: An introduction. *International Journal of Production Economics*, 62(1–2), 7–22.
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of sustainable enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533.
- Tornatzky, L. G., & Fleischer, M. (1990). *The Processes of Technological Innovation*. Lexington Books.
- Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems*, 28(2), 118–144.
- Warner, K. S. R., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long Range Planning*, 52(3), 326–349.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180.
- Zhou, K. Z., Yim, C. K., & Tse, D. K. (2005). The effects of strategic orientations on technology- and market-based breakthrough innovations. *Journal of Marketing*, 69(2), 42–60.