

A Model of Financial Resilience: Dynamic Capabilities, Financial Behavior, and Organizational Agility in Non-Technology MSMEs

Rahmat Maulidan^{1*}, Imam Gunanjar², Safrizal³

^{1*,2} Management Study Program, Faculty of Economics and Business, Universitas Samudra, Langsa City, Aceh Province, Indonesia

³ Agribusiness Study Program, Faculty of Agriculture, Universitas Samudra, Langsa City, Aceh Province, Indonesia

Email: rahmat.maulidan@unsam.ac.id^{1*}, imamgunanjar@unsam.ac.id², safrizalfp@unsam.ac.id³

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Abstract

This study analyzes the effect of Dynamic Capabilities and Financial Behavior on the Financial Resilience of non-technology MSMEs in Langsa City and Aceh Tamiang, and tests the mediating role of Organizational Agility in that relationship. The study uses an explanatory quantitative approach with a cross-sectional design on 154 non-technology MSMEs at least five years old, selected through purposive sampling. Data were analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with a 5,000-subsample bootstrapping procedure. Dynamic Capabilities and Financial Behavior were specified as second-order constructs using a repeated-indicator approach. The results show that both Dynamic Capabilities ($\beta = 0.472$; $p < 0.001$) and Financial Behavior ($\beta = 0.419$; $p < 0.001$) have a significant positive effect on Financial Resilience, whereas Organizational Agility neither directly affects Financial Resilience nor mediates either of these two relationships. These findings provide empirical evidence that, among non-technology MSMEs, financial resilience is built directly through internal capabilities and financial discipline rather than through organizational agility, which remains conceptually rooted in digital-technology-based capabilities.

Keywords:

Dynamic capabilities; Financial behavior; Organizational agility; Financial resilience; non-technology MSMEs; PLS-SEM.

1. INTRODUCTION

1.1. Background

Micro, Small, and Medium Enterprises (MSMEs) are the backbone of the Indonesian economy. Ministry of MSMEs (2025) data record more than 64 million national MSME units, contributing about 61% of Gross Domestic Product (GDP), equivalent to IDR 8,573 trillion, and absorbing about 97% of the national workforce. Indonesia's MSME structure is also dominated by micro enterprises (96.84%), with wholesale-retail trade and accommodation-food-beverage provision as the two sectors with the largest number of business units (OECD, 2026). This scale of contribution makes MSME financial resilience not merely an individual business concern but a strategic issue that determines regional and national economic stability as a whole.

This significance is even more apparent at the regional level. BPS Aceh, (2025) recorded Aceh Province's Gross Regional Domestic Product (GRDP) growing 4.66% in 2024, the highest in four years, with an economic structure still dominated by agriculture (30.97%) and trade (14.99%), two sectors directly supported by micro- and small-scale MSME activity. Aceh Tamiang Regency, one of this study's research sites, recorded GRDP per capita of IDR 37.35 million in 2024, with a five-year CAGR of 7.86% (BPS Kabupaten Aceh Tamiang, 2025), while the local Cooperatives and MSME Office reported that about 98% of MSMEs had resumed active operation after a series of economic pressures. This raises an important question: what internal capabilities sustain the resilience of non-technology MSMEs here, given that most operate without the digital-transformation support that underlies contemporary capability and resilience theories?

This large scale stands in inverse proportion to MSMEs' resilience against market shocks: MSMEs are structurally far more vulnerable than large firms to supply-chain disruption, inflationary pressure, and limited access to critical resources (Ode et al., 2026). Saptono et al., (2024) argue that readiness can no longer be measured solely through static indicators such as liquidity or profitability ratios, but requires a dynamic approach covering readiness before, response during, and recovery after a disruption, underlying the need to understand financial resilience through internal organizational capability.

On the other hand, the literature on organizational capability and MSME resilience is dominated by the assumption that digitalization is a prerequisite for success. Sagala & Öri, (2025) conclude that dynamic capabilities theory is the most dominant framework for explaining MSME resilience and antifragility, yet it consistently requires higher digital capability and organizational learning. Troise et al., (2022) add that in VUCA environments MSME agility is largely conceptualized in tandem with digital transformation, so its role in MSMEs that have not adopted digital technology remains underexplored. In Indonesia, Affandi et al., (2024) found a real digital-adoption gap among small-scale businesses across 17 provinces, indicating that many MSMEs, especially outside major urban centers, still operate with limited digital adoption (Rupeika-Apoga & Petrovska, 2022).

This is the central gap that the present study addresses. Non-technology MSMEs, defined here as those that do not use, or only use to a limited extent, digital technology in their operations, must still build financial resilience amid equally challenging market dynamics, without digital capability as a primary support. Dynamic capabilities theory (Wang & Ahmed, 2007) offers an alternative, positioning the ability to absorb knowledge, innovate, and adapt as internal resources any MSME can possess regardless of digitalization. Supported by sound financial behavior (Dew & Xiao, 2011), this combination may form a foundation for financial resilience independent of digital infrastructure, as Supramono et al., (2025) confirm empirically for post-crisis recovery among Indonesian MSMEs.

The urgency of studying financial behavior in non-urban contexts is reinforced by the 2024 National Financial Literacy and Inclusion Survey (SNLIK), which recorded a national financial-literacy index of 65.43% and a financial-inclusion index of 75.02%, with a clear urban–rural gap: literacy reached 69.71% in urban versus 59.25% in rural areas, and inclusion 78.41% versus 70.13% (OECD, 2026). The financial-management behavior of MSME actors in non-urban regions such as Langsa and Aceh Tamiang therefore cannot be assumed equivalent to that of urban MSMEs, which have more often been the subject of similar research.

Organizational agility is also a theoretically promising variable for bridging MSMEs' internal capabilities and financial resilience, because the ability to detect and respond quickly to market changes is crucial for business continuity (Arsawan et al., 2022; Handayani & Masrokhah, 2024). However, because widely used agility instruments originate from the IT-enabled dynamic capabilities framework, its mediating role in non-technology MSMEs has rarely been tested; a systematic review of MSME resilience and agility in developing countries identifies this gap and calls for studies in resource-constrained contexts with immature digital transformation (Idrovo Hurel et al., 2026).

Langsa City and Aceh Tamiang Regency were chosen because both represent a significant base of non-technology MSMEs in the east-coast Aceh economy, yet have rarely been studied using dynamic-capability-based models. By integrating Dynamic Capabilities, Financial Behavior, and Organizational Agility into a single structural model of Financial Resilience, this study contributes empirically and theoretically on how non-technology MSMEs can build financial resilience through internal capabilities regardless of digital adoption, while testing whether an agility framework rooted in a digital context remains relevant in a different context.

These considerations lead the present study to four interrelated research questions: whether dynamic capability affects the financial resilience of non-technology MSMEs, whether financial behavior affects their financial resilience, whether organizational agility affects financial resilience, and whether organizational agility mediates the relationship that dynamic capability and financial behavior each have with financial resilience.

This study aims to analyze the effect of dynamic capabilities and financial behavior on the financial resilience of non-technology MSMEs, and to test the role of organizational agility as a mediating variable in that relationship, in the context of non-technology MSMEs in Langsa City and Aceh Tamiang. The novelty of this study lies in applying a dynamic-capabilities-based approach in the context of non-technology MSMEs, which has not been widely explored, and in integrating the concept of organizational agility as a mediator between dynamic capabilities and financial behavior on one side and financial resilience on the other, a relationship that has not been widely studied among non-technology MSMEs in Indonesia.

In summary, three conditions justify this inquiry: the economic weight of MSMEs, the persistent urban–non-urban literacy–inclusion gap, and a literature that still treats agility as inseparable from digital infrastructure (Setiawan et al., 2025; Martín-Rojas et al., 2026). Non-technology MSMEs in Langsa City and Aceh Tamiang are thus a context in which dynamic capabilities and financial behavior, rather than digital-agility mechanisms, are the more plausible drivers of financial resilience, an argument this study tests directly.

1.2. Grand Theory: Dynamic Capability View (DCV)

This study is grounded in the Dynamic Capability View (DCV) as the grand theory underlying the whole model. Teece et al., (1997) define dynamic capabilities as the ability of an organization and its management to integrate, build, and reconfigure internal and external competencies to respond to a rapidly changing environment. This definition emerged as a critical extension of the largely static Resource-Based View RBV explains why certain resources can be a source of competitive advantage, but not how firms renew those resources as the environment changes, a gap that DCV fills (Teece, 2023).

DCV also draws a firm distinction between ordinary capabilities, which concern the technical efficiency of running current operations correctly (“doing things right”), and dynamic capabilities, which concern adjusting those capabilities as conditions change (“doing the right things”) (Ode et al., 2026). Teece, (2007) further asserts that dynamic capabilities are converted into superior performance only when supported by suitable complementary assets. Ode et al., (2026) synthesize RBV and DCV into a two-dimensional framework (adaptability × resource availability) yielding four MSME resilience archetypes, reinforcing DCV's relevance as the primary lens for understanding MSME resilience in turbulent environments.

DCV was chosen as this study's grand theory because of its direct fit with the context under investigation: non-technology MSMEs in Langsa City and Aceh Tamiang operate in a dynamic and uncertain market environment, so their financial resilience is theoretically determined by their capability to recognize change, mobilize resources, and reconfigure operations, which is precisely the core thesis of DCV. The four constructs in this study's model map directly onto DCV. First, Dynamic Capability (DC) operationalizes the microfoundations of Teece, (2007): the Absorptive-Innovative-Adaptive triad of Wang & Ahmed, (2007) parallels the sensing-seizing-transforming triad. Second, Financial Behavior (FB) is an ordinary capability, namely the operational routines of cash, credit, and savings management that form the “raw material” subsequently reconfigured by dynamic capabilities. Third, Organizational Agility (OA) follows Asghar et al., (2026) and Desalegn et al., (2024), who conclude that DCV is the most dominant framework for explaining organizational agility as “a bundle of interrelated dynamic capabilities”; OA thus represents a more actualized, operational form of dynamic capability. Fourth, Financial Resilience (FR) is the performance/outcome variable, consistent with DCV's core thesis that dynamic capabilities lead to resource reconfiguration and sustained performance.

With this mapping, the overall research model can be read as a DCV chain model: ordinary capability (FB) and dynamic capability (DC) as antecedents, organizational agility (OA) as an actualized form of dynamic capability/mediator, and financial resilience (FR) as the ultimate performance/outcome resulting from the entire sensing-seizing-transforming process. This framework underlies the hypothesis development that follows.

1.3. Dynamic Capabilities

Wang & Ahmed, (2007) conceptualize dynamic capabilities as a firm's behavioral orientation that continuously integrates, reconfigures, renews, and re-creates its resources and capabilities, manifested in three components: absorptive capacity (recognizing the value of new information, absorbing it, and applying it for commercial purposes; sensing), innovative capacity (developing new products/markets by aligning an innovative strategic orientation with innovative behavior and processes; seizing), and adaptive capacity (identifying and exploiting emerging market opportunities; transforming).

As a higher-order capability, dynamic capability differs from ordinary operational capability because its function is to change routines when the environment shifts, not to run them efficiently (Teece, 2007). This is crucial for MSMEs because owners often run ordinary and dynamic capabilities simultaneously without a formal division of function, what Ode et al., (2026) term the “ordinary-dynamic capability hierarchy problem.”

Recent research confirms the relevance of dynamic capabilities to MSME resilience in developing countries: they accelerate post-crisis performance recovery (Supramono et al., 2025) and underpin conceptualizations of financial resilience covering readiness, response, and recovery (Legenzova et al., 2025). At the sub-dimension level, absorptive capacity affects MSME performance in Tanzania (Changalima et al., 2025), innovation strategy in Chile (Carrasco-Carvajal et al., 2023), and innovation-strategy implementation (Bedoya-Villa et al., 2023); innovation capability affects Yogyakarta MSME performance (Nurhayati et al., 2021); and dynamic capability moderates environmental turbulence (Okon et al., 2026). This forms the empirical basis for H1.

1.4. Financial Behavior

Dew & Xiao, (2011) define financial behavior as human behavior relevant to money management, covering cash management, credit management, and savings and investment. It is largely explained by the Theory of Planned Behavior (Ajzen, 1991), in which behavior is shaped by intention, influenced by attitude, subjective norms, and perceived behavioral control. Financial behavior is multidimensional and can be learned and improved over time (Yeo et al., 2024), and attitude and perceived behavioral control predict healthier financial behavior (She et al., 2024), reinforcing the basis that MSME owners' financial behavior can be shaped through targeted interventions.

Within the DCV framework, Financial Behavior is an ordinary capability, the daily financial routines that form the “raw material” subsequently reconfigured by dynamic capabilities. Its sub-dimensions are Cash Management (daily cash flow and liquidity), Credit Management (obligations and access to financing), and Savings & Investment (setting aside surplus as a future buffer). Financial-management capability supports MSME financial resilience (Legenzova et al., 2025), disciplined financial behavior accelerates post-crisis recovery (Supramono et al., 2025), and actual financial behavior, not merely financial knowledge, contributes most to coping strategy among Indonesian MSME households (Maulidya & Putri, 2026), supporting the development of H2.

1.5. Organizational Agility

Mikalef & Pateli, (2017) conceptualize organizational agility as the ability to detect and respond to market opportunities and threats easily, quickly, and accurately, within an IT-enabled dynamic capabilities framework, rooted in the sense-and-respond framework of sensing capability (recognizing environmental change) and responding capability (reacting appropriately to it) (Overby et al., 2006). Asghar et al., (2026), reviewing 110 articles, reconceptualize agility as “a bundle of interrelated dynamic capabilities,” covering macro-agility (strategic agility and partnering) and micro-agility (operational, innovation, and workforce agility), with IT capability consistently identified as one of the most decisive vital enablers.

Recent research shows that the role of agility depends strongly on the digital-capability context: its impact on MSME digital-transformation success is largely channeled through digital capability (Zhang et al., 2024; Sagala & Öri, 2026), IT capability and organizational ambidexterity jointly facilitate resilience and performance (Trieu et al., 2023; Trieu et al., 2024), and IT capability mediates the relationship between dynamic capability and agility in the Jordanian IT sector (Awwad et al., 2022; salman et al., 2026). In contrast, Idrovo Hurel et al., (2026) identify conceptual tensions between resilience and agility among resource-limited MSMEs with immature digital transformation, which underlies H3, H4, and H5: do IT-enabled versions of agility remain relevant for non-technology MSMEs that lack the digital support in question?

1.6. Financial Resilience

MSME financial resilience refers to an organization's ability to absorb financial pressure/shocks, withstand them, and recover from adverse conditions while maintaining its core business function. In line with the DCV framework described above, financial resilience in this study is positioned as the performance/outcome variable resulting from a successful sensing-seizing-transforming process, not merely a static financial condition (e.g., a liquidity ratio alone), but the organization's dynamic capacity to continually adjust to changing pressures over time (Legenzova et al., 2025; Pusparini et al., 2026).

Ode et al., (2026) found that effective MSME resilience requires a balance between adaptation speed and resource constraints, and that prior crisis experience enables institutionalized learning, confirming that financial resilience is a capability that strengthens over time, consistent with this study's inclusion criterion of MSMEs at least five years old. Hamidani & Ali, (2025), studying 291 Pakistani MSMEs, found that improvisational capability and flexible IT systems significantly affect financial performance, while informal capabilities such as organizational culture do not significantly mediate that relationship. Gautam et al., (2025) documented entrepreneurial adaptation as a key mechanism of post-crisis recovery in hospitality MSMEs, the common thread underlying all hypotheses. The hypotheses are shown in Figure 1.

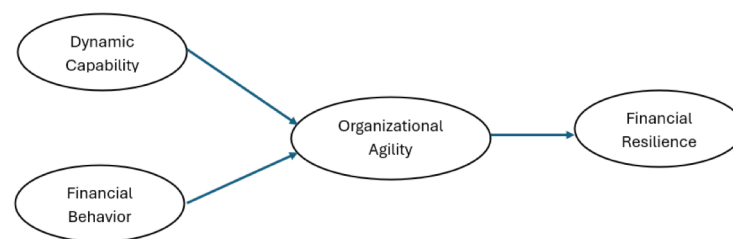


Figure 1. Research Framework

H1: Dynamic capability has a positive effect on MSME financial resilience.

H2: Financial behavior has a positive effect on financial resilience.

H3: Agility has a positive effect on MSME financial resilience.

H4: Agility mediates the relationship between dynamic capability and MSME financial resilience.

H5: Agility mediates the relationship between financial behavior and MSME financial resilience.

2. RESEARCH METHOD

2.1. Research Design and Approach

This study is designed as explanatory research with a quantitative approach, using cross-sectional data collected at a single point in time to answer the research questions.

2.2. Population, Sample, and Sampling Technique

The study population is MSMEs in Langsa City and Aceh Tamiang. The sample was selected through non-probability sampling using a purposive-sampling technique, with the criterion of non-technology MSMEs at least 5 years old, on the assumption that organizations of that age have faced market changes and proven able to survive. Following the minimum sample-size rule of 5 times the number of indicators (26 indicators $\times$ 5), this study targeted at least 130 respondents; field data collection successfully obtained 154 respondents, exceeding that minimum threshold and consistent with PLS-SEM's advantage for relatively small sample sizes (J. F. J. Hair et al., 2019).

2.3. Data Collection and Variable Measurement

Primary data were collected through a self-administered questionnaire survey of MSME owners/managers, the parties most familiar with the organization's strategic direction, using a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) (Sekaran & Bougie, 2020). The study variables consist of two independent variables (Dynamic Capability and Financial Behavior), one mediating variable (Organizational Agility), and one dependent variable (Financial Resilience).

Organizational Agility was measured with five items adapted from Mikalef & Pateli, (2017), reflecting an MSME's ability to sense and respond quickly to market and customer changes. Dynamic Capability was measured with nine items adapted from Wang & Ahmed, (2007), spanning its absorptive, innovative, and adaptive sub-dimensions. Financial Behavior was measured with seven items adapted from Dew & Xiao, (2011), covering the cash management, credit management, and savings-and-investment dimensions of the Financial Management Behavior Scale. Financial Resilience was measured with seven items adapted from Legenzova et al., (2025) and Rayampatt & Rajan, (2025), covering the withstand, adapt, recover, and seize-opportunity dimensions of business financial resilience. All items were translated into Indonesian and contextually adjusted for non-technology MSMEs before being distributed to respondents.

2.4. Data Analysis

Data were analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) via SmartPLS software, chosen for its predictive, theory-development orientation and its suitability for relatively limited sample sizes (Hair & Alamer, 2022). The first stage was evaluation of the measurement model (outer model); the second stage was evaluation of the structural model (inner model) through a bootstrapping procedure with a two-tailed critical value of 1.96 at a 5% significance level ($p < 0.05$) (Hair et al., 2019).

2.5. Measurement Model Evaluation Criteria

Outer-model evaluation in PLS-SEM follows two different tracks depending on the measurement nature of a construct: reflective or formative (Hair et al., 2021).

2.5.1. Reflective Measurement Model

In a reflective model, the latent construct is treated as the cause that “reflects” variation onto each of its indicators; the indicators are assumed to be interchangeable and must be highly correlated. (Hair & Alamer, 2022) summarize its evaluation criteria as follows:

- Each indicator's outer loading should ideally be ≥ 0.70 ;
- Internal-consistency reliability, measured via Cronbach's Alpha, ρ_A , and Composite Reliability (CR), should ideally be ≥ 0.70 (0.60–0.70 is acceptable for exploratory research);
- Convergent validity, measured via Average Variance Extracted (AVE) ≥ 0.50 ;
- Discriminant validity, tested via the Heterotrait-Monotrait (HTMT) ratio with a threshold of < 0.90 , following the criterion of Henseler et al., (2015), recommended as a replacement for the Fornell-Larcker criterion because it is more sensitive in detecting discriminant-validity problems.

2.5.2. Formative Measurement Model

In a formative model, the indicators are treated as causes that jointly form the latent construct; indicators need not be highly correlated, and removing one indicator can change the construct's meaning. Its evaluation uses criteria entirely different from the reflective model (Hair et al., 2019): convergent validity via redundancy analysis, collinearity via the Variance Inflation Factor (VIF, ideally < 3.3 , maximum < 5), and the significance and relevance of outer weights via bootstrapping.

2.6. First-Order and Second-Order Constructs (Higher-Order Construct)

Sarstedt et al., (2019) explain that a higher-order construct (HOC) is used when a theoretical concept is too abstract to be measured directly, so it is broken down into sub-dimensions (lower-order components/LOC), each measured by its own items. In this study, Dynamic Capability (Absorptive/AB, Innovative/INN, Adaptive/ADP) and Financial Behavior (Cash Management/CM, Credit Management/CRM, Savings & Investment/S_I) are positioned as second-order constructs, while Organizational Agility and Financial Resilience are first-order constructs measured directly by their items.

Sarstedt et al., (2019) distinguish two types of HOC specification: Type I (reflective-reflective), in which the second-order construct is modeled as reflecting its sub-dimensions (causality flows from HOC to LOC), and Type II (reflective-formative), in which the sub-dimensions instead form their second-order construct. Both types are generally estimated via the repeated-indicator approach, in which all items of the sub-dimensions are simultaneously connected to their sub-dimension and directly to their second-order construct.

2.6.1. Rules for Determining HOC Type

The choice between Type I and Type II must be guided by the theoretical nature of the concept. Sarstedt et al., (2019) propose four criteria: (1) direction of causality: does the construct “cause” its sub-dimensions, or do the sub-dimensions form it; (2) interchangeability: can the sub-dimensions be interchanged without changing the construct's meaning; (3) covariation: must the sub-dimensions be highly correlated because they stem from the same cause; and (4) nomological net: must the sub-dimensions have identical antecedents and consequences.

2.6.2. Applying the Criteria to Dynamic Capability and Financial Behavior

Tested against these criteria, Wang & Ahmed, (2007) original conceptualization of Dynamic Capability points more toward Type II: Absorptive, Innovative, and Adaptive capacity jointly compose what is meant by dynamic capability (criterion 1), are not interchangeable, since an MSME can have high absorptive but low innovative capacity (criterion 2), need not be highly correlated (criterion 3), and may have different antecedents, e.g., external networks for absorptive capacity versus the owner's entrepreneurial orientation for innovative capacity (criterion 4). The same logic applies to Financial Behavior under Dew & Xiao, (2011): Cash Management, Credit Management, and Savings & Investment are distinct behavioral domains that do not substitute for one another, so they too are more appropriately specified as Type II.

This study's model estimation (Table 7) instead uses the repeated-indicator approach with a Type I (reflective-reflective) path direction: paths flow from Dynamic Capability to AB, INN, and ADP, and from Financial Behavior to CM, CRM, and S_I, the opposite of the direction recommended by the Jarvis et al., (2003) rule for these two constructs. This deviation has direct consequences for several measurement results, discussed further (Table 1).

Table 1. Classification of Construct Order and Measurement Type

Construct	Order	(SmartPLS Output)	Constituent Items
Dynamic Capability (DC)	Second-order	Type I (reflective)	AB, INN, ADP
Absorptive (AB)	First-order	Reflective	DC1, DC3, DC8
Innovative (INN)	First-order	Reflective	DC4, DC5
Adaptive (ADP)	First-order	Reflective	DC7, DC9
Financial Behavior (FB)	Second-order	Type I (reflective)	CM, CRM, S_I
Cash Management (CM)	First-order	Reflective	FB1, FB2
Credit Management (CRM)	First-order	Reflective	FB3, FB4, FB5
Savings & Investment (S_I)	First-order	Reflective	FB6, FB7
Organizational Agility (OA)	First-order	Reflective	OA1, OA2, OA5
Financial Resilience (FR)	First-order	Reflective	FR1–FR7

Note: items DC2, DC6, OA3, and OA4, originally planned in the instrument, do not appear in the final SmartPLS output analyzed (likely dropped during data pre-processing/due to low outer loading)

3. RESULTS AND DISCUSSION

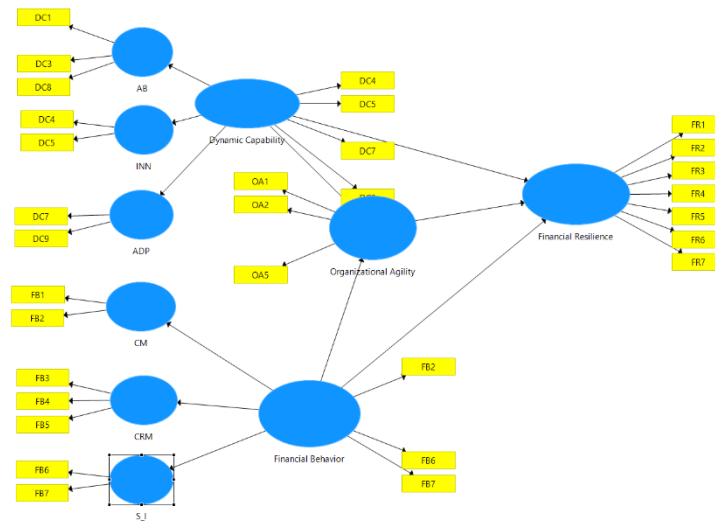


Figure 2. PLS-SEM Structural Model

3.1. Respondent Characteristics

This study involved 154 non-technology MSME actors as respondents, spread across Aceh Tamiang Regency (52.6%) and Langsa City (47.4%), exceeding the minimum of 130 respondents required by the 5-times-the-number-of-indicators rule. The respondent profile is presented in Table 2.

Respondents were dominated by women (53.9%), aged mainly 36–45 years (34.4%) and 25–35 years (31.2%), and mostly with a senior-high-school education (64.9%), indicating that non-technology MSME management in this region is largely run by actors with a secondary-education background. All businesses met the inclusion criterion of at least 5 years in operation (63.0% for 5–10 years), and most were micro enterprises with 1–4 employees (79.9%). Consistent with the screening criteria, 58.4% of respondents used digital technology only to a limited extent (WhatsApp or simple social media) and 41.6% not at all, confirming that the sample genuinely represents non-technology MSMEs.

Table 2. Distribution of Respondent Characteristics and Business Profile (N = 154)

Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Male	71	46.1
	Female	83	53.9
Respondent Age	< 25 years	23	14.9
	25–35 years	48	31.2
	36–45 years	53	34.4
	> 45 years	30	19.5
Highest Education	Senior High School/Equivalent	100	64.9
	Diploma	10	6.5
	Bachelor's (S1)	24	15.6
	Master's (S2)	1	0.7
	Other	19	12.3
Business Location	Aceh Tamiang Regency	81	52.6
	Langsa City	73	47.4
Years in Operation	5–10 years	97	63.0
	11–15 years	31	20.1
	16–20 years	9	5.8
	> 20 years	17	11.0
Number of Employees	1–4 people (Micro)	123	79.9
	5–19 people (Small)	30	19.5
	20–99 people (Medium)	1	0.7
Average Monthly Turnover	< IDR 10 million	67	43.5
	IDR 10–50 million	56	36.4
	IDR 50–300 million	26	16.9
	> IDR 300 million	5	3.2
Digital Technology Use	Uses to a limited extent	90	58.4
	Does not use	64	41.6

Business Sector/Type	Culinary/Food & Beverage	60	39.0
	Trade/Retail	54	35.1
	Services	23	14.9
	Garment & Manufacturing	11	7.1
	Other	6	3.9
Total		154	100.0

3.2. Convergent Validity

Consistent with the Hair & Alamer, (2022) criteria described earlier, the convergent validity of reflective constructs is tested through each item's outer loading, ideally ≥ 0.70 (Table 3), and Average Variance Extracted (AVE), ideally ≥ 0.50 (Table 4). It is presented first because it must be met before the reliability and discriminant-validity criteria can be meaningfully interpreted.

Table 3. Outer Loadings per Construct (PLS-SEM Algorithm)

Item	AB	ADP	CM	CRM	DC	FB	FR	INN	OA	S_I
DC1	0.786									
DC3	0.675									
DC4					0.767			0.858		
DC5					0.738			0.846		
DC7		0.814			0.697					
DC8	0.785									
DC9		0.834			0.733					
FB1			0.612							
FB2			0.952			0.659				
FB3				0.951						
FB4				0.729						
FB5				0.650						
FB6						0.804				0.864
FB7						0.786				0.857
FR1							0.673			
FR2							0.793			
FR3							0.801			
FR4							0.822			
FR5							0.788			
FR6							0.726			
FR7							0.665			
OA1									0.772	
OA2									0.817	
OA5									0.708	

Most outer loadings on the first-order constructs exceed 0.70. A few items (FB1 0.612, FB5 0.650, FR7 0.665, FR1 0.673, DC3 0.675) fall slightly below it but remain above 0.50 and are retained because the AVE of their constructs stays above 0.50 (Hair & Alamer, 2022). For the second-order constructs, the items connected via the repeated-indicator approach (DC4, DC5, DC7, DC9; FB2, FB6, FB7) show adequate loadings (0.659–0.804).

All ten constructs, including Dynamic Capability (AVE = 0.539) and Financial Behavior (AVE = 0.566) as second-order constructs, meet the convergent-validity requirement (AVE range 0.539–0.740, all > 0.50 ; Table 4). AVE is self-referential and therefore not distorted by the shared-indicator issue between constructs that affects some of the other criteria discussed next.

3.3. Further Measurement Model Evaluation (Outer Model)

After convergent validity was satisfied, the measurement-model evaluation continues with reliability, discriminant validity, and collinearity, closing with an overall model-fit test (Hair & Alamer, 2022).

3.3.1. Construct Reliability

Table 4. Construct Reliability and Convergent Validity (AVE)

Construct	Cronbach's Alpha	rho_A	Composite Reliability	AVE
AB	0.610	0.616	0.794	0.563
ADP	0.528	0.529	0.809	0.679
CM	0.507	0.821 ¹	0.773	0.640
CRM	0.767	1.416 ¹	0.826	0.619
Dynamic Capability	0.715	0.716	0.824	0.539

Financial Behavior	0.612	0.622	0.795	0.566
Financial Resilience	0.873	0.879	0.902	0.570
INN	0.622	0.623	0.841	0.726
Organizational Agility	0.648	0.653	0.810	0.588
S_I	0.649	0.649	0.851	0.740

As shown in Table 4, Composite Reliability ranges from 0.773 to 0.902 across the ten constructs. The rho_A values for CM (0.821) and CRM (1.416) are anomalous (above their own Composite Reliability and, for CRM, above 1), an estimation anomaly known to occur in reflective constructs with few indicators and unbalanced loadings (Hair et al., 2021), so Composite Reliability is more appropriate as the basis for assessment.

Referring to the Hair & Alamer, (2022) criteria, all ten constructs meet the composite-reliability requirement ($CR > 0.70$). Cronbach's Alpha values in the 0.50–0.65 range for several constructs (AB, ADP, CM, FB, OA, S_I) are reasonable, given that Cronbach's Alpha is known to systematically underestimate the reliability of constructs with few items; CR still shows adequate results for all constructs.

3.3.2. Discriminant Validity

Table 5. Heterotrait-Monotrait Ratio (HTMT): Selected Construct Pairs

Construct Pair	HTMT	Note
AB – ADP	0.912	Exceeds 0.90
ADP – INN	0.931	Exceeds 0.90
ADP – Organizational Agility	0.931	Exceeds 0.90
Dynamic Capability – ADP	1.419	Repeated-indicator artifact
Dynamic Capability – INN	1.320	Repeated-indicator artifact
Financial Behavior – S_I	1.440	Repeated-indicator artifact
AB – Financial Resilience	0.593	Meets < 0.90
CM – CRM	0.266	Meets < 0.90
Financial Resilience – Financial Behavior	0.830	Meets < 0.90

The HTMT results for selected construct pairs (Table 5) show two patterns. First, Dynamic Capability–ADP (1.419), Dynamic Capability–INN (1.320), and Financial Behavior–S_I (1.440) exceed the upper bound of the ratio purely because the repeated-indicator approach makes the same item an indicator of both a sub-dimension and its second-order construct, a mathematical artifact of Type I HOC specification (Sarstedt et al., 2019), not conceptual indistinguishability. Second, AB–ADP (0.912), ADP–INN (0.931), and ADP–Organizational Agility (0.931) share no indicators, so $HTMT > 0.90$ is a genuine finding: the Adaptive sub-dimension, represented by only two items (DC7, DC9) instead of three, has not yet been fully separated empirically from the other sub-dimensions or from Organizational Agility.

3.3.3. Collinearity Test (Collinearity Statistics)

All outer VIF values are below 3.3 (range 1.14–2.54, with the majority < 2), indicating no inter-indicator collinearity problem within each construct (Hair et al., 2019)

Inner VIF values (1.354–1.765) are also all below 3.3, indicating no problematic collinearity in the structural model, so the path-coefficient estimates presented later can be interpreted without distortion from multicollinearity.

3.3.4. Model Fit

Regarding model fit, SRMR is 0.103 for the saturated model and 0.110 for the estimated model, which slightly exceeds the conservative threshold of 0.08 but falls within a range still commonly found in PLS-SEM models with complex second-order structures. The relatively high rms Theta value (0.214; closer to 0 is better) is consistent with the earlier discriminant-validity findings, indicating residual correlation among indicators, partly stemming from the repeated-indicator structure of Dynamic Capability and Financial Behavior.

3.4. Structural Model Evaluation (Inner Model)

After the measurement model was declared valid and reliable above, the structural model (inner model) is evaluated in three stages: the coefficient of determination (R^2) to assess the model's predictive power for the endogenous constructs, effect size (f^2) to assess the relative contribution of each exogenous construct, and hypothesis testing via structural path coefficients from 5,000-subsample bootstrapping.

3.4.1. Coefficient of Determination (R^2)

Table 6. R Square and R Square Adjusted

Endogenous Construct	R Square	R Square Adjusted	Category
AB	0.340	0.335	Weak-Moderate
ADP	0.754	0.752	Strong
CM	0.407	0.403	Moderate
CRM	0.053	0.046	Very Weak
Financial Resilience	0.522	0.513	Moderate
INN	0.780	0.779	Strong
Organizational Agility	0.398	0.390	Moderate
S_I	0.853	0.852	Strong

The R^2 values (Table 6) show that Dynamic Capability and Financial Behavior explain 52.2% of the variance in Financial Resilience (adjusted $R^2 = 0.513$) and 39.8% of Organizational Agility, both moderate. At the sub-dimension level, R^2 is strong for S_I (0.853), INN (0.780), and ADP (0.754), moderate for CM (0.407), weak-moderate for AB (0.340), and very weak for CRM (0.053), consistent with the moderate outer loadings of FB4 and FB5 (0.729 and 0.650) and suggesting that credit management among non-technology MSMEs is less strongly reflected by financial behavior than saving/investing habits.

3.4.2. Effect Size (f^2)

Effect sizes (f^2) are reported in the last column of Table 7. Dynamic Capability (0.264) and Financial Behavior (0.258) have medium-to-large effects on Financial Resilience, while the effect of Organizational Agility on Financial Resilience is very small (0.010). The values marked ¹ (paths to ADP, INN, and S_I) far exceed Cohen's "large" threshold (0.35) and do not reflect genuinely substantive effects of that magnitude, but a statistical artifact of the repeated-indicator items shared between a second-order construct and its sub-dimensions; f^2 on paths that share no indicators is unaffected and can be interpreted conventionally.

3.4.3. Hypothesis Testing: Structural Path Coefficients

Table 7 presents the direct-effect path coefficients from bootstrapping. All paths directly testing H1–H3, namely the effects of Dynamic Capability on Financial Resilience, Financial Behavior on Financial Resilience, and Organizational Agility on Financial Resilience, are statistically significant except the last one, while the effects of Dynamic Capability and Financial Behavior on Organizational Agility are also significant, showing that Organizational Agility is successfully formed but fails to further channel its influence to Financial Resilience.

Table 7. Path Coefficients and Effect Sizes (f^2): Direct Effects

Path	Coefficient (O)	Sample Mean	STDEV	T-Statistics	P-Values	f^2
Dynamic Capability → AB	0.583	0.589	0.060	9.718	0.001	0.514
Dynamic Capability → ADP	0.868	0.869	0.022	40.330	0.001	3.064 ¹
Dynamic Capability → Financial Resilience	0.472	0.475	0.076	6.236	0.001	0.264
Dynamic Capability → INN	0.883	0.883	0.020	43.261	0.001	3.555 ¹
Dynamic Capability → Organizational Agility	0.497	0.502	0.067	7.413	0.001	0.304
Financial Behavior → CM	0.638	0.643	0.060	10.568	0.001	0.686
Financial Behavior → CRM	0.229	0.256	0.080	2.875	0.004	0.055
Financial Behavior → Financial Resilience	0.419	0.420	0.078	5.354	0.001	0.258
Financial Behavior → Organizational Agility	0.210	0.213	0.081	2.599	0.010	0.054
Financial Behavior → S_I	0.924	0.925	0.011	84.641	0.001	5.818 ¹
Organizational Agility → Financial Resilience	-0.090	-0.091	0.092	0.977	0.329	0.010

Table 8 presents the results of the mediation-effect test (specific indirect effects) for H4 and H5. Both mediating paths, from Dynamic Capability through Organizational Agility to Financial Resilience and from Financial Behavior through Organizational Agility to Financial Resilience, show very small, non-significant coefficients ($p > 0.05$), consistent with the non-significant effect of Organizational Agility on Financial Resilience in Table 7.

Table 8. Specific Indirect Effects (Mediation Test)

Mediation Path	Coefficient (O)	STDEV	T-Statistics	P-Values
Dynamic Capability → Organizational Agility → Financial Resilience	-0.045	0.046	0.971	0.332
Financial Behavior → Organizational Agility → Financial Resilience	-0.019	0.023	0.821	0.412

The total effects (the sum of direct and indirect effects) of Dynamic Capability on Financial Resilience (0.427; $p < 0.001$) and Financial Behavior on Financial Resilience (0.400; $p < 0.001$) are practically dominated by their respective direct effects (Table 7), because the indirect effects in Table 8 are very small and non-significant. The total effect of Organizational Agility on Financial Resilience (-0.090; $p = 0.329$) remains non-significant and identical to its direct effect, since Organizational Agility has no further mediator toward Financial Resilience.

3.5. Summary of Hypothesis Testing

Table 9. Summary of Hypothesis Testing Results

Hypothesis	Statement	Test Result	Conclusion
H1	Dynamic capability has a positive effect on financial resilience	$\beta = 0.472$; $p < 0.001$	Supported
H2	Financial behavior has a positive effect on financial resilience	$\beta = 0.419$; $p < 0.001$	Supported
H3	Agility has a positive effect on financial resilience	$\beta = -0.090$; $p = 0.329$	Not Supported
H4	Agility mediates the dynamic-capability–financial-resilience relationship	Indirect = -0.045; $p = 0.332$	Not Supported
H5	Agility mediates the financial-behavior–financial-resilience relationship	Indirect = -0.019; $p = 0.412$	Not Supported

3.6. First-Order and Second-Order Structure in the Research Results

Dynamic Capability and Financial Behavior are second-order constructs (Section 2.6) estimated via the repeated-indicator approach, which allows the results to report how much Dynamic Capability explains AB, INN, and ADP separately ($R^2 = 0.340$; 0.780; 0.754), information that would otherwise be lost (Sarstedt et al., 2019). However, the original conceptualizations of Wang & Ahmed (2007) and Dew & Xiao (2011) point more toward Type II, yet the estimated model uses the Type I direction (Table 7). This intersects with two symptoms: extreme f^2 values on the paths to ADP, INN, and S_I (3.064; 3.555; 5.818), far exceeding Cohen's “large” threshold (0.35), and HTMT values above 1.0 for Dynamic Capability–ADP, Dynamic Capability–INN, and Financial Behavior–S_I (Section 3.3.2). Both are consistent with the warning of Sarstedt et al. (2019): under repeated indicators the same item (e.g., DC4 and DC5) indicates both INN and Dynamic Capability, so the two share variance mathematically, not because the substantive relationship is that large.

Unlike f^2 and HTMT, which test between-construct relationships and are therefore prone to distortion from repeated indicators, AVE tests a construct's relationship with its own indicators (DC4, DC5, DC7, DC9 for Dynamic Capability; FB2, FB6, FB7 for Financial Behavior) and is relatively unaffected by this overlap. The AVE values for Dynamic Capability (0.539) and Financial Behavior (0.566) can thus still be trusted as evidence of convergent validity (Hair & Alamer, 2022); only discriminant validity (HTMT) and effect size (f^2) on the HOC–LOC pairs are problematic due to the repeated indicators.

This matters for the structural results: the paths underlying H1–H5 are all between-construct paths that share no indicators with other constructs, so their direction and significance can be interpreted with confidence. Greater caution is needed for the exact magnitude of the contribution of AB/INN/ADP and CM/CRM/S_I to their second-order constructs (Table 7), which is likely inflated by the Type I structure; re-estimation as formative Type II or a two-stage approach is recommended (Hair & Alamer, 2022).

3.7. Discussion

The test results show that Dynamic Capability has a positive and significant effect on Financial Resilience ($\beta = 0.472$; $p < 0.001$; $f^2 = 0.264$, medium-large), so H1 is supported; this path shares no indicators with other constructs (Section 3.6), so its coefficient and significance can be fully trusted. All three sub-dimensions are strong, significant reflections of Dynamic Capability ($\beta = 0.583$ –0.883; $p < 0.001$ in Table 7), with the largest contributions from INN (0.883) and ADP (0.868), although these magnitudes should be read with caution due to potential inflation from the Type I structure. Innovation and adaptation to competitor movements and customer needs are thus the main supports of Dynamic Capability here, while Absorptive contributes more moderately.

The significance of Absorptive Capacity is consistent with Changalima et al., (2025), Carrasco-Carvajal et al., (2023), and Bedoya-Villa et al., (2023), who found that absorptive capability significantly affects performance, innovation strategy, and innovation-strategy implementation in Tanzanian, Chilean, and other MSMEs, respectively. This confirms that non-technology MSMEs' ability to absorb market knowledge remains relevant as a foundation of dynamic capability, even without digital infrastructure.

INN's dominant contribution is consistent with Nurhayati et al., (2021), who found that innovation capability significantly affects the performance of 202 Yogyakarta MSMEs. Among non-technology MSMEs, the innovation in items DC4 and DC5 appears to be incremental and based on direct market experience rather than formal R&D, yet is still the strongest dynamic-capability component.

Dynamic capability moderates the effect of environmental turbulence on MSME strategic resilience in developing countries (Saptono et al., 2024; Tajeddini et al., 2026), enabled Chinese MSMEs to survive the COVID-19 pandemic through business-model innovation (Huang & Ichikohji, 2024), and underpins post-crisis recovery through entrepreneurial adaptation in hospitality MSMEs (Gautam et al., 2025). Together with Supramono et al., (2025), these studies show that dynamic capability is a relatively stable predictor of MSME financial resilience, including among non-technology MSMEs in Langsa City and Aceh Tamiang.

Financial Behavior also has a positive and significant effect on Financial Resilience ($\beta = 0.419$; $p < 0.001$; $f^2 = 0.258$, medium-large), so H2 is supported. Savings & Investment (S_I) shows the highest reflective relationship with Financial Behavior ($\beta = 0.924$), far exceeding Cash Management ($\beta = 0.638$) and Credit Management ($\beta = 0.229$; R^2 only 0.053), indicating that the habit of setting aside income is the most decisive financial-behavior element for financial resilience in this sample, while credit management is a relatively independent aspect.

This result is consistent with Supramono et al., (2025), who found that disciplined financial behavior, including recording income and expenses and setting aside part of business profit, accelerates MSME performance recovery, with Legenzova et al., (2025), and, regarding S_I, with Selfira et al., (2026), who found that actual financial behavior, not merely financial knowledge, contributes most to MSME households' coping strategy and resilience. CRM's low R^2 (0.053) also echoes the credit-access literature: limited access to formal financing makes credit management more dependent on external factors (bank policy, collateral, credit history) than on the owner's habits, unlike Savings & Investment, which is within the owner's control.

Unlike H1 and H2, Organizational Agility has no significant effect on Financial Resilience ($\beta = -0.090$; $p = 0.329$; $f^2 = 0.010$), so H3 is not supported. Yet both Dynamic Capability ($\beta = 0.497$; $p < 0.001$) and Financial Behavior ($\beta = 0.210$; $p = 0.010$) significantly form Organizational Agility ($R^2 = 0.398$), and its items show solid loadings (0.708–0.817): agility is well measured and formed, but fails to translate into financial resilience. Why does a well-formed capability “stall” before reaching the expected outcome?

A useful starting point is the wording of the agility items themselves. The three retained items, the speed of making and executing decisions when the market changes (OA1), continuous efforts to improve ways of working (OA2), and quickly fulfilling customers' special requests (OA5), make no mention of any technological device or infrastructure; they measure the behavioral responsiveness of business actors, which any MSME can demonstrate regardless of digitalization. Mikalef & Pateli, (2017) place agility within an IT-enabled framework, but IT is more accurately one activation pathway observed in their context than an absolute prerequisite. The non-significance of H3 therefore does not necessarily reflect a shortcoming of the MSMEs studied; the original pathway may simply not be the most relevant one for non-technology MSMEs.

Several recent studies find digital capability to be one pathway connecting agility with performance: Zhang et al., (2024) found that agility's impact on MSME digital-transformation success is largely channeled through digital capability, Maalouf et al., (2025) show that business agility and digitalization move together as determinants of crisis resilience, and Trieu et al., (2023) add that IT capability facilitates the translation of ambidexterity into performance. Where digital capability is not yet routine, as in most respondents here, that channel may not yet be formed, so existing agility has not found its way toward financial outcomes, one plausible explanation among several rather than the sole cause.

A second explanation is statistical: with Dynamic Capability explaining nearly 40% of the variance in Organizational Agility ($R^2 = 0.398$) and being a far stronger antecedent than Financial Behavior, agility may largely “inherit” the information content of Dynamic Capability, so its incremental contribution to Financial Resilience becomes thin. Idrovo Hurel et al., (2026) likewise note that resilience and agility often overlap empirically, and Hamidani & Ali, (2025) found that explicit-system capability (flexible IT systems) significantly affects financial performance while implicit capabilities such as organizational culture do not significantly mediate that relationship.

The indirect effects of Dynamic Capability (-0.045 ; $p = 0.332$) and Financial Behavior (-0.019 ; $p = 0.412$) on Financial Resilience through Organizational Agility are non-significant, so H4 and H5 are not supported. Statistically, because path “b” (Organizational Agility $\rightarrow$ Financial Resilience) was already non-significant under H3, every indirect effect passing through it is non-significant regardless of how strong path “a” is; theoretically, the question remains why path “b” has not formed here.

One relevant lens is the concept of complementary assets: Teece, (2023) explains that capabilities, including agility as an actualized form of sensing-seizing capability, are generally converted into performance only when combined with suitable complementary assets, and Mikalef & Pateli, (2017) position IT capability

as one such asset in their context. The resource orchestration perspective complements this: capabilities need to be “orchestrated,” bundled, and deliberately deployed through a mechanism suited to the context. Agility has thus formed well (a strongly significant path “a”) but has not yet found the mechanism connecting it to financial outcomes, which need not be digital infrastructure but could be managerial capacity, business networks, or formal decision-making structures not covered by this study's model.

This “a significant, b not significant” pattern is also found elsewhere: Huang & Ichikohji, (2024) found that business-model innovation fully mediates the relationship between dynamic capability and the survival of Chinese MSMEs during the pandemic. The mediation failure of H4 and H5 therefore does not mean no connecting mechanism exists; other mediators, such as business-model innovation (Huang & Ichikohji, 2024) or financial coping strategy (Selfira et al., 2026), may explain it better in follow-up studies.

This pattern finds an indirect echo in the digitalization–agility literature. Zhang et al., (2025) show that digitalization has a robust positive effect on organizational agility, strongest where digital infrastructure is already in place, consistent with this study's finding that an IT-enabled agility construct fails to translate into outcomes where such infrastructure is largely absent. Pangesthi et al., (2026) identify micro-level strategic-agility elements, such as resource fluidity and leadership unity, that operate independently of any digital tool, pointing to an agenda of re-specifying Organizational Agility around technology-agnostic micro-elements.

The Absorptive–Innovative–Adaptive and Cash Management–Credit Management–Savings & Investment triads remain relevant as measurement frameworks for Dynamic Capability and Financial Behavior among non-technology MSMEs, even under a reflective second-order (Type I) specification. The finding that Organizational Agility does not significantly affect or mediate the DC/FB–Financial Resilience relationship suggests an explicit boundary condition, the availability of digital capability, before an agility scale from the IT-enabled context can be assumed to be a universal mediator.

For non-technology MSMEs, strengthening Dynamic Capability and Financial Behavior, particularly the habit of saving/re-investing, should be a top priority, since both directly affect financial resilience without depending on agility. The Cooperatives and MSME Office and mentoring institutions in Langsa City and Aceh Tamiang can direct training toward sensing-seizing-reconfiguring capability and financial behavior, particularly credit-management (CRM) education, while agility programs should be designed alongside a channeling mechanism such as basic digital capability or business-model innovation.

The cross-sectional design limits strong causal conclusions; future research is advised to use a longitudinal design that measures capability before, during, and after market disruption.

Specifying Dynamic Capability and Financial Behavior as reflective second-order constructs (Type I) produces statistical artifacts in f^2 and HTMT involving constructs that share indicators; further research should compare results with a formative Type II specification or a two-stage approach (Sarstedt et al., 2019). Future studies are also encouraged to test Organizational Agility using technology-agnostic micro-elements of strategic agility (e.g., resource fluidity, leadership unity), following Pangesthi et al., (2026), and to examine the relationship between agility and digitalization among non-technology MSMEs.

4. CONCLUSION

This study aims to analyze the effect of Dynamic Capability and Financial Behavior on Financial Resilience among 154 non-technology MSMEs in Langsa City and Aceh Tamiang, and to test the mediating role of Organizational Agility, using PLS-SEM with Dynamic Capability and Financial Behavior specified as second-order constructs via the repeated-indicator approach. Five main conclusions can be drawn.

First, Dynamic Capability is proven to have a positive and significant effect on Financial Resilience ($\beta = 0.472$; $p < 0.001$; $f^2 = 0.264$), so H1 is supported. All three sub-dimensions contribute significantly, with Innovative and Adaptive capacity as the most dominant supports, indicating that MSMEs' ability to innovate incrementally and adapt to competitor movements and customer needs is the main internal strength underpinning financial resilience, regardless of the business's level of digitalization.

Second, Financial Behavior also has a positive and significant effect on Financial Resilience ($\beta = 0.419$; $p < 0.001$; $f^2 = 0.258$), so H2 is supported. Savings & Investment most strongly explains Financial Resilience, far exceeding Credit Management (R^2 only 0.053), confirming that financial resilience among non-technology MSMEs is determined more by the decision to set aside income, which is within the owner's control, than by access to external financing.

Third, unlike the two hypotheses above, Organizational Agility is not proven to have a significant effect on Financial Resilience ($\beta = -0.090$; $p = 0.329$; $f^2 = 0.010$), so H3 is not supported, even though Organizational Agility itself is successfully and significantly formed by both Dynamic Capability ($\beta = 0.497$; $p < 0.001$) and Financial Behavior ($\beta = 0.210$; $p = 0.010$).

Fourth, and most theoretically substantial, Organizational Agility is not proven to mediate either the Dynamic Capability relationship (indirect = -0.045 ; $p = 0.332$; H4 not supported) or the Financial Behavior relationship (indirect = -0.019 ; $p = 0.412$; H5 not supported) with Financial Resilience, because the non-significant path “b” (Organizational Agility $\rightarrow$ Financial Resilience) nullifies every indirect effect passing through it, regardless of how strong path “a” is. Since the retained agility items (OA1, OA2, OA5) measure technology-

neutral behavioral responsiveness and are well formed by both Dynamic Capability and Financial Behavior, this failure is not a shortcoming of the MSMEs studied but an open question about the right connecting mechanism. Complementary assets (Teece, 2007) and resource orchestration suggest that capability is converted into performance only when combined with a context-appropriate mechanism, which may be digital, managerial, network-based, or business-model innovation not covered by this study's model.

Fifth, methodologically, even though Dynamic Capability and Financial Behavior were estimated using a Type I second-order specification that differs from their ideal theoretical conceptualization, their convergent validity remains satisfied and all structural paths testing H1–H5 share no indicators with other constructs, so the conclusions can be held with adequate confidence, without diminishing the need for confirmation through a Type II or two-stage approach in future research.

Overall, the financial resilience of non-technology MSMEs in Langsa City and Aceh Tamiang is most strongly built directly through strengthening dynamic capability and financial-behavior discipline as autonomous internal resources, while organizational agility, although well formed by both, requires further exploration of the right mechanism to channel it into financial resilience. Strategies should therefore prioritize sensing-seizing-reconfiguring capability and saving/investing behavior, with agility programs designed alongside a channeling mechanism (digital capability, business-model innovation, or other managerial capacity) rather than delivered stand-alone.

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