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Digital Financial Inclusion and Sustainable MSME Resilience in Indonesia's *Asta Cita* Agenda: A Structured Narrative Review

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Abstract

Purpose: This review examines how digital financial inclusion can support the resilience of micro, small and medium enterprises (MSMEs) and its policy relevance to Indonesia's *Asta Cita* development agenda and economic resilience. The review explains how digital financial resources can develop into organisational capabilities that enable MSMEs to absorb disruption, adapt operations, transform business models and maintain long-term viability.

Design/methodology/approach: The study applies a structured narrative review of peer-reviewed literature published between 2016 and 2025 from Scopus, Web of Science, ScienceDirect, Emerald Insight and SpringerLink, supported by selected Google Scholar studies and Indonesian policy documents. The synthesis examines resource mechanisms, organisational capabilities, resilience outcomes and contextual boundary conditions.

Findings: The review identifies four strategic resources comprising liquidity access, transactional visibility, managerial information and ecosystem connectivity. MSMEs can convert these resources through sensing, seizing and reconfiguring capabilities into absorptive, adaptive and transformative resilience. Digital literacy, affordability, trust, infrastructure, institutional support, consumer protection and regulatory readiness shape the effectiveness and inclusiveness of this conversion.

Originality/value: The review develops a capability conversion framework that explains why similar levels of digital financial access can produce different resilience outcomes. The framework distinguishes financial access from effective organisational use and links MSME capability development with *Asta Cita* priorities and the economic dimension of national resilience without treating policy alignment as an empirically established programme effect.

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INTRODUCTION

Robust national economic resilience requires a holistic approach within the the eight aspects of national life that serve as the foundation and sources of strength for realising Indonesia's national resilience (*Asta Gatra*) framework, alongside simultaneous policies that account for the dynamics of factor markets. MSMEs strengthen economic structures by generating employment, household income, and local value added across various developing nations. However, liquidity constraints, information asymmetry, limited bargaining power, and external shocks continue to hinder business continuity. The COVID-19 crisis highlighted these vulnerabilities as many small businesses suffered revenue declines while facing limited cash reserves (Cowling et al., 2020; Fairlie, 2020; Saputra, F., 2023). Business sustainability demands adequate access to finance, the capacity to absorb disruptions, operational adjustments, and business model innovations capable of ensuring long-term viability.

Digital finance offers alternative ways to address these constraints. Mobile banking, digital payments, fintech lending, alternative credit assessment, and cloud-based accounting reduce spatial and administrative barriers while expanding access and generating transaction information. With safeguards, digital finance can support financial inclusion and stability (Ozili, 2018). However, opening an account or accessing digital credit does not ensure meaningful use. Owners must interpret financial information, assess borrowing costs, manage repayment and digital risks, and incorporate data into routine decisions. Access, therefore, represents an enabling resource rather than an organisational capability or resilience outcome.

This distinction connects three insufficiently integrated literature streams. Financial inclusion research focuses on access and use, dynamic capabilities research explains how organisations sense change, seize opportunities, and reconfigure resources, while resilience scholarship examines how firms absorb disruption, adapt, and transform. Studied separately, these perspectives do not fully explain how MSMEs convert digitally enabled financial resources into effective organisational responses. The gap concerns how liquidity, transaction visibility, managerial information, and ecosystem connectivity become organisational capabilities and which conditions shape that conversion.

Empirical evidence reinforces this gap because similar levels of digital access produce different outcomes: some MSMEs use digital services to stabilise cash flow, improve information, and respond to market changes, while others encounter expensive credit, fraud, weak financial understanding, platform dependency, or peripheral technologies. This variation makes Indonesia a relevant setting for examining the issue, as financial digitalisation has expanded rapidly amid diverse enterprise conditions. By October 2024, QRIS had reached 54.1 million users and 34.7 million merchants, most of them MSMEs, while transaction volume increased by 183.9 per cent year on year and nominal value by 184.5 per cent (CNN Indonesia, 2024). Rapid adoption, however, does not demonstrate equivalent capacities to interpret financial information, manage digital risks, or use transaction data strategically, which confirms that technology adoption alone cannot explain business continuity or adaptation.

The national literacy profile reinforces the concern because the 2025 survey reported a financial inclusion index of 80.51 per cent and a financial literacy index of 66.46 per cent, while urban financial literacy reached 70.89 per cent compared with 59.60 per cent in rural areas and financial inclusion reached 83.61 per cent and 75.70 per cent, respectively (Yonatan, 2025) Although these indicators refer to the broader population rather than MSME capability directly, they reveal structural differences in knowledge,

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skills, and support environments that can shape the effective use of digital finance. These conditions sharpen the Indonesian research problem because literacy, connectivity, formality, institutional support, and sectoral characteristics influence the quality of use, making Indonesia a relevant setting for examining a broader emerging economy question: why does digital financial access become a strategic resource for some MSMEs but remain primarily a transaction channel for others?

The issue has direct policy relevance under *Asta Cita* and the National Medium-Term Development Plan (RPJMN) 2025 to 2029, enacted through Presidential Regulation No. 12 of 2025, because digital finance can support entrepreneurship, employment, downstream value creation, regional equality, poverty reduction, and sustainable development by broadening productive finance, improving transaction transparency, strengthening managerial information, and connecting enterprises with wider markets. However, the alignment of digital finance with these policy objectives depends on affordability, financial capability, institutional support, and adequate protection. At the firm level, MSME resilience may contribute to broader economic resilience when enterprises maintain operations, employment, local supply, and productive investment during disruption, while institutional coordination, suitable financial products, interoperable infrastructure, and regional support can reinforce this contribution. The relationship nevertheless remains conditional and institutionally mediated, and the reviewed evidence does not establish that digital financial inclusion has already generated macroeconomic resilience or achieved *Asta Cita* outcomes.

To address this problem, the article applies a structured narrative review to synthesise heterogeneous literature and develop an explanatory account rather than estimate a pooled causal effect (Snyder, 2019). The review asks how digital financial inclusion provides strategic resources to MSMEs, how firms convert those resources into absorptive, adaptive, and transformative resilience, and which contextual conditions enable or constrain the process. The article contributes by distinguishing access from effective organisational use, explaining capability conversion through sensing, seizing, and reconfiguring, identifying multilevel boundary conditions, and linking the framework with *Asta Cita* and economic resilience while separating the reviewed evidence, conceptual synthesis, and policy propositions that require further empirical testing.

LITERATURE REVIEW

Theoretical Studies

Economic resilience refers to an economic system's capacity to withstand disruption, maintain essential functions, adapt, and recover without enduring structural weakness. Within the *Asta Gatra* framework, the economic *gatra* supports national resilience through continuity in production, employment, and market activity. MSMEs contribute by generating jobs and household income, sustaining local supply, and supporting regional economies. Stronger MSME resilience can provide a micro-level foundation for broader economic resilience when institutions allow firm-level benefits to accumulate across regions.

Financial inclusion expands the MSME resource base through appropriate and affordable services. Formal finance can reduce vulnerability, ease liquidity constraints, and widen productive opportunities (Allen et al., 2016; Demirgüç-Kunt et al., 2017). Access and usage remain central dimensions (Beck et al., 2007; Allen et al., 2016), while service quality includes affordability, suitability, transparency, and security (Pesqué-Cela

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et al., 2021). Digitalisation reduces geographical and administrative barriers and generates financial information, while fintech can extend financing through alternative credit assessments for firms with limited collateral (Chen et al., 2019). Strategic value emerges when MSMEs integrate these resources into managerial decisions.

Digital finance can create vulnerability. Lending may ease working capital shortages, but unsuitable pricing or repayment structures can intensify financial pressure. Digital payments improve visibility but may increase platform dependence, while digital accounting strengthens records only when data are accurate and users possess adequate analytical capability (Arner et al., 2018; Gomber et al., 2018). Financial literacy, affordability, security, and institutional safeguards shape whether digital finance strengthens business capacity.

Dynamic capabilities theory explains how MSMEs convert financial and informational resources into organisational responses. Teece (2018) defines dynamic capabilities through sensing, seizing, and reconfiguring. Sensing identifies liquidity pressure, customer shifts, and opportunities; seizing translates information into financing, expenditure, or market decisions; and reconfiguring embeds effective responses into routines and relationships. Digital resources contribute to resilience when managerial capability converts information into appropriate action.

Organisational resilience concerns the capacity to withstand disruption and adapt to change. Duchek (2020) frames resilience through anticipation, coping, and adaptation, while Conz and Magnani (2020) emphasise its temporal and processual nature. Absorptive resilience maintains operations, adaptive resilience modifies routines, and transformative resilience renews business models or ecosystem relationships. Sustainability assesses the long-term viability of these responses. Excessive debt, insecure data management, and unsustainable financial arrangements may preserve short-term operations while increasing future vulnerability, creating synergies and trade-offs between resilience and sustainability (Weber, 2023). Sustainable MSME resilience therefore combines absorptive, adaptive, and transformative capacity with long-term viability while avoiding practices that weaken future resilience.

A theoretical gap remains because financial inclusion, dynamic capabilities, and organisational resilience are commonly examined separately. Financial inclusion research explains access, usage, and service quality (Beck et al., 2007; Allen et al., 2016; Pesqué-Cela et al., 2021), dynamic capabilities theory explains resource conversion (Teece, 2018), and resilience theory explains responses to disruption (Duchek, 2020; Conz & Magnani, 2020). Integration links liquidity access, transaction visibility, managerial information, and ecosystem connectivity with sensing, seizing, and reconfiguring, which support absorptive, adaptive, and transformative resilience. Financial literacy, affordability, trust, infrastructure, institutional support, and regulation condition the process, while organisational learning creates feedback.

Firm-level resilience can support wider economic resilience when continuity preserves production, employment, local supply chains, and productive investment. Broader effects depend on infrastructure, institutional capacity, and public policy, so firm-level outcomes do not automatically translate into national resilience. The framework positions MSME resilience within the economic *gatra* of *Asta Gatra* without assuming unsupported macro-level causality. *Asta Cita* provides the policy alignment framework by linking digital financial inclusion with entrepreneurship, employment, regional participation, and inclusive development, subject to adequate financial capability, affordability, infrastructure, and institutional support.

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Four propositions follow. Proposition 1 states that affordable, reliable, and fit-for-purpose digital financial services strengthen MSME resilience when integrated into core business processes. Proposition 2 proposes that sensing, seizing, and reconfiguring convert digital financial resources into absorptive, adaptive, and transformative resilience. Proposition 3 identifies financial literacy, trust, infrastructure, institutional support, and regulatory quality as conditions shaping conversion effectiveness and inclusiveness. Proposition 4 proposes that sustained MSME resilience can contribute to wider economic resilience and *Asta Cita* when institutional and policy conditions allow firm-level benefits to accumulate across enterprises and regions. These propositions require empirical validation.

Emperical Studies

Empirical research shows that financial inclusion can broaden access to financial resources, but its value depends on users' ability to manage those services effectively. Morgan and Long (2020) found that financial literacy and financial inclusion influenced financial behaviour in Laos, indicating that access becomes more useful when users possess adequate financial capabilities. Although their study focused on households, the relationship remains relevant to owner-managed MSMEs because financial knowledge also shapes financing and investment decisions. Digital finance can further reduce conventional financing barriers. Zhang et al. (2023) found that digitalisation and local financial development eased SME financing constraints in China, although the effects varied across geographic and institutional settings, while Tay et al. (2022) showed that infrastructure, affordability, and user capability can limit the productive use of inclusive digital finance.

Evidence of organisational capability reinforces this relationship. Putritamara et al. (2023) found that dynamic capabilities supported digital transformation and business resilience among Indonesian beekeeping MSMEs, while Supramono et al. (2025) associated organisational capabilities and financial behaviour with recovery and business sustainability. Kumar et al. (2024) identified management competence, knowledge management, monitoring, and control as important enablers of digital resilience, whereas Bhatti et al. (2025) linked analytics, digital platforms, and business networks with stronger innovation and performance. These findings indicate that technology creates strategic value when firms combine digital resources with managerial knowledge, organisational routines, and external relationships.

Financial capability also influences longer-term sustainability and resilience. Elmi et al. (2025) found that financial inclusion and financial literacy partially mediate the relationship between fintech adoption and SME sustainability in Somalia, showing that effective use can improve business decision-making without directly establishing resilience effects. Crisis evidence further highlights the importance of liquidity and adaptive capacity. Cowling et al. (2020) found that liquidity and access to finance helped small businesses absorb the economic shock of COVID-19, while Fairlie (2020) documented a sharp decline in small business activity during the early pandemic. In Indonesia, Purnomo et al. (2021) found that creative industry SMEs in Yogyakarta maintained continuity and growth through resource utilisation and corporate strategies, while Utami et al. (2021) identified human capital development as a key factor in strengthening MSME resilience to disaster risk.

Regional evidence extends the analysis beyond the firm level. Lee et al. (2022) found that industrial diversity strengthened regional resistance to the COVID-19 shock in

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South Korea, whereas greater pandemic exposure weakened MSME performance. Their findings suggest that enterprise resilience depends on markets, supply networks, infrastructure, and institutional conditions, while the continuity of many firms can help sustain production, employment, and local economic activity. Firm-level resilience may therefore contribute to broader economic resilience, although regional and institutional conditions mediate that contribution.

Overall, the literature examines financial inclusion, digital transformation, organisational capability, sustainability, and resilience through largely separate strands, leaving limited explanation of how MSMEs convert digital financial resources into absorptive, adaptive, and transformative resilience. The gap is particularly relevant to Indonesia, where rapid financial digitalisation coincides with disparities in literacy, infrastructure, business capability, and regional development. Existing evidence also does not establish a direct causal link between digital financial inclusion and *Asta Cita* outcomes. *Asta Cita* is therefore better positioned as a policy alignment framework that connects MSME resilience with entrepreneurship, employment, productive activity, regional participation, and broader economic resilience through adequate institutional support.

METHODS

Review Design, Scope and Analytical Alignment

The study adopts a structured narrative review to synthesise heterogeneous evidence on digital financial inclusion, organisational capabilities, and sustainable MSME resilience. Snyder (2019) guides review transparency, Thomas and Harden (2008) support thematic synthesis, and Richards and Linder (2021) inform operational reporting of sources, search procedures, and reference tracing. The review examines how digital financial resources are converted through organisational capabilities into absorptive, adaptive, and transformative resilience, as well as the conditions that enable or constrain this process. Publications from 2016 to 2025 form the primary evidence base, while earlier sources The primary evidence base consists of publications from 2016 to 2025, while earlier sources are retained solely for foundational concepts. only for foundational concepts. Indonesian policy documents support contextual alignment with economic resilience, *Asta Gatra*, *Asta Cita*, and the RPJMN 2025 to 2029 rather than serving as empirical evidence of firm-level effects. The analysis addresses three questions concerning resource mechanisms, capability conversion, and boundary conditions, while treating economic resilience and *Asta Cita* as broader implications rather than direct empirical outcomes.

Information Sources and Search Strategy

The review searched Scopus and Web of Science as the main indexing databases and extended coverage through ScienceDirect, Emerald Insight, SpringerLink, Google Scholar, backward reference searching, and forward citation tracing. All identified records followed the same eligibility and quality criteria. The core search combined digital financial inclusion, MSMEs, and resilience using ("digital financial inclusion" OR fintech OR "digital finance" OR "mobile banking" OR "digital payment" OR "digital accounting") AND (MSME OR SME* OR microenterprise* OR "small business*") AND (resilien* OR sustainab* OR recover* OR adapt* OR continuit*). A supplementary search captured capability conversion using ("digital finance" OR "fintech" OR

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"digitalisation") AND ("MSME" OR "SME") AND ("dynamic capabilit*" OR "organisational capabilit*" OR sensing OR seizing OR reconfigur*)"sensing" OR "seizing" OR "reconfigur*"). Searches focusing on Indonesia added Indonesia* to relevant combinations, while comparable developing economy studies remained eligible when they clarified mechanisms or boundary conditions. Field codes, quotation rules, and wildcards followed the technical requirements of each platform.

Table 1. Review protocol and decision rules

Element	Operational decision
Period	Main evidence published from 2016 to 2025; earlier sources retained only for foundational theory.
Inclusion	Peer reviewed empirical, conceptual, and review studies addressing digital finance, MSMEs, organisational capability, resilience, or sustainability; authoritative Indonesian policy documents used only for contextual mapping.
Exclusion	Purely technical fintech studies, irrelevant enterprise contexts or mechanisms, opinion pieces, inaccessible full texts, duplicates, and analytically irrelevant sources.
Appraisal	Design and claim alignment, transparency of samples and measures, analytical credibility, contextual clarity, and proportionality of conclusions.

Selection and Quality Appraisal

Selection included duplicate screening, title and abstract assessment, full-text eligibility review, and citation tracing. A predefined relevance rule retained sources that informed at least one component of the resource, capability, and resilience pathway or a stated boundary condition. Adverse, null, conditional, and unequal findings were also retained to reduce confirmation bias. Quality appraisal considered the methodological characteristics of each source rather than applying a common numerical score to heterogeneous designs. Empirical evidence received greater weight when the design supported the claim, constructs and samples were transparent, analytical procedures were credible, and conclusions remained proportional to the evidence. Cross-sectional and descriptive studies informed associations and mechanisms but not temporal causality, while conceptual studies supported construct development, and policy documents supported policy alignment only.

Data Extraction and Synthesis

The extraction matrix recorded the source, setting, research design, digital finance mechanism, organisational capability, resilience outcome, boundary condition, and study limitation (Snyder, 2019). Thematic synthesis combined deductive and inductive coding following Thomas and Harden (2008). Financial inclusion, dynamic capability, and organisational resilience theories informed the initial categories, while recurring patterns refined them during subsequent analyses. The synthesis identified four resource mechanisms comprising liquidity access, transactional visibility, managerial information, and ecosystem connectivity; three dynamic capabilities comprising sensing, seizing, and reconfiguring; and three resilience outcomes comprising absorptive, adaptive, and

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transformative resilience. Constant comparison examined these mechanisms against adverse and conditional evidence, including overindebtedness, data exclusion, fraud, platform dependency, and unequal infrastructure.

Table 2. Characteristics of the principal sources informing the synthesis

Source	Context and design	Role in the synthesis
Cowling et al. (2020)	UK SMEs; crisis evidence	Shows how liquidity and financing support shock absorption and business continuity.
Duchek (2020)	Conceptual study	Frames resilience as a capability involving anticipation, coping, and adaptation rather than survival alone.
Morgan and Long (2020)	Laos; household survey	Shows that financial access requires financial capability to support effective use.
Tay et al. (2022)	Developing economies; review	Identifies affordability, literacy, and exclusion as conditions shaping digital financial inclusion.
Zhang et al. (2023)	China; empirical SME study	Shows that digitalisation can reduce financing constraints under varying institutional conditions.
Putritamara et al. (2023)	Indonesian MSMEs; survey	Links dynamic capabilities and digital transformation with business resilience.
Kumar et al. (2024)	SMEs; expert based modelling	Identifies managerial and digital capabilities as organisational resilience enablers.
Supramono et al. (2025)	Indonesian MSMEs; PLS SEM	Links organisational capabilities and financial behaviour with recovery and business sustainability.
Bhatti et al. (2025)	Manufacturing MSMEs; time lagged data	Shows how analytical, platform, and network capabilities support adaptive organisational outcomes.
Elmi et al. (2025)	Somalia; empirical SME study	Shows that financial inclusion and literacy partly mediate the relationship between fintech adoption and SME sustainability

Review integrity and limitations

The structured narrative review integrates heterogeneous theoretical, empirical, and policy evidence through a transparent and traceable synthesis. Its limitations include incomplete stage-level search records and execution dates for some platforms, potential English language and database indexing bias, heterogeneous constructs and research designs, and the predominance of cross-sectional evidence. Publication bias may also favour positive digital adoption outcomes. These constraints limit causal and temporal

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inference, so the proposed framework should be treated as a theory-building synthesis requiring systematic updating and longitudinal empirical testing.

RESULTS AND DISCUSSIONS

Result

The synthesis addressed the three research questions by identifying the digital financial resources available to MSMEs, examining how organisational capabilities convert these resources into resilience outcomes, and determining the conditions that enable or constrain this conversion. The findings distinguish four strategic resources comprising liquidity access, transactional visibility, managerial information, and ecosystem connectivity. These resources acquire resilience value only when firms incorporate them into organisational routines that support sensing, seizing, and reconfiguring. The resulting capabilities are associated with absorptive, adaptive, and transformative resilience, while financial literacy, firm characteristics, infrastructure, institutional support, regulation, and trust influence the effectiveness of the conversion process. This structure allows the findings to follow the analytical sequence established in the research questions and the review method.

Digital Financial Resources

The synthesis identifies four strategic digital financial resources. Liquidity access can reduce collateral and documentation barriers, accelerate financing, and support short-term continuity, but resilience benefits depend on financing costs, maturity, and repayment schedules that match the operating cycle; unsuitable credit may instead increase excessive debt. Transactional visibility generated through digital payments can reduce information asymmetry, strengthen auditability, improve credit assessment, and increase the visibility of informal enterprises, although fragmented platforms and weak separation between personal and business finances may limit managerial value. Managerial information from mobile banking and digital accounting can support liquidity monitoring, margin assessment, and sensing capability when owners possess sufficient financial literacy to interpret the data. Morgan and Long (2020) show that financial capability shapes effective service use, while Elmi et al. (2025) find that financial inclusion and financial literacy partly mediate the relationship between fintech adoption and SME sustainability, supporting the capability and sustainability pathway rather than direct resilience effects. Ecosystem connectivity can link MSMEs with customers, suppliers, marketplaces, financial institutions, and government programmes, expand market access, and support new business models, although platform dependence may create switching costs, information asymmetry, and unequal bargaining power.

Capability Conversion and Resilience Outcomes

The reviewed evidence indicates that digital financial resources contribute to resilience when MSMEs embed them in their organisational routines. Sensing develops through the use of transaction, financial, and market information; seizing through the mobilisation of suitable finance and market responses; and reconfiguring through the integration of financial, operational, and customer processes into revised routines or business models, consistent with dynamic capability theory (Teece, 2018). Similar levels of digital adoption may therefore produce different outcomes because occasional service use reflects access, whereas the use of transaction histories for cash flow forecasting, financing decisions, or inventory adjustments reflects organisational capability. Digital

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transformation research likewise shows that capability development depends on learning, managerial adjustment, and organisational renewal rather than technology adoption alone (Warner & Wäger, 2019; Kumar et al., 2024; Bhatti et al., 2025). The conversion process produces absorptive resilience through continuity during disruption, adaptive resilience through operational adjustment, and transformative resilience through deeper organisational renewal. Evidence on liquidity supports absorptive continuity (Cowling et al., 2020), while studies of Indonesian MSMEs and broader digital capability research link dynamic capabilities, digital transformation, analytics, platforms, and networks with resilience and organisational renewal (Putritamara et al., 2023; Kumar et al., 2024; Bhatti et al., 2025). The synthesis, therefore, identifies a sequential pathway from digital financial resources to organisational capabilities and differentiated resilience outcomes.

Table 3. Capability-Conversion Framework

Digital financial resource	Organisational capability	Resilience outcome	Boundary risk
Liquidity access	Liquidity access: seizing suitable and timely finance	Absorptive resilience	Excessive cost, unsuitable maturity, or repayment pressure
Transactional visibility	Sensing financial and market signals	Adaptive resilience.	Fragmented records or poor data quality.
Managerial information	Reconfiguring routines	Adaptive resilience.	Low financial literacy and weak data discipline
Ecosystem connectivity	Seizing and reconfiguring market relationships.	Transformative resilience.	P latform dependency, exclusion, and unequal bargaining power.

Boundary Conditions and Unequal Outcomes

The synthesis identifies financial literacy, digital capability, firm characteristics, infrastructure, institutional support, regulatory readiness, and trust as key boundary conditions shaping whether MSMEs convert digital financial resources into resilience. Financial and digital literacy affect effective use, while firm size, sector, formality, owner education, location, and access to productive assets influence adoption and subsequent benefits. Smaller and rural enterprises may face weaker connectivity, limited support, and less suitable financing. Interoperable systems, reliable infrastructure, mentoring, accounting assistance, and market access can strengthen organisational capability, while consumer protection, data governance, transparent pricing, and dispute resolution sustain trust. Weak oversight may expose MSMEs to fraud or inappropriate products, whereas excessive compliance can exclude smaller firms, requiring regulation to balance accessibility, protection, service quality, and accountability (Arner et al., 2018; Zetzsche et al., 2020).

Discussion

Capability Conversion and Theoretical Interpretation

The findings show that financial access alone does not generate organisational resilience because digital financial resources acquire strategic value only when MSMEs convert them into effective organisational responses. This interpretation aligns with

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multidimensional financial inclusion approaches that distinguish access from usage, service quality, and effective use (Allen et al., 2016; Pesqué Cela et al., 2021). Dynamic capability theory explains the conversion through sensing, seizing, and reconfiguring (Teece, 2018), while organisational resilience theory clarifies how these capabilities support anticipation, adaptation, and renewal rather than survival alone (Duchek, 2020; Conz & Magnani, 2020). The synthesis, therefore, identifies a pathway from digital financial resources to organisational capabilities and differentiated resilience outcomes, explaining why similar levels of fintech adoption can produce different results across MSMEs.

Sustainable MSME Resilience

The synthesis distinguishes organisational resilience from sustainability. Organisational resilience concerns the capacity to absorb disruption, adapt operations, and transform when required, whereas sustainability concerns the durability and longer-term viability of those responses. Sustainable MSME resilience therefore arises when absorptive, adaptive, and transformative capabilities are maintained without creating financial, social, or governance vulnerabilities that weaken future viability. Rapid digital credit, platform dependence, weak data governance, and cybersecurity risks may support short-term adaptation while undermining sustainability. Elmi et al. (2025) further show that financial inclusion and financial literacy partly mediate the relationship between fintech adoption and SME sustainability, supporting the longer-term sustainability dimension of the framework rather than providing direct evidence of absorptive, adaptive, or transformative resilience. This distinction prevents sustainability, survival, performance, and resilience from being treated as interchangeable constructs.

MSME Resilience within the Asta Gatra Framework

Within the *Asta Gatra* framework, MSME resilience relates most directly to the economic *gatra* because MSMEs support production, employment, household income, local supply networks, and regional economic activity. Absorptive resilience preserves essential transactions and production during disruption, adaptive resilience supports adjustments in financing, markets, pricing, and operations, while transformative resilience enables formalisation, productivity improvement, wider market participation, and new business models. Enterprise resilience does not independently constitute national economic resilience, but its cumulative effects across firms, sectors, and regions can reduce the transmission of economic shocks. The pathway also reflects interactions with geographical, demographic, social, and institutional conditions through access to digital infrastructure, economic opportunity, social stability, and regulatory capacity. Digital financial inclusion should therefore be treated as an enabling mechanism, while MSME resilience represents a micro-level contribution to the economic *gatra* whose broader national significance depends on institutional capacity and interactions with other dimensions of *Asta Gatra*.

Policy Alignment with Asta Cita

Asta Cita provides a policy framework for translating the identified resilience mechanisms into national development priorities. Suitable finance, digital payments, market connectivity, transaction visibility, supply chain finance, and platform integration can promote entrepreneurship, productive employment, participation in higher-value

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activities, village development, regional inclusion, poverty reduction, and sustainable business practices (Government of Indonesia, 2025). The reviewed evidence, however, supports policy alignment rather than direct causal effects on *Asta Cita* outcomes. Policy evaluation should therefore move beyond account ownership, lending volumes, and transaction counts by assessing effective use, organisational capability, business continuity, productive investment, employment retention, and market upgrading. Government initiatives that combine financial inclusion, literacy, and targeted MSME support can strengthen the conversion of digital financial resources into durable organisational capabilities and broader economic resilience (Coordinating Ministry for Economic Affairs, 2025, 2026).

Table 4. *Asta Cita* Policy Alignment and Evaluative Indicators

Asta Cita priority	Capability pathway	Evaluative outcome
Entrepreneurship and productive employment	Suitable finance, digital payments, and market capability	Business continuity, employment, and productive investment
Downstreaming and value creation	Transaction data, supply chain finance, and platform integration	Higher value chain participation and improved margins
Village development and regional equality	Accessible services, connectivity, and financial capability	Effective use among underserved MSMEs
Sustainable development	Digital records, traceability, and responsible finance	Resource efficiency and durable viability

CONCLUSION

The literature synthesis indicates that digital financial inclusion can support sustainable MSME resilience when financial, informational, and relational resources are converted into organisational capabilities. Liquidity access, transactional visibility, managerial information, and ecosystem connectivity support sensing, seizing, and reconfiguring, which underpin absorptive, adaptive, and transformative resilience. The relationship remains conditional on literacy, firm characteristics, infrastructure, institutional support, regulation, trust, consumer protection, and data governance. Within *Asta Gatra*, the strongest contribution lies in the economic dimension through business continuity, employment preservation, productive activity, and market adaptation. Alignment with *Asta Cita* therefore represents a policy pathway rather than evidence of direct causal effects on national resilience.

Policy should move beyond account ownership and transaction volume toward effective use, organisational capability, and measurable resilience outcomes. Government agencies, financial institutions, fintech providers, local governments, universities, and business associations should strengthen financial and digital literacy, product suitability, infrastructure interoperability, consumer protection, and assisted access for underserved MSMEs. The review remains limited by incomplete search records for some platforms, potential language and indexing bias, heterogeneous constructs and study designs, and

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predominantly cross-sectional evidence. Future research should apply longitudinal, mixed-method, and multilevel designs to test the resource, capability, and resilience pathway across regions, sectors, and firm characteristics while examining excessive debt, fraud, algorithmic exclusion, data exploitation, platform dependency, and unequal infrastructure.

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