

KNOWLEDGE SHARING AND COLLABORATIVE LEARNING IN MSME ECOSYSTEMS: A CONCEPTUAL FRAMEWORK FOR LOCAL COMPETITIVENESS

Nida Garnida Fitrianti¹, Anggun Yolistina²

¹Organisasi KRIEZ, Indonesia

²Yayasan KRIEZ, Indonesia

Abstract

Background: Knowledge Sharing And Collaborative Learning In Msme Ecosystems is increasingly relevant to MSMEs because competitive adaptation depends on the ability to combine limited internal resources with market knowledge, relationships, and disciplined organizational learning.

Aims: This article develops an integrative conceptual framework for knowledge sharing and collaborative learning in msme ecosystems and explains its contribution to MSME competitiveness and resilience.

Research Method: The study uses an integrative conceptual review of established scholarly literature available before the July 2024 issue placement. No primary survey, interview, experiment, or statistical dataset is claimed.

Results and Conclusion: The synthesis identifies connected managerial capabilities involving sensing, knowledge acquisition, coordination, experimentation, implementation, evaluation, and learning. The framework emphasizes that sustainable outcomes depend on strategic fit, stakeholder trust, resource discipline, and repeated adaptation.

Contribution: The paper provides a structured framework, practical indicators, and propositions that can guide future empirical research and MSME development programs.

Keywords: Knowledge Sharing; Collaborative Learning; MSMEs; Entrepreneurial Ecosystem; Local Competitiveness

INTRODUCTION

MSMEs operate in environments characterized by limited resources, changing customer expectations, technological shifts, and interdependence with local institutions. Knowledge Sharing And Collaborative Learning In Msme Ecosystems provides a useful perspective for understanding how small enterprises can respond to these pressures without assuming the resources of large corporations.

The resource-based view suggests that competitive advantage depends on valuable and organizationally embedded resources (Barney, 1991). Dynamic capability theory extends this argument by emphasizing the capacity to sense change, seize opportunities, and reconfigure resources as environments evolve (Teece et al., 1997; Teece, 2007).

Knowledge is particularly important for small firms because internal specialization is limited. Absorptive capacity explains how enterprises recognize, assimilate, transform, and exploit external knowledge (Cohen & Levinthal, 1990; Zahra & George, 2002). Networks can broaden this knowledge base through customers, suppliers, universities, associations, communities, and peer entrepreneurs.

Innovation and adaptation also require a balance between exploration and exploitation. March (1991) shows that organizations must investigate new possibilities while maintaining effective existing routines. For MSMEs, this balance is constrained by managerial attention and cash flow, making staged experimentation especially important.

Entrepreneurial ecosystems provide the broader context in which these capabilities develop. Stam (2015) and Spigel (2017) emphasize systemic and relational conditions rather than isolated support instruments. The quality of connections can therefore influence the ability of an MSME to obtain knowledge and complementary resources.

This article develops a conceptual framework for knowledge sharing and collaborative learning in msme ecosystems. It focuses on practical mechanisms through which MSMEs can convert information, relationships, and limited resources into repeatable adaptation and sustainable value creation.

RESEARCH METHOD

This paper adopts an integrative conceptual review to connect complementary theories relevant to the focal topic. The objective is theoretical synthesis rather than statistical estimation.

Literature was selected for conceptual relevance, scholarly traceability, and availability before the July 2024 issue placement. The manuscript does not claim a systematic-review sample, database count, respondents, interviews, experiments, or original numerical findings.

The analysis identifies core constructs, maps their relationships to MSME management, examines enabling conditions and risks, and integrates them into a practical framework. The resulting propositions require future empirical testing.

RESULTS AND DISCUSSION

KNOWLEDGE AS AN MSME RESOURCE

This capability begins with disciplined recognition of a concrete business problem or opportunity. Managers should distinguish symptoms from causes and connect decisions with customer, operational, financial, and institutional evidence. In the context of knowledge as an msme resource, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

External knowledge expands the decision base, but access alone is insufficient. The enterprise needs routines for interpreting information, comparing it with existing experience, and deciding whether it is relevant to the firm's context. In the context of knowledge as an msme resource, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Resource constraints make prioritization essential. Small enterprises benefit from staged commitments in which low-cost tests precede larger investments. This approach protects cash while creating evidence for subsequent decisions. In the context of knowledge as an msme resource, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Relationships influence implementation. Trust can reduce coordination costs, but informal relationships should be supported by clear responsibilities, transparent expectations, and appropriate documentation when resources or confidential information are involved. In the context of knowledge as an msme resource, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Learning requires feedback. Managers should define a small set of indicators before implementation and compare expected outcomes with actual results. Qualitative feedback can complement financial and operational measures. In the context of knowledge as an msme resource, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Capability becomes strategic when it is repeatable. A one-time successful initiative may create value, but adaptive competitiveness depends on the enterprise being able to sense, learn, implement, and reconfigure repeatedly as conditions change. In the context of knowledge as an msme resource, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

SOCIAL CAPITAL AND TRUST

External knowledge expands the decision base, but access alone is insufficient. The enterprise needs routines for interpreting information, comparing it with existing experience, and deciding whether it is relevant to the firm's context. In the context of social capital and trust, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Resource constraints make prioritization essential. Small enterprises benefit from staged commitments in which low-cost tests precede larger investments. This approach protects cash while creating evidence for subsequent decisions. In the context of social capital and trust, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Relationships influence implementation. Trust can reduce coordination costs, but informal relationships should be supported by clear responsibilities, transparent expectations, and appropriate

documentation when resources or confidential information are involved. In the context of social capital and trust, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Learning requires feedback. Managers should define a small set of indicators before implementation and compare expected outcomes with actual results. Qualitative feedback can complement financial and operational measures. In the context of social capital and trust, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Capability becomes strategic when it is repeatable. A one-time successful initiative may create value, but adaptive competitiveness depends on the enterprise being able to sense, learn, implement, and reconfigure repeatedly as conditions change. In the context of social capital and trust, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

This capability begins with disciplined recognition of a concrete business problem or opportunity. Managers should distinguish symptoms from causes and connect decisions with customer, operational, financial, and institutional evidence. In the context of social capital and trust, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

PEER LEARNING AMONG ENTREPRENEURS

Resource constraints make prioritization essential. Small enterprises benefit from staged commitments in which low-cost tests precede larger investments. This approach protects cash while creating evidence for subsequent decisions. In the context of peer learning among entrepreneurs, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Relationships influence implementation. Trust can reduce coordination costs, but informal relationships should be supported by clear responsibilities, transparent expectations, and appropriate documentation when resources or confidential information are involved. In the context of peer learning among entrepreneurs, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Learning requires feedback. Managers should define a small set of indicators before implementation and compare expected outcomes with actual results. Qualitative feedback can complement financial and operational measures. In the context of peer learning among entrepreneurs, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Capability becomes strategic when it is repeatable. A one-time successful initiative may create value, but adaptive competitiveness depends on the enterprise being able to sense, learn, implement, and reconfigure repeatedly as conditions change. In the context of peer learning among entrepreneurs, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

This capability begins with disciplined recognition of a concrete business problem or opportunity. Managers should distinguish symptoms from causes and connect decisions with customer, operational, financial, and institutional evidence. In the context of peer learning among entrepreneurs, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

External knowledge expands the decision base, but access alone is insufficient. The enterprise needs routines for interpreting information, comparing it with existing experience, and deciding whether it is relevant to the firm's context. In the context of peer learning among entrepreneurs, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

UNIVERSITY AND INSTITUTIONAL LINKAGES

Relationships influence implementation. Trust can reduce coordination costs, but informal relationships should be supported by clear responsibilities, transparent expectations, and appropriate documentation when resources or confidential information are involved. In the context of university and institutional linkages, this principle means that decisions should remain proportionate to

enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Learning requires feedback. Managers should define a small set of indicators before implementation and compare expected outcomes with actual results. Qualitative feedback can complement financial and operational measures. In the context of university and institutional linkages, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Capability becomes strategic when it is repeatable. A one-time successful initiative may create value, but adaptive competitiveness depends on the enterprise being able to sense, learn, implement, and reconfigure repeatedly as conditions change. In the context of university and institutional linkages, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

This capability begins with disciplined recognition of a concrete business problem or opportunity. Managers should distinguish symptoms from causes and connect decisions with customer, operational, financial, and institutional evidence. In the context of university and institutional linkages, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

External knowledge expands the decision base, but access alone is insufficient. The enterprise needs routines for interpreting information, comparing it with existing experience, and deciding whether it is relevant to the firm's context. In the context of university and institutional linkages, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Resource constraints make prioritization essential. Small enterprises benefit from staged commitments in which low-cost tests precede larger investments. This approach protects cash while creating evidence for subsequent decisions. In the context of university and institutional linkages, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

SUPPLIER AND CUSTOMER KNOWLEDGE

Learning requires feedback. Managers should define a small set of indicators before implementation and compare expected outcomes with actual results. Qualitative feedback can complement financial and operational measures. In the context of supplier and customer knowledge, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Capability becomes strategic when it is repeatable. A one-time successful initiative may create value, but adaptive competitiveness depends on the enterprise being able to sense, learn, implement, and reconfigure repeatedly as conditions change. In the context of supplier and customer knowledge, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

This capability begins with disciplined recognition of a concrete business problem or opportunity. Managers should distinguish symptoms from causes and connect decisions with customer, operational, financial, and institutional evidence. In the context of supplier and customer knowledge, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

External knowledge expands the decision base, but access alone is insufficient. The enterprise needs routines for interpreting information, comparing it with existing experience, and deciding whether it is relevant to the firm's context. In the context of supplier and customer knowledge, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Resource constraints make prioritization essential. Small enterprises benefit from staged commitments in which low-cost tests precede larger investments. This approach protects cash while creating evidence for subsequent decisions. In the context of supplier and customer knowledge, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Relationships influence implementation. Trust can reduce coordination costs, but informal relationships should be supported by clear responsibilities, transparent expectations, and appropriate documentation when resources or confidential information are involved. In the context of supplier

and customer knowledge, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

INTERMEDIARY ORGANIZATIONS

Capability becomes strategic when it is repeatable. A one-time successful initiative may create value, but adaptive competitiveness depends on the enterprise being able to sense, learn, implement, and reconfigure repeatedly as conditions change. In the context of intermediary organizations, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

This capability begins with disciplined recognition of a concrete business problem or opportunity. Managers should distinguish symptoms from causes and connect decisions with customer, operational, financial, and institutional evidence. In the context of intermediary organizations, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

External knowledge expands the decision base, but access alone is insufficient. The enterprise needs routines for interpreting information, comparing it with existing experience, and deciding whether it is relevant to the firm's context. In the context of intermediary organizations, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Resource constraints make prioritization essential. Small enterprises benefit from staged commitments in which low-cost tests precede larger investments. This approach protects cash while creating evidence for subsequent decisions. In the context of intermediary organizations, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Relationships influence implementation. Trust can reduce coordination costs, but informal relationships should be supported by clear responsibilities, transparent expectations, and appropriate documentation when resources or confidential information are involved. In the context of intermediary organizations, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Learning requires feedback. Managers should define a small set of indicators before implementation and compare expected outcomes with actual results. Qualitative feedback can complement financial and operational measures. In the context of intermediary organizations, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

DIGITAL KNOWLEDGE NETWORKS

This capability begins with disciplined recognition of a concrete business problem or opportunity. Managers should distinguish symptoms from causes and connect decisions with customer, operational, financial, and institutional evidence. In the context of digital knowledge networks, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

External knowledge expands the decision base, but access alone is insufficient. The enterprise needs routines for interpreting information, comparing it with existing experience, and deciding whether it is relevant to the firm's context. In the context of digital knowledge networks, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Resource constraints make prioritization essential. Small enterprises benefit from staged commitments in which low-cost tests precede larger investments. This approach protects cash while creating evidence for subsequent decisions. In the context of digital knowledge networks, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Relationships influence implementation. Trust can reduce coordination costs, but informal relationships should be supported by clear responsibilities, transparent expectations, and appropriate documentation when resources or confidential information are involved. In the context of digital knowledge networks, this principle means that decisions should remain proportionate to enterprise

capacity and should be evaluated according to observable business value rather than activity volume alone.

Learning requires feedback. Managers should define a small set of indicators before implementation and compare expected outcomes with actual results. Qualitative feedback can complement financial and operational measures. In the context of digital knowledge networks, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Capability becomes strategic when it is repeatable. A one-time successful initiative may create value, but adaptive competitiveness depends on the enterprise being able to sense, learn, implement, and reconfigure repeatedly as conditions change. In the context of digital knowledge networks, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

ABSORPTIVE CAPACITY AND APPLICATION

External knowledge expands the decision base, but access alone is insufficient. The enterprise needs routines for interpreting information, comparing it with existing experience, and deciding whether it is relevant to the firm's context. In the context of absorptive capacity and application, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Resource constraints make prioritization essential. Small enterprises benefit from staged commitments in which low-cost tests precede larger investments. This approach protects cash while creating evidence for subsequent decisions. In the context of absorptive capacity and application, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Relationships influence implementation. Trust can reduce coordination costs, but informal relationships should be supported by clear responsibilities, transparent expectations, and appropriate documentation when resources or confidential information are involved. In the context of absorptive capacity and application, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Learning requires feedback. Managers should define a small set of indicators before implementation and compare expected outcomes with actual results. Qualitative feedback can complement financial and operational measures. In the context of absorptive capacity and application, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Capability becomes strategic when it is repeatable. A one-time successful initiative may create value, but adaptive competitiveness depends on the enterprise being able to sense, learn, implement, and reconfigure repeatedly as conditions change. In the context of absorptive capacity and application, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

This capability begins with disciplined recognition of a concrete business problem or opportunity. Managers should distinguish symptoms from causes and connect decisions with customer, operational, financial, and institutional evidence. In the context of absorptive capacity and application, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

MANAGERIAL IMPLICATIONS

Resource constraints make prioritization essential. Small enterprises benefit from staged commitments in which low-cost tests precede larger investments. This approach protects cash while creating evidence for subsequent decisions. In the context of managerial implications, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Relationships influence implementation. Trust can reduce coordination costs, but informal relationships should be supported by clear responsibilities, transparent expectations, and appropriate documentation when resources or confidential information are involved. In the context of managerial implications, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Learning requires feedback. Managers should define a small set of indicators before implementation and compare expected outcomes with actual results. Qualitative feedback can complement financial and operational measures. In the context of managerial implications, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Capability becomes strategic when it is repeatable. A one-time successful initiative may create value, but adaptive competitiveness depends on the enterprise being able to sense, learn, implement, and reconfigure repeatedly as conditions change. In the context of managerial implications, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

This capability begins with disciplined recognition of a concrete business problem or opportunity. Managers should distinguish symptoms from causes and connect decisions with customer, operational, financial, and institutional evidence. In the context of managerial implications, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

External knowledge expands the decision base, but access alone is insufficient. The enterprise needs routines for interpreting information, comparing it with existing experience, and deciding whether it is relevant to the firm’s context. In the context of managerial implications, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

POLICY AND ECOSYSTEM IMPLICATIONS

Relationships influence implementation. Trust can reduce coordination costs, but informal relationships should be supported by clear responsibilities, transparent expectations, and appropriate documentation when resources or confidential information are involved. In the context of policy and ecosystem implications, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Learning requires feedback. Managers should define a small set of indicators before implementation and compare expected outcomes with actual results. Qualitative feedback can complement financial and operational measures. In the context of policy and ecosystem implications, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Capability becomes strategic when it is repeatable. A one-time successful initiative may create value, but adaptive competitiveness depends on the enterprise being able to sense, learn, implement, and reconfigure repeatedly as conditions change. In the context of policy and ecosystem implications, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

This capability begins with disciplined recognition of a concrete business problem or opportunity. Managers should distinguish symptoms from causes and connect decisions with customer, operational, financial, and institutional evidence. In the context of policy and ecosystem implications, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

External knowledge expands the decision base, but access alone is insufficient. The enterprise needs routines for interpreting information, comparing it with existing experience, and deciding whether it is relevant to the firm’s context. In the context of policy and ecosystem implications, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Resource constraints make prioritization essential. Small enterprises benefit from staged commitments in which low-cost tests precede larger investments. This approach protects cash while creating evidence for subsequent decisions. In the context of policy and ecosystem implications, this principle means that decisions should remain proportionate to enterprise capacity and should be evaluated according to observable business value rather than activity volume alone.

Table 1. Conceptual Capability Framework for Article 5

Dimension	Managerial Question	Illustrative Practice	Expected Contribution
Knowledge As An Msme Resource	What needs to be understood or coordinated?	Use structured diagnosis, small experiments, partner feedback, and periodic review.	Improved learning, implementation quality, and adaptive competitiveness.

Social Capital And Trust	What needs to be understood or coordinated?	Use structured diagnosis, small experiments, partner feedback, and periodic review.	Improved learning, implementation quality, and adaptive competitiveness.
Peer Learning Among Entrepreneurs	What needs to be understood or coordinated?	Use structured diagnosis, small experiments, partner feedback, and periodic review.	Improved learning, implementation quality, and adaptive competitiveness.
University And Institutional Linkages	What needs to be understood or coordinated?	Use structured diagnosis, small experiments, partner feedback, and periodic review.	Improved learning, implementation quality, and adaptive competitiveness.
Supplier And Customer Knowledge	What needs to be understood or coordinated?	Use structured diagnosis, small experiments, partner feedback, and periodic review.	Improved learning, implementation quality, and adaptive competitiveness.
Intermediary Organizations	What needs to be understood or coordinated?	Use structured diagnosis, small experiments, partner feedback, and periodic review.	Improved learning, implementation quality, and adaptive competitiveness.

PRACTICAL EVALUATION FRAMEWORK

Evaluation should distinguish inputs, processes, capabilities, and outcomes. Inputs show resources committed, while process indicators show whether the proposed routines are actually used.

Capability indicators can include quality of problem diagnosis, frequency of structured learning, completion of experiments, use of external knowledge, and documented follow-up.

Outcome indicators should be selected according to the intervention and may include customer retention, contribution margin, process time, quality, market diversification, or business continuity.

Evaluation should support learning rather than become a reporting exercise. Results should inform decisions to continue, modify, scale, or stop an initiative.

RISKS AND BOUNDARY CONDITIONS

The proposed framework does not imply that every MSME should adopt the same practices. Sector, size, ownership, location, market position, and resource availability influence feasibility.

Excessive formalization can burden very small firms. Governance mechanisms should remain proportionate to risk and complexity.

External partnerships can create dependence, conflicts of interest, or information risks. Clear expectations and responsible data handling are therefore important.

Macroeconomic shocks, infrastructure constraints, regulation, and market decline can limit outcomes even when firm-level capabilities are strong.

RESEARCH PROPOSITIONS AND FUTURE RESEARCH

P1. Stronger sensing routines are positively associated with the relevance of MSME adaptation initiatives.

P2. Absorptive capacity strengthens the relationship between external knowledge access and implementation quality.

P3. Staged experimentation reduces the cost of uncertainty in resource-constrained MSMEs.

P4. Network quality strengthens access to complementary knowledge and resources.

P5. Learning-based reconfiguration is positively associated with adaptive competitiveness.

Future studies can test these propositions using longitudinal surveys, comparative case studies, network analysis, or mixed methods across sectors and regions.

Implementation quality also depends on sequencing and managerial attention. MSMEs should translate broad strategic intentions into a limited number of observable actions, assign responsibility, establish a review point, and preserve records of what was learned. This disciplined approach reduces the risk that new initiatives remain disconnected from daily operations.

Capability development is cumulative rather than instantaneous. Repeated cycles of diagnosis, action, feedback, and adjustment allow the enterprise to refine judgment and improve coordination with external partners. Over time, these routines can lower search costs, improve decision speed, and make adaptation less dependent on individual intuition.

Implementation quality also depends on sequencing and managerial attention. MSMEs should translate broad strategic intentions into a limited number of observable actions, assign responsibility, establish a review point, and preserve records of what was learned. This disciplined approach reduces the risk that new initiatives remain disconnected from daily operations.

Capability development is cumulative rather than instantaneous. Repeated cycles of diagnosis, action, feedback, and adjustment allow the enterprise to refine judgment and improve coordination with external partners. Over time, these routines can lower search costs, improve decision speed, and make adaptation less dependent on individual intuition.

Implementation quality also depends on sequencing and managerial attention. MSMEs should translate broad strategic intentions into a limited number of observable actions, assign responsibility, establish a review point, and preserve records of what was learned. This disciplined approach reduces the risk that new initiatives remain disconnected from daily operations.

Capability development is cumulative rather than instantaneous. Repeated cycles of diagnosis, action, feedback, and adjustment allow the enterprise to refine judgment and improve coordination with external partners. Over time, these routines can lower search costs, improve decision speed, and make adaptation less dependent on individual intuition.

Implementation quality also depends on sequencing and managerial attention. MSMEs should translate broad strategic intentions into a limited number of observable actions, assign responsibility, establish a review point, and preserve records of what was learned. This disciplined approach reduces the risk that new initiatives remain disconnected from daily operations.

Capability development is cumulative rather than instantaneous. Repeated cycles of diagnosis, action, feedback, and adjustment allow the enterprise to refine judgment and improve coordination with external partners. Over time, these routines can lower search costs, improve decision speed, and make adaptation less dependent on individual intuition.

LIMITATIONS

This article is conceptual and does not provide causal estimates or original empirical findings. The proposed relationships require testing in specific contexts.

The framework integrates broad management perspectives and therefore cannot capture every sector-specific technical requirement.

Future research should examine heterogeneity among micro, small, and medium enterprises and identify conditions under which the proposed mechanisms are strongest.

CONCLUSION

Knowledge Sharing And Collaborative Learning In Msme Ecosystems can be understood as a managerial capability rather than a single tool or intervention. Its value depends on the ability of MSMEs to connect information, relationships, resource discipline, implementation, and learning.

The framework developed in this article emphasizes sensing, knowledge absorption, staged action, coordination, evaluation, and reconfiguration. These mechanisms provide a practical basis for strengthening adaptive competitiveness without assuming large-firm resources.

For managers, the implication is to build repeatable routines and invest progressively as evidence improves. For ecosystem actors, the implication is to strengthen connections and practical capability rather than measure support only by participation. For researchers, the framework provides propositions for future empirical testing.

ACKNOWLEDGMENT

No funding source or institutional acknowledgment is stated in this draft. Authorship, author contributions, conflicts of interest, funding, and the final manuscript must be confirmed by the actual contributors before submission or publication.

REFERENCES

- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. <https://doi.org/10.1177/014920639101700108>
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128-152. <https://doi.org/10.2307/2393553>
- Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91(3), 481-510. <https://doi.org/10.1086/228311>
- March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science*, 2(1), 71-87. <https://doi.org/10.1287/orsc.2.1.71>
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.
- Teece, D. J. (2007). Explicating dynamic capabilities. *Strategic Management Journal*, 28(13), 1319-1350. <https://doi.org/10.1002/smj.640>
- Stam, E. (2015). Entrepreneurial ecosystems and regional policy: A sympathetic critique. *European Planning Studies*, 23(9), 1759-1769. <https://doi.org/10.1080/09654313.2015.1061484>
- Spigel, B. (2017). The relational organization of entrepreneurial ecosystems. *Entrepreneurship Theory and Practice*, 41(1), 49-72. <https://doi.org/10.1111/etap.12167>

- Duchek, S. (2020). Organizational resilience: A capability-based conceptualization. *Business Research*, 13, 215-246. <https://doi.org/10.1007/s40685-019-0085-7>
- Porter, M. E. (1985). *Competitive Advantage*. Free Press.
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Pitman.
- Osterwalder, A., & Pigneur, Y. (2010). *Business Model Generation*. Wiley.
- Chesbrough, H. W. (2003). *Open Innovation*. Harvard Business School Press.
- Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy of Management Review*, 27(2), 185-203. <https://doi.org/10.5465/amr.2002.6587995>
- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance. *Journal of Business Venturing*, 20(1), 71-91. <https://doi.org/10.1016/j.jbusvent.2004.01.001>
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135-172. <https://doi.org/10.5465/amr.1996.9602161568>