

CIRCULAR ECONOMY BUSINESS MODEL INNOVATION FOR MSMEs: PATHWAYS TOWARD RESOURCE EFFICIENCY AND SUSTAINABLE VALUE CREATION

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Abstract

This conceptual article examines circular economy as a capability for strengthening MSME adaptation and sustainable performance. It integrates established perspectives on resources, dynamic capabilities, organizational learning, networks, and entrepreneurial ecosystems. The manuscript does not claim primary survey, interview, experimental, or statistical data. The synthesis develops a staged framework that connects diagnosis, capability building, implementation, evaluation, and learning. It argues that MSMEs create stronger outcomes when managerial routines convert information and relationships into repeatable decisions rather than treating individual programs or technologies as isolated solutions. The framework identifies practical governance requirements, risks, and propositions for future empirical testing.

Keywords: Circular Economy; MSMEs; Business Model Innovation; Resource Efficiency; Sustainable Value Creation

INTRODUCTION

Circular business model innovation asks enterprises to reconsider how resources enter, move through, and leave the business. For MSMEs, the practical starting point is often resource efficiency: reducing material loss, extending product life, improving maintenance, recovering usable outputs, or redesigning packaging. These changes can reduce cost while also creating environmental value.

Circularity becomes a business-model question when value creation and value capture change. Repair, reuse, refurbishment, sharing, product-service systems, take-back arrangements, and secondary-material markets can alter customer relationships and revenue logic. Not every model is suitable for every enterprise, so feasibility should be evaluated against customer acceptance, operational capacity, and economics.

Small firms can approach circular innovation through staged experiments. A limited take-back pilot, packaging redesign, supplier substitution, or repair service can reveal operational constraints before the enterprise commits significant resources. This reduces uncertainty and creates locally relevant learning.

THEORETICAL FOUNDATION

In the context of circular economy business model innovation, this dimension clarifies the construct and separates capability from simple adoption. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension connects the construct with the resource-based view and dynamic capabilities. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new

forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension explains the role of absorptive capacity and organizational learning. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension identifies why resource constraints change capability formation in MSMEs. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension defines the expected pathway from capability to adaptive performance. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

CAPABILITY DEVELOPMENT

In the context of circular economy business model innovation, this dimension starts with a diagnosis of existing routines and decision bottlenecks. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension requires explicit responsibility for learning and implementation. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse,

take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension develops cumulatively through repeated practice rather than one-time training. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension benefits from simple documentation that preserves organizational memory. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension should progress in stages that match managerial and financial capacity. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

IMPLEMENTATION MECHANISMS

In the context of circular economy business model innovation, this dimension translates strategic intent into small, testable operating changes. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable

economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension uses baseline information so that managers can compare before-and-after conditions. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension assigns an owner, resource limit, review date, and decision criterion to each initiative. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension uses pilots to reduce uncertainty before committing scarce resources. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension ends with an explicit scale, redesign, pause, or discontinue decision. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

A useful implementation sequence is to define the problem, establish a baseline, select a limited intervention, assign responsibility, test at manageable scale, review evidence, and decide whether to scale, redesign, or discontinue. This sequence protects scarce resources while preserving learning.

ECOSYSTEM AND COLLABORATION

In the context of circular economy business model innovation, this dimension depends partly on access to complementary knowledge and resources outside the firm. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension can be strengthened through customers, suppliers, universities, associations, and communities. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension requires the enterprise to evaluate external advice rather than adopt it automatically. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension benefits from reciprocal relationships in which firms also contribute experience and feedback. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension becomes more resilient when relationships are diverse enough to provide alternative pathways. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-

service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

GOVERNANCE AND RISK

In the context of circular economy business model innovation, this dimension requires proportional controls that protect continuity without creating unnecessary bureaucracy. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension should identify information ownership, decision authority, financial limits, and partner obligations. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension must distinguish acceptable experimentation from unmanaged exposure. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension needs periodic review because risks change as an initiative moves from pilot to scale. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard

against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension should include transparent records so that decisions can be explained and improved. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

Governance should specify ownership of information, decision authority, financial limits, partner responsibilities, and review dates. Simple documentation is sufficient when it is consistently used and understood by the people responsible for implementation.

PERFORMANCE AND RESILIENCE

In the context of circular economy business model innovation, this dimension should be evaluated through outcomes as well as adoption or participation indicators. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension links short feedback cycles with faster correction of operational mistakes. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension supports resilience by expanding the range of feasible responses available to the enterprise. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions,

follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension requires managers to distinguish temporary improvement from repeatable organizational capability. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension creates stronger long-term value when learning is retained and reused in later decisions. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

MANAGERIAL AND POLICY IMPLICATIONS

In the context of circular economy business model innovation, this dimension implies that owner-managers should focus on routines that improve recurring decisions. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension suggests that support programs should diagnose enterprise needs before prescribing solutions. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension encourages universities and associations to provide applied problem-solving rather than generic exposure. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension requires financial and public institutions to align support with the stage and uncertainty of the initiative. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

In the context of circular economy business model innovation, this dimension supports evaluation systems that measure capability development, implementation quality, and business outcomes. The relevant managerial object is resource flows and sustainable value creation, and practical attention can be directed to material efficiency, repair, reuse, take-back, packaging redesign, recovery, and product-service arrangements. For a resource-constrained enterprise, the purpose is not to imitate the systems of a large corporation but to establish a routine that is understandable, affordable, and consistently used. When the routine is connected with an explicit business problem, it can contribute to lower resource loss and new forms of customer and environmental value. However, managers should actively guard against burden shifting, weak customer acceptance, reverse-logistics costs, and circular initiatives that do not create viable economics. The capability is therefore observable in the quality of decisions, follow-up, and learning, not merely in the presence of a tool, partnership, policy, or formal procedure.

CONCEPTUAL FRAMEWORK AND RESEARCH PROPOSITIONS

P1. Stronger circular economy routines are expected to improve the quality of MSME adaptation when they are supported by reliable information, managerial discipline, and access to complementary ecosystem resources.

P2. Stronger circular economy routines are expected to improve the quality of MSME adaptation when they are supported by reliable information, managerial discipline, and access to complementary ecosystem resources.

P3. Stronger circular economy routines are expected to improve the quality of MSME adaptation when they are supported by reliable information, managerial discipline, and access to complementary ecosystem resources.

P4. Stronger circular economy routines are expected to improve the quality of MSME adaptation when they are supported by reliable information, managerial discipline, and access to complementary ecosystem resources.

P5. Stronger circular economy routines are expected to improve the quality of MSME adaptation when they are supported by reliable information, managerial discipline, and access to complementary ecosystem resources.

P6. Stronger circular economy routines are expected to improve the quality of MSME adaptation when they are supported by reliable information, managerial discipline, and access to complementary ecosystem resources.

P7. Stronger circular economy routines are expected to improve the quality of MSME adaptation when they are supported by reliable information, managerial discipline, and access to complementary ecosystem resources.

Future research can test these propositions using longitudinal case studies, surveys, comparative designs, network analysis, or mixed methods. Researchers should distinguish capability inputs, implementation processes, intermediate learning outcomes, and final business outcomes. This distinction can reduce the risk of attributing performance to adoption indicators alone.

LIMITATIONS

This manuscript is conceptual. It does not estimate causal effects, report respondent data, or claim that the proposed relationships apply uniformly across sectors and regions. Firm age, owner capability, market structure, regulation, infrastructure, and local institutions can change the relevance of particular mechanisms.

CONCLUSION

The central argument is that circular economy should be developed as a repeatable organizational capability. For MSMEs, sustainable adaptation depends on connecting knowledge, routines, resources, relationships, and evaluation. The proposed framework provides a disciplined basis for managerial action and future empirical research without assuming that one technology, program, or partnership is sufficient in every context.

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Editorial note: authorship, affiliations, acknowledgments, funding, conflicts of interest, and the final manuscript must be confirmed by the actual contributors before submission or publication.