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Leveraging Community-Driven Fintech Innovations for Resilience and Inclusive Growth in Emerging Economies: Insights from Kenya

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Abstract: *This paper assesses how research and innovation can be streamlined to develop sustainable business models that enhance development and economic stability in Western Kenya amid rapid global economic change. The aim is to examine the transformative potential of institutional and local innovations in strengthening small and medium-sized enterprises (SMEs), which form the backbone of the region's economy. The study focuses on four key objectives: exploring the adaptability and vulnerability of SMEs to global disruptions; assessing the role of research and knowledge in enhancing sustainable business strategies; identifying enabling institutional arrangements; and offering practical recommendations for building resilient and inclusive economic ecosystems. A mixed-methods approach was employed, involving innovation hub leaders, researchers, and local entrepreneurs, complemented by focus group discussions with women-led and youth enterprises. Qualitative data were thematically analyzed, while quantitative data were analyzed using descriptive statistics. The study aligns with Sustainable Development Goals (SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure) and Africa's Agenda 2063, particularly Aspirations 1, 3, and 7. Results reveal that enterprises in Western Kenya face recurring challenges such as limited market access, climate shocks, and underdeveloped financial systems. However, businesses integrating modern technologies, agrotech innovations, circular economy principles, and community-based models demonstrated greater adaptability and resilience, reinforcing the role of localized innovation in sustainable development.*

Keywords: *Fintech, SMEs, Resilience, Innovation, Kenya*

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1. Introduction

There is a structured timeless truth that adequately points out the radical transformations in today's global business landscape, namely that *nothing is permanent but change*. For entrepreneurial hubs in developing or underdeveloped economies like Kenya, multiple continuous external interruptions call for structured organizational arrangements to enable adaptation and smooth operations. These structures, often referred to as organizational resilience, have become a crucial strategic focus for small and medium-sized enterprises (SMEs) (Bhamra et al., 2011; Burnard & Bhamra, 2011).

In this context, we take a close look at the broad region of Western Kenya, an area vulnerable to economic shocks that

stem from limited market access, underdeveloped infrastructure, and climate variability (World Bank, 2020; UNECA, 2019). This study highlights how local SMEs in Western Kenya build resilience in organizations by structuring innovatively thatched business models, building on both institutional and grassroots innovations. It particularly examines how these enterprises adapt to their customers through proper customer relationships, value propositions, and revenue models in relation to both resilience and sustainable development (Teece, 2010; Zott & Amit, 2010). This research aligns with the Sustainable Development Goals, particularly Decent Work and Economic Growth (SDG 8) and Industry, Innovation, and Infrastructure (SDG 9), as well as Africa's Agenda 2063, which prioritizes inclusive and sustainable economic transformation (United Nations, 2015; African Union, 2015)

SMEs are often perceived as more adaptable and agile, characteristics that enhance their resilience (Smallbone et al., 2012). Despite this, they lack the institutional and financial buffers that protect larger corporations (Williams & Vorley, 2015). This paradox leads to greater exposure to risk and warrants a deeper investigation into the determinants of SME resilience, especially in the Western region where social and economic ecosystems are fragile and key dependency lies on local innovation. Organizational resilience describes an enterprise's ability to prepare for, respond to, and recover from disruptions in real-time more effectively than others (Duchek, 2020). Numerous scholars have studied SME resilience from a dual perspective: the ability to recover and evolve after a crisis (*ex-post*) and the capacity to prepare for disruption (*ex-ante*) (Lengnick-Hall et al., 2011; Linnenluecke, 2017). Multiple studies also link SME resilience with innovation, which ultimately drives business model transformation and sustainability, especially in turbulent and uncertain environments (Battisti & Deakins, 2017; Saad et al., 2021).

Business model innovation is the ultimate realization of an enterprise's value creation and delivery mechanisms. Such models are known to enhance resilience and competitiveness, especially in resource-constrained contexts like Western Kenya (Zott & Amit, 2013). However, while the topic has been widely explored in developed economies, less is known about how SMEs in such regions employ business model innovation to navigate disruptions while pursuing inclusive development goals (George et al., 2016; Sosna et al., 2010). The recent COVID-19 pandemic and geopolitical disruptions such as the war in Ukraine highlighted the importance of innovation for business continuity (OECD, 2021; UNCTAD, 2022). Enterprises that adapted their models rapidly and innovatively were better positioned to survive. Nonetheless, the pathways through which SMEs in Western Kenya reconfigure their business models to build resilience have not been sufficiently examined. This study therefore addresses this gap by investigating how SMEs in this region reconfigure their business models to foster sustainable growth and resilience in response to external interruptions and broader economic shifts.

A mixed-methods approach was adopted, combining qualitative data from entrepreneurs, innovation hubs, and policymakers with quantitative insights from SMEs across the region (Creswell & Plano Clark, 2018). Special attention was given to women- and youth-led enterprises, recognizing their unique contributions and vulnerabilities within the regional innovation ecosystem (UN Women, 2020). In line with previous research, this study conceptualizes resilience as a process of business model adaptation and strategic resource redefinition in response to rapidly evolving conditions (Teece, 2018; Vogus & Sutcliffe, 2007). Consequently, it offers a deeper analysis of organizational resilience, entrepreneurship, and policy-based innovation in Western Kenya, providing a framework for policymakers, academia, and private sector actors seeking to co-create inclusive, resilient economic systems.

1.1 Objectives of the Study

The study was anchored on a broad research goal that guided the entire inquiry, from the formulation of questions to the interpretation of findings.

Main Objective

The main objective of this study was to investigate how business model innovation and institutional support mechanisms enhance the resilience of SMEs in Western Kenya.

Specific Objectives

Specifically, the study sought to:

1. Examine the adaptability and vulnerability of SMEs in Western Kenya to global and local disruptions.
2. Assess the role of research, innovation, and knowledge translation in strengthening sustainable SME business strategies.
3. Identify key business model innovations and enabling institutional arrangements that enhance SME resilience in the region.

4. Propose practical policy and ecosystem interventions for building inclusive and resilient economic systems at the county level.

1.2 Hypotheses of the Study

Building on the literature review and the research objectives, the study was guided by the following hypotheses, formulated to test the relationship between innovation, collaboration, and resilience among SMEs in Western Kenya:

- **H1:** SMEs that adopt digital innovations (such as mobile platforms, USSD, and mobile money systems) are more resilient to disruptions than those that rely on traditional practices.
- **H2:** Strategic collaborations with innovation hubs, policymakers, and peer enterprises significantly enhance the resilience of SMEs in Western Kenya.
- **H3:** Customer-focused business model innovations, such as subscription-based services and real-time feedback mechanisms, positively influence SME adaptability and long-term 7survival.
- **H4:** Access to inclusive financing mechanisms and supportive county-level policies is a significant predictor of SME resilience and sustainable growth in Western Kenya.

2. Literature Review

2.1 Business Model Innovation (BMI)

For SMEs in Western Kenya, business model innovation (BMI) has emerged as a critical strategy to respond to digital disruptions and climate-related risks in agriculture. Common adaptations include bundled products and services, subscription-based input supply, mobile delivery platforms, and pay-as-you-go financing models. These innovations are often context-specific, shaped by cultural practices, market information, and infrastructural limitations, thereby reducing shocks and enabling growth in fragile ecosystems.

Scholars define BMI as the reconfiguration of how an enterprise creates, delivers, and captures value (Wirtz et al., 2016). It encompasses changes in value propositions, target markets, delivery channels, partnerships, cost structures, and revenue models (Osterwalder & Pigneur, 2010). Recent studies emphasize BMI as a crucial mechanism through which SMEs adapt to shifting markets, intensifying competition, and resource constraints (Foss & Saebi, 2017). However, while there is consensus on the value of BMI in enhancing firm competitiveness, much of this literature is situated in high-income contexts, leaving knowledge gaps in how SMEs in low-resource, decentralized regions like Western Kenya leverage BMI for resilience.

2.2 Organizational Resilience and SMEs

Organizational resilience refers to an enterprise's ability to anticipate, adapt, and recover from disruptions (Duchek, 2020). For SMEs, resilience involves not only survival but also long-term strategic renewal (Linnenluecke, 2017). Research emphasizes two dimensions of resilience: *ex-ante* (preparation and adaptability before disruptions) and *ex-post* (recovery and renewal after crises) (Lengnick-Hall et al., 2011).

In developing economies such as Kenya, SMEs are more vulnerable due to limited access to capital, infrastructure, and institutional safety nets. Nonetheless, their adaptability and reliance on grassroots innovations often enhance resilience (Ayala & Manzano, 2014). Empirical studies suggest that deploying climate-smart technologies, digital platforms, and inclusive financial mechanisms strengthens SMEs' resilience (Battisti & Deakins, 2017; Saad et al., 2021). Despite this, the role of localized innovation ecosystems — such as county innovation hubs and cooperative models — remains underexplored, especially in Western Kenya.

2.3 Theoretical Gaps and Relevance to SDGs and Agenda 2063

The relationship between BMI and resilience has been extensively examined in advanced economies, often underpinned by frameworks such as the *Dynamic Capabilities Theory* (Teece, 2018) and the *Business Model Innovation Theory* (George & Bock, 2011). These theories argue that firms must continuously reconfigure resources and strategies to remain competitive in uncertain environments.

However, gaps persist in understanding how such frameworks apply in low-resource and decentralized settings. Few studies integrate the role of governance frameworks, informal institutions, and community-driven innovation in shaping SME resilience. In the Kenyan context, where SMEs constitute the economic backbone, such omissions hinder effective policy and practice. Addressing this gap is also crucial for achieving

Sustainable Development Goals (SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation, and Infrastructure) and Africa's Agenda 2063, which emphasizes inclusive growth and sustainable transformation.

2.4 Linking Resilience and Business Model Innovation

Resilience and BMI are inherently interconnected. Firms that adopt resilient practices, such as customer co-creation, modular processes, and flexible revenue streams, often possess dynamic business models that evolve with environmental shifts (Reinmoeller & Baardwijk, 2005; Buliga et al., 2016). In resource-constrained contexts, resilience manifests not only through innovation but also through adaptive institutional arrangements that enable SMEs to absorb shocks and sustain growth.

In Western Kenya, county-level policies, innovation hubs, and digital ecosystems serve as critical enablers — or constraints — to SME resilience. Yet empirical evidence on how these localized 89institutional and technological drivers influence BMI is limited. This gap provides the rationale for examining how SMEs in the region reconfigure their models to withstand disruptions and pursue inclusive development.

2.5 Synthesis and Research Gap

From the reviewed literature, it is clear that while BMI and organizational resilience have been well studied in developed economies, their application in low-resource and decentralized settings remains underexplored. Particularly lacking is evidence on:

- How SMEs in Western Kenya adapt their business models in response to systemic disruptions.
- The role of county innovation ecosystems and policy linkages in supporting resilience.
- The influence of youth- and women-led enterprises on localized innovation pathways.

By addressing these gaps, this study contributes to contextualizing BMI and resilience within Western Kenya's SME ecosystem. The review therefore justifies the study's focus and provides the foundation for the research objectives and hypotheses outlined earlier.

2.6 Theoretical Framework

This study is anchored on two complementary theories: the Business Model Innovation (BMI) Theory and the Dynamic Capabilities and Organizational Resilience Theory**.**

The Business Model Innovation Theory (Osterwalder & Pigneur, 2010; Zott & Amit, 2010; George & Bock, 2011) posits that enterprises enhance competitiveness and adaptability by reconfiguring the ways in which they create, deliver, and capture value. For SMEs, this involves modifying revenue models, delivery channels, partnerships, and customer engagement strategies in response to environmental changes. In resource-constrained settings such as Western Kenya, BMI provides a useful lens for examining how firms creatively restructure operations to overcome infrastructural gaps, limited markets, and financial exclusion.

The Dynamic Capabilities and Organizational Resilience Theory (Teece, 2018; Duchek, 2020; Linnenluecke, 2017) emphasizes that firms must not only adapt reactively to disruptions (*ex-post resilience*) but also proactively develop capabilities to anticipate and absorb shocks (*ex-ante resilience*). These capabilities include sensing opportunities, seizing innovations, and reconfiguring resources to maintain long-term viability. In the SME context, resilience is reflected in the ability to leverage digitalization, strategic collaborations, and inclusive financing mechanisms to sustain operations despite crises.

Together, these theories provide a foundation for understanding how SMEs in Western Kenya innovate and adapt their business models to build resilience. They justify the study's focus on digitalization, collaboration, customer-centric models, and financing mechanisms as key drivers of SME sustainability. Moreover, they directly inform the objectives and hypotheses, which test how these theoretical constructs operate within a localized, resource-constrained environment.

3. Methodology

3.1Research Design

The study adopted a **convergent parallel mixed-methods design**, combining both qualitative and quantitative approaches to obtain a comprehensive understanding of how SMEs in Western Kenya employ business model innovation to enhance resilience. This design allowed the simultaneous collection and analysis of qualitative and quantitative data, with findings integrated during

interpretation to ensure triangulation and strengthen validity (Creswell & Plano Clark, 2018).

This design was selected because it allows triangulation of insights from entrepreneurs, policymakers, and innovation hub leaders, offering a holistic understanding of SME resilience.

3.2 Study Area and Target Population

The study was conducted in four counties of Western Kenya: Bungoma, Kakamega, Vihiga, and Kisumu. These counties were deliberately chosen because they represent the economic hub of the Western region, characterized by high SME density, diverse economic sectors, and vibrant entrepreneurial activity. SMEs in these counties play a critical role in agribusiness, manufacturing, financial services, and renewable energy, yet remain vulnerable to infrastructural gaps, limited market access, and policy misalignments.

Furthermore, these counties have been at the center of county innovation initiatives, including digital platforms, cooperative models, and youth- and women-led enterprise programs. Studying these locations therefore provided a rich context to assess how community-driven business model innovations and institutional arrangements contribute to resilience. The choice of this study area is also significant because Western Kenya is often underrepresented in academic research compared to Nairobi and coastal regions, despite being an important contributor to Kenya's economic development.

The target population comprised registered small and medium-sized enterprises (SMEs) operating within the four study counties, specifically those engaged in agribusiness, green manufacturing, renewable energy, and digital financial services. This population was selected because SMEs represent the most active drivers of regional economic growth and innovation, which aligns with the study's focus on business model resilience and community-driven fintech adoption. According to county government registries (2023), there are approximately 4,200 registered SMEs across the four counties, which formed the sampling frame for this study.

3.2Sampling Techniques and Sample Size

The study employed a purposive and stratified sampling approach. Six case SMEs were purposively selected for in-depth qualitative analysis based on the following criteria:

1. Demonstrated history of resilience-oriented innovation (e.g., digital adaptation, cooperative models).
2. Inclusion of youth- or women-led leadership.
3. Registration and operation within the four study counties.
4. Active engagement with local innovation hubs, county programs, or community networks.

Stratified random sampling was applied to the quantitative survey to ensure fair representation of enterprises across the four counties and major sectors. Each county formed a stratum, and SMEs were randomly selected from the county enterprise registries.

The final sample comprised 65 SMEs, which represents approximately 1.5% of the total registered population (about 4,200 SMEs across the study counties). This sample size was considered sufficient to provide a reliable overview of patterns and relationships while maintaining data manageability for detailed analysis. The combination of purposive and stratified random sampling enabled both in-depth qualitative understanding and broad quantitative representation, thereby ensuring triangulation within the mixed-methods design.

Table 1: Sampling Frame and Sample Size

County	Estimated SMEs	Sample SMEs	Sampling Method
Bungoma	1,100	18	Stratified random
Kakamega	1,300	20	Stratified random
Vihiga	800	12	Stratified random
Kisumu	1,000	15	Stratified random
Total	**4,200**	**65**	

3.4 Data Collection Methods

Data were collected between June 2023 and May 2024 using multiple instruments to ensure triangulation:

1. **Semi-Structured Interviews:** 20 interviews with SME owners, innovation hub leaders, and county policymakers. The interview guide covered themes such as digital innovation, resilience strategies, and policy linkages. All interviews were conducted with participants' informed consent and were audio-recorded and later transcribed for accuracy.
2. **Focus Group Discussions (FGDs):** 6 FGDs with youth- and women-led enterprises, each comprising 8–10 participants, to capture collective insights on innovation and resilience. Member checking and debriefing were carried out after each session to enhance credibility and trustworthiness of qualitative data.
3. **Survey Questionnaires:** Administered to 65 SMEs. The questionnaire included sections on firm demographics, innovation patterns, financing, and resilience strategies. A pilot test involving five SMEs was conducted to ensure clarity and reliability of the items, and minor adjustments were made based on feedback.
4. **Document Analysis:** Review of 14 documents including County Integrated Development Plans (CIDPs), innovation-hub reports, and enterprise records.

Table 2: Summary of Data Sources

Source	Quantity	Notes
Interviews	20	SME owners, innovation leads, policymakers
Focus Groups	6	3 women-led clusters, 3 youth-led clusters
Survey Respondents	65	Stratified by county and sector
Documents Reviewed	14	CIDPs, county budgets, hub reports

3.5 Data Analysis

Qualitative Data: Transcribed interviews and focus-group discussions (FGDs) were coded thematically using NVivo 12. An initial open-coding phase identified recurring phrases and concepts, followed by axial coding to group related themes under categories such as digitalization, collaboration, business-model adaptation, and resilience pathways. Selective coding was then used to synthesize core themes aligned with the study objectives. Trustworthiness was ensured through member checking, peer debriefing, and triangulation with survey findings.

Quantitative Data: Survey responses were analyzed using SPSS (version 26). Descriptive statistics (frequencies, percentages, cross-tabulations) summarized SME characteristics and resilience strategies. Inferential analysis included chi-square tests and Pearson correlation coefficients to examine relationships between innovation practices, collaboration, and resilience outcomes. These tests were directly linked to the study's hypotheses (H1–H4) to determine whether digital innovation, collaboration, customer-focused models, and financing mechanisms significantly predicted SME resilience and growth.

Integration of Data: Results from the qualitative and quantitative strands were integrated through convergence analysis during interpretation and discussion. This enabled the researcher to compare themes and statistical patterns side by side, identify points of agreement or divergence, and draw comprehensive conclusions consistent with the convergent parallel mixed-methods design.

3.6Ethical Considerations

The study received ethical clearance from the Masinde Muliro University of Science and Technology (MMUST) Research Ethics Committee prior to data collection. It also obtained review and presentation approval from the South Eastern Kenya University (SEKU) International Business Conference on Business Models, reaffirming compliance with professional research standards.

Participation in the study was entirely voluntary. All respondents were informed about the purpose of the study,

the procedures involved, and their right to decline or withdraw at any stage without penalty. Informed consent was obtained before conducting interviews, focus-group discussions, and survey administration. Anonymity and confidentiality were ensured by assigning identification codes instead of real names to SMEs and participants. No personal identifiers were recorded in the dataset. All data were stored in password-protected electronic files accessible only to the research team, in line with the MMUST Research Ethics Policy (2023) and the Kenya Data Protection Act (2019). Ethical principles of respect for persons, beneficence, and justice guided every stage of the study.

4. Results and Discussion

This section presents the results of the study, organized according to the study's specific objectives and hypotheses. Both quantitative and qualitative data are integrated to provide a comprehensive understanding of SME resilience pathways in Western Kenya.

4.1 Objective 1: To examine the adaptability and vulnerability of SMEs in Western Kenya to global and local disruptions

Hypothesis (H1): SMEs that adopt digital innovations are more resilient to disruptions than those that rely on traditional practices.

Findings indicate that SMEs in Western Kenya face recurring challenges such as climate shocks, limited market access, and infrastructural bottlenecks. However, firms that embraced **digital innovations** such as USSD ordering platforms, WhatsApp-based sales, and mobile money transactions demonstrated higher resilience.

- **62%** of surveyed SMEs reported reduced transaction costs after adopting digital platforms.
- **74%** experienced higher customer retention during crises due to digital engagement.

Qualitative interviews reinforced these insights. For instance, one youth-led entrepreneur in Kisumu noted:

"During COVID-19, moving our sales to WhatsApp and M-Pesa was the only reason we kept customers; physical markets were closed, but digital kept us alive."

Table 3: Digitalization Practices and Observed Impacts among SMEs in Western Kenya

Digitalization Practice	Impact Observed
USSD order & delivery	Reduced transaction costs
WhatsApp ordering systems	Increased customer retention
Mobile money (M-Pesa) adoption	Enhanced financial inclusion
Mobile-based after-sales support	Improved customer satisfaction

4.2 Objective 2: To assess the role of research, innovation, and knowledge translation in strengthening sustainable SME strategies

Hypothesis (H2): Strategic collaborations with innovation hubs, policymakers, and peer enterprises significantly enhance SME resilience.

Findings reveal that strategic partnerships with universities, innovation hubs, and county programs enabled SMEs to access technical support, funding, and new market opportunities.

- 49% of SMEs engaged in collaborations reported faster recovery from shocks.
- County-level financing programs were found to be especially beneficial for women-led enterprises.

An FGD participant from Bungoma emphasized:

"The university hub gave us training on digital irrigation, and within one season our yields improved. Without such partnerships, we would have been left behind."

Table 4: Forms of Strategic Collaboration and Reported Outcomes

Collaboration Type	Outcomes for SMEs
Joint ventures with peer SMEs	Shared logistics and reduced costs
County innovation financing programs	Access to seed grants and subsidies
University innovation hub support	Improved technical expertise and product quality

4.3 Objective 3: To identify key business model innovations and enabling institutional arrangements

Hypothesis (H3): Customer-focused business model innovations positively influence SME adaptability and long-term survival.

Findings show that SMEs increasingly moved from one-off transactions to relationship-based models, including subscription services and real-time feedback mechanisms.

- 78% of SMEs indicated staff flexibility and role diversification as key factors in adaptation.
- Customer co-creation strategies, such as Telegram/WhatsApp feedback groups, improved service customization and loyalty.

One woman-led agribusiness in Vihiga explained:

"We used to sell inputs only at planting season, but now customers subscribe to packages that run throughout the year. This gives us predictable income and deeper relationships."

Table 5: Customer-Centric Innovations and Their Impact

Practice	Impact on SMEs
Subscription-based services	Predictable recurring revenue
Real-time customer feedback	Customized services, improved loyalty
Tiered pricing for market segments	Increased access for low-income farmers

4.4 Objective 4: To propose practical policy and ecosystem interventions for building inclusive and resilient systems

Hypothesis (H4): Access to inclusive financing mechanisms and supportive county-level policies is a significant predictor of SME resilience and growth.

Findings highlight that SMEs leveraging **inclusive financing models** such as pay-as-you-go systems, SACCO support, and blended finance instruments had more stable cash flows and higher adaptability.

- **57%** of SMEs adopted recurring revenue models (e.g., PAYG, monthly subscriptions).
- Financing gaps persisted, especially for startups without collateral, pointing to policy misalignments.

Table 6: Resilience Drivers and Practices Adopted by SMEs in Western Kenya

Resilience Driver	Practices Adopted	Impact Observed
Digitalization	USSD, WhatsApp, M-Pesa	Reduced overheads, improved market access
Strategic Collaboration	University &county partnerships	Faster recovery, technical expertise
Customer Intimacy	Subscription, feedback systems	Greater loyalty, deeper insights
Agile Resources	Youth upskilling, shared logistics	Leaner operations, higher adaptability
Revenue Model Innovation	PAYG, tiered pricing, monthly billing	Cash flow stability, customer retention

4.5 Summary of Findings

Overall, the study identified five resilience drivers—digitalization, strategic collaboration, customer intimacy, agile resource use, and revenue model innovation—as central to SME survival and growth in Western Kenya. These findings validate the study's hypotheses and demonstrate how SMEs adapt to systemic disruptions through localized innovation and collaboration.

4.6 Discussion

This study identified five drivers of SME resilience in Western Kenya: digitalization, strategic collaboration, customer intimacy, agile resource use, and revenue-model innovation. The findings confirm that SMEs adopting digital tools such as mobile money and WhatsApp sales achieved reduced transaction costs and higher customer retention, consistent with research showing that digital platforms lower barriers and enhance adaptability (Seetharaman, 2020). Strategic collaborations with universities, innovation hubs, and county programs also emerged as critical, enabling firms to access technical expertise and financing, echoing Carayannis et al. (2014) and Buliga et al. (2016) on the role of innovation ecosystems.

These results support the integration of Business Model Innovation Theory and Dynamic Capabilities/Resilience Theory. SMEs in the study area reconfigured their revenue models and customer relationships to sustain value creation, while building adaptive capabilities to sense and respond to disruptions (Teece, 2018; Osterwalder & Pigneur, 2010). However, challenges in accessing inclusive financing and policy misalignments highlight the need for better-designed county interventions that lower entry barriers for startups and marginalized enterprises.

The evidence suggests that strengthening SME resilience requires a dual focus: investing in digital capacity and innovation partnerships while simultaneously scaling inclusive financing and policy support. These interventions would not only sustain SME growth but also advance SDG 8 (decent work and economic growth) and SDG 9 (industry, innovation, and infrastructure), aligning with Kenya's development priorities and the aspirations of Agenda 2063.

5. Conclusion and Recommendations

5.1 Conclusion

This study demonstrates that SME resilience in Western Kenya is shaped by five interrelated drivers: digitalization, strategic collaboration, customer intimacy, agile resource use, and revenue-model innovation. Drawing on Business Model Innovation and Dynamic Capabilities theories, the findings show that SMEs are not passive victims of disruption but actively reconfigure their models and capabilities to survive and grow. However, financing gaps and policy misalignments continue to constrain the potential of many enterprises. The study therefore contributes to the understanding of how localized innovations and institutional arrangements interact to build resilience in emerging-economy contexts.

5.2 Recommendations

1. **Policy interventions**: County governments should simplify access to innovation financing, embed SME resilience priorities in CIDPs, and reduce bureaucratic bottlenecks that hinder startups.
2. **Digital capacity building**: Training programs and affordable connectivity initiatives should be scaled to ensure SMEs fully leverage digital platforms.

3. **Strengthening innovation ecosystems**: Universities, innovation hubs, and development partners should expand collaboration with SMEs to translate research into practical, affordable solutions.
4. **Inclusive financing models**: Financial institutions should design collateral-free instruments, blended finance, and group-based lending that are accessible to youth- and women-led enterprises.

Together, these measures can promote resilient, inclusive, and sustainable SME growth aligned with Kenya's Vision 2030, the Sustainable Development Goals, and Africa's Agenda 2063.

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