

# Business Model Innovation – A Determinant of Business Sustainability among Micro-Lending Institutions in Kenya: Empirical Review

Geoffrey Sirengo Chichi, Dr. Joannes Kyongo School of Business and Economics, Daystar University, Nairobi – Kenya Corresponding Author Email geoffreychichi220227@daystar.ac.ke

To Link this Article: http://dx.doi.org/10.6007/IJARAFMS/v15-i1/23625 DOI:10.6007/IJARAFMS/v15-i1/23625

Published Online: 22 January 2025

#### **Abstract**

The purpose of this paper is to review the extant literature on the effect of business model innovation on business sustainability among microlending institutions in Kenya. Microlending institutions operate in a competitive business environment full of major financial institutions thus the need to be very innovative. Tapping into the capabilities of technology and increased penetration of mobile connectivity, microlenders can innovate their business models toward the unbanked and underserved population in Kenya. Since sustainability is beyond profit only but people and the planet, it is critical for such entities to rethink their business models to deliver the triple bottom line strategy within their business operations. The extant literature reviewed in the area of business model innovation and business sustainability reveals a nuanced mutuality. Microlenders that deploy their innovative business model increase their customer base, especially among the unbanked. The review also reveals that innovative business models within the broader triple-bottom-line framework can increase their profits without harming the planet and the people. Findings also showed that business model innovation can cut costs, reduce employee turnover, and increase social investment for microlending institutions. However, microlending institutions still face some challenges to business sustainability including initial costs, inadequate policies, and legislation to operationalize the triple bottom line framework in Kenya. These gaps therefore present further opportunities for scientific inquiry into solutions that can spur business sustainability among microlenders in Kenya.

Keywords: Business Model Innovation, Business Sustainability, Micro-Lending Institutions

## Introduction

Business model innovation is a critical strategy that lending businesses can deploy to unlock the full potential of their businesses. It can also lead to well-grounded business sustainability by providing an environment where business organizations can adapt, survive, thrive, and stay competitive (Cavallo et al., 2023). Because the business environment keeps on changing due to several external factors, it is significant that owners and top management teams pursue business model innovation as a core business function (Holtstrom, 2021).

Vol. 15, No. 1, 2025, E-ISSN: 2225-8329 © 2025

Several important business model innovations exist including allowing businesses to adapt to changing market dynamics. These dynamics including consumer preferences, technological innovations, and regulatory environments often necessitate businesses to be innovative. Through these innovations, businesses can avoid rigidity which often leads to obsolescence as opposed to thriving and meeting new business demands by those that embrace BMI (Kehbila, 2020).

Microlenders that focus on modeling their businesses around innovation can leverage the full benefits thereon, and stand out among the competitors. This is probable when businesses rethink value delivery, disrupt the market commonness, and introduce innovation-driven models to increase their customer reach and ease the process of doing business (Holtstrom, 2021). Further, embracing business model innovation enhances an organization's ability to promote the efficient utilization of resources. These can be achieved by BMI through the reduction of wastes, improvement of circular economy, and optimization of business processes. Even though the majority of businesses aim to drive customer inflows, it can also contribute to reduced environmental impact that such businesses would have contributed (Xiao et al., 2021).

Business model innovation is an important asset for improving the stakeholder value, while this value is often construed as profitability, it can also be magnified in social, and environmental outcomes (Hollebeek et al., 2022). For instance, those lenders that focus on clean energy, and have taken decisive measures to go green would normally increase the value of their shareholding, not because of financial value, but because of its contribution to the reduction of carbon emissions, which conservative investors would want to associate with. Its share value might go higher when innovative products are rolled out into the market beyond the proof of concept (Li et al., 2024). Business model innovation can also be a powerful tool for mitigating business risks when businesses avoid reliance on legacy systems which are prone to cyber-attacks, a grave risk that has made other organizations terminate their businesses (Holtstrom, 2021).

Business model innovation is a necessary key that lending organizations should have to open up new revenue streams that could be untapped and underexploited. For example, microlenders can embed their BMI into ESG and raise additional funds from additional revenue sources such as crowdfunding, and other digital platforms (Kehbila, 2020). These innovative platforms including the pay-per-view or per-use, have shifted from physical tickets, hence ensuring that more revenue flows from the economies of scale while diversifying their business products to serve more customers (Li et al., 2024). Business model innovation can also enhance business sustainability by providing the foundation for survival in crises including pandemics. For example, during COVID-19, only those businesses that were able to quickly shift to e-commerce and remote services survived (Kansheba & Marobha, 2024). BMI can also help businesses match their present strategies with long-term goals in mind. Thus, even if the focus is only on profitability, such innovative businesses can predict the future and lean toward those products and services that care about society, the environment, and governance, thereby enhancing their ability to remain sustainable (Huang & Farboudi Jahromi, 2020).

Vol. 15, No. 1, 2025, E-ISSN: 2225-8329 © 2025

The relationship between business model innovation and business sustainability is important for microlending entities (Chen & Shahid, 2024). In Kenya for instance, microlenders who operate in a dynamic and competitive financial environment need to innovate their business models, to capture the untapped potential among the unbanked (Omwanza et al., 2022). Microlenders can create value beyond conventional credit services by incorporating innovative digital financial systems and utilizing data analytics to analyze customer creditworthiness, and even develop community-based lending schemes. These innovations can lead to greater financial inclusion, reduce operational costs, and enhance customer satisfaction, thus contributing to long-term business sustainability (Muithya & Muathe, 2020). In Kenya, where access to financial services is vital for many small businesses and underserved populations, innovative business models can position microlenders to remain relevant in the financial sector, resilient in financial and economic hardship, and impactful to society (Mwania, 2022).

#### **Business Model Innovation**

According to Almeida and Tavares (2024), Business Model Innovation (BMI) is defined as the process of creating, refining, and transforming the way a business operates for the delivery of more value to its customers, improving efficiency, and staying competitive. Business model innovation involves rethinking the key elements of an entity's business model. Roshan and Balodi (2024) suggest that the key elements include rethinking how a business creates, delivers, and captures value, in response to changing market conditions, customer needs, and technological advancements. It is not simply about improving existing products or services, BMI focuses on reinventing the structure and its approach to doing business (Ludeke-Freund et al., 2018). Business model innovation often targets key measures of a business including value proposition, customer segmentation, revenue streams, channels, customer relationships, key resources, key activities, key partnerships, and cost structure (Jorzik et al., 2024). Lia et al. (2024) opine that it is also critical that businesses innovate their key activities which are the essential processes and operations needed to run the business. These activities can be innovated and optimized through innovation in technology, automation, and outsourcing. Such activities often require that businesses identify key partnerships including collaboration with other organizations, and stakeholders including suppliers, distributors, and technological partners, among others. These partnerships are crucial to the identification of new ways to cut costs, extend business reach, and improve productive offerings (Moshood et al., 2021). BMI should also innovate its cost structure by finding ways to reduce operational costs and identify and shift to a scalable cost model including leaning towards variable costs as opposed to fixed costs (Roshan & Balodi, 2024).

#### **Business Sustainability**

Almeida and Tavares (2024) define business sustainability as the ability of a firm to operate with a mindset for long-term success while balancing economic, environmental, and social factors that affect the business. Business sustainability is beyond profitability and growth; it emphasizes practices that meet the needs of the present while optimizing the ability of future generations to meet their own needs (Van Bommel (2018). The main aim of sustainable business is to create strategic value for shareholders, and stakeholders (employees, customers, the community, and the environment). Several value creation principles characterize business sustainability including economic sustainability, environmental sustainability, and social sustainability. Businesses that pursue sustainable

Vol. 15, No. 1, 2025, E-ISSN: 2225-8329 © 2025

processes, products, markets, models, and innovations are inclined to consider these three principles as key components of their business strategies (Bashir et al., 2022). Businesses can strive to remain sustainable by adopting various strategies for short-term and long-term operations. Drawing from various sources on the dispensation of business sustainability, firms can strategically pursue resource efficiency by minimizing the use of natural resources to reduce the overall environmental impact (Qi & Yang, 2023). Firms can also strategically pursue sustainable supply chains by partnering and working with suppliers that have ethical labor practices, maintain high environmental standards, and responsible sourcing policies that collectively contribute to business sustainability (AL-Dosari et al., 2023). Businesses can also adopt both short-term and long-term innovation and technology by installing energy-efficient machinery, producing highly innovative products, using 100% renewable energy systems that can generally reduce carbon footprint, and yet remaining conscientiously competitive (Masood et al., 2023). Besides building a culture of employee engagement and rewarding ecofriendly behaviors that contribute to social and environmental sustainability (Ciulli et al., 2022), businesses can also adopt transparency and accountability as well as responsible reporting of their business processes, procedures, and models, and how they account for the Triple Bottom Line framework to investors, customers, consumers, and regulatory bodies (Hassan & Khoso, 2024).

## *Triple Bottom Line Framework*

Theoretically, business sustainability has been investigated under the Triple Bottom Line Framework (Senyo & Osabutey, 2021; Masood et al., 2023). This framework considers people (social), planet (environmental), and profit (economic). The framework is used to analyze how these three components of sustainability work together to ensure that the business succeeds beyond financial performance. The benefits of approaching a business from a triple-bottom-line perspective are multifaceted. Businesses can enhance their reputation and brand loyalty especially when the business is seen to be responsible and ethical. It can build trust with customers, and yield tightened brand loyalty. Businesses can also use the TBL framework to increase their operational efficiency by adopting practices that reduce energy consumption, waste minimization, and optimization of operational costs for better financial achievements (AL-Dosari et al., 2023).

The Triple Bottom Line framework enables businesses to mitigate risks when they prioritize sustainability which can help them manage better environmental, regulatory, and social risks (Qi & Yang, 2023). For example, firms that prioritize sustainability across their operations can mitigate fines, and penalties associated with pollution and irresponsible disposal of wastes. Equally, when they consider people as strategic resources, they can reduce long court battles emanating from labor disputes. Adopting the TBL framework, businesses can also attract investments from those major investors who prioritize sustainability. Existing evidence shows that businesses with stronger ESG strategies are perceived as long-term investments due to the focus on responsible use of resources and management optimization (Chandra et al., 2024).

Managing business sustainability through the TBL framework has been shown to lead to employee satisfaction and retention. Firms that commit to fair labor practices, diversity, inclusion, and community involvement increase employee satisfaction while reducing employee turnover (Masood et al., 2023). On the same breadth, firms that ground their

Vol. 15, No. 1, 2025, E-ISSN: 2225-8329 © 2025

strategies on sustainable business practices can easily comply with the stricter environmental and regulatory laws imposed by their governments (Bhatnagar et al., 2022). For example, manufacturers who considered plastic carry bags as unsustainable products were not shocked when the government of Kenya, through an Act of Parliament banned, plastic bags. Those companies that did not consider sustainable manufacturing through the TBL framework, were forced to innovate or close down and shift their focus to other industries (Ayinaddis, 2023).

### Methodology

This study adopted an empirical literature review of the extant literature in the areas of business model innovation and business model innovation in the context of microlending institutions. The study restricted the sources of literature to empirical evidence based on study findings. Papers used for the review were sourced from various databases and other online sources including Google Scholar, Elsevier, Semantic Scholar, Taylor and Francis, and Springer. The papers included in the review were empirical studies between the years 2019 to 2024 across the globe. Only those papers that reported empirically were included in the review of the relationship between business model innovation and business sustainability.

## Business Process Innovation and Business Sustainability

Ndung'u and Moturi (2020) investigated the determinants of mobile fintech uptake in Kenya's Microfinance Sector. A descriptive survey was used to study the concept of mobile fintech among the 30 Microfinance Institutions. Data was collected using questionnaires from 120 respondents and analyzed with descriptive and inferential statistics. The findings of the study reveal that technology factors, environmental characteristics, and organizational factors were critical to the uptake of fintech innovation in Kenya. Some of the factors that influence fintech innovation include technology availability, perceived technology benefits, size of the organization, availability of resources, competition, and regulatory and legal environment. Fintech uptake by MFIs showed that it can reduce operation costs leading to efficient business operations. Therefore, learning from these findings, MFIs can adopt innovative business models integrating technology that can cut costs and improve the overall performance of the institution.

Bika et al. (2021) investigated microfinance and small business development in a transitional economy with insights from borrowers' relationships with Microfinance Organizations in Kazakhstan. Using mixed methods, the study investigates the intricate relationship between microfinance and everyday entrepreneurial practices. Data was collected in three phases where the first involved in-depth interviews with key industry informants, the second was through qualitative semi-structured interviews with Microfinance Organization's loan officers, owners, or managers, and the third method was a survey of entrepreneurial borrowers from the interviewed MFOs. The findings of the study revealed that the formalization of Microfinance Institutions does not affect business models in transitionary stages. The findings further revealed that the microfinancing business model works for most entrepreneurs irrespective of the status of their formalization. The outcome of the study showed as well that access to microloans is more active in social capital/networks in Kazakhstan as opposed to formalization. These good relationships acted as collateral and led to better-negotiated loan terms between entrepreneurs and the MFOs. The use of relationships as opposed to conventional property-collateral, is innovative and could apply to several countries.

Vol. 15, No. 1, 2025, E-ISSN: 2225-8329 © 2025

Abubakar (2022) assessed the role of microfinance in enhancing entrepreneurial growth in Sub-Saharan Africa, through a comparative analysis of Nigeria and Kenya. The study explored this phenomenon through existing literature, particularly how microfinance services impact entrepreneurial development in both countries. The findings of the study suggested that microfinance significantly contributes to entrepreneurship growth through differences in local infrastructure and economic policy. The study also identified the challenges faced by microfinance institutions including high interest rates from commercial banks, and insufficient financial education among borrowers. The findings of the study also indicated that Kenya demonstrated more robust conceptual outcomes due to stronger regulatory frameworks. The debate on the role of MFIs in economic growth can be further explored especially where such are embedded in technology to reach more people and offer services that have been avoided by mainstream financial institutions including commercial banks.

Bashir et al. (2022) measured sustainable business model innovation using scale development, validation, and proof of performance. The study used both qualitative and quantitative methods where 20 respondents were initially selected and then followed by a quantitative validation using a two-sample set of 130 and 200 SMEs from Saudi Arabia. The findings developed a 10-item scale for three main factors including sustainable value proportion innovation, sustainable value creation and delivery innovation, and sustainable value capture innovation. The findings concluded that SME that adopt the 10-scale items or at least implement the majority of them enhances their performance and increase their competitive advantage. Therefore, borrowing from these findings, microlenders can adopt these approaches to increase their financial performance in their business model innovation strategies.

Guo et al. (2022) investigated developing sustainable business model innovation through stakeholder management and dynamic capability through a longitudinal case study. The study investigated the case of a single company and the multiple stages it goes through in developing SBMI. Where such stages depend on government provisions, technology availability, and social-orientation for 15 years. The findings of the study showed that integrating stakeholder management strategies operationalizes resource bases for implementing sustainable business model innovation. The study also found that a firm's dynamic capability leveraged strategic management and SBMI. The study equally found that learning and innovation sensing capabilities are critical to firms at initial stages. Other factors such as society-oriented, integrating, and coordinating capabilities increase stakeholders' willingness to participate in innovative business models.

Hagawe et al. (2022) researched a unique business model for microfinance institutions with a case study of Assadaqaat Community Finance (ACF) in the UK. The study deployed an in-depth case study where semi-structured interviews were done with 20 participants including the beneficiaries, benefactors, and founders. The findings of the study suggested that beneficiaries were happier and financially independent in 4 months, leading to transformed beneficiaries able to contribute finances to the ACF. The paper highlighted the understanding of the transformation created by microlending that can create a ripple effect for community development. Though the paper was based in the UK and within a specific closely knit community, the findings can be spread to other localities to enhance the impact of microfinance among the lower cadre of income earners for the betterment of society.

Vol. 15, No. 1, 2025, E-ISSN: 2225-8329 © 2025

Carbona et al. (2024) assessed how firms embrace new disruptions as business models in the transition to Mobility as a Service (MAAS). The study specifically investigated the dynamic nature of business model innovation in the MaaS business ecosystem. Through an inductive, multiple case study approach, the study captured disruptive changes, adaptations, and innovations organizations undergo in new value creation, capture, and delivery mechanisms among six renowned firms transitioning to MaaS. The findings of the study revealed that even though heterogeneous service and technology providers have adopted similar strategies in the new business model innovation. These businesses have utilized value creation, capture, and delivery as critical approaches to BMI adoption. Thus, micro-lending institutions can adopt such strategies to fully shift their operation to innovative business models to enhance their business development and sustainability.

Cheng and Wang (2024) studied how business model innovation facilitates microcredit in balancing social mission with commercial performance, with evidence from three local commercial banks in China's Taizhou region. The duo grounded the study on grounded theory and iterative canvas theory framework of business models. The outcome of the research shows that microcredit institutions innovate their business models using three distinct approaches including desirability, feasibility, and viability. The desirability was found to focus on small businesses, a key innovation model for successful integration into the social mission of banks. Feasibility was found to indicate the accurate application of soft information and resource integration to gain a competitive advantage in the market. Viability was found to enhance risk management and scaling of operations which increases MFI's operational performance. The study also observed that microfinancing is critical in expanding profitability and impacting the social welfare of the community where such business models are operationalized. Therefore, microlenders can model their business with desirability, feasibility, and viability approaches to operationalize innovations in the financial sector.

### **Discussions and Conclusions**

Drawing from the reviewed literature, the relationship between business model innovation and business sustainability among macro-lending institutions is multifaceted. These cause-effect relationships can be assessed through the expansion of access to financial services, effective management of risks, optimized operational costs, social-driven impact innovations, green financing, building community trust and customer loyalty, and ultimately diversifying revenue streams among micro-lenders (Si et al., 2019). These causes can affect business sustainability in various ways within the larger business environment.

Micro-lenders that innovate their business models through the adoption of digital platforms such as mobile banking, and agent-based networks can improve their reach to underserved and remote populations (lizuka & Hane, 2021). For instance, digital transformation increases service delivery efficiency, and the lender's ability to provide loans at affordable costs (lower costs). Business model innovation can therefore enhance the lender's customer base, improve repayment rates, reduce operational costs, and make services more accessible (Barua & Khaled, 2023). With these efficiencies, firms can obtain economic sustainability, and maintain profitability while serving larger segments of the population as posited by Mohan and Potnis (2010). Mobile lending platforms like M-Pesa in Kenya have allowed micro-lenders to serve rural and unbanked populations, improving access

Vol. 15, No. 1, 2025, E-ISSN: 2225-8329 © 2025

to credit while minimizing infrastructure costs, and creating critical economic development (Bashir et al., 2022).

Microlenders who implement innovative risk assessment tools, such as using Artificial intelligence (AI) or alternative credit scoring based on non-traditional data for example social media behavior, mobile phone usage, and e-commerce platforms usage among others, can help micro-lenders better assess credit risk (Bika et al., 2021). These innovations can lead to better loan repayment rates, reduced default rates, and efficient targeted lending decisions. These efforts can increase both financial stability and sustainability because they can lend responsibly and recover funds efficiently (Ayinaddis, 2023). Microlenders such as Tala, use smartphone data to assess borrower risk, and accurately predict credit scoring. This kind of accurate prediction consequently reduces default rates, thereby contributing to economic sustainability (Ndungu & Moturi, 2020).

Micro lenders that innovate their business processes through automation, digitization of loan disbursement, and adopting virtual offices using online platforms can reduce fixed and operational costs (Abubakar, 2022). Findings showed that lowering operational costs directly contributes to business sustainability by enhancing profitability margins and offering competitive loan interest rates (Omwanza et al., 2022; Hagawe et al., 2023; Chen & Wang, 2024). Micro-lending apps such as Branch and M-Shwari have eliminated physical branches which enables them to lend efficiently with low overhead costs (Muithya & Muathe, 2020). The savings from reduced overhead costs can be shifted to other critical investments that increase a firm's profitability (Mwania, 2022).

Micro-lending institutions that innovate their loan products to support social goals, for instance, loans for women entrepreneurs, education, and sustainable agriculture are likely to remain sustainable (Moshood et al., 2021; Liao et al., 2024). These products are business models with an explicit social mission that is not only meant to increase the firm's profitability but ensure social inclusion into the business sustainability strategy. These innovations can improve livelihoods, empower vulnerable groups, and uplift communities, where such lenders operate. Such social impacts reinforce customer loyalty and community trust, which are critical aspects of business sustainability (Mori & Zhang, 2024). Equity Bank, for example, through its business model focused on women's empowerment and poverty alleviation by giving women entrepreneurs loans. This approach to business has demonstrated how innovative lending can drive social sustainability by transforming communities gradually.

#### References

- Abubakar, A. (2022). The Role of Microfinance in Enhancing Entrepreneurial Growth in Sub-Saharan Africa: A Comparative Analysis of Nigeria and Kenya. *Abubakar | Branding: Jurnal Manajemen Dan Bisnis*. https://doi.org/10.15575/jb.v1i2.38748
- AL-Dosari, K., Fetais, N., & Kucukvar, M. (2023). A shift to green cybersecurity sustainability development: Using triple-bottom-line sustainability assessment in Qatar transportation sector. *International Journal of Sustainable Transportation*, 17(12), 1287–1301. https://doi.org/10.1080/15568318.2023.2171321
- Almeida, L., & Tavares, F. (2024). Sustainability in international business. In *Elsevier eBooks*. https://doi.org/10.1016/b978-0-443-13701-3.00009-8
- Ayinaddis, S. G. (2023). The effect of innovation orientation on firm performance: evidence from micro and small manufacturing firms in selected towns of Awi Zone, Ethiopia. *Journal of Innovation and Entrepreneurship*, 12(1). https://doi.org/10.1186/s13731-023-00290-3
- Barua, U., & Khaled, A. F. Md. (2023). The Grameen Bank Microfinance Model in the Global North: Processes, Transfer Intermediaries and Adoption. *Journal of Comparative Policy Analysis: Research and Practice*, 25(5), 546–563. https://doi.org/10.1080/13876988.2023.2223542
- Bashir, M., Alfalih, A., & Pradhan, S. (2022). Sustainable business model innovation: Scale development, validation and proof of performance. *Journal of Innovation & Knowledge*, 7(4), 100-243. https://doi.org/10.1016/j.jik.2022.100243
- Bellucci, M., Bini, L., & Giunta, F. (2019). Implementing environmental sustainability engagement into business. In *Elsevier eBooks* (pp. 107–143). https://doi.org/10.1016/b978-0-12-817382-4.00004-6
- Bhatnagar, R., Keskin, D., Kirkels, A., Romme, A. G. L., & Huijben, J. (2022). Design principles for sustainability assessments in the business model innovation process. *Journal of Cleaner Production*, *377*, 134313. https://doi.org/10.1016/j.jclepro.2022.134313
- Bhatti, S. M., Haq, M. Z. U., Kanwal, S., & Makhbul, Z. K. M. (2024). Impact of green intellectual capital, green organizational culture, and frugal innovation on sustainable business model innovation: Dataset of manufacturing firms in Pakistan. *Data in Brief*, *54*, 110-419. https://doi.org/10.1016/j.dib.2024.110419
- Bika, Z., Subalova, M., & Locke, C. (2021). Microfinance and Small Business Development in a Transitional Economy: Insights from Borrowers' Relations with Microfinance Organisations in Kazakhstan. *The Journal of Development Studies*, *58*(1), 183–203. https://doi.org/10.1080/00220388.2021.1956472
- Carbonara, N., Petruzzelli, A. M., Panniello, U., & De Vita, D. (2024). Embracing new disruptions: business model innovation in the transition to Mobility as a Service (MAAS). *Journal of Cleaner Production, 464,* 142744. https://doi.org/10.1016/j.jclepro.2024.142744
- Cavallo, A., Cosenz, F., & Noto, G. (2023). Business model scaling and growth hacking in digital entrepreneurship. *Journal of Small Business Management*, *62*(4), 2058–2085. https://doi.org/10.1080/00472778.2023.2195463
- Chandra, A., Shukla, D. M., Sharma, S., & Dwivedi, G. (2024). Fostering Environmentally Sustainable Business: Analysis of Factors from Entrepreneurial Ecosystem Perspective. *Journal of Cleaner Production*, 143667. https://doi.org/10.1016/j.jclepro.2024.143667
- Chen, A., Li, L., & Shahid, W. (2024). Digital Transformation as the Driving Force for sustainable business performance: a moderated mediation model of market-driven business model

- innovation and digital leadership capabilities. *Heliyon*, *10*(8), e29509. https://doi.org/10.1016/j.heliyon.2024.e29509
- Chen, M., & Wang, C. (2024). How business model innovation facilitates microcredit in balancing social mission with commercial performance evidence from local commercial banks. *Technological Forecasting and Social Change*, 202, 123287. https://doi.org/10.1016/j.techfore.2024.123287
- Ciulli, F., Kolk, A., Bidmon, C. M., Sprong, N., & Hekkert, M. P. (2022). Sustainable business model innovation and scaling through collaboration. *Environmental Innovation and Societal Transitions*, 45, 289–301. https://doi.org/10.1016/j.eist.2022.11.003
- Coffay, M., & Bocken, N. (2023). Sustainable by design: An organizational design tool for sustainable business model innovation. *Journal of Cleaner Production*, *427*, 139-294. https://doi.org/10.1016/j.jclepro.2023.139294
- Corcoran, C. K., Cook, D., & Jóhannsdóttir, L. (2024). A qualitative inquiry into sustainable transitions and business models in Icelandic energy-related companies. *Sustainable Production and Consumption*. https://doi.org/10.1016/j.spc.2024.02.013
- Guo, L., Cao, Y., Qu, Y., & Tseng, M. (2022). Developing sustainable business model innovation through stakeholder management and dynamic capability: A longitudinal case study. Journal of Cleaner Production, 372, 133626. https://doi.org/10.1016/j.jclepro.2022.133626
- Hagawe, H. M., Mobarek, A., Hanuk, A., & Jamal, A. (2023). A unique business model for microfinance institutions: the case of Assadaqaat Community Finance (ACF). *Cogent Business & Management*, 10(1). https://doi.org/10.1080/23311975.2022.2135202
- Hall, S., Workman, M., Hardy, J., Mazur, C., Anable, J., Powell, M., & Wagner, S. M. (2022). Doing business model innovation for sustainability transitions Bringing in strategic foresight and human-centered design. *Energy Research & Social Science*, *90*, 102-685. https://doi.org/10.1016/j.erss.2022.102685
- Hassan, H., Li, C., & Khoso, W. M. (2024). Digital Economy and its impact on sustainable business practices: an analytical study in the Chinese context. *Heliyon*, e36617. https://doi.org/10.1016/j.heliyon.2024.e36617
- Heinemann, G. (2022). Innovating in the off-grid sector: Sustainable supply chains and business models for solar home system provision in Bangladesh and Kenya. *Energy Research & Social Science*, *94*, 102853. https://doi.org/10.1016/j.erss.2022.102853
- Hollebeek, L. D., Urbonavicius, S., Sigurdsson, V., Clark, M. K., Parts, O., & Rather, R. A. (2022). Stakeholder engagement and business model innovation value. *The Service Industries Journal*, 42(1–2), 42–58. https://doi.org/10.1080/02642069.2022.2026334
- Holtström, J. (2021). Business model innovation under strategic transformation. *Technology Analysis and Strategic Management*, 34(5), 550–562. https://doi.org/10.1080/09537325.2021.1914329
- Huang, A., & Farboudi Jahromi, M. (2020). Resilience building in service firms during and post COVID-19. *The Service Industries Journal*, 41 (1–2), 138–167. https://doi.org/10.1080/02642069.2020.1862092
- lizuka, M., & Hane, G. (2021). Towards attaining the SDGs: cases of disruptive and inclusive innovations. *Innovation and Development*, 11(2–3), 343–364. https://doi.org/10.1080/2157930X.2021.1954751
- Jonsdottir, A. T., Johannsdottir, L., & Davidsdottir, B. (2024). Systematic literature review on System dynamic modeling of sustainable business model strategies. *Cleaner Environmental Systems*, 13, 100200. https://doi.org/10.1016/j.cesys.2024.100200

- Jorzik, P., Antonio, J. L., Kanbach, D. K., Kallmuenzer, A., & Kraus, S. (2024). Sowing the seeds for sustainability: A business model innovation perspective on artificial intelligence in green technology startups. *Technological Forecasting and Social Change*, 208, 123-653. https://doi.org/10.1016/j.techfore.2024.123653
- Kajtazi, K., Rexhepi, G., Sharif, A., & Ozturk, I. (2023). Business model innovation and its impact on corporate sustainability. *Journal of Business Research*, 166, 114082. https://doi.org/10.1016/j.jbusres.2023.114082
- Kansheba, J. M., & Marobhe, M. I. (2024). Weathering the Unforeseen: The Interplay of Resilience and Innovation in Start-Up Performance Amidst Crisis. *Journal of African Business*, 1–18. https://doi.org/10.1080/15228916.2024.2361501
- Kehbila, A.G. (2020). The entrepreneur's go-to-market innovation strategy: towards a decision-analytic framework and a road mapping process to create radically successful businesses driving spectacular growth and profitability. *Journal of Small Business & Entrepreneurship*, 33 (6), 689–716. https://doi.org/10.1080/08276331.2020.1786646
- Li, X., Cheng, L., & Zhou, H. (2024). Does digital platform capability enable Chinese SMEs' business model innovation? The role of complementary assets and entrepreneurial orientation. *Asian Journal of Technology Innovation*, 1–33. https://doi.org/10.1080/19761597.2024.2431859
- Liao, A., Pan, C., & Wu, Z. (2024). Digital Transformation and Innovation and Business Ecosystems: A bibliometric analysis for conceptual insights and collaborative Practices for ecosystem innovation. *International Journal of Innovation Studies*. https://doi.org/10.1016/j.ijis.2024.04.003
- Lüdeke-Freund, F., Carroux, S., Joyce, A., Massa, L., & Breuer, H. (2018). The sustainable business model pattern taxonomy—45 patterns to support sustainability-oriented business model innovation. *Sustainable Production and Consumption*, *15*, 145–162. https://doi.org/10.1016/j.spc.2018.06.004
- Masood, T., Israr, A., Zubair, M., & Qazi, U. W. (2023). Assessing challenges to sustainability and resilience of energy supply chain in Pakistan: a developing economy from Triple Bottom Line and UN SDGs' perspective. *International Journal of Sustainable Energy*, 42(1), 268–288. https://doi.org/10.1080/14786451.2023.2189489
- Mohan, L., & Potnis, D. (2010). Catalytic Innovation in Microfinance for Inclusive Growth: Insights from SKS Microfinance. *Journal of Asia-Pacific Business*, 11(3), 218–239. https://doi.org/10.1080/10599231.2010.500574
- Mori, A., & Zhang, K. (2024). Networked sustainable business model innovation and sustainable energy transitions: A case study of incumbent Chinese manufacturers in 2010–2022. *Environmental Innovation and Societal Transitions*, 53, 100911. https://doi.org/10.1016/j.eist.2024.100911
- Moshood, T. D., Nawanir, G., Aripin, N. M., Ahmad, M. H., Lee, K. L., Hussain, S., Sanusi, Y. K., & Ajibike, W. (2021). Lean business model canvas and sustainable innovation business model based on the industrial synergy of microalgae cultivation. *Environmental Challenges*, 6, 100-418. https://doi.org/10.1016/j.envc.2021.100418
- Muithya, V., & Muathe, S. (2020). Dynamic capabilities and performance in the context of microfinance institutions in Kenya: An exploratory study. *Journal of Business, Economics and Management Works*, 7(08), 15-29. Paper template
- Mwania, S. (2022). Effect of Financial Innovation on Operational Sustainability of Micro-finance Institutions in Kenya (Doctoral dissertation, University of Nairobi).

- Ndungu, J. M., & Moturi, C. A. (2020). Determinants of mobile Fintech uptake in Kenyan Microfinance sector. *Current Journal of Applied Science and Technology*, 102–114. https://doi.org/10.9734/cjast/2020/v39i2830943
- Neumeyer, X., & Santos, S. C. (2017). Sustainable business models, venture typologies, and entrepreneurial ecosystems: A social network perspective. *Journal of Cleaner Production*, 172, 4565–4579. https://doi.org/10.1016/j.jclepro.2017.08.216
- Nuryanto, U. W., Basrowi, N., Quraysin, I., & Pratiwi, I. (2024). Harmonizing Eco-Control and Eco-Friendly Technologies with Green Investment: Pioneering Business Innovation for Corporate Sustainability in the Indonesian Context. *Environmental Challenges*, *15*, 100-952. https://doi.org/10.1016/j.envc.2024.100952
- Omwanza, C. O., Jagongo, A. O., & Ndede, F. W. S. (2022). EFFECT OF PROCESS INNOVATIONS ON FINANCIAL PERFORMANCE OF MICROFINANCE BANKS IN KENYA. *Strategic Journal of Business & Change Management*, *9*(2). https://doi.org/10.61426/sjbcm.v9i2.2326
- Peñarroya-Farell, M., Miralles, F., & Vaziri, M. (2023). Open and sustainable business model innovation: An intention-based perspective from the Spanish cultural firms. *Journal of Open Innovation Technology Market and Complexity*, *9*(2), 100036. https://doi.org/10.1016/j.joitmc.2023.100036
- Qi, X., & Yang, Z. (2023). Drivers of green innovation in BRICS countries: exploring triple bottom line theory. *Economic Research*, *36*(3). https://doi.org/10.1080/1331677X.2022.2150670
- Roshan, R., & Balodi, K. C. (2024). Sustainable Business Model Innovation of an Emerging Country Startup: An Imprinting Theory Perspective. *Journal of Cleaner Production*, 143-687. https://doi.org/10.1016/j.jclepro.2024.143687
- Sarangdhar, V., Awate, S., & Mudambi, R. (2024). Business model innovations in high-velocity environments. *Journal of Business Research*, 183, 114-864. https://doi.org/10.1016/j.jbusres.2024.114864
- Senyo, P. K., & Osabutey, E. L. C. (2021). Transdisciplinary perspective on sustainable multitier supply chains: a triple bottom line inspired framework and future research directions. *International Journal of Production Research*, *61*(14), 4918–4933. https://doi.org/10.1080/00207543.2021.1946194
- Xiao, H., Yang, Z., & Hu, Y. (2021). Influencing mechanism of strategic flexibility on corporate performance: the mediating role of business model innovation. *Asia Pacific Business Review*, *27*(3), 470–492. https://doi.org/10.1080/13602381.2021.1896256
- Si, S., Ahlstrom, D., Wei, J., & Cullen, J. (2019). Business, Entrepreneurship, and Innovation Toward Poverty Reduction. *Entrepreneurship & Regional Development*, *32*(1–2), 1–20. https://doi.org/10.1080/08985626.2019.1640485
- Sze, L. B., Salo, J., & Tan, T. M. (2024). Sustainable innovation in the metaverse: Blockchain's role in new business models. *Digital Business*, *4*(2), 100086. https://doi.org/10.1016/j.digbus.2024.100086
- Van Bommel, K. (2018). Managing tensions in sustainable business models: Exploring instrumental and integrative strategies. *Journal of Cleaner Production*, 196, 829–841. https://doi.org/10.1016/j.jclepro.2018.06.063
- Wang, S., & Zhang, H. (2024). Inter-organizational cooperation in digital green supply chains: a catalyst for Eco-Innovations and sustainable business practices. *Journal of Cleaner Production*, 143-383. https://doi.org/10.1016/j.jclepro.2024.143383

Vol. 15, No. 1, 2025, E-ISSN: 2225-8329 © 2025

Williamsson, J., & Sandoff, A. (2023). Holding hands on the platform: Exploring the influence of municipal open innovation platforms on sustainable business model innovation. *Cities*, *140*, 104-455. https://doi.org/10.1016/j.cities.2023.104455