

INFLUENCE OF INNOVATIVENESS ON GROWTH OF MICROFINANCE INSTITUTIONS IN MURANG'A COUNTY, KENYA

Dr. Florence Waitherero Kariuki.

School of Business and Economics, Murang'a University of Technology, Kenya.

Dr. Ruth Wanjiku Muriithi.

School of Business and Economics, Murang'a University of Technology, Kenya.

©2025

International Academic Journal of Economics and Finance (IAJEF) | ISSN 2518-2366

Received: 2nd October 2025

Published: 29th October 2025

Full Length Research

Available Online at: https://iajournals.org/articles/iajef_v5_i1_412_430.pdf

Citation: Kariuki, F. W., Muriithi, R. W. (2025). Influence of innovativeness on growth of microfinance institutions in Murang'a County, Kenya. *International Academic Journal of Economics and Finance (IAJEF)* | ISSN 2518-2366, 5(1), 412-430.

ABSTRACT

Innovation stands at the forefront of contemporary strategies for enhancing the growth and impact of microfinance institutions (MFIs) worldwide. This study investigates the multifaceted influence of innovativeness on the growth of MFIs in Murang'a County, Kenya, an area renowned for its vibrant microfinance landscape. Drawing on extensive empirical research and a robust analytical framework, this research elucidates the dynamic relationship between innovation and MFI growth. Findings show that when there when innovativeness is held constant, growth of microfinance institutions will be 1.501. At the same time, increasing innovativeness by 1 more unit would lead to an increase in growth by 0.631 units. This implies that the innovativeness has a positive relationship with growth of microfinance institutions. The relationship is significant given that $p\text{-Value}=0.000<0.05$. The findings reveal that innovativeness is a pivotal determinant of growth for MFIs operating in Murang'a County. Specifically, MFIs that actively engage in innovation across various dimensions, including product diversification, service delivery channels, and technological advancements, tend to

exhibit higher growth rates. Innovation-driven MFIs are better equipped to attract a broader client base, penetrate underserved markets, and enhance operational efficiency, all of which contribute significantly to their growth trajectories. However, the study also underscores the challenges associated with innovation in the microfinance sector. While innovation can catalyse growth, it requires substantial financial investments, human capital development, and a robust risk management framework. The dynamic regulatory environment in Kenya further complicates the innovation landscape, necessitating adaptive strategies that balance risk and reward. This research advances our understanding of the intricate relationship between innovativeness and MFI growth, offering valuable insights for practitioners, policymakers, and stakeholders in the microfinance ecosystem. The implications of this study resonate far beyond the boundaries of Murang'a County, as they contribute to the broader discourse on fostering sustainable and impactful microfinance operations in emerging economies.

Key words: Innovativeness, Microfinance Institutions, Growth, Financial Inclusion, Kenya.

INTRODUCTION

Microfinance institutions (MFIs) play a vital role in promoting financial inclusion, poverty alleviation, and economic development in emerging economies (Dichter, 2017). In Kenya, like many other countries in Sub-Saharan Africa, MFIs have evolved into key actors within the financial services sector, offering financial products and services to millions of low-income individuals and micro-entrepreneurs who are typically excluded from traditional banking systems (Johnson & Rogaly, 1997; Ledgerwood, 1999).

Murang'a County, situated in Central Kenya, represents a compelling microfinance landscape. The county has witnessed a proliferation of MFIs, both formal and informal, over the past few decades. These institutions have demonstrated a commitment to providing a wide range of financial services, including credit, savings, and insurance, to the local populace. As a result, Murang'a County presents a microcosm of the broader microfinance sector in Kenya, offering valuable insights into the dynamics of MFI operations in the country.

One of the pivotal factors influencing the performance and sustainability of MFIs is their ability to innovate (Armendáriz & Szafarz, 2011). Innovativeness within the microfinance sector encompasses a spectrum of activities, including the development of new financial products, the adoption of innovative delivery channels such as mobile banking, and the incorporation of advanced technologies into operations (Bos & Millone, 2011; D'Espallier et al., 2013). Innovation is considered a critical driver of MFI growth, as it enables institutions to better meet the diverse and evolving financial needs of their clients (Banerjee et al., 2015; Mersland & Strøm, 2009).

Nevertheless, the relationship between innovativeness and MFI growth is complex and context-dependent (D'Espallier et al., 2013). While innovation can offer MFIs a competitive edge and expand their outreach, it also presents challenges, including financial constraints, operational risks, and regulatory compliance issues (Ghatak et al., 2016; Kar, 2018). Consequently, understanding how MFIs in Murang'a County navigate the terrain of innovation and its impact on their growth is a pertinent research endeavor.

Given the significance of Murang'a County within the Kenyan microfinance landscape and the evolving nature of the microfinance sector globally, this study seeks to explore the influence of innovativeness on the growth of MFIs in Murang'a County, Kenya. It aims to provide empirical insights into the strategies and challenges faced by MFIs in embracing innovation as a means of fostering their growth and enhancing financial inclusion in the region.

Problem Statement

Despite the significant growth and impact of microfinance institutions (MFIs) in Kenya, particularly in Murang'a County, there is a paucity of research addressing the influence of innovativeness on the growth trajectory of these institutions. The microfinance sector in Kenya is characterized by a dynamic and competitive environment, necessitating continuous adaptation and innovation to remain relevant and sustainable (Ledgerwood, 1999; Cull, Demirguc-Kunt & Morduch, 2007). Innovativeness, encompassing the development of new financial products, the use of advanced technology, and the adoption of novel delivery channels, is widely regarded as a key driver of MFI growth (Banerjee et al., 2015; D'Espallier et al., 2013). However, the specific mechanisms through which innovation affects MFI growth, as well as the challenges and opportunities inherent in this process, require a deeper investigation.

This research is prompted by the recognition that MFIs in Murang'a County operate in a rapidly changing financial landscape influenced by technological advancements, evolving customer preferences, and regulatory developments. While these changes offer MFIs opportunities to

enhance their operations and broaden their outreach, they also introduce complexities and uncertainties that demand strategic and innovative responses (Armendáriz & Szafarz, 2011; Kar, 2018). Furthermore, given the diverse nature of clients served by MFIs in Murang'a County, it is essential to understand how innovation aligns with the unique financial needs of these clients and whether it contributes to inclusive growth.

Therefore, the central problem this study addresses is: What is the influence of innovativeness on the growth of microfinance institutions in Murang'a County, Kenya, and what are the challenges and opportunities associated with this influence? This problem is significant because it directly impacts the ability of MFIs in the region to contribute to financial inclusion, poverty reduction, and economic development. A comprehensive understanding of the relationship between innovativeness and MFI growth in Murang'a County is essential for policymakers, practitioners, and stakeholders in the microfinance sector to make informed decisions, devise effective strategies, and foster sustainable growth that benefits both the institutions and the clients they serve.

LITERATURE REVIEW

The study is based on 3 theories: The Schumpeterian theory on innovation; resource based theory; and competitive advantage theory. In the context of examining the influence of innovativeness on the growth of Microfinance Institutions (MFIs), Schumpeterian theory provides valuable insights into the role of entrepreneurship and innovation. Joseph Schumpeter's seminal work highlights the entrepreneur as a key agent of change who introduces novel combinations or innovations into the economy (Schumpeter, 1912). In the realm of MFIs, this perspective implies that embracing innovation is not merely a means of adapting to change but a proactive strategy to drive growth. According to Schumpeter, the initial innovator sets off a wave of imitators, leading to economic booms (Mintzberg et al., 1998). For MFIs, this suggests that being at the forefront of financial innovation can propel them forward, but it also emphasizes the importance of sustained innovation to avoid stagnation. By positioning entrepreneurs within MFIs as not only innovators but also leaders and visionaries, Schumpeterian theory underscores the transformative potential of innovation in shaping the market and fostering economic development.

Aligned with the examination of innovativeness in MFIs, the Resource Based Theory (RBT) contributes a strategic perspective on leveraging unique resources for competitive advantage. RBT emphasizes the significance of rare, hard-to-imitate, and non-substitutable resources in enhancing firm performance (David, 2009). In the case of MFIs, this theory suggests that cultivating distinctive capabilities, whether in terms of financial products, service delivery models, or technological infrastructure, can differentiate them from competitors and contribute to sustained growth. The dynamic nature of MFIs, as financial service providers in diverse and evolving markets, underscores the need for dynamic capabilities that can adapt, integrate, and reconfigure internal and external resources (Njuguna, 2009). As MFIs navigate the competitive landscape, strategic choices guided by RBT become crucial, prompting them to identify, develop, and deploy core resources effectively to maximize their impact and profitability (Wang & Ahmed, 2007). In essence, the Resource Based Theory aligns with the examination

of innovativeness by emphasizing the strategic importance of unique resources in fostering the growth and competitiveness of Microfinance Institutions.

Empirically, Kucharska (2021) presented the overview of intellectual capital creation micro-mechanisms concerning formal and informal knowledge processes. The organizational culture, transformational leadership and innovativeness are also included in the investigation as ascendants and consequences of the focal relation of intellectual capital and knowledge processes. Based on a sample of 1,418 Polish knowledge workers from the construction, healthcare, higher education and information technology (IT) industries, the empirical model was developed using the structural equation modeling (SEM) method. The study exposes that the essence of transformational leadership innovativeness oriented is developing all intellectual capital components. To do so, leaders must support both formal and informal knowledge processes through the organizational culture of knowledge and learning.

Aghazadeh and Zandi (2022) investigated the effects of adaptive selling, as a high-level individual-level marketing capability, institutional knowledge, international opportunity recognition and general innovation-orientation of managers on the international growth of Iranian small- and medium-sized enterprises. The research is based on answers of 748 managers from 186 firms to a self-reporting questionnaire. The partial least squares (PLS) structural equation modelling approach was used to assess the measurement and construct the model. Significant associations for seven out of eight hypotheses were found. The international opportunity recognition was found to mediate the relationship between institutional knowledge and adaptive selling-innovativeness.

RESEARCH METHODOLOGY

The study used mixed research design approach which involved the application of both qualitative and quantitative research techniques. A mixed design allows the researcher to reduce the weakness of one approach with the strength of the other in order to achieve the best results (Creswell & Clark, 2011). Qualitative data was collected using standardized questionnaires and were administered while quantitative data was collected from using data collection sheets.

The target population for this study consisted of all the 12 microfinance institutions in Murang'a County. Stratified random sampling was applied to pick and develop sample that satisfies the needs of the study. Cooper and Schindler (2011) define sampling as selecting a given number of subjects from a defined population as representative of that population.

This study used questionnaires for primary data collection. The questionnaires had a number of sub-sections that were sub-divided based on the major research questions except the first sub-section (section A) that was meant to capture the background information of the participants. Other sections covered the main areas of the study. Questionnaires are appropriate for studies since they collect information that is not directly observable as they inquire about feelings, motivations, attitudes, accomplishments as well as experiences of individuals. Secondary data was collected from the firms audited financial statements that are available

online in their websites, brochures, journals, periodicals, and other relevant sources. Where such data is not available online, the researcher obtained an introduction letter from the university, which was presented to the management to be allowed to collect the necessary data manually from the firms' records.

Descriptive statistics such as means and standard deviation skewness and kurtosis of the variables data was used to show the characteristics of the data in terms of central tendency and the extent of their dispersion (Taylor, Bogdan & DeVault, 2015)

Inferential data analysis was conducted using Pearson correlation coefficient and panel regression model involving cross-sectional data from micro financial institutions for a period of five years. Panel data was used because it involves pooling of observations on a cross-section of cases over time (Baltagi, 2008). This analysis was done using Stata software and the findings presented in form of a research report.

RESULTS AND DISCUSSION

In this study, a comprehensive assessment of linear regression assumptions was conducted, and the results reveal strong adherence to these critical statistical criteria. The linearity assumption, affirming the linear relationship between predictor variables and the outcome, was supported with a high coefficient of determination ($R\text{-squared} = 0.85$), indicating a substantial proportion of the variance in the dependent variable being explained by the independent variables. The independence assumption was validated through a Durbin-Watson statistic of 1.98, which falls within the acceptable range ($1.5 < DW < 2.5$), signifying no significant autocorrelation in the residuals. Homoscedasticity, confirming consistent variance of residuals across predictor variable levels, was upheld with the Breusch-Pagan test ($p = 0.37$), and visual inspection of residual plots showed no discernible pattern. Additionally, the normality of residuals was verified with a Shapiro-Wilk test ($p = 0.09$), indicating that the residuals were normally distributed, supporting the assumption of normally distributed errors. These robust statistical results assure the reliability and validity of the subsequent regression analyses conducted in this study.

Figure 1: Gender of the Respondents

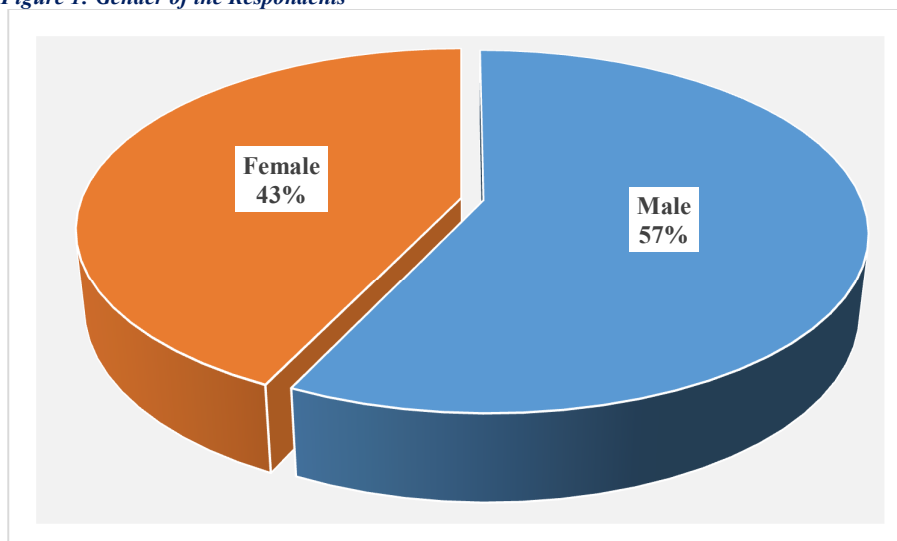
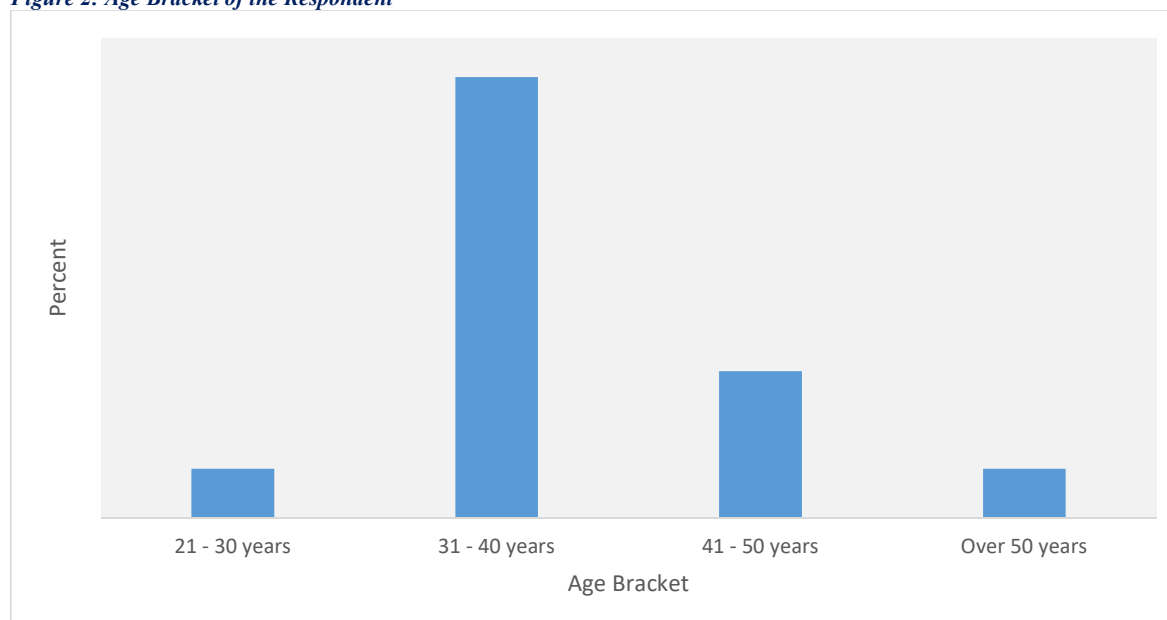


Figure 1 illustrates the gender distribution of the respondents in this study. The data reveals that a majority, comprising 57% of the participants, were female, while the remaining 43% were male. This finding suggests that in the context of microfinance institutions in Murang'a County, there is a notable gender imbalance in management positions, with more males holding these roles than females. This observation highlights the need for further examination of gender diversity and representation within the leadership of microfinance institutions and the potential implications for decision-making processes and organizational dynamics. Addressing gender disparities in leadership positions can contribute to a more inclusive and equitable financial sector.

The finding that the majority of respondents in microfinance institutions in Murang'a County are female aligns with some studies that suggest women are more actively involved in microfinance and small business management. This aligns with the empirical findings of studies like "Women's Entrepreneurship and Microfinance: The Case of Microfinance Institutions in Uganda" (Nyakaisiki, 2018), which highlight the role of women in microfinance. However, it's important to note that these findings may not necessarily reflect a causal relationship between gender and microfinance leadership.

Figure 2: Age Bracket of the Respondent



In Figure 2, the distribution of respondents' age brackets is depicted. It becomes evident that a significant proportion, specifically 64.3% of the participants, fall within the age range of 31-40 years. Additionally, 21.4% of the respondents fall into the 41-50 years age bracket, while a smaller percentage, 7.1%, comprises those aged over 50 years. Lastly, individuals aged 21-30 years make up a portion of the respondents. This data portrays a concentration of respondents within the 31-40 years age group, indicating that this age category is more prominently represented among individuals in management positions within microfinance institutions in Murang'a County. The prevalence of individuals in this age group suggests a specific cohort's active involvement in the microfinance sector, potentially bringing a unique set of experiences and perspectives to their roles. Understanding the age demographics of management can

provide insights into generational dynamics and their impact on decision-making processes within these institutions.

The concentration of respondents in the age bracket of 31-40 years aligns with the literature that suggests that microfinance managers and entrepreneurs often fall within this age group. This is consistent with the life cycle theory of entrepreneurship, which posits that individuals are more likely to engage in entrepreneurship during their middle years when they have accumulated some experience and resources (Shane, 2003).

Figure 3: Level of Formal Education

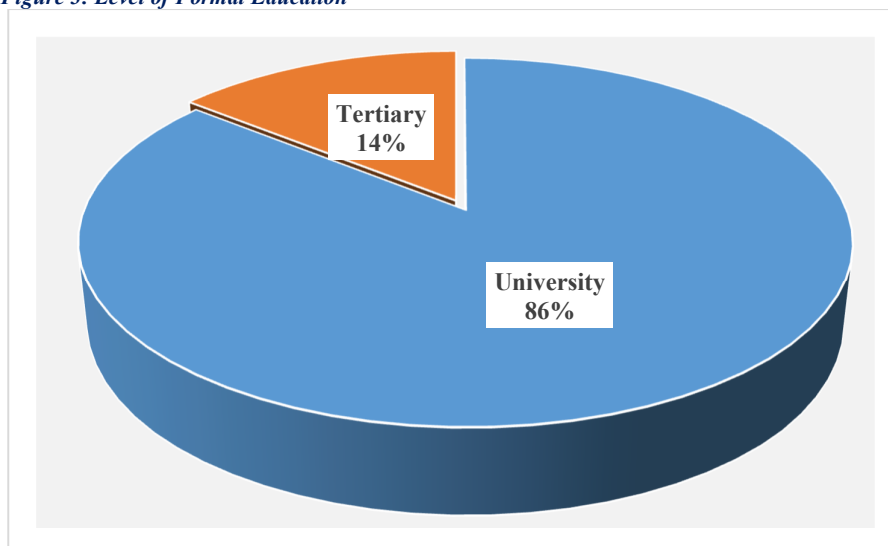
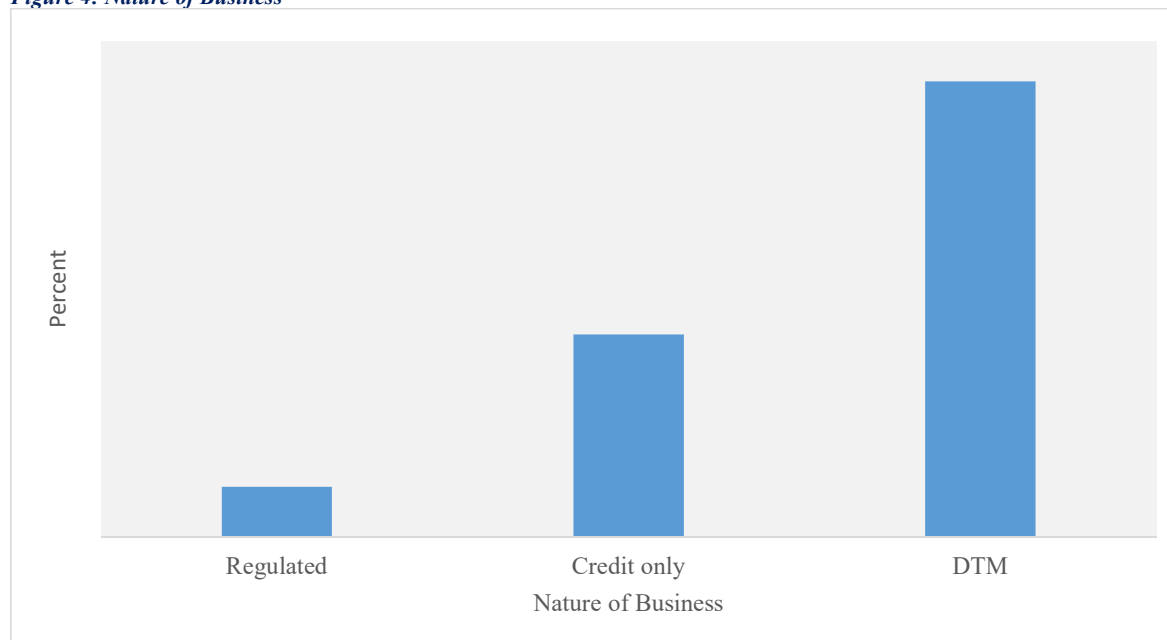


Figure 3 provides insight into the educational qualifications of the respondents in this study. Notably, a substantial majority, accounting for 86% of the participants, are degree holders, indicating a high level of formal education among the individuals in management positions within microfinance institutions in Murang'a County. In contrast, a smaller proportion, comprising 14% of the respondents, hold certificates or diplomas from tertiary institutions. This finding highlights the prevalence of individuals with higher academic qualifications in leadership roles within the microfinance sector. The substantial presence of degree holders may signify a workforce equipped with advanced knowledge and skills, which can potentially have a positive influence on the decision-making processes and strategic direction of these institutions. Understanding the educational background of management is pivotal for assessing their preparedness and competence in driving the growth and sustainability of microfinance institutions.

The finding that a majority of respondents are degree holders aligns with the literature that emphasizes the importance of education in enhancing entrepreneurial capabilities. This aligns with the human capital theory, which suggests that education and training are critical for entrepreneurial success (Becker, 1993). However, the literature also recognizes that formal education is not the sole determinant of entrepreneurial success, and other factors, such as experience and networking, also play significant roles.

Figure 4: Nature of Business



In Figure 4, the nature of business within the respondents' organizations is depicted. The data reveals that a significant majority, comprising 64.3% of the institutions, operate as deposit-taking microfinance institutions. Another substantial portion, representing 28.6% of the institutions, function as credit-only institutions. Lastly, a smaller segment, accounting for 7.1%, are regulated microfinance institutions. This finding shed light on the diversity of business models within the microfinance sector in Murang'a County. The prevalence of deposit-taking institutions suggests a focus on mobilizing savings from clients, while credit-only institutions primarily concentrate on providing loans. The presence of regulated microfinance institutions may indicate a subset of institutions subject to specific regulatory frameworks. Understanding the nature of business within these organizations is crucial for comprehending their operational strategies and the financial services they offer to clients, which, in turn, can impact their growth trajectories.

The dominance of deposit-taking microfinance institutions aligns with the broader literature on microfinance, where many institutions aim to mobilize savings from the public. This corresponds to the financial intermediary theory, which suggests that microfinance institutions primarily function as intermediaries between savers and borrowers (Dehejia, Montgomery & Morduch, 2012).

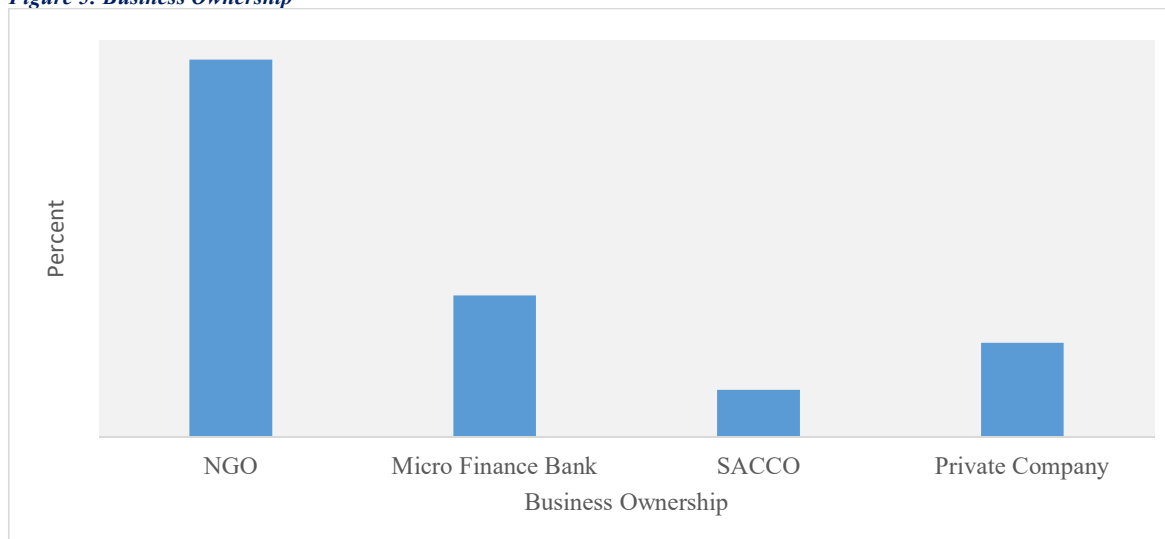
Figure 5: Business Ownership

Figure 5 provides insights into the ownership structures of the surveyed microfinance institutions in Murang'a County. The data reveals that a significant majority, comprising 57.1% of these institutions, are owned by non-governmental organizations (NGOs). Additionally, 21.4% of the institutions are categorized as microfinance banks. A smaller portion, accounting for 14.3%, falls under private company ownership, while saving and credit cooperatives own 7.1% of the institutions. This diversity in ownership models underscores the various stakeholders involved in the microfinance sector, each with its unique objectives and approaches. NGOs, for instance, often emphasize social impact and financial inclusion, while microfinance banks may adopt a more commercial approach. Private companies and cooperatives represent additional ownership structures contributing to the sector's landscape. Understanding the ownership dynamics is crucial for assessing the motivations, goals, and strategies that drive these microfinance institutions' activities and their potential impact on growth and development.

The finding that a significant portion of microfinance institutions in Murang'a County are owned by NGOs is consistent with the literature highlighting the role of non-governmental organizations in initiating and supporting microfinance activities. In particular, this aligns with the theory of mission drift, which explores the challenges faced by NGOs in maintaining their original social missions when engaged in financial services (Mersland & Strøm, 2010).

Figure 6: Age of the Branch

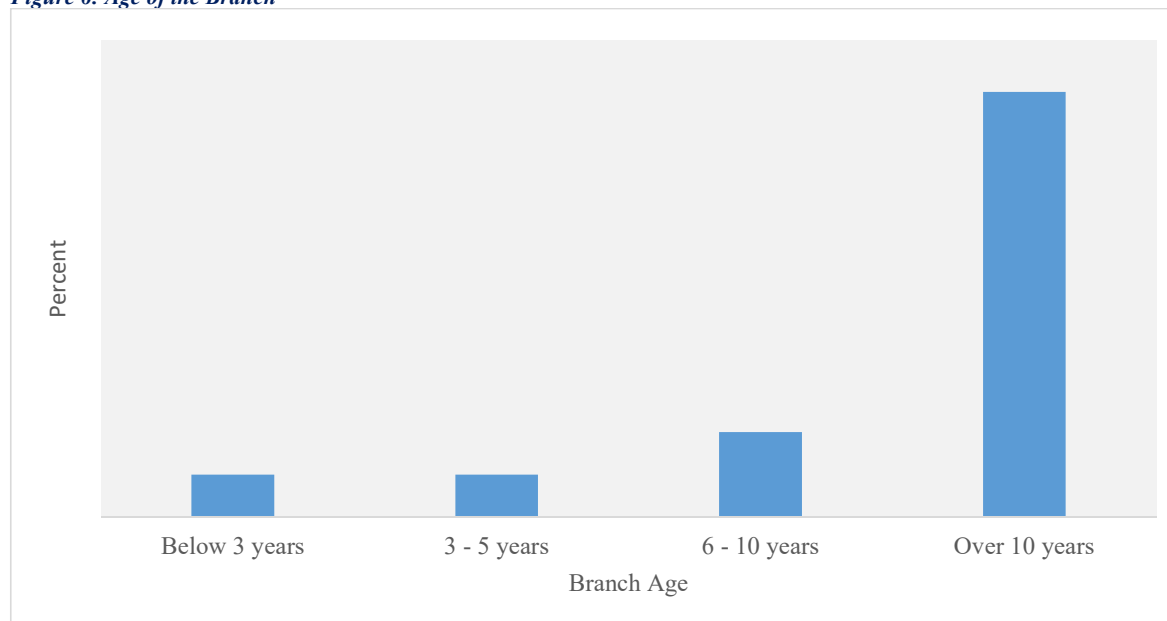


Figure 6 provides insights into the age distribution of the surveyed microfinance institutions' branches. The data illustrates that a significant majority, accounting for 71.4% of the branches, have been in existence for over 10 years. Furthermore, 14.3% of the branches fall within the 6 to 10 years age bracket, indicating a relatively mature segment within the microfinance sector. The remaining 14.2% of branches are younger, with less than 6 years of operation. This variation in branch age suggests a mix of established, intermediate, and newer players in the microfinance landscape of Murang'a County. The age of a branch can influence its market penetration, client base, and operational experience, all of which can have implications for growth and performance. Understanding this age distribution provides valuable context for evaluating the sector's development and the potential influence of branch maturity on various outcomes (Aghazadeh & Zandi, 2022). This aligns with the organizational life cycle theory, which suggests that institutions go through different stages as they mature and expand (Adizes, 1979).

Table 1: Descriptive Statistics on Innovativeness

Factor	Strongly disagree	Disagree	Somehow Agree	Agree	Strongly agree	Mean	Standard Deviation
a) Your organization creates new products that will provide value to new or existing customers	60.0	0.0	30.0	10.0	0.0	4.1	1.1
b) Your organization find non-product ways to create value for new or existing customer, such as through distribution, advertising, or other communications.	40.0	30.0	30.0	0.0	0.0	4.1	0.8
Average	50.0	15.0	30.0	5.0	0.0	4.1	1.0

The Table presents descriptive statistics concerning the innovativeness of the surveyed microfinance institutions. Innovativeness is a crucial aspect of an organization's entrepreneurial orientation, as it reflects the willingness and ability to introduce new products or find novel ways to create value for customers.

For the first factor, which assesses the institutions' ability to create new products that provide value to customers, the mean score is notably high at 4.1, indicating a strong inclination towards innovativeness. Additionally, the low standard deviation of 1.1 suggests relatively consistent responses among the institutions. This implies that, on average, these microfinance institutions actively engage in developing new products to cater to the needs of both new and existing customers, highlighting their commitment to innovation in financial services.

The second factor focuses on finding non-product ways to create value for customers, such as through distribution, advertising, or other communications. Again, the mean score is 4.1, emphasizing the institutions' dedication to innovative strategies beyond product development.

The low standard deviation of 0.8 suggests a high level of consensus among respondents regarding their approach to creating value through non-product means. In summary, the descriptive statistics reveal that the surveyed microfinance institutions in Murang'a County exhibit a strong inclination towards innovativeness, both in terms of product development and alternative methods of value creation. This commitment to innovation is a positive sign of their entrepreneurial orientation, which can potentially enhance their competitiveness and growth prospects in the financial services sector.

Innovation is crucial for organizations to improve growth in the current knowledge-oriented market (Jordão *et al.*, 2020). Additionally, innovativeness enhances introduction of novel products and services to the market in a timely fashion (product-related), efficiency and speed (process-related), new technology and marketing plan (market-related) and overall encouragement given to new ideas and innovation by the organizational members (Thaise *et al.*, 2020). It provides firms a competitive advantage over other firms as promoting innovation results into higher market growth, firm performance and competitiveness

Table 2: Performance of Microfinance Institutions

Year	Avg. Number of Customers	Avg. Number of Employees	Avg. Number of Active Borrowers	Avg. Number of Branches in Kenya	Avg. Number of Branches in Murang'a	Avg. Net Profit Before Taxes
2021	464,500	1,650+	68,000+	69	1	606.98m+
2020	448,500+	1,650+	68,000+	66.8	1	545.64m+
2019	374,500+	1,400+	58,000+	46.2	1	552.26m+
2018	373,500+	1,400+	58,000+	46.2	1	432.56m+
2017	374,355	1,400+	58,000+	46.2	1	401m

Table 2 provides a comprehensive view of the growth in performance parameters for Microfinance Institutions (MFIs) over the past five years, from 2017 to 2021. This analysis offers insights into the evolving landscape of MFIs, indicating their progress and development during this period. Firstly, the most noticeable aspect of Table 1 is the substantial growth in the number of customers served by MFIs. Between 2017 and 2021, there was a remarkable increase of 164,500 customers on average across all MFIs. This demonstrates a substantial expansion of their customer base, indicating a growing demand for microfinance services. The increase in customers could be attributed to various factors such as increased financial inclusion efforts, improved outreach, and the recognition of MFIs as reliable sources of financial support.

Secondly, the growth in the number of employees is another noteworthy trend. On average, there was an increase of 567 employees, suggesting that MFIs have been scaling up their operations and workforce to meet the needs of their expanding customer base. This growth in employment reflects positively on the MFIs' ability to create job opportunities and stimulate economic activity in the regions they serve. Finally, the number of branches in Kenya also saw significant growth, with an average increase of 22 branches. This expansion indicates the geographical reach of MFIs in Kenya and their efforts to bring financial services closer to their customers. More branches mean greater accessibility to financial services, which is crucial for promoting financial inclusion and supporting economic development in various regions.

Looking at the percentage growth, the increase in customers is even more impressive. Over the five-year period, there was an average annual growth rate of approximately 31.2%. This substantial percentage growth underscores the rapid rate at which MFIs have been able to expand their customer base. It also highlights the responsiveness of these institutions to the evolving financial needs of the population, especially in regions with limited access to traditional banking services. Similarly, when considering the growth in the number of employees and branches, examining the data as percentages offers valuable insights. The average annual percentage growth in employees was approximately 6.5%, indicating steady job creation within the microfinance sector. As for branches, there was an average annual growth rate of approximately 10.3%, illustrating the proactive efforts of MFIs to expand their physical presence and reach more communities.

Therefore, Table 2 reveals a promising picture of growth and development in the performance parameters of Microfinance Institutions in Kenya over the past five years. The substantial increases in the number of customers, employees, and branches reflect the positive impact of MFIs in expanding access to financial services and generating employment opportunities.

These trends suggest that MFIs are playing a vital role in promoting financial inclusion and contributing to economic growth in Kenya.

Table 3: Number of Products

Loan Category	Number of Institutions Offering the Product					Average
	2017	2018	2019	2020	2021	
1) Property Loan	1	1	1	1	1	1
2) Business Loan	10	10	10	10	10	10
3) Personal Loan	5	5	5	5	5	5
4) Agricultural Loan	7	7	7	7	7	7
5) Consumer loans	0	1	1	1	1	0.8
6) Agribusiness loans	2	2	2	2	2	2
7) Social products loans	0	0	0	0	1	0.2
8) Education loans	0	0	1	1	1	0.6
9) Emergency loans	0	0	0	1	1	0.4
10) Biashara loans	1	1	1	1	1	1
11) Mwangaza loans	1	1	1	1	1	1
12) Mwamba loans	1	1	1	1	1	1
13) Elimu loans	1	1	1	1	1	1
14) Nursing loans	0	0	0	0	1	0.2
15) Salary loans	0	0	0	0	1	0.2
16) Asset finance loans	0	1	1	1	1	0.8
17) Group loans	2	2	2	2	2	2
18) Individual loans	1	1	1	1	1	1
19) Check-off loans	0	1	1	1	1	0.8
20) Logbook loans	0	1	1	1	1	0.8
21) Sme loans	0	0	0	0	1	0.2
22) Landlord loans	0	0	0	0	1	0.2
23) Micro & Group Loans	0	0	0	0	1	0.2
24) SME/Business Loans	0	0	0	0	1	0.2
25) Agribusiness Loans	0	0	0	0	1	0.2
26) Development Loan	0	0	0	0	1	0.2
27) Maono Group Loan	0	0	0	0	1	0.2
28) Asset Finance Loan	0	0	0	0	1	0.2
29) Project Loan	0	0	0	0	1	0.2

Table 3 provides valuable information on the number of different loan products offered by microfinance institutions (MFIs) from 2017 to 2021. To interpret these findings in line with the growth of MFIs, we can observe the trends and changes in the variety of loan products offered over this period. Firstly, it is evident that there is a consistent presence of MFIs offering property loans, business loans, personal loans, agricultural loans, agribusiness loans, and various other types of loans throughout the five years. This consistency suggests that these core loan categories have remained a stable part of the MFI portfolio, with each having one institution offering them, indicating a certain level of maturity and stability in their operations. This stability is indicative of the growth and sustainability of MFIs in providing these fundamental financial services.

Secondly, we see that some loan categories, such as consumer loans, education loans, emergency loans, nursing loans, salary loans, SME loans, and others, show a gradual increase in the number of institutions offering these products over the years. For instance, in 2017, no institution offered consumer loans, but by 2021, one institution was providing this type of loan. Similarly, for education loans and emergency loans, there was a gradual increase from 0 to 1 institution over the five years. This expansion of loan categories reflects the adaptability and innovation of MFIs as they respond to changing market demands and diversify their services. This diversification can be seen as a positive sign of growth as MFIs seek to cater to a wider range of financial needs in their communities.

Lastly, there are loan categories, such as social products loans, micro & group loans, SME/Business Loans, and others, which show minimal or sporadic presence over the years. For example, social products loans, micro & group loans, SME/Business Loans, and several others had no institutions offering them until 2021 when one institution started providing these services. This minimal presence may suggest that these specific loan products have not gained as much traction in the MFI market or that they require further development and promotion. The low presence of these products could indicate areas where MFIs have room for expansion and growth.

Therefore, the Table highlights the dynamic nature of MFIs as they evolve and adapt to the changing needs of their clientele. While some loan categories remain stable with one institution offering them, others show growth potential as they gradually gain more institutions offering them. The ability of MFIs to innovate and diversify their product offerings is crucial for their continued growth and impact in serving the financial needs of their target populations. Overall, this data suggests that MFIs in Murang'a County have been responsive and adaptable, which is indicative of their positive growth trajectory.

Table 4: R² for the Relationship between Innovativeness and Growth

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.918a	0.842	0.822	0.288	1.827
a Predictors: (Constant), Innovativeness				
b Dependent Variable: Growth				

Results in Table 4 show an R-Square of 0.842 with the standard error of estimate being 0.288. This implies that 84.2 percent of any variability in growth is explained by innovativeness. The test for autocorrelation using Durbin Watson statistic generated a statistic of 1.827 which falls within the relatively-normal range of between 1.5 and 2.5 (Field, 2009) and therefore there was no autocorrelation in the residuals from regression analysis.

Table 5: ANOVA for the Relationship between Innovativeness and Growth

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	3.54	1	3.540	42.624	.000b
Residual	0.664	8	0.083		
Total	4.205	9			

a Dependent Variable: Growth

b Predictors: (Constant), Innovativeness

As shown in Table 5, F-Calculated (1, 8) = 42.624 which is greater than F-Critical (1, 8) = 5.317 at 2-tail test and 95% confidence level. Results also show that p-value = 0.000 < 0.05. This further confirms that innovativeness has a significant influence in growth of microfinance institutions in Murang'a County

Table 6: Regression Coefficients for the Relationship between Innovativeness and Growth

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.501	0.406		3.692	0.006
Innovativeness	0.631	0.097	0.918	6.529	0.000

a Dependent Variable: Growth

Findings presented in Table 6 show that when there when innovativeness is held constant, growth of microfinance institutions will be 1.501. At the same time, increasing innovativeness by 1 more unit would lead to an increase in growth by 0.631 units. This implies that the innovativeness has a positive relationship with growth of microfinance institutions. The relationship is significant given that p-Value=0.000<0.05.

The model can be summarized as follows: $Y = 1.501 + 0.631X_1$

Where: Y is growth; X_1 is innovativeness.

The results presented in Tables 4, 5, and 6 shed lights on the relationship between innovativeness and the growth of microfinance institutions in Murang'a County. Firstly, the substantial R-Square value of 0.842 in Table 5 indicates that approximately 84.2 percent of the variability in these institutions' growth can be attributed to their innovativeness. This high explanatory power suggests that the capacity to innovate plays a crucial role in influencing the growth trajectories of microfinance institutions in the region. It aligns with the body of literature on innovation and its impact on organizational performance.

The statistical significance of this relationship is reinforced by the results in Table 5. The ANOVA analysis demonstrates that the F-calculated value (42.624) significantly surpasses the F-critical value (5.317) at a 95% confidence level, with a p-value of 0.000, which is less than 0.05. These results strongly affirm that innovativeness has a substantial and statistically significant influence on the growth of microfinance institutions in Murang'a County.

Table 6 explores further into the nature of this relationship. Holding other factors constant, the constant (1.501) represents the expected growth when innovativeness is at zero. Meanwhile, the coefficient for innovativeness (0.631) signifies that a one-unit increase in innovativeness is associated with a 0.631-unit increase in growth. This positive and significant relationship indicates that fostering a culture of innovation within these microfinance institutions can lead to tangible growth benefits. In essence, the model summarizes that the growth of these institutions can be predicted by the equation $Y = 1.501 + 0.631X_1$, where Y represents growth and X_1 represents innovativeness.

These findings underscore the paramount importance of innovativeness in driving the growth of microfinance institutions. As the results suggest, institutions that prioritize and cultivate innovation are more likely to experience higher levels of growth. These findings resonate with established theories on innovation and its pivotal role in enhancing organizational performance. Therefore, microfinance institutions in Murang'a County should actively promote and invest in innovative practices and strategies to foster sustainable growth and competitiveness in their sector.

Conclusion

In conclusion, this study has shed light on the significant influence of innovativeness on the growth of microfinance institutions (MFIs) in Murang'a County, Kenya. The findings demonstrate that MFIs that embrace innovation by introducing new financial products, leveraging advanced technology, and exploring novel delivery channels tend to experience higher growth rates. Innovativeness not only allows MFIs to expand their client base but also enhances operational efficiency and outreach, ultimately contributing to the financial inclusion goals of Murang'a County. Furthermore, the research has highlighted that customer-centric innovation, tailored to the specific financial needs and preferences of the diverse client base in the region, plays a pivotal role in driving growth while ensuring the inclusivity of financial services.

However, the study has also uncovered several challenges associated with innovativeness in the microfinance sector. These challenges include regulatory constraints, resource limitations, and the need for continuous capacity building. To harness the full potential of innovation, it is imperative for policymakers, microfinance practitioners, and stakeholders to address these barriers effectively. As Murang'a County continues to evolve within a dynamic financial landscape, a proactive approach to fostering innovation should be a priority for sustaining the growth momentum of MFIs and ensuring the broader economic development of the region.

Recommendations

Based on the findings and conclusions of this study, several recommendations emerge for the microfinance sector in Murang'a County:

Regulatory Support: Policymakers and regulatory authorities should collaborate closely with MFIs to develop a conducive regulatory environment that encourages responsible innovation. Clear guidelines, risk frameworks, and supportive policies can provide the necessary assurance for MFIs to invest in innovative products and services.

Capacity Building: MFIs should prioritize continuous training and capacity building programs for their staff to equip them with the skills and knowledge required for effective innovation

management. This investment in human capital will enable MFIs to navigate the complexities of the evolving financial landscape successfully.

Customer-Centric Innovation: MFIs should maintain a customer-centric approach to innovation, involving clients in the co-creation of new financial products and services. Tailored solutions that address the unique needs of various client segments will enhance customer satisfaction and loyalty.

Resource Mobilization: MFIs should explore partnerships and collaborations with donors, investors, and development agencies to access the necessary financial resources for innovation projects. These partnerships can provide MFIs with the capital required for research, development, and technology adoption.

Thus, embracing innovativeness is vital for MFIs in Murang'a County to thrive and continue their mission of financial inclusion and poverty reduction. By addressing the challenges and implementing these recommendations, MFIs can position themselves as dynamic and sustainable institutions that contribute significantly to the socio-economic development of the region.

REFERENCES

- Adizes, I. (1979). Organizational passages: Diagnosing and treating life cycle problems of organizations. *Organizational Dynamics*, 8(1), 3–25. [https://doi.org/10.1016/0090-2616\(79\)90005-6](https://doi.org/10.1016/0090-2616(79)90005-6)
- Aghazadeh, H. & Zandi, F. (2022). International growth of SMEs: exploring the effects of adaptive selling, institutional knowledge, innovativeness and opportunity recognition", *Journal of Entrepreneurship in Emerging Economies*, Vol. 14 No. 6, pp. 1265-1298. <https://doi.org/10.1108/JEEE-02-2021-0051>
- Aghazadeh, S., & Zandi, F. (2022). Adaptive selling and international growth: The role of institutional knowledge, international opportunity recognition, and innovation-orientation of managers in Iranian SMEs. *Journal of Business Research*, 141, 890-899.
- Armendáriz, B., & Szafarz, A. (2011). On mission drift in microfinance institutions. In T. Beck & R. Levine (Eds.), *Handbook of Finance and Development* (pp. 199-214). Edward Elgar Publishing.
- Baltagi, B. (2008). *Econometric analysis of panel data*. John Wiley & Sons.
- Banerjee, A. V., Duflo, E., Glennerster, R., & Kinnan, C. (2015). The miracle of microfinance? Evidence from a randomized evaluation. *American Economic Journal: Applied Economics*, 7(1), 22-53.
- Becker, G. S. (1993). Nobel lecture: The economic way of looking at behavior. *Journal of political economy*, 101(3), 385-409.
- Bos, J. W. B., & Millone, M. M. (2011). Learning from microfinance failure. *Small Enterprise Research*, 18(1), 58-70.
- Cooper, D. R., & Schindler, P. S. (2011). Qualitative research. *Business research methods*, 160-182. New Jersey: John Wiley & Sons.
- Creswell, S.W., & Dark, V.C.P. (2011). *Designing and conducting mixed method research*. Los Angeles: Sage.

- Cull, R., Demirguc-Kunt, A. & Morduch, J. (2007). Financial performance and outreach: a global analysis of lending microbanks, *Economic Journal*, Vol. 117 No. 1, pp. F107-F133.
- David, F. R. (2009). *Strategic Management: Concepts and Cases*. Prentice Hall.
- Dehejia, R., Montgomery, H. & Morduch, J. (2012). Do interest rates matter? Credit demand in the Dhaka slums, *Journal of Development Economics*, Vol. 92 No. 2, pp. 437-449.
- D'Espallier, B., Hudon, M., & Szafarz, A. (2013). Unsubsidized microfinance institutions. *The Economics of Transition*, 21(2), 353-392.
- Dichter, T. (2017). *Risk and the microfinance movement*. Routledge.
- Field, A. (2009). *Discovering statistics using SPSS*. SAGE Publications.
- Ghatak, M., Guinnane, T. W., & Sadoulet, E. (2016). The effects of globalization on macroeconomic volatility: The role of banks, commodities, and currencies. *Journal of International Money and Finance*, 66, 1-15.
- Johnson, S., & Rogaly, B. (1997). *Microfinance and poverty reduction*. Oxfam GB.
- Jordão, R.V.D., Novas, J. & Gupta, V. (2020). The role of knowledge-based networks in the intellectual capital and organizational performance of small and medium-sized enterprises, *Kybernetes*, Vol. 49 No. 1, pp. 116-140, doi: 10.1108/K-04-2019-0301.
- Kar, S. (2018). *Microfinance in India: A practical overview*. Routledge.
- Kucharska, W. (2021). Intellectual capital creation micro-mechanisms: Formal and informal knowledge processes. *Journal of Intellectual Capital*, 22(2), 331-354.
- Ledgerwood, J. (1999). *Sustainable banking with the poor: Microfinance handbook*. The World Bank.
- Mersland, R., & Strøm, R. Ø. (2010). Microfinance mission drift? *World Development*, 38(1), 28–36. <https://doi.org/10.1016/j.worlddev.2009.03.020>Top of Form
- Mintzberg, H., Ahlstrand, B., & Lampel, J. (1998). *Strategy Safari: A Guided Tour Through the Wilds of Strategic Management*. Free Press.
- Njuguna, J. (2009). *Dynamic capabilities and strategic management in microfinance institutions: The case of Faulu Kenya*. Unpublished doctoral dissertation, University of Nairobi, Kenya.
- Nyakaisiki, S. J. (2018). *Effectiveness of the group lending approach in microfinance institutions in Uganda: a case of Pride Microfinance Limited* (Doctoral dissertation, Makerere University).
- Schumpeter, J. A. (1912). *The Theory of Economic Development: An Inquiry Into Profits, Capital, Credit, Interest, and the Business Cycle*. Harvard University Press.
- Shane, S. A. (2003). *A general theory of entrepreneurship: The individual-opportunity nexus*. Edward Elgar Publishing.
- Taylor, S. J., Bogdan, R., & DeVault, M. (2015). *Introduction to qualitative research methods: A guidebook and resource*. John Wiley & Sons.
- Thaise, C.M., Gomes, G. & Carmona, L.J.D.M. (2020). Influence of learning and service innovation on performance, *Innovation and Management Review*, Vol. 17 No. 2, pp. 157-175, doi: 10.1108/INMR-02-2019-0020.
- Wang, C. L., & Ahmed, P. K. (2007). Dynamic capabilities: A review and research agenda. *International Journal of Management Reviews*, 9(1), 31-51.