INNOVATION STRATEGIES AND PERFORMANCE IN MICROFINANCE INSTITUTIONS IN KENYA

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ABSTRACT

Currently, the performance of MFIs in Kenya reflects their significant impact on the financial sector and broader economy. According to data from the Central Bank of Kenya, as of recent years, MFIs collectively manage a substantial portfolio of loans and deposits, demonstrating their growing importance in the financial market. The general objective of the study was to assess the influence of innovation strategies on performance in microfinance institutions in Kenya. Specifically, the study sought to assess the influence of product innovation on performance in microfinance institutions in Kenya and to determine the influence of process innovation on performance in microfinance institutions in Kenya. The study adopted descriptive research design. According to the CBK report (2023), there are twelve licensed MFIs in Kenya. These include Choice Microfinance Bank, Faulu, Kenya, Women Microfinance bank limited, SMEP, REMU, Rafiki, Uwezo, Century, Sumac, U&I, Daraja and Caritas. There are 5 wholesale MFIs, 9 deposit taking MFIs and around 36 Retail MFIs. The target population was therefore 258 management employees working in twelve licensed MFIs in Kenya. The Yamane formula was adopted to calculate the study sample size. Therefore, the study sample size was 157 respondents. Primary data was obtained using structured and semi-structured questionnaires. Quantitative data collected was analyzed using descriptive statistical techniques which are frequencies, mean, standard deviation. Inferential statistics which include Pearson correlation and the Regression Analysis Model was used to test the relationship between study variables. Data was analysed using Statistical Package for Social Sciences (SPSS) software version 26. The study concludes that product innovation has a positive and significant effect on performance in microfinance institutions in Kenya. In addition, the study concludes that process innovation has a positive and significant effect on performance in microfinance institutions in Kenya. Based on the findings, the study recommends that the management of microfinance institutions should develop tailored digital financial solutions that address the specific needs of underserved communities. By implementing mobile-based platforms that offer microloans, savings accounts, and insurance products, MFIs can increase accessibility and convenience for clients in remote areas.

Key Words: Innovation Strategies, Product Innovation, Process Innovation, Performance in Microfinance Institutions

Background of the study

Microfinance institutions (MFIs) have emerged as vital entities globally, addressing the financial needs of underserved populations who lack access to traditional banking services. These institutions play a pivotal role in promoting financial inclusion by providing microloans, savings accounts, insurance products, and other financial services tailored to the specific needs of low-income individuals and small businesses (Kenea, 2022). Their expansion has been particularly pronounced in developing countries, where they serve as critical engines for economic empowerment and poverty alleviation. By offering accessible and affordable financial services, MFIs enable clients to invest in education, healthcare, and entrepreneurship, thereby fostering sustainable livelihoods and community development (Karanja, Kahuthia, & Gakeni, 2020).

In terms of performance metrics, MFIs are evaluated on several key indicators that reflect their operational effectiveness and impact. These metrics include portfolio quality, which assesses loan repayment rates and the management of non-performing loans, operational efficiency measured by costs per borrower and staff productivity, and outreach metrics such as the number of clients served and geographic coverage. Variations in these metrics across regions and types of MFIs highlight the diverse challenges and opportunities they face, influenced by regulatory frameworks, market conditions, and organizational capacities (Kiarie, & Lewa, 2021).

Innovation strategies are crucial frameworks that organizations deploy to stimulate creativity, drive growth, and maintain competitiveness in dynamic markets. These strategies encompass a broad spectrum of approaches tailored to meet specific organizational goals and adapt to diverse industry contexts. Product innovation involves the development of new or improved products and services that meet evolving customer needs or create entirely new market opportunities. This strategy focuses on enhancing features, functionality, or performance to differentiate offerings from competitors and attract new customers. Examples include technological advancements in consumer electronics, innovative pharmaceuticals in healthcare, or eco-friendly materials in manufacturing (Kigenza, & Irechukwu, 2023).

Process innovation revolves around improving internal operations and workflows to boost efficiency, reduce costs, and enhance quality. Organizations implement new methods, technologies, or organizational structures to streamline production, logistics, or service delivery processes (Pratiba, & Rupali, 2021). Process innovation often leads to significant operational improvements, such as lean manufacturing techniques in automotive industries or automated customer service systems in telecommunications. Marketing innovation centers on creative approaches to promoting products and engaging with customers. This strategy involves developing novel marketing campaigns, utilizing new communication channels, or employing data-driven insights to personalize customer experiences (Nduati, 2020). By adopting innovative marketing techniques, organizations can strengthen brand positioning, increase customer loyalty, and capture market share in competitive environments. Examples include viral marketing campaigns on social media platforms, influencer collaborations, or interactive digital marketing strategies (Mdasha, 2020).

Organizational innovation focuses on fostering a culture of creativity, collaboration, and adaptability within the organization. This strategy involves implementing new management practices, leadership styles, or organizational structures that encourage innovation at all levels (Mugogo, 2020). Organizational innovation aims to enhance agility, responsiveness to market changes, and employee engagement, fostering a conducive environment for generating and implementing new ideas. Examples include cross-functional teams for innovation projects, flexible work arrangements to support creativity, or incentivizing employees for innovative contributions (Muchungu, & Mutua, 2024).

Muchungu and Mutua (2024) investigated on innovation strategies and organization performance of the telecommunication industry in Kenya. The study relied on desktop research to address the existing gaps

in the literature. Information for the research was obtained from published literature and information in the public domain. The study found that innovation strategies have a positive relationship with organization performance. The study concluded that innovation strategies have influenced the performance of the organizations in the telecommunication industry in Kenya.

Statement of the Problem

Microfinance institutions (MFIs) play a crucial role in the Kenyan economy by fostering financial inclusion and supporting economic empowerment, particularly among underserved and low-income populations (Nduati, 2020). By providing access to financial services such as credit, savings, and insurance, MFIs enable individuals and small businesses to invest in education, healthcare, and entrepreneurship, thereby contributing to poverty alleviation and economic development. Currently, the performance of MFIs in Kenya reflects their significant impact on the financial sector and broader economy. According to data from the Central Bank of Kenya, as of recent years, MFIs collectively manage a substantial portfolio of loans and deposits, demonstrating their growing importance in the financial market. However, challenges such as varying loan portfolio quality and operational efficiency persist, highlighting the need for strategic improvements to sustain and enhance their contributions to the economy (Mdasha, 2020). According to the Financial Sector Deepening (FSD) Kenya, over 82% of Kenyan adults had access to a mobile money account as of 2021, underscoring the transformative potential of digital finance innovations. However, the specific impact of digital transformation on MFIs in Kenya requires further exploration. Furthermore, studies by the Consultative Group to Assist the Poor (CGAP) suggest that innovative MFIs often experience improvements in key performance indicators such as loan portfolio quality, operational efficiency, and client satisfaction (Kiarie, & Lewa, 2021).

Various studies have been conducted on innovation strategies and organization performance. For instance; Karanja, Kahuthia and Gakeni (2020) conducted a study on innovation strategies and organizational performance: a case study of Telkom Kenya Limited. Kiarie and Lewa (2021) assessed on the effect of innovation strategies on organizational performance in health insurance service providers in Kenya. Nduati (2020) examined on the influence of innovation strategies on performance of manufacturing firms in Kenya. Nevertheless, none of these studies focused on performance in microfinance institutions in Kenya. To fill the highlighted gaps, the current study seeks to assess the influence of innovation strategies on performance in microfinance institutions in Kenya.

General objective

The general objective of the study was to assess the influence of innovation strategies on performance in microfinance institutions in Kenya

Specific Objectives

The study was guided by the following specific objectives

  i.   To assess the influence of product innovation on performance in microfinance institutions in Kenya
  ii. To determine the influence of process innovation on performance in microfinance institutions in Kenya

Theoretical Review

Diffusion of Innovation Theory

The Diffusion of Innovation theory, developed by Everett Rogers in 1962, is a seminal framework that explains how new ideas, technologies, products, or services spread and are adopted within a society or market. At its core, the theory categorizes individuals into distinct adopter categories based on their willingness and propensity to adopt innovations at different stages of their lifecycle (Xiao, Hajar & Hutahayan, 2022). These adopter categories include innovators, early adopters, early majority, late

majority, and laggards. Innovators are the first to embrace new products, driven by a strong curiosity and willingness to take risks. They often serve as influencers and opinion leaders within their social circles, paving the way for early adopters who follow suit. Understanding the dynamics of adopter categories can help firms tailor their marketing strategies and product positioning to effectively target each group. For instance, targeting innovators and early adopters through product demonstrations, exclusive launches, or influencer collaborations can generate initial buzz and create a ripple effect among the broader market segments (Nakato, Ngigi & Andemariam, 2021).

Moreover, the Diffusion of Innovation theory highlights key factors that influence the adoption of new products. These factors include the perceived relative advantage of the innovation over existing alternatives, its compatibility with consumer lifestyles and preferences, the complexity involved in adopting the innovation, trialability (the ability to test the innovation before committing), and observability (the visibility of its benefits) (Kuguru, Jaensson & Nyanga, 2022). Firms in Nairobi can leverage these factors by emphasizing the unique benefits of their products, ensuring ease of use and integration into daily routines, offering trial opportunities, and showcasing tangible benefits that resonate with local consumers. Furthermore, the theory underscores the importance of timing and strategic planning in the product lifecycle. By recognizing where a product stands in terms of adoption and market saturation, firms can adjust their strategies to maximize adoption rates and sustain long-term success. This could involve adapting pricing strategies, expanding distribution (Nafula, Kadima & Miroga, 2022). This theory was relevant in assessing the influence of product innovation on performance in microfinance institutions in Kenya.

The Institutional Theory

The Institutional Theory introduced by John Meyer and Brian Rowan in the late 1970s is a framework used to understand how organizations are influenced by the formal and informal rules, norms, and cultural beliefs of the environment in which they operate. It posits that organizations are not just shaped by economic and technical factors, but also by social and cultural pressures. These pressures come from various institutions such as governments, professional associations, and societal norms, which collectively create a context that organizations must navigate to gain legitimacy, resources, and survival (Awan & Javed, 2022). According to Institutional Theory, organizations often adopt certain structures, practices, and behaviors not because they are the most efficient, but because they are widely accepted and considered legitimate within their institutional context. This process is known as isomorphism, which can be coercive (due to formal regulations), mimetic (imitation of successful organizations), or normative (arising from professional standards and education) (Akpoviroro, Akinbola & Olalekan, 2021).

The theory also highlights the concept of institutionalization, where certain practices become taken for granted as the way things are done, making them resistant to change. Organizations strive for legitimacy by conforming to these established norms and expectations, which can lead to homogeneity within fields or industries. Institutional Theory thus provides insights into why organizations often look similar and why they adopt certain practices that may not necessarily be the most efficient but are crucial for their legitimacy and survival within their institutional environment (Nyamau & Tari, 2023). This is theory was relevant in determining the influence of process innovation on performance in microfinance institutions in Kenya.

Conceptual Framework

A conceptual framework as a diagram that inks the concepts under study and shows their relationship. It defines the independent variables, and the dependent variable on effect of innovation strategies on the performance of microfinance institutions in Kenya.
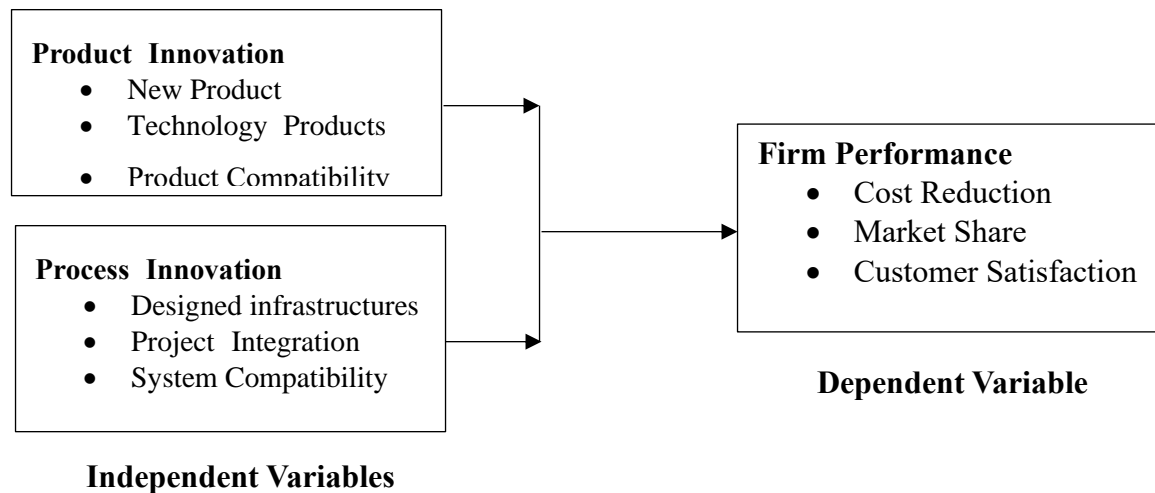
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┌─────────────────────────────────┐
│ Product  Innovation             │
│    •  New Product               │
│    •  Technology  Products      │
│    •  Product Compatibility     │
└─────────────────────────────────┘                  ┌──────────────────────────────┐
                                                      │ Firm Performance             │
┌─────────────────────────────────┐                  │    •  Cost Reduction         │
│ Process  Innovation             │                  │    •  Market Share           │
│    •  Designed infrastructures  │                  │    •  Customer Satisfaction  │
│    •  Project  Integration      │                  └──────────────────────────────┘
│    •  System Compatibility      │                          Dependent Variable
└─────────────────────────────────┘
        Independent Variables
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Figure 2.1: Conceptual Framework

Product Innovation

Product innovation refers to the process of developing and bringing new or significantly improved products to the market. This can involve the introduction of completely new products, enhancements to existing products, or significant changes in design, functionality, or materials. The goal of product innovation is typically to meet customer needs better, differentiate from competitors, and drive business growth (Nafula, Kadima & Miroga, 2022).

The development of a new product is a multifaceted process that begins with identifying a gap in the market or an unmet customer need. This involves extensive market research, brainstorming, and conceptualizing ideas that can offer unique value propositions. Once an idea is formed, it undergoes rigorous research and development to turn it into a viable product. This includes designing prototypes, testing for functionality and quality, and refining the product based on feedback. The final stage involves strategic planning for the product launch, including marketing, distribution, and sales efforts to ensure the product reaches its target audience effectively. The introduction of a new product is not just about innovation but also about managing risks and aligning the product with the company's overall strategy and goals (Kawira, 2021).

Technology products encompass a wide range of items that incorporate advancements in science and engineering to solve problems or enhance capabilities. These products often include hardware, software, and services that leverage new or existing technologies to improve efficiency, connectivity, and user experience. The development cycle for technology products is typically fast-paced, driven by rapid technological advancements and competitive pressures. Companies must stay abreast of the latest trends and continuously innovate to maintain relevance. Critical aspects of technology product development include ensuring reliability, security, and scalability. Successful technology products often transform industries, create new markets, and significantly impact how people live and work (Xiao, Hajar & Hutahayan, 2022).

Product compatibility refers to the ability of a new product to seamlessly integrate and function with existing systems, products, or standards. Ensuring compatibility is crucial for user adoption and satisfaction, as it reduces the friction associated with switching to or incorporating new products. In technology sectors, this often involves adhering to industry standards and protocols, ensuring interoperability with other devices, software, or platforms. For example, a new smartphone should be compatible with various networks, accessories, and applications to provide a comprehensive user experience. Compatibility also extends to user interfaces and user experience design, ensuring that new

products are intuitive and easy to use for those familiar with previous versions or related products. By prioritizing compatibility, companies can foster loyalty and ease the transition for customers upgrading or expanding their product ecosystems (Nakato, Ngigi & Andemariam, 2021).

Process Innovation

Process innovation refers to the implementation of new or significantly improved methods, techniques, or procedures within an organization to enhance operational efficiency, productivity, and overall performance. It is concerned with optimizing the way business processes are carried out (Nyamau & Tari, 2023).

Designed infrastructures refer to the planned and strategically developed frameworks that support the operational and functional needs of an organization or system. This includes physical infrastructure such as buildings, networks, and utilities, as well as digital infrastructure like IT systems, software platforms, and data centers. Effective design of infrastructure requires a comprehensive understanding of current and future needs, ensuring that the infrastructure is scalable, reliable, and capable of supporting business objectives. For instance, a well-designed IT infrastructure will integrate hardware, software, and network components to provide a robust foundation for data management, communication, and operational efficiency. Properly designed infrastructures facilitate smooth operations, reduce downtime, and can be critical in supporting business growth and technological advancements (Ahawo, 2021).

Project integration involves the coordination and alignment of various components, activities, and stakeholders within a project to ensure that it meets its objectives and delivers value. This process encompasses the synchronization of project planning, execution, and control to ensure that all parts of the project work together harmoniously. Key elements of project integration include developing a comprehensive project plan, managing resources and schedules, and ensuring effective communication among team members and stakeholders. Integration also involves addressing dependencies and potential conflicts between different project elements, facilitating smooth transitions between project phases, and aligning project outcomes with organizational goals. Effective project integration is crucial for achieving project success, minimizing risks, and optimizing resource utilization (Karanja, Kahuthia & Gakenia, 2020).

System compatibility refers to the ability of different systems, applications, or components to work together seamlessly without conflicts or issues. In the context of technology and infrastructure, this often involves ensuring that hardware, software, and network elements can interact effectively, share data, and perform their intended functions. For instance, a new software application must be compatible with existing operating systems and hardware to function correctly within an organization's IT environment. System compatibility also includes ensuring that different systems adhere to industry standards and protocols, facilitating interoperability and data exchange. By addressing compatibility issues, organizations can avoid disruptions, reduce costs associated with integration challenges, and enhance overall system performance and user satisfaction (Awan & Javed, 2022).

Empirical Review

Product Innovation and Firm Performance

Xiao, Hajar and Hutahayan (2022) conducted a study on the influence of product innovation on performance of large manufacturing firms in China. The study used a descriptive research design. The targeted population included selected large manufacturing firms in Beijing. The study found that product innovation is positively and significantly related to performance. The study concluded that a positive relationship exists between product innovation and performance.

Nakato, Ngigi and Andemariam (2021) assessed on the effect of product innovation on performance of printing SMEs in Kampala Central District. The study used the explanatory design. The study conducted

a census on a target population of 125printing SMEs operating in Kampala Central district. The study found that product innovation positively affected performance of printing SMEs. The study concluded that product innovation positively affects performance of printing SMEs.

Kuguru, Jaensson and Nyanga (2022) investigated on the influence of product innovation on the performance of coffee cooperatives in Kenya. A descriptive research design was applied. The target population of this study was 525 coffee cooperative societies in Kenya registered with the Commissioner for Cooperatives and licensed by AFFA. The sample size was 227 respondents. The study found that product innovation and performance are positively and significantly related. The study concluded that developments of new products are essential for the improvement of the coffee cooperatives' performance.

Process Innovation and Firm Performance

Awan and Javed (2022) researched on the impact of process innovation on the performance of employees. Data were collected through survey questionnaires from 200 respondents mainly from production, R&D and marketing departments of manufacturing companies. The study found that there is positive relationship between process innovation and performance of employees. The study concluded that process innovation has a positive impact on the performance of the employees.

Akpoviroro, Akinbola and Olalekan (2021) conducted a study on the impact of process innovation on organizational performance. Primary and secondary data was employed for the study. The population of the study was the staff of Etisalat Telecommunications Company, Nigeria with primary focus on the NNPC-Ikoyi branch. The study found that process innovation has a significant effect on organizational performance and there exist a significant relationship between service modification and sales volume. The study concluded that service process innovation has a significant effect on organizational performance and there is exist a significant relationship between process service modification and sales volume.

Nyamau and Tari (2023) investigated on process innovation and the performance of financial technology companies in Kenya. The study adopted a descriptive research design to determine the problem under investigation. The target population of this study was 36 financial technology companies in Kenya. The study found that there is a positive and significant relationship between the implementation of process innovation and the performance of financial technology companies in Kenya. The study concluded that process innovation had a positive and significant effect on the performance of financial technology companies in Kenya.

RESEARCH METHODOLOGY

Research Design

The study adopted descriptive research design. The descriptive research design allows the researcher to gather information, summarize, present and interpret it for purpose of clarification (Karama, Iravo, & Shale, 2019). The design was suitable for the study since it enabled description of both dependent and independent variables. Therefore, this design was appropriate for this study which extensively tests the analysis of the relationships between variables (Amuhaya, Namusonge, & Nthigah, 2019). Descriptive research design was therefore appropriate since the study intends to establish the influence of innovation strategies on performance in microfinance institutions in Kenya. The descriptive studies are more formalized and typically structured with clearly stated hypotheses or investigative questions.

Target Population

The unit of analysis for this study was microfinance institutions in Kenya. According to the CBK report (2023), there are twelve licensed MFIs in Kenya. These include Choice Microfinance Bank, Faulu, Kenya,

Women Microfinance bank limited, SMEP, REMU, Rafiki, Uwezo, Century, Sumac, U&I, Daraja and Caritas. There are 5 wholesale MFIs, 9 deposit taking MFIs and around 36 Retail MFIs. The target population was therefore 258 management employees working in twelve licensed MFIs in Kenya.

Table 3.1: Target Population

Department	Population
Top Managers	43
Middle Level Managers	86
Lower-Level Managers	129
Total	**258**

Sample Size and Sampling Technique

The Yamane formula was adopted to calculate the study sample size as follows;

$$n = \frac{N}{1+N(e^2)}$$

Where n is the sample size, and N is the population size, e- acceptable sampling error (0.05)

$$= \frac{258}{1+258\ (0.05^2)}$$

$$= \frac{258}{1.645} = 156.84$$

n≈ 157

Therefore, the study sample size was 157 respondents.

Table 3.2: Sample Size

Department	Population	Sample Size
Top Managers	43	26
Middle Level Managers	86	52
Lower Level Managers	129	79
Total	**258**	**157**

Data Collection Instruments

This research used a questionnaire to collect primary data. According to Patton *et. al (*2019), a questionnaire is appropriate in gathering data and measuring it against a particular point of view. It provides a standardized tool for data collection. Structured questions were used to collect primary data from the field. Questionnaires were preferred because they are effective data collection instruments that allow respondents to give much of their opinions pertaining to the research problem (Dempsey, 2019). According to Kothari (2019), the information obtained from questionnaires is free from bias and researchers' influence and thus accurate and valid data is gathered. The preference for the questionnaire is based on the premise that it gives respondents freedom to express their views or opinions more objectively.

Pilot Study

A pilot test was conducted to assess the questionnaire's validity and reliability of the data that was collected. According to Copper and Schindler (2019), a pilot test is conducted to detect weaknesses in the design and instrumentation and provide a proxy data for selection of probability sample. According to Leedy and Ormrod (2019), a pilot study is an excellent way to determine the feasibility of the study. The subjects participating in the pilot study were not included in the final study to avoid survey fatigue. In this study, 10% of the sample size participated in the pilot study.

Data Analysis and Presentation

The researcher collected questionnaires, code them, and enter them into the Software Package for Social Sciences (SPSS version 26) for analysis. The sort function was used to perform the initial screening. The data was based on the study's objectives and research hypothesis. The descriptive statistical techniques of frequency, mean, and standard deviation was used to analyze the quantitative data acquired. The results were displayed using frequency distribution tables, which kept track of how many times a score or response appears. Qualitative data collected was analysed using content analysis and presented in prose form.

Inferential statistics including regression and correlation analysis was used in the study. According to Saunders *et al.* (2019), correlation is a statistical tool that helps to determine the relationships between two or more variables. Cooper and Schindler (2019) indicate that correlation, as measured by a correlation coefficient, is the degree to which a linear predictive relationship exists between random variables. Pearson correlation coefficient was used for testing associations between the independent and the dependent variables. According to Wagana (2018), a correlation coefficient (r) has two characteristics, strength and direction. The strength of the relationship is indicated by how r tends toward 1, the maximum value possible. r is interpreted as follows; when r = +1 it means there is perfect positive correlation between the variables, when r = 0 it means there is no correlation between the variables, that is the variables are uncorrelated, when r = -1 it means there is perfect inverse correlation between the variables.

A multiple regression model was used to test the significance of the influence of the independent variables on the dependent variable. Regression analysis attempts to determine whether a group of variables together predict a given dependent variable and, in this way, attempts to increase the accuracy of the estimate (Mugenda & Mugenda, 2019). The use of regression model is ideal due to its ability to show whether a positive or a negative relationship exists between independent and dependent variables (Mason, Lind, & Marchal, 2019).

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

Descriptive Statistics

Product Innovation and Firm Performance

The first specific objective of the study was to assess the influence of product innovation on performance in microfinance institutions in Kenya. The respondents were requested to indicate their level of agreement on various statements relating to product innovation and performance in microfinance institutions in Kenya. The results were as presented in Table 4.1.

From the results, the respondents agreed that their organization has a structured process for developing and launching new products (M=3.968, SD= 0.636). In addition, the respondents agreed that they regularly conduct market research to identify opportunities for new product development (M=3.830, SD=0.972). Further, the respondents agreed that they invest in cutting-edge technologies to drive innovation in their product offerings (M=3.712, SD= 0.705). The respondents also agreed that their technology products incorporate the latest advancements to meet market demands (M=3.710, SD= 0.608). In addition, the respondents agreed that their products are designed to be compatible with a wide range of existing systems and technologies (M=3.697, SD=0.873). Further, the respondents agreed that they conduct thorough compatibility testing to ensure seamless integration with other products (M=3.684, SD=0.798).

Table 4. 1: Product Innovation and Firm Performance

	Mean	Std. Deviation
Our organization has a structured process for developing and launching new products.	3.968	0.636
We regularly conduct market research to identify opportunities for new product development.	3.830	0.972
We invest in cutting-edge technologies to drive innovation in our product offerings.	3.712	0.705
Our technology products incorporate the latest advancements to meet market demands.	3.710	0.608
Our products are designed to be compatible with a wide range of existing systems and technologies.	3.697	0.873
We conduct thorough compatibility testing to ensure seamless integration with other products.	3.684	0.798
Aggregate	**3.767**	**0.765**

Correlation Analysis

This research adopted Pearson correlation analysis to determine how the dependent variable (performance in microfinance institutions in Kenya) relates with the independent variables (product innovation and process innovation).

Table 4. 3: Correlation Coefficients

		Firm Performance	Product Innovation	Process Innovation
Firm Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	137		
Product Innovation	Pearson Correlation	.820**	1	
	Sig. (2-tailed)	.003		
	N	137	137	
Process Innovation	Pearson Correlation	.830**	.297	1
	Sig. (2-tailed)	.000	.060	
	N	137	137	137

From the results, there was a very strong relationship between product innovation and performance in microfinance institutions in Kenya (r = 0.820, p value =0.003). The relationship was significant since the p value 0.003 was less than 0.05 (significant level). The findings are in line with the findings of Xiao, Hajar and Hutahayan (2022) who indicated that there is a very strong relationship between product innovation and firm performance.

Moreover, there was a very strong relationship between process innovation and performance in microfinance institutions in Kenya (r = 0.830, p value =0.000). The relationship was significant since the p value 0.000 was less than 0.05 (significant level). The findings are in line with the findings of Akpoviroro, Akinbola and Olalekan (2021) who indicated that there is a very strong relationship between process innovation and firm performance.

Regression Analysis

Multivariate regression analysis was used to assess the relationship between independent variables (product innovation and process innovation) and the dependent variable (performance in microfinance institutions in Kenya).

Table 4. 4: **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.875[a]	.766	.767	.10482

a. Predictors: (Constant), product innovation and process innovation

The model summary was used to explain the variation in the dependent variable that could be explained by the independent variables. The r-squared for the relationship between the independent variables and the dependent variable was 0.766. This implied that 76.6% of the variation in the dependent variable (performance in microfinance institutions in Kenya) could be explained by independent variables (product innovation and process innovation).

Table 4. 5: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	102.028	2	51.01	245.26	.002[b]
	Residual	13.668	132	.104		
	Total	115.695	136			

a. Dependent Variable: performance in microfinance institutions in Kenya
b. Predictors: (Constant), product innovation and process innovation

The ANOVA was used to determine whether the model was a good fit for the data. F calculated was 245.26 while the F critical was 2.440. The p value was 0.002. Since the F-calculated was greater than the F-critical and the p value 0.002 was less than 0.05, the model was considered as a good fit for the data. Therefore, the model can be used to predict the influence of product innovation and process innovation on performance in microfinance institutions in Kenya.

Table 4. 6: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.345	0.090		3.833	0.001
product innovation	0.355	0.091	0.354	3.901	0.001
process innovation	0.371	0.095	0.370	3.905	0.000

a Dependent Variable: performance in microfinance institutions in Kenya

The regression model was as follows:
$Y = 0.345 + 0.355X_1 + 0.371X_2 + \varepsilon$

According to the results, product innovation has a significant effect on performance in microfinance institutions in Kenya β_1=0.355, p value= 0.001). The relationship was considered significant since the p value 0.001 was less than the significant level of 0.05. The findings are in line with the findings of Xiao, Hajar and Hutahayan (2022) who indicated that there is a very strong relationship between product innovation and firm performance.

The results also revealed that process innovation has a significant effect on performance in microfinance institutions in Kenya, β_1=0.371, p value= 0.000). The relationship was considered significant since the p

value 0.000 was less than the significant level of 0.05. The findings are in line with the findings of Akpoviroro, Akinbola and Olalekan (2021) who indicated that there is a very strong relationship between process innovation and firm performance.

Conclusions

The study concludes that product innovation has a positive and significant effect on performance in microfinance institutions in Kenya. Findings revealed new product, technology products and product compatibility influence performance in microfinance institutions in Kenya.

In addition, the study concludes that process innovation has a positive and significant effect on performance in microfinance institutions in Kenya. Findings revealed that designed infrastructures, project integration and system compatibility influence performance in microfinance institutions in Kenya.

Recommendations

The study recommends that the management of microfinance institutions should develop tailored digital financial solutions that address the specific needs of underserved communities. By implementing mobile-based platforms that offer microloans, savings accounts, and insurance products, MFIs can increase accessibility and convenience for clients in remote areas.

Further, the study recommends that the management of microfinance institutions should implement a streamlined and automated loan approval process. By integrating advanced data analytics and machine learning algorithms into the loan application process, MFIs can enhance the speed and accuracy of credit assessments.

REFERENCES

Adhaya, Z. J, Wainaina, G & Odock, S. (2023). Organizational innovation effect on performance of manufacturing firms: empirical evidence from firms in Kenya. *African Journal Of Business And Management, 8*(4), 14-30.

Awan, A. G & Javed, A. (2022). The impact of process innovation on the performance of employees. *Industrial Engineering Letters, 5*(12), 1-10.

Ayinaddis, S. G. (2023). Effect of organizational innovation on firm performance: evidence from micro and small manufacturing firms in selected towns of Awi Zone, Ethiopia. *Journal of Innovation and Entrepreneurship, 12*(26), 1-19.

Creswell, R. (2019). Research design: *qualitative, quantitative, and mixed methods approaches*. USA: Sage Publications.

Ekwueme, C. I, Dike, G. N, Obinna, S & Azbuike, A. N. (2023). Effect of innovation strategy on organization performance in Nigeria Bottling Company Enugu State. *International Journal of Innovative Development and Policy Studies, 11*(3), 21-36.

Grant, R. (2019). *Contemporary Strategy Analysis, (4 Ed). Blackwell Publishers*

Ikpe, E. O, Ikechukwu, E, Okri, A. K, Okoi, B. O. O & Tabi, O. O. (2020). Innovation strategies and firm performance: a study of Femine Mill Nigeria, Calabar. *International Journal of Social Science and Human Research, 4*(10), 2855-2869.

Kawira, K. D. (2021). Effect of product innovation on the performance of micro, small and medium enterprises in Kenya. *Journal of Marketing and Communication, 4*(1), 1-16.

Kenea, D. A. (2022). Role of innovation strategy in improving organizational performance and productivity: focus on Heineken Beverage Industry, Ethiopia. *Horn of Africa Journal of Business and Economics, 3*(1), 19-32.

Kiarie, A. N & Lewa, E. (2021). Effect of innovation strategies on organizational performance in health insurance service providers in Kenya. *The Strategic Journal of Business & Change Management, 6*(1), 623-636.

Lütfi, S., (2020) Validity and reliability in quantitative research. *Business and management studies. An International Journal, European Leadership University*

Mdasha, Z. (2020). Influence of innovation strategies on performance of entrepreneurial businesses in Kenya: a case of SMEs in Nairobi County. *Journal of Strategic Management, 2*(5), 13-31.

Mdasha, Z. (2020). Influence of innovation strategies on performance of entrepreneurial businesses in Kenya: a case of SMEs in Nairobi County. *Journal of Strategic Management, 2*(5), 13-31.

Muchungu, A & Mutua, J. (2024). Innovation strategies and organization performance of the telecommunication industry in Kenya. *European Journal of Business and Strategic Management, 9*(2), 28-43.

Nakato, M. H, Ngigi, B. W & Andemariam, K. (2021). Effect of product innovation on performance of printing SMEs in Kampala Central District. *European Journal of Business and Strategic Management, 6*(2), 1-14.

Nduati, P. M. (2020). Influence of innovation strategies on performance of manufacturing firms in Kenya: a literature based review. *African Journal of Emerging Issues, 2*(5), 55-66.

Nduati, P.M. (2020). Influence of innovation strategies on performance of manufacturing firms in Kenya: a literature based review. *African Journal of Emerging Issues, 2*(5), 55-66.

Nyamau, I. N & Tari, J. (2023). Process innovation and the performance of financial technology companies in Kenya. *European Journal of Business and Management Research, 8*(5), 240-245.

Odhiambo, A. R. (2020). Organizational innovation and performance of nonprofit organizations in Kenya. *International Journal of Management and Commerce Innovations, 8*(2), 224-231.

Okundi, S. M & Muchemi, A. W. (2022). Marketing innovation strategy and entrepreneurial performance of small and medium enterprises in Nakuru East Town Sub-County. *International Journal of Business Management, Entrepreneurship and Innovation, 4*(2), 35-47.

Sekaran, U., & Bougie, R., (2019). *Research methods for business:* A skill building approach (5th ed.). Chichester, West Sussex:

Sila, M. C, Kegoro, O. H & Njagi, E. (2024). Organizational innovations and performance of Public Universities in Kenya. *International Journal of Research and Innovation in Social Science, 8*(2), 1025-1038.

Siti, N. A, Much, R. S & Ika, S. (2020). Impact of innovation strategy on performance: a study of Indonesian SMEs. *Migration Letters, 21*(2), 39-53.

Suhag, A. K, Solangi, S. R, Larik, R. S. A, Lkho, M. K & Tagar, A. H. (2022). The relationship of innovation strategies with organizational performance. *International Journal of Research, 5*(2), 292-306.

Xiao, Y. Z, Hajar, L & Hutahayan, H. K. (2022). Influence of innovation strategies on performance of large manufacturing firms in China. *Journal of Strategic Management, 6*(4), 16-25.

YuSheng, K & Ibrahim, M. (2020). Innovation strategies and firm performance: evidence from the banking sector of Ghana. Retrieved From, file:///C:/Users/user/.