

# International Journal of **Finance** (IJF)

**Financial Innovations and Operational Performance of SACCOs in  
Kisii County, Kenya**



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## Financial Innovations and Operational Performance of SACCOs in Kisii County, Kenya



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*Accepted: 30<sup>th</sup> Apr, 2025, Received in Revised Form: 7<sup>th</sup> May, 2025, Published: 13<sup>th</sup> May, 2025*

### ABSTRACT

**Purpose:** Financial innovation plays a critical role in shaping organizational performance. Financial institutions have employed various strategies to enhance their competitiveness and profitability. In Kenya, Savings and Credit Cooperative Societies (SACCOS) are vital economic actors, offering timely services such as flexible loans to individuals who prefer micro-institutions over traditional banks. This study explored the impact of financial innovation on the operational performance of SACCOS in Kisii County. It examined the effects of institutional, product, service, and process innovations on their operations.

**Methodology:** A census approach was used to cover all 69 registered SACCOS in the county. Primary data were gathered through self-administered questionnaires, validated via a pilot test. Both descriptive (means, standard deviations) and inferential (correlation and regression) statistics were employed in the analysis.

**Findings:** The results showed that institutional, product, and process innovations each had a significant positive effect on operational performance. Overall, the findings confirm that financial innovation significantly enhances the operational efficiency and stability of SACCOS in Kisii County.

**Unique Contribution to Theory, Policy and Practice:** This study contributes to theory by expanding the understanding of financial innovations as drivers of operational performance in SACCOS. It offers policy implications for regulating and fostering financial innovation within SACCOS to enhance efficiency and competitiveness. Practically, the study provides SACCO managers with insights into adopting innovative financial practices to improve service delivery, streamline operations, and align with evolving market demands, ensuring sustainable growth and operational excellence.

**Keywords:** *Institutional Innovations, Product Innovations, Service Innovations, Process Innovations, Performance, SACCOS*

## INTRODUCTION

### Background of the Study

On a global scale, Savings and Credit Cooperative Societies (SACCOs) have exhibited a consistent enhancement in their operational performance over time, as evidenced by the growing membership, estimated at around one billion. The collective turnover generated by the top 300 SACCOs worldwide reached approximately \$2.5 trillion by December 2017 (International Cooperative Alliance, 2017). This expansion is primarily driven by the escalating demand for fund mobilization and investment, particularly among individuals with lower incomes (Rejda, 2018). However, this progress is vulnerable to financial and operational risks (Santomero, 2014). The aftermath of the global financial crisis, from which the world is still recovering, has underscored the significance of financial innovations in the day-to-day operations of financial institutions, including SACCOs (International Cooperative Alliance, 2017).

Financial innovation refers to the emergence of novel technologies that exert a comprehensive influence on an institution's performance and operational approach. These innovations directly impact an organization's revenue and risk profile, either amplifying or mitigating these factors, thereby affecting overall performance. The predominant forms of financial innovations encompass institutional investment, product innovations, service enhancements, and process transformations (Mobility, 2019). These innovations can manifest as fresh products (e.g., adjustable rate mortgages and exchange-traded index funds), novel services (such as online securities trading, Internet banking, and mobile banking), innovative production processes (like credit scoring), or inventive organizational structures, including agency banking and Internet-only banks (Hayashi & Klee, 2013).

Financial innovation can be categorized into various segments, including new products (like adjustable rate mortgages and exchange-traded index funds), innovative services (such as online securities trading, Internet banking, and mobile banking), inventive production processes (like credit scoring), and novel organizational forms, such as agency banking and Internet-only banks (Hayashi & Klee, 2019). Notably, internet banking stands out as a financial market innovation. Through block chain technology, financial institutions have been able to connect their ledgers, facilitating easier data comparison. This technology also holds the potential to lower remittance costs between financial entities, thus bolstering revenue (Mobility, 2019). Another significant financial innovation is mobile banking, which enables financial institutions to offer basic transactional services such as cash deposits and withdrawals, enhancing accessibility for their clients. Mobile banking has also accelerated money transfers between individuals, ensuring timely transactions and providing secure banking through robust security protocols to prevent unauthorized data access.



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**Statement of the Problem**

In an ideal financial ecosystem, SACCOs should be at the forefront of financial inclusivity, offering competitive, innovative, and technology-driven financial services that enhance operational efficiency, increase member confidence, and drive economic empowerment. Through financial innovation, SACCOs have the potential to reduce transaction costs, improve service delivery, and expand financial access, particularly for individuals in rural and underserved areas (Cheney & Rhine, 2016). By leveraging advancements such as mobile banking, automated lending platforms, and digital payment solutions, SACCOs could complement mainstream banking by providing affordable credit, mobilizing savings effectively, and ensuring financial sustainability. In this ideal scenario, SACCOs would not only improve their operational performance but also contribute significantly to Kenya's financial inclusion agenda, supporting broader economic development and poverty reduction (Njuguna, 2017).

However, SACCOs in Kenya, particularly in Kisii County, face challenges in achieving this ideal state. Despite their critical role in financial intermediation, SACCOs are experiencing a decline in membership, largely due to competition from commercial banks and microfinance institutions that have embraced superior financial technologies (Maingi & Wanjiru et al., 2018). Traditional SACCO operations have been characterized by inefficiencies in savings mobilization, slow loan processing, and limited outreach, making them less attractive to a growing population of tech-savvy customers (Mosongo et al., 2018). Additionally, governance weaknesses, fraud, and rising loan defaults have further eroded trust and financial sustainability. Reports indicate that fraud cases within SACCOs have risen significantly, with committee members engaging in misappropriation, external fraud increasing by 3.8%, and member defaults growing by 5.23% (Njoroge et al., 2019). These operational inefficiencies, coupled with weak internal controls, limit SACCOs' ability to compete effectively, negatively impacting their financial sustainability and overall contribution to economic growth.

Several studies have examined the relationship between financial innovation and operational performance in banks and other financial institutions. Research has established that financial innovation positively influences efficiency, cost reduction, and competitiveness (Gubler, 2011; Duguma & Han, 2018). In the Kenyan context, Kalui (2019) emphasized the need for financial institutions, including SACCOs, to embrace modern technology to remain competitive in both domestic and global financial markets. Additionally, Maorwe (2017) highlighted the importance of diversifying SACCO financing models beyond reliance on member deposits. Mosongo et al. (2018) categorized financial innovation into process, product, and institutional innovation, concluding that institutional innovation had the most significant impact on operational performance. However, despite these findings, existing literature has not systematically examined the link between financial innovations and the operational performance of SACCOs in Kisii County. There remains a gap in understanding the extent to which various types of financial innovation influence SACCO sustainability, efficiency, and competitiveness in this region.

Given these gaps, this study sought to investigate the influence of financial innovations on the operational performance of SACCOs in Kisii County, Kenya.

### **General Objective**

To investigate the effect of financial innovations on operational performance of SACCOs in Kisii County, Kenya.

### **Specific Objectives**

- (i) To evaluate the effect of institutional financial innovations on operational performance of SACCOs in Kisii County.
- (ii) To determine the effect of financial product innovations on operational performance of SACCOs in Kisii County.
- (iii) To assess the effect of financial service innovations on operational performance of SACCOs in Kisii County.
- (iv) To establish the effect of financial process innovations on operational performance of SACCOs in Kisii County.

## **LITERATURE REVIEW**

### **Theoretical Review**

#### **Schumpeter's theory of Innovation**

This theory was postulated by Schumpeter (1989). His theory of innovation scrutinizes an entity's business cycle in relation to economic shifts. Schumpeter delineated innovation as a five-stage process: Commencing with the introduction of a new product, which marks the initial phase and induces operational changes within the entity. The second phase involves employing fresh sales promotion techniques to establish product awareness. The third phase entails broadening the product's reach to a novel market segment, potentially encompassing a different sector of the economy, like macro-finance institutions or the agricultural domain. The fourth phase concentrates on streamlining the production process, achieved through the acquisition of new production materials like semi-finished goods or the automation of processes to expedite innovation delivery. The concluding stage involves establishing an entity or organization to oversee innovation services, encompassing installation, maintenance, and a research and development unit dedicated to enhancing the product (Sweezy, 2013).

The theory posits that each financial system innovation originates from a source, gains traction among a multitude of users, and confers benefits upon them (Sweezy, 2013). This theory can be employed to pinpoint innovators within the market, early adopters, innovation developers, and late adopters. Furthermore, the theory can facilitate the identification of factors and circumstances conducive to the proliferation and adoption of an innovation within an organization. These conditions might encompass legal, geographical, or internal elements, such as financial capabilities to embrace a given innovation.

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### **Technological Acceptance Model**

This study was initiated by Professor Fred Davis (1980) with the aim of establishing a link between the impact of computer systems and their acceptance by users (Davis, 2015). Davis discerned that the attributes of a given system influence its end users, as individuals seek out product specifications that align with their own preferences. Scholars have subsequently adopted this model to discern the factors that influence the adoption of information technology. It was determined that two major external factors play a role in an individual's decision to adopt a particular technology: perceived ease of use and perceived usefulness (Shih-Chih Chen, 2018).

Researchers have found that this model is particularly effective when investigating online information systems. In a study conducted by Paul (2011), the high costs and time required for full implementation of information systems within an organization were highlighted. The study aimed to explore the motives behind individuals' use of information technology. The researcher concluded that while an innovation may be universally embraced, exceptions exist when the needs cater to specific groups categorized by gender, age, or requirements. The study revealed that the software needs of a student diverge from those of a manager. The study's conclusion recommended that managers adopt the technological acceptance model when deciding to acquire and integrate new software into an organization (Legris, 2013). This model could be employed to elucidate the reasons top-level management opts for one system over another to enhance the organization's performance.

### **Diffusion of Innovation Theory**

The theory was formulated by Everett Rogers and aims to elucidate the rate at which technologies spread. Rogers contends that diffusion is the process through which an idea is transmitted from one individual to another over time (Rogers, 2013). He outlined diffusion as a five-stage sequence: knowledge, persuasion, decision to adopt innovation, implementation of the acquired innovation, and ongoing monitoring of progress due to the innovation. Every individual or institution undergoes this process before incorporating a new technology into their operations. Following adoption, Rogers further classified adopters of innovations into five primary groups: Innovators, early adopters, early majority, late majority, and laggards—those who are slowest to embrace and integrate technologies (Rogers, 2013).

A quantitative research study conducted by Isleem (2013) sought to assess the connection between the extent of computer utilization and factors like an individual's computer education level and access to computers (Sahin, 2016). The study concluded that successful acceptance of an innovation necessitates thorough training of employees, enabling them to acquaint themselves with upcoming innovations and cultivate favorable attitudes toward novel concepts. The study identified factors affecting the ability to adopt innovations, including the organization's size, its specific needs, financial capacity to adopt new inventions, and the availability of the innovation. The diffusion of innovation, meanwhile, was found to be influenced by external elements such as

agents responsible for creating awareness about the innovation. However, the study could not definitively determine the overall impact of innovation diffusion due to the limited extent of research in that domain, thereby leaving room for further exploration in this area.

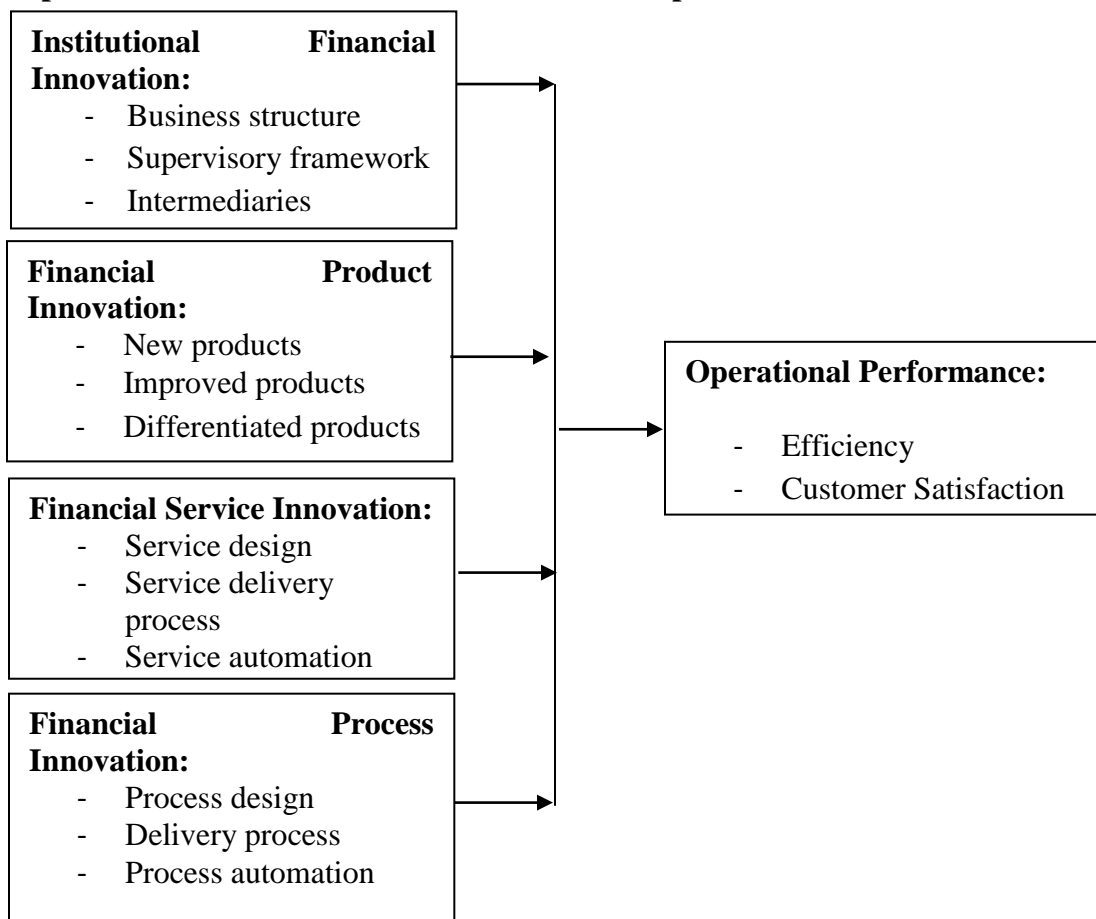
### **Enterprise Risk Management Theory**

As outlined by Nocco and Stulz (2006), Enterprise Risk Management (ERM) is a risk management theory that advocates for the measurement and management of significant risks for a specific entity, alongside the independent management of each individual risk. The fundamental objective of this approach is to amalgamate various risk management divisions into a comprehensive and integrated framework. The ERM Risk Management Framework underscores the active involvement of senior managers and staff members in the process of analyzing and responding to various risks that the company faces (Hallowell, Molenaar, & Fortunato, 2013). This philosophy encourages the engagement of all members of the organization in the risk management process, rather than being solely the responsibility of a select few individuals. ERM also underscores the importance of well-defined risk management procedures and protocols.

Additionally, the theory posits that organizations can adopt formal regulations delineating risks, acceptable tolerance levels, strategic goals, and systematic protocols to bolster their capability in identifying, analyzing, and addressing risks, as stated by Olson and Wu (2018). The concept also underscores the establishment of a risk management culture, wherein all stakeholders are empowered to manage risks. Cormican (2015) contends that ERM methodologies bring about enhanced competitive advantage, stakeholder trust, and long-term sustainability. While originally developed for corporate risk control, the ERM theory has gained traction within project management practices. Drumll (2011) elucidates that the ERM philosophy is a rational approach for industries characterized by high failure rates, such as the construction industry. The inability to recognize, mitigate, and manage risks across the entire business landscape underscores the significance of this theory in the context of this research.

### **Conceptual Framework**

The conceptualized relationship of the research variables is shown in figure 1 below.

**Independent Variable****Dependent variable***Fig 1: Conceptual Framework***Critique of Empirical Literature**

The present study acknowledges the scholarly efforts put in previous studies relative to financial innovations. However, it is pinpointed that there are limitations regarding these studies that are supposed to be effectively addressed in the present study. A study by Mugo (2012) noted that MFI institutional innovativeness observed in mobile banking, partnerships, financial trainings, branch networking and opening up new branches enhance firm growth. The limitation of the study is the fact that institutional innovation has not been linked to performance; instead it has been related to growth of firms.

In respect to product innovation, Chemitei (2012) investigating the role of product innovation in creating competitive advantage in SACCOs. The study noted that the product innovation in Kenyan SACCOs do not contribute to firm profitability. Despite product innovations not resulting to profitability, it is noted that product development, management approaches, efficiency in serving customers and training contribute to profit, increased market share and



revenue. A clear limitation of the findings in respect to the current study is the fact that it failed to determine the effect of product innovation on performance of SACCOs.

The relationship between financial engineering and performance of commercial banks in Kenya was examined by Kariuki (2010). The findings indicated that commercial banks had adopted various financial engineering strategies among them process innovation. The study noted that a unit increase in process innovation led to a 0.128 increase in performance measured by return on assets. Though the study examined the effect of process innovation on performance, the study focused on commercial banks as opposed to SACCOs. The identified research gaps were addressed in the present research study.

### **Research Gaps**

From studies cited above from past scholars, it is evident that little research has been focused on SACCOs. This has paved way for a research to be conducted to help bridge the gap left by past scholars by including SACCOS in the study of how financial innovation has affected their performance in Kenya. This will help and current future scholars and market managers in knowing and monitoring financial innovations coming into the market and help in monitoring its effects in future. This research focused on product innovation, service innovation and organizational innovation that have been adopted by SACCOs in Kisii County to help determine how these three independent variables affect the overall performance of SACCOs.

### **RESEARCH METHODOLOGY**

For this study, a descriptive survey design was employed, incorporating both quantitative and qualitative methodologies. The total population of this study was the 69 SACCOs in Kisii County. The Financial Managers of the SACCOS formed the unit of observation. Since the target population is small, a census of all the 69 SACCOs in Kisii County was used. In this study primary data was collected through a survey questionnaire. A pilot test was conducted to detect weakness in design and instrumentation and to provide proxy data for selection of a probability sample. This was done by use of 10% of the sample size which was 7 respondents from 7 randomly-selected SACCOs in Kisii County. Primary data from the field was edited to check the errors in the raw data. Data was analyzed through descriptive and inferential statistics. The data from questionnaires was analyzed with the aid of the Statistical Package for Social Sciences (SPSS) version 24 due to speedy and accurate analysis of data. Regression analysis was done to determine the extent of that relationship between the independent variables and the dependent variable.

### **RESULTS AND DISCUSSION**

#### **Response Rate**

Sixty-nine questionnaires were issued according to the sampling frame. Out of this, 58 questionnaires were returned but after scrutiny, nine questionnaires were incomplete and were

therefore dropped from the analysis. The high rate of questionnaire return was due to the use of research assistants.

## Descriptive Statistics of Study Variables

### Descriptive Analysis of Institutional Financial Innovations

The analysis in this section is in line with the study's first objective, which sought to determine the effect of Institutional financial innovations on financial sustainability of DT-SACCOs in Kisii County. The descriptive results are shown in Table 1.

As shown by a mean of 3.88 and a standard deviation of 1.05, the findings demonstrated that the majority of respondents agreed that their organizations had a clear business financial structure. A mean score of 4.01 and a standard deviation of 0.90 demonstrate that the SACCOs has adopted advanced technologies. There was an agreement that the SACCOs had partnered with various financial intermediaries, according to the respondents (Agree = 45.9%; Strongly agree = 16.4%; Mean = 3.53).

Moreover, the respondents agreed that the SACCOs are guided by a clear financial legal framework, as shown with a mean of 3.69 and a standard deviation of 1.06. The respondents also agreed with the statements that there is there is a supervisory framework that monitors the SACCO, with averages of 3.19 and 4.22, respectively. Respondents mostly concurred that control actions were carried out in DT-SACCOs in Kisii County.

**Table 1: Descriptive Statistics for Institutional Financial Innovations**

Statement	SD	D	N	A	SA	Mean	Std. Dev.
My organization has a clear business financial structure.	4.9%	8.5%	6.9%	52.8%	26.9%	3.88	1.05
The SACCO has adopted advanced technologies.	3.3%	4.6%	6.9%	57.7%	27.5%	4.01	0.90
The SACCO has partnered with various financial intermediaries.	7.5%	10.2%	20.0%	45.9%	16.4%	3.53	1.11
The SACCO is guided by a clear financial legal framework.	6.9%	7.9%	11.5%	56.1%	17.7%	3.69	1.06
There is a supervisory framework that monitors the SACCO.	13.8%	20.3%	9.8%	44.9%	11.1%	3.19	1.27
The SACCO has institutionalized processes in its strategy	3.0%	2.0%	4.6%	50.5%	40.0%	4.22	0.86

### Descriptive Analysis of Financial Products Innovations

The study's second objective was to establish the effect of Financial Products Innovations on the financial sustainability of DT-SACCOs in Kisii County. The descriptive statistics for the objective are shown in Table 2 below.

As the findings portray, respondents were complacent regarding the statement that the SACCOs develop new products quite regularly (Mean = 3.43, SD = 1.12). On the other hand, the respondents agreed with the statements that the SACCOs offered improved financial products to its customers (Mean = 3.67, SD = 1.01) and the one that the financial products offered are unique (Mean = 3.23, SD = 1.19). Both of these statements have a mean value of 3.67 and a standard deviation of 1.01. Additionally, they agreed with the statement that financial products offered by their SACCO are competitive (Mean = 3.68, SD = 1.61); however, they did not agree with the statement that the financial products offered by their SACCO are highly differentiated (Mean: 2.32, Standard Deviation: 1.6117). The respondents, on the whole, gave the impression that they were in agreement with the existence of Financial Products Innovations as a practice in DT-SACCOs in Kisii County.

**Table 2: Descriptive Statistics of Financial Products Innovations**

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev.
The SACCO develops new products quite regularly	7.5%	16.4%	12.5%	51.8%	11.8%	3.43	1.12
The SACCO offers improved financial products to its customers.	5.2%	9.2%	13.4%	57.0%	15.1%	3.67	1.01
The financial product performance is relatively high compared to other financial institutions.	4.3%	11.1%	12.5%	49.5%	22.6%	3.75	1.05
The financial products offered by our SACCO are highly differentiated.	9.8%	18.4%	41.5%	20.5%	9.8%	2.32	1.17
Our financial products are unique	11.1%	19.7%	32.8%	27.5%	8.9%	3.23	1.19
The financial products offered by our SACCO are competitive	13.4%	14.1%	46.2%	7.4%	18.9%	3.68	1.61

### Descriptive Analysis of Financial Services Innovations

The third objective of the study was to establish the effect of Financial Process Innovations and evaluation factors on financial sustainability of DT-SACCOs in Kisii County. The descriptive statistics for the objective are shown in Table 3 below.

The majority of respondents believed that their SACCO has a well-articulated financial service innovation process, as shown by a mean score of 3.51 and a standard deviation of 1.09. As shown by a mean of 2.86 and a standard deviation of 1.21, the respondents believed that their SACCO had enacted changes in provision of its services. The number of respondents strongly disagreed with this statement was 36.4%, and the number disagreed was 26.6%. As indicated by the fact that 48.0% of the cases were neutral and a mean score of 3.02, the respondents did not have a strong opinion on the assertion that SACCOs had adopted an improved cost effective process of operations. According to the findings, financial services innovation can be found in the DT-SACCOs in Kisii County.

**Table 3: Descriptive Results on Financial Services Innovations**

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev.
Our SACCO has a well-articulated financial service innovation process.	7.2%	12.5%	14.4%	53.1%	12.8%	3.51	1.09
Our SACCO has enacted changes in provision of its services.	36.4%	26.6%	15.7%	16.7%	4.6%	2.86	1.21
Our SACCOs has adopted an improved cost effective process of operations.	12.8%	23.9%	48.0%	8.7%	6.6%	3.02	1.18
Our SACCO has automated its financial service delivery.	10.8%	12.8%	16.1%	49.8%	10.5%	3.36	1.16
The financial services innovation initiated by our SACCO are competitive	13.4%	14.1%	7.4%	46.2%	18.9%	3.98	1.01
Our Financial Services Innovations are competitive	4.3%	4.9%	10.8%	47.2%	32.8%	3.99	1.01

### Descriptive Analysis of Financial Process Innovations

The fourth objective of the study was to establish the effect of Financial Process Innovations on the financial sustainability of DT-SACCOs in Kisii County. The descriptive statistics for the objective are shown in Table 4 below. As shown by a mean of 3.52 and a standard deviation of 1.12, the respondents agreed that Process Innovations initiated by their SACCO had made them competitive among their peers. With a mean score of 2.66 and a standard deviation of 1.27, the findings show that the respondents were neutral about the statement that the SACCOs had continuously automated their financial processes delivery. The statements that the SACCOs had institutionalised process innovations with a mean of 3.55 and a standard deviation of 1.44, and there was a general agreement on the statements that process innovations by the DT-SACCOs made them competitive with a mean of 3.19 and a standard deviation of 1.20.



**Table 4: Descriptive Results of Financial Process Innovations**

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev.
Our SACCO has a well-articulated process design strategy.	13.4%	15.4%	20.3%	43.6%	7.2%	3.15	1.18
Our SACCO has initiated new processes in its service provision.	20.7%	20.3%	26.6%	28.9%	4.3%	2.77	1.18
The Process Innovations initiated by our SACCO have made it competitive among its peers	9.2%	7.2%	22.3%	44.9%	16.4%	3.52	1.12
Our SACCO has continuously automated its financial processes delivery.	25.2%	21.6%	20.3%	26.6%	6.2%	2.66	1.27
The Process Innovations by our SACCO make it competitive.	12.5%	18.0%	16.7%	43.3%	9.5%	3.19	1.20
Our SACCO has institutionalised processes innovations	9.5%	7.9%	16.4%	49.8%	16.4%	3.55	1.14

## Inferential Results

### Correlation Results

In order to determine if there is a connection between the variables, this study used correlation analysis.

**Table 5: Correlation between Study Variables**

	Y	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>
Y	1				
X <sub>1</sub>	.746***	1			
X <sub>2</sub>	.794***	.136	1		
X <sub>3</sub>	.872***	.124	.056	1	
X <sub>4</sub>	.612***	.032	.001	.065	1

Note: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

A correlation coefficient of 0.794 demonstrates that there is a substantial and positive association between Financial Products Innovations and the capacity of DT-SACCOs in Kisii County to be

financially viable in the long run. This indicates that the operational performance of DT-SACCOs in Kisii County should improve by 0.794 units in the event that an increase of one unit in the amount of Financial Products Innovations in DT-SACCOs in Kisii County is implemented.

Financial Process Innovations and evaluating have a strong and positive association with the capacity of DT-SACCOs in Kisii County to remain in operation, as shown by a correlation coefficient of 0.872. This suggests that this connection is positive. This demonstrates that an increase of one unit in Financial Process Innovations and evaluation is associated with an increase of 0.872% in the financial sustainability of DT-SACCOs in Kisii County in the region. The correlation between Financial Process Innovations and the ability of DT-SACCOs in Kisii County to maintain operational performance was determined to have a statistically significant value of 0.612 in the study. According to these findings, a one-unit gain in tracking is equivalent to a 0.612-unit increase in the capacity of DT-SACCOs in Kisii County to continue operating.

### Regression Analysis

The results from performing regression analysis on the data that was collected are reported

**Table 6: Model Summary**

Model	R	R Square	Adjusted R Square	Sig
1	.856 <sup>a</sup>	.732	.728	.000

The value of the model's coefficient of determination, or R square, which was 0.728, suggests that it is effective in forecasting whether or not DT-SACCOs in Kisii County would be able to maintain their operational performance in the future. This suggests that about 72.8% of the variation in financial sustainability can be predicted by applying the identified Institutional financial innovations, while the remaining 27.2% is influenced by additional practices that are not included in the model. This is the case since the model includes just certain practices.

**Table 7: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	60.425	4	15.11	98.117	.000 <sup>a</sup>
	Residual	6.773	44	.154		
	Total	67.198	48			

a. Predictors: (Constant),  $X_1$ ,  $X_2$ ,  $X_3$ ,  $X_4$

b. Dependent Variable:  $Y$

The analysis of the variance table shows a considerable F-value of 98.117, which is notable from a statistical point of view. This suggests that the model is a useful tool for predicting the extent to which DT-SACCOs in Kisii County will be able to maintain their operational performance.

**Table 8: Regression Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients		
	Beta	Std. Error	Beta	t-stat	Sig.
1 (Constant)	0.376	0.286		1.315	.002
<b>X<sub>1</sub></b>	0.391	0.165	0.308	2.370	.038
<b>X<sub>2</sub></b>	0.401	0.154	0.421	2.600	.021
<b>X<sub>3</sub></b>	0.296	0.106	0.207	2.792	.010
<b>X<sub>4</sub></b>	0.372	0.162	0.291	2.300	.000

Table 8 demonstrates that the implementation of financial innovations results in a statistically significant increase in the financial sustainability of DT-SACCOs in Kisii County ( $X_1 = 0.391$ ,  $p = 0.002$ ). This indicates that the financial sustainability of DT-SACCOs in Kisii County increases by 39.1 percent for every additional unit of Institutional financial innovations that is implemented. These results are in agreement with those by Harelimana (2017) who conducted an analysis over a sample of 132 financial institutions in Rwanda.

Table 8 shows that Financial Products Innovations positively affects the long-term financial sustainability of DT-SACCOs in Kisii County ( $X_2 = 0.408$ ,  $p = 0.038$ ). This suggests that a 40.1% improvement in the financial sustainability of DT-SACCOs in Kisii County may be expected from a one-unit increase in financial products innovations. The results of the study agree with those by Muteke (2015) whose study focus were Savings and Credit Co-Operative Societies (SACCOs) in Mombasa, Kenya. It was ascertained in the study that institutional innovation marginally but positively influenced performance.

The regression analysis of the third objective, which sought to establish how much of an influence the Financial Services Innovations has on the long-term sustainability of DT-SACCOs in Kisii County, indicated a positive effect ( $X_3 = 0.296$ ,  $p = 0.010$ ). This indicates that the financial sustainability of DT-SACCOs in Kisii County increases by 29.6% for every extra unit of Financial Services Innovations that is present. These results are consistent with those found by Oloo (2017) who revealed that the flurry of fresh entrants in some countries is credited with helping to drive down banking charges, improve access to banking services and spark off a wave of new products and services.

The study's fourth objective was to establish how much of an effect Financial Process Innovations has on DT-SACCOs in Kisii County. Regression analysis showed that financial process innovation has a significant and favourable influence ( $X_4 = 0.372$ ,  $p = 0.000$ ) on DT-SACCOs in Kisii County. This means that, all else being equal, the financial sustainability of DT-SACCOs in Kisii County increases by 37.2% for each additional Financial Process Innovations unit added. These findings are consistent with those of Muraleetharan (2011), who investigated the effect of internal management strategies on the long-term sustainability of institutions in Sri Lanka's northern Jaffna area.

## **CONCLUSIONS AND RECOMMENDATIONS**

### **Conclusions**

It is possible to draw the following conclusions based on the outcome of the initial goal: This is possible to have the financial sustainability of DT Sacco in Kisii County based on the positive and important effects of institutional financial innovation on the financial sustainability of DT Sacco in Kisii County. DT Sacco from Kisii County. We found that financial product innovation had the most significant impact of the four recognized financial innovation practices.

The regression findings that were obtained for the third goal revealed that the Financial Services Innovations has a favorable and significant effect on the financial sustainability of DT-SACCOs in Kisii County. This suggests that an increase in Financial Process Innovations leads to a large improvement in the financial sustainability of DT-SACCOs in Kisii County, provided that all other parameters remain the same. As a result, the conclusion that can be reached is that the Financial Services Innovations considerably improves the financial sustainability of DT-SACCOs in Kisii County.

Regarding the results of the analysis of data in the fourth goal, which is to examine the impact of financial process innovation on financial sustainability in DT Sacco in Kisii County, we found that innovation has a positive and important impact on financial processes. This was the conclusion from the findings of the impact of financial procedures on DT-SACCOS's financial sustainability in Kishi District. As a result, it can be concluded that innovation in the financial process is an important and advantageous aspect that contributes to the financially sustainable operation of DT Sacco in Kisii County

### **Recommendations**

The study's findings suggest several key recommendations for enhancing the financial sustainability of DT-SACCOs in Kisii County. Based on the positive and significant effects of institutional financial innovations, it is recommended that DT-SACCOs focus on enhancing Financial Process Innovations. This will ensure greater financial sustainability. The study also highlighted the importance of Financial Products Innovations in contributing to sustainability,



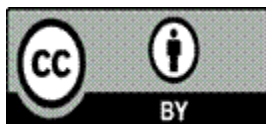
thus advising that these innovations be further developed to improve DT-SACCOs' financial stability.

Additionally, the findings emphasized the significance of Financial Services Innovations, suggesting that efforts be made to strengthen these innovations to positively impact the financial sustainability of DT-SACCOs. Furthermore, based on the analysis of Financial Process Innovations, the study recommends that policies around these innovations be specifically tailored to the needs of DT-SACCOs in Kisii County. This will improve tracking and operational performance, ultimately supporting the long-term sustainability of these financial institutions. By implementing these recommendations, DT-SACCOs can enhance their financial resilience and ensure sustained growth in the face of evolving financial challenges.

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