



(RESEARCH ARTICLE)



## Effect of digital financial services on financial performance of rotating, savings and credit associations in Mombasa County

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### Abstract

The effect of digital financial services on financial performance includes the introduction of new financial instruments and services as well as the introduction of new sources of funding. Access to financial services is the key limitation impacting Kenyan informal finance organisations. Although informal finance services are accessible, the quantity supplied is insufficient to achieve the goals of the informal finance groups thus hindering financial performance. Despite the government's efforts to encourage borrowing from the official sector, informal financing remains popular among small traders. Due to their insufficient records, seek modest loan sizes, and lack collateral, several banks find it difficult to assess informal financial groupings for loans. The research objective was to determine the effect of digital financial services on financial performance of RoSCAs in Mombasa County. A descriptive survey technique was used to conduct in-depth investigations by the researchers in order to accomplish the study's goals. The results showed that the respondents strongly agreed with a mean of 4.52 and a standard deviation of 0.723 that digital payment has enabled effective and efficient running of the operations and reduced fraud in the RoSCAs. Findings revealed that the coefficient of determination (R-Square) was 0.715 i.e.  $R^2 = 0.511$ . The study concluded that digital payment has enabled RoSCAs to be flexible and change with the dynamic environment for convenient payment.

**Keywords:** Digital services; Financial performance; Informal financial groupings; Rotating savings and credit associations (RoSCAs)

## 1. Introduction

### 1.1. Financial Performance

Evaluates how an organisation is able to use and generate its asset. It measures the competence of a business to generate value for investors, (Baydas & Elma, 2021). Financial measures such as liquidity ratios, activity ratios, profitability ratios, and debt ratios are used to measure the financial performance of RoSCAs in most cases. Ratios are employed as a standard for assessing performance of an institution and aid in the qualitative evaluation of the firm's performance as well as the summarization of vast amounts of financial data. The return on equity and return on assets of a company are measures of its financial success (Tharmila & Arulvel, 2020).

### 1.2. Statement of the Problem

Access to financial services is the key limitation impacting Kenyan informal finance organisations. Although informal finance services are accessible, the quantity supplied is insufficient to achieve the goals of the informal finance groups

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thus hindering financial performance. Due to their insufficient records, seek modest loan sizes, and lack collateral, several banks find it difficult to assess informal financial groupings for loans, (Nguyet, 2019). It has been discovered that persons who are poor, jobless, less educated, women, the elderly, live in rural regions, or belong to ethnic or religious minorities are less likely to be financially involved (Carbo et al., 2018). With the adoption of digital financial service, informal finance groups may obtain a solution to their financial problems allowing them to achieve the goals and enhance financial performance of the groups.

Despite the fact that several studies like that of (VK.wachira,2021) and (CA.mawere,2022) on digital financial services on financial performance on informal finance groups in developing countries have been undertaken, a scarcity of investigation concerning influence of informal financial services on financial performance is seen (Jain & Mansuri, 2021).

According to the analysed research, most studies focus on financial services and their influence on the informal financial group sectors, hence there were less convincing study on digital financial services and financial performance. As a result, the purpose of this research was to determine the effect of digital financial services on financial performance of rotating savings and credit association in Mombasa County.

### **1.3. General objective**

To determine the effect of digital financial services on financial performance of RoSCAs in Mombasa County.

### **1.4. Specific Objectives**

- To assess the effect of digital payment on financial performance of RoSCAs in Mombasa County.
- To establish the effect of digital savings on financial performance of in RoSCAs in Mombasa County.
- To ascertain the effect of digital remittance on financial performance of RoSCAs in Mombasa County.
- To determine the effect of digital credit on financial performance of RoSCAs in Mombasa County.

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## **2. Literature review**

### **2.1. Theoretical Framework**

It covered Technology Acceptance Model, theory related to digital finance and financial performance which Technology Acceptance Model, and Innovation Diffusion Theory

### **2.2. Technology Acceptance Theory**

Davis (2018) proposed this hypothesis to elaborate on the mentality underlying the desire to use digital finance know-how for digital savings and financial performance (Monyoncho, 2021). According to the hypothesis, the perception of new financial technology is directly related to its utility as well as the ease of digital savings on financial performance of rotating saving and credit association (Li & Zeng, 2020).

The Technology Acceptance Theory is particularly crucial to this study since it promotes the creation of a link between individual behavior and the usage of Technology, such as in digital finance services on the informal finance organization.

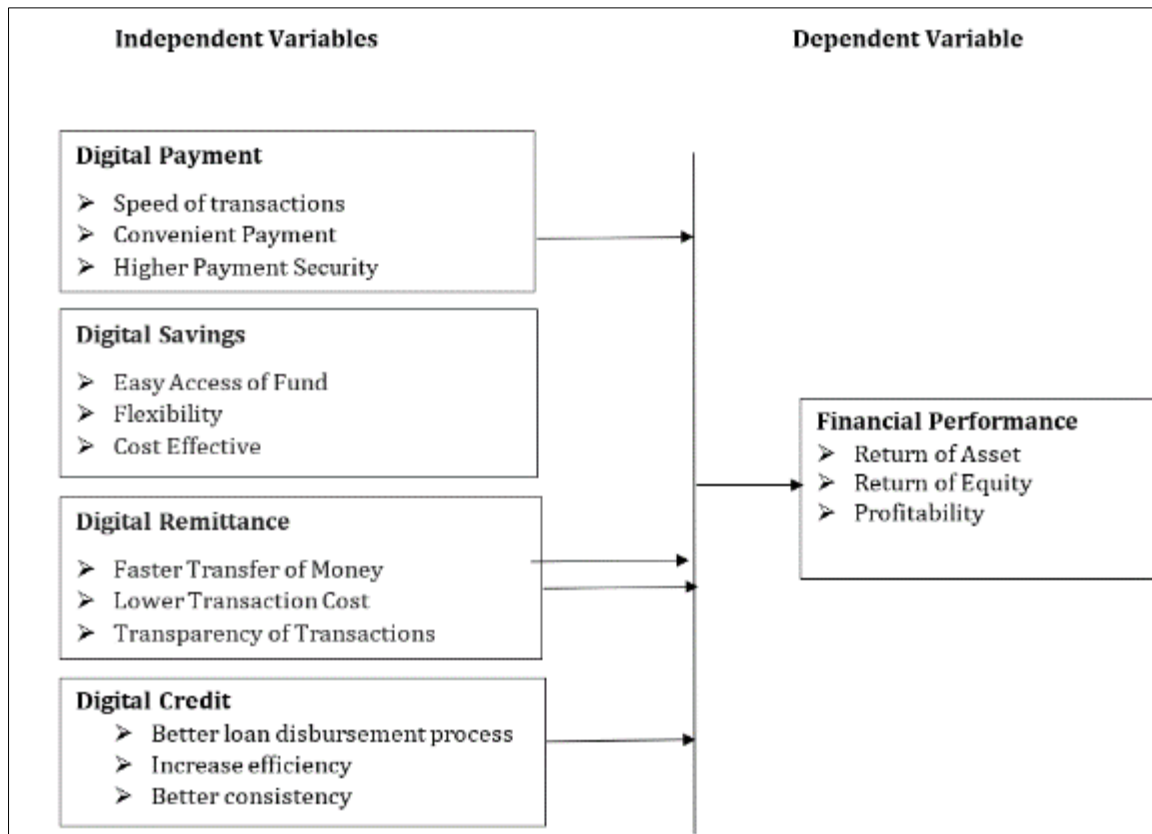
### **2.3. Diffusion of Innovation Theory**

Rogers (2019) developed the Diffusion of Innovations (DOI) theory, which he defined as the communication process by which the market adopts a new concept or item.

The most essential component in digital remittance and digital credit on financial performance of RoSCAs is by establishing deployment of innovation, as per diffusion theory, is: absolute benefit, congenial, affordability, trial ability, and ease of detection (Monyoncho, 2020). The need for adoption of digital contents by the informal finance organizations makes the diffusion innovation relevant in the research study on the impact of digital financial services on the financial performance of ROSACAs.

### **2.4. Conceptual Framework**

Conceptual framework to be a graphical or diagrammatic depiction of a study linking between variables as shown below:



**Figure 1** Conceptual Framework

## 2.5. Review of Study Variables

### 2.5.1. Digital Payment on Financial Performance

An electronic payment, often known as online payment, referring to the movement of value between payment accounts utilising an electronic tool like mobile phone, POS (Point of Sale), or computer, as well as a various digital communications such as mobile wireless data or SWIFT (Society for Worldwide Interbank Financial Telecommunication). Digital payments enable informal financial groups get access to digital financial services by supporting social distancing policies implemented in numerous countries. When alternate means of distribution become difficult due to health rules, digital payments facilitate payment transactions for RoSCAs to persist, allowing financial aid to reach persons demanding (Chen, Cheng, & Hwang, 2021).

The digital payment system reduce risks for providers and consumers also promoting growth of the digital payment and financial performance of RoSCAs. Financially, the adoption of Electronic-based payment system is linked to an increase in management efficiency by permitting the sharing of multiple transaction medium like Mpesa, merchant POS terminals, and agents boosting performance of informal finance organization in provision of financial services (Yang et al., 2018).

### 2.5.2. Digital Savings on Financial performance

A digital savings account allows RoSCAs members to open, manage, and transact through their accounts, from the comfort and safety of their homes, which is highly paramount for digital savings on financial performance of RoSCAs. Digital saving is a wise financial strategy, especially for those with little or unpredictable wages. Digital financial savings assist RoSCAs in coping with the financial services they get thus enhancing performance. Sufficient funds can ensure the continuation of children's educations or allow a firm to expand or diversify due to capital adequacy. Members of RoSCAs who save may be rewarded with interest or, as they create a financial footprint, access to credit, which can improve earnings when invested in enterprises or income-generating assets. With digital financial services filling holes in the informal financial sector's funds, digital savings accounts are the answer to lengthy winding line ups and unending document verifications required for savings accounts (Chen, & Hwang, 2021).

### 2.5.3. Digital Remittance on Financial performance

According to Wellman (2019), digital remittance refers to overseas employees sending money electronically to their home countries. This may be done via a variety of means, including the internet or a mobile app, a digital wallet or bank account is used to send the money. As RoSCAs' growth accelerated, digital remittances were already beginning to emerge. Electronic transactions increased for both more recent businesses like World Remit and Wise as well as for established ones like Western Union and MoneyGram. The worldwide remittance market was valued USD 19.65 billion in 2022, and it is expected to rise at a CAGR of 15.6% between 2023 and 2030. The increased financial transfers from migrant workers to informal finance organisations can be ascribed to market expansion.

The spread of digital remittance platforms is projected to encourage RoSCAs to migrate toward online transactions. Furthermore, the increasing global usage of mobile devices in recently has pushed digital technology remittance services and cross-border payments. Clients globally are also migrating toward digital remittance services, which helps with Transparency of Transactions, (Wellman, 2019). Furthermore, digital remittance services provide excellent privacy and money safety for users

### 2.5.4. Digital Credit on Financial Performance

According to Berg et al. (2018), "digital credit" is a modest, short-term loans obtained instantaneously and remotely and providing borrowers with access to money. As a brand-new, cutting-edge method of obtaining electronic money via digital platforms such as M-Shwari which offer credit services just by a tap on a mobile phone device, digital credit products are quickly growing in popularity in the digital financial services (DFS) sector, (Matray 2021). Digital credit allow RoSCAs to access and obtain loan facilities using smart and feature phone technology or web platform allowing them with earning ability to cater for their households and financial needs improving their financial performance. By enabling unbanked and/or low-income groups to obtain loans and credit, digital credit products have the potential to increase credit to borrowers who would otherwise not be served by the formal financial system (Fonseca and Matray, 2021).

## 2.6. Empirical Reviews

The impact of online banking on American community banks' operations was assessed by Kagan et al. in 2019. From 2015 to 2020, they took a representative sample of 60 of the biggest EU banking organizations. The study used a descriptive design. Data from the financial reports of the relevant financial entities were gathered. Inferential analysis was used to examine the facts. According to the survey, institutions that provided a wide range of online banking services outperformed those that didn't. They also learned that online banking improved community banks' capacity to profit, as seen by a greater return on equity.

Isinta, Aduda, and Magutu (2019) looked at the impact of digital savings on financial inclusion as an explanatory variable in linking informal groups and commercial bank financial performance. According to Isinta et al. (2021), the impact of digital savings on financial inclusion on bank assurance performance in Kenya was minimal.

Chenuos, Bitok, Tanui, and Kiptanui (2014) investigated the influence of savings in the financial performance of informal sector in Kiambu County, Kenya and established that the majority of the respondents were happy with the savings services provided by informal financial organizations because it enhanced their business growth.

Osoro and Muturi (2013) studied the role of informal financial institutions on the growth of SMEs in Kenya. The findings from their research indicated that the majority (42%) of the respondents had a positive increase in sales volume after receiving credit from informal financial institutions.

## 2.7. Critique of Existing Literature of the Study

The research already in existence makes it evident that many surveys either lack sufficient variables or have an inadequate study scope. For instance, a research by Kagan et al. (2019) that assessed the impact of internet banking on the operation of community banks in America found that banks had considerably greater growth rates of liquidity produced relative to growth rates of total assets than do informal organizations. But rather than using data from Kenya, the study used data from another nation.

Locally, Isinta, Aduda, and Magutu (2019) looked studied the impact of digital savings on financial inclusion as an explanatory variable in linking informal groups and commercial bank financial performance. However, the study focused on commercial banks, which have a different framework than ROSCAs. Additionally, as in the case of the current investigation.

Chenuos, Bitok, Tanui, and Kiptanui (2014) investigated the influence of savings in the financial performance of informal sector in Kiambu County, Kenya. The study focused on a single variable which is savings unlike the current study which looked on several variables.

Nevertheless, Osoro and Muturi (2013) looked on the role of informal financial institutions on the growth of SMEs in Kenya. Unlike the current study which is focused on the Roscas within Mombasa county rather than SMEs in Kenya.

All of these studies have been unable to show whether the development of technology has affected the bank's trend of offering ROSCA services, leading to a rise in ROSCA banking services. The researchers looked into whether advancements in technology like as online banking, electronic banking, or mobile banking (M-PESA, Airtel Money, Orange Money, and YU cash) had an impact on the expansion of ROSCA financial services.

## **2.8. Research Gaps**

According to the literature reviews the effect of digital financial services on the financial performance of informal finance groups had been the subject of extensive research in Kenya, but less was undertaken to examine the impact of these services on the financial performance of RoSCAs. Previous research had concentrated on the factors that influence financial access and inclusion. In publishing their conclusions, several research (Shittu, 2018) merely relied on secondary data, which may or may not be legitimate. Several studies focused on SMEs rather than informal financial groupings RoSCAs (Fatoki & Asah., 2018). This strategy is insufficient for obtaining critical information from responders. As a result, the present research was to establish the impact of digital financial services on financial performance of RoSCAs .

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## **3. Research Methods**

### **3.1. Research Design**

As per (Newing 2019), a study design is a broad technique for carrying out a research to investigate particular detail research questions of interest. The research approach permits the use of many data collection tools, including questionnaires, interview schedules, and others. To fulfil the project's aims, descriptive research approach was used by the researcher to conduct in-depth examinations on the effect of digital financial services on financial performance of RoSCAs.

### **3.2. Target Population**

A population is a collection of element about which we wish to reference, according to (Cooper & Schindler 2018). The study target population was 880 ROSCAs. The respondents included the staff and chairpersons serving ROSCAs in Mombasa County.

### **3.3. Sample size**

According to Kombo and Tromp (2019), a sample is a gathering of elements picked at random from the universe to constitute it. The study sampled 275 groups of ROSCAs in Mombasa County.

### **3.4. Data Collection Instruments**

A questionnaire was used to collect primary data. A questionnaire was more preferred by respondents due to anonymity. The scale of measurement was ordinal where Likert scale (Strongly Disagree -1, Disagree -2, Neutral -3, Agree -4, Strongly Agree -5) was used.

### **3.5. Data Analysis**

Descriptive statistical approaches was used to summarize the data collected in an organize manner in order to describe the relationship between the study variables. Marsh and stocker (2019) argue that descriptive analysis of data is good for its high degree of neutrality and objectivity of the researcher.

## 4. Results and Discussion

### 4.1. Response Rate

Out of the 275 respondents who made up the intended sample size, the study collected 236 valid questionnaires, yielding an 86 percent response rate. According to Fincham (2020) and Saldivar (2021), sampling bias is less likely when a minimum response rate of 70% is met.

**Table 1** Response rate

Response rate	Frequency	Percentage (%)
Returned	236	86
Unreturned	39	14
Total	236	100

### 4.2. Reliability Results

**Table 2** Reliability Results

Constructs	Number of Items	Overall Cronbach's Alpha	Acceptability
<b>Independent variables</b>			
Digital payment	236	0.753	Acceptable
Digital savings	236	0.832	Acceptable
Digital remittance	236	0.775	Acceptable
Digital credit	236	0.871	Acceptable
<b>Dependent variable</b>			
Financial performance	236	0.768	Acceptable

One way to gauge an instrument's reliability is how consistently and impartially it produces results. According to Lishenga (2013), the correlation coefficient (alpha) between a given value and 1 indicates the dependability of the data. It's suggested that the value be at least 0.70. Given that the Cronbach Alpha coefficient was more than 0.70, as indicated in Table 4.7 above, the data was deemed suitable for additional investigation.

It was discovered that the respondents' ratings were genuine because the reliability estimates and item-total correlations of the variables were within a tolerable range, from 0.753 to 0.871. The internal consistency measures of the four independent variables: digital payment, digital savings, digital remittance, and digital credit can be seen in Table 4.7 above. Because  $\alpha \geq 0.70$ , the dependent variable; the financial performance of Mombasa County's RoSCAs was quite valid and acceptable.

### 4.3. Descriptive Statistics

Descriptive statistics were calculated for this research study in order to aid in drawing conclusions about the nature of the relationship between the variables. (Johansen, 2021). The standard deviation and mean were employed in the investigation.

The results show that respondent agreed that digital payment attribute the number of members in the informal financial groups for its reliability, has enabled the informal financial groups to be flexible and change with the dynamic environment for convenient payment, enables the informal financial groups to be flexible and change with the dynamic environment for convenient payment, has enabled effective and efficient running of the informal financial groups' operations and reduced fraud in the ROSCAs, is a convenient mode of payment and finally agreed that with the various digital payment channels the financial transactions are affordable and the fees levied if any is acceptable with higher payment of security per transition.

**Table 3** Digital Payment and Financial Performance

Statement	N	Mean	Std. Deviation
Digital payment attribute the number of members in the informal financial groups for its reliability.	236	3.95	0.654
Digital payment has enabled the informal financial groups to be flexible and change with the dynamic environment for convenient payment.	236	5	0.776
Digital payment has enabled effective and efficient running of the informal financial groups' operations and reduced fraud in the RoSCAs.	236	4.52	0.723
Customer chose to use the digital payment on financial inclusion channel provided by the financial branches as it is a convenient mode of payment.	236	3.09	0.642
With the various digital payment channels the financial transactions are affordable and the fees levied if any is acceptable with higher payment of security per transition.	236	4.71	0.714
Valid N (List Wise)	236		

**Table 4** Digital Savings and Financial Performance

Statement	N	Mean	Std. Deviation
Digital savings enables the informal financial groups to align itself with new profiting innovations trending in the industry and the world.	236	3.58	0.612
Having digital savings has seen the society reach members from remote parts of the county for easy access of fund.	236	4.43	0.761
Digital savings have improved the financial performance structure with technological advancement for flexibility.	236	4.32	0.745
Digital savings have increased the growth of informal groups, for cost effective, productivity and profit by generation of potential services in the informal financial groups.	236	3.79	0.628
The implementation of digital savings enables regulatory structures for the growth of informal groups and compete well with other formal financial institutions	236	4.92	0.783
Valid N (list wise)	236		

Table above shows that the respondents agreed that digital savings enables the informal financial groups to align itself with new profiting innovations trending in the industry and the world, digital savings has seen the society reach members from remote parts of the county for easy access of fund, digital savings have improved the financial performance structure with technological advancement for flexibility, digital savings have increased the growth of informal groups, for cost effective, productivity and profit by generation of potential services in the informal financial groups. Lastly the respondents agreed that the implementation of digital savings enables regulatory structures for the growth of informal groups and compete well with other formal financial institutions.

**Table 5** Digital Remittance and Financial Inclusion

Statement	N	Mean	Std. Deviation
Digital remittance has given rise to a new set of members in the informal financial groups hence increasing profits from membership due to lower transaction cost charged.	236	4.73	0.724
Digital remittance had positive impact on informal financial groups because it is faster to transfer the money from one place to another.	236	4.76	0.726
The use of digital remittance has increased customer access to financial services as it has improved the level of deposits for the financial informal groups for transparency of transactions among the members.	236	4.43	0.708
Digital remittance influence reduction of operation costs and hence better return on assets for the informal financial groups.	236	4.68	0.781
The faster transfer of money and transparency of transactions involved in digital remittance, impact on product innovation to make the operations of the informal financial groups be continuous.	236	3.68	0.662
Valid N (List Wise)	236		

Table 4.8 showed the respondents answers. The results show that the respondents agreed that digital remittance has given rise to a new set of members in the informal financial groups hence increasing profits from membership due to lower transaction cost charged, digital remittance have had positive impact on informal financial groups because it is faster to transfer the money from one place to another, digital remittance has increased customer access to financial services as it has improved the level of deposits for the financial informal groups for transparency of transactions among the members, digital remittance influence reduction of operation costs and hence better return on assets for the informal financial groups, lastly the faster transfer of money and transparency of transactions involved in digital remittance, impact on product innovation to make the operations of the informal financial groups be continuous.

**Table 6** Effect of Digital Credit and Financial Performance

Statement	N	Mean	Std. Deviation
Digital credit has given rise to a new set of members in the informal financial groups hence increasing profits from membership due to lower transaction cost charged.	236	4.18	0.930
Digital credit has positive impact on informal financial groups because it is easier to transfer the money thus convenient.	236	4.19	1.192
The use of digital credit has increased customer access to financial services as it has improved money disbursement process for the financial informal groups through wide spread of agents.	236	4.64	1.379
Digital credit influence reduction of operation costs and hence better return on assets for the informal financial groups.	236	3.12	0.921
Digital credit impacts on product innovation to make the operations efficiency of the informal financial groups.	236	4.21	1.184
Valid N (list wise)	236		

Table 4.9 above showed that the respondents were asked to give their opinion on the effect of digital credit on financial performance. According to Rongers (2021) it was noted that the use of digital credit has increased customer access to financial services as it improves money disbursement process for the financial informal groups through wide spread of agents and the digital credit impacts on product innovation make the operations more efficient. The results show that the majority of the respondents agreed with 4.18 as a mean and 0.930 a standard deviation that digital credit has given rise to a new set of members in the informal financial groups hence increasing profits from membership due to lower



transaction cost charged. The respondents agreed with 4.64 as a mean and 1.379 a standard deviation that digital credit have had positive impact on informal financial groups because it is easier to transfer the money thus convenient. The results also showed that the respondents agreed with 3.12 as a mean and 0.921 a standard deviation that the use of digital credit has increased customer access to financial services as it has improved money disbursement process for the financial informal groups through wide spread of agents. The respondents agreed with 4.21 as a mean and 0.921 a standard deviation that digital credit influence reduction of operation costs and hence better return on assets for the informal financial groups. The results also showed that the respondents agreed with 4.21 as a mean and 1.184 a standard deviation that digital credit impacts on product innovation to make the operations efficiency of the informal financial groups.

**4.4. Regression Analysis**

Regression analysis was conducted to determine the relationship between the variables.

**Table 7** Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.715 <sup>a</sup>	0.511	0.589	0.078
Predictors: (Constant), Digital Payment, Digital Savings, Digital Remittance and Digital Credit.				

**4.5. Analysis of Variance**

The ANOVA method was employed to assess the model's reliability in illuminating the correlation between the variables.

**Table 8** ANOVA Table for Financial Performance against Digital Payment, Digital Savings, Digital Remittance, Digital Credit. and their Interaction

Model	Sum of Squares	df	Mean Square	F	p-value
Regression	65.963	1	65.963	4.010	0.050 <sup>a</sup>
Residual	970.595	59	16.451		
Total	1036.557	60			
Regression	89.466	2	44.733	2.739	0.073 <sup>b</sup>
Residual	947.091	58	16.329		
Total	1036.557	60			
Regression	89.466	3	29.822	1.795	0.158 <sup>c</sup>
Residual	947.091	57	16.616		
Total	1036.557	60			
Regression	119.288	4	29.822	0.985	0.118 <sup>d</sup>
Residual	930.496	56	16.616		
Total	1049.784	60			

Y = Dependent Variable: Financial Performance (FP) ; a. Predictors: (Constant), Digital Payment (DP); b. Predictors: (Constant), Digital Savings (DS); c. Predictors: (Constant), Digital Remittance (DR); d. Predictors: (Constant), Digital Credit (DC)

The findings verify the null hypothesis, which states that there is a nonlinear relationship between financial performance and digital payment, savings, remittance, and credit, and their interaction, at the 5% significant level. As an alternative, the null hypothesis that predictions based on the dependent variable's mean are more accurate than those that take into account the variability of the independent variables is tested using the F-test of overall significant from the ANOVA table.

## 5. Summary of key findings

### 5.1. Digital Payment

The first objective of this study, the researcher sought to establish the effect of digital payment on financial performance of RoSCAs in Mombasa County. The results show that the respondents agreed with a mean of 3.95 and standard deviation of 0.654 that digital payment attribute the number of members in the informal financial groups for its reliability. The majority of the respondents strongly agreed with a mean of 5 and a standard deviation of 0.776 that digital payment has enabled the informal financial groups to be flexible and change with the dynamic environment for convenient payment. The respondents also strongly agreed with a mean of 4.52 and a standard deviation of 0.723 that digital payment has enabled effective and efficient running of the informal financial groups' operations and reduced fraud in the RoSCAs. Findings revealed that the coefficient of determination (R-Square) was 0.715 i.e.  $R^2=0.511$ . This showed that the predictor variables in this study i.e. digital payment, digital savings, digital remittance and digital credit towards financing performance explains 71.5% of the variation in the financial performance. It was found that there existed a strongest correlation between financial performance and digital payment as  $r= 0.521$ .

### 5.2. Digital Savings

The second objective of the study sought to assess the the effect of digital savings on financial performance of in RoSCAs in Mombasa County. The findings showed that the respondents the respondents showed that they agreed with a mean of 3.58 and standard deviation of 0.612 that digital savings enables the informal financial groups to align itself with new profiting innovations trending in the industry and the world. The results also show that the respondents agreed with a mean of 4.32 and a standard deviation of 0.745 that digital savings have improved the financial performance structure with technological advancement for flexibility. The response from the respondents showed that they agreed with a mean of 4.09 and standard deviation of 0.619 that digital savings enables the informal financial groups to align itself with new profiting innovations trending in the industry and the world which has seen the society reach members from remote parts of the county for easy access of fund. A moderate correlation was found in between digital savings and digital remittance towards financial performance. However, since the observed p value of 0.073 was not significantly larger than the critical significance of 0.05, then it is prudent to recognise the influence of digital saving in augmenting financial performance.

### 5.3. Digital Remittance

The third objective was to determine the effect of digital remittance on financial performance of RoSCAs in Mombasa County. The results show that the respondents agreed with a mean of 4.73 and standard deviation of 0.724 that digital remittance has given rise to a new set of members in the informal financial groups hence increasing profits from membership due to lower transaction cost charged. The results showed that that the respondents agreed with a mean of 4.76 and a standard deviation of 0.726 that digital remittance have had positive impact on informal financial groups because it is faster to transfer the money from one place to another. The respondents also agreed with a mean of 3.68 and a standard deviation of 0.662 that the faster transfer of money and transparency of transactions involved in digital remittance, impact on product innovation to make the operations of the informal financial groups be continuous. The observed p-value corresponding to the inclusion of the interaction effect was 0.158, which was larger than the critical significance of 0.05. Therefore, the interaction effect does little to augment the prediction of financial performance.

### 5.4. Digital Credit

The fourth objective of the study was to assess the effect of digital credit on financial performance. It was found that the majority of the respondents agreed with a mean of 4.18 and standard deviation of 0.930 that digital credit has given rise to a new set of members in the informal financial groups hence increasing profits from membership due to lower transaction cost charged. The respondents agreed with a mean of 4.64 and a standard deviation of 1.379 that digital credit have had positive impact on informal financial groups because it is easier to transfer the money thus convenient. The fourth analysis of variance represented the regression model in the hierarchical series.

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## 6. Conclusion

From the findings of the research study, it was concluded that digital payment attributes the number of members in the informal financial groups for its reliability. The study concluded that digital payment has enabled the informal financial groups to be flexible and change with the dynamic environment for convenient payment. It was concluded that the digital payment in any financial institution enables the informal financial groups to be flexible and change with the dynamic environment for convenient payment. The study concluded that customer chose to use the digital payment on

financial inclusion channel provided by the financial branches as it is a convenient mode of payment. It was concluded that with the various digital payment channels the financial transactions are affordable and the fees levied if any is acceptable with higher payment of security per transition. The study concluded that the financial performance in any organization is determined by the use of digital remittance to increase customer access to financial services as it has improved the level of deposits for the financial informal groups for transparency of transactions among the members and digital remittance influence reduction of operation costs and hence better return on assets for the informal financial groups. From the analysis of the study findings, it was concluded that that digital credit had positive impact on informal financial groups because it is easier to transfer the money thus convenient.

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## Compliance with ethical standards

### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

### *Statement of informed consent*

Informed consent was obtained from all individual participants included in the study.

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