

Effect Of Mobile Banking On Financial Inclusion Among Registered Smes In Kisii County

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ABSTRACT

In the past few years, a great deal of emphasis has been placed on expanding financial service and product uptake and use in an attempt to promote economic development and alleviate poverty by assuring simple and inexpensive access to credit and loans, savings and investment, and insurance. The findings provide a basis for analysis for management of financial institutions on the best financial innovations to push forward by formulating strategic policies to support financial inclusion among SMEs. The disruptive innovation theory formed the basis of the study. The study targeted 2,246 registered SMEs and a sample of 340 SMEs owners/managers was drawn. To cater for non-sampling rate, addition of 30% of the sample size was added, raising the sample size to 486. The research used stratified random sampling to select participants. A structured questionnaire was used to gather the primary data for this study. Analysis was carried out using frequencies, mean, standard deviation, percentage, while correlation and multiple linear regressions were part of the inferential analysis. Tables were used to present the results. The results affirm that mobile banking had a statistically significant effect of financial inclusion and there was a strong positive and significant relationship between mobile banking and financial inclusion. The implication of this finding is that most SMEs have embraced the use of mobile banking in line with the specifications and need of modern clientele.

Key Words: *Mobile Banking, Financial Inclusion, Innovation, Financial Services, Strategic Policies, Savings and Investments*

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I. INTRODUCTION

It has been suggested in the past that Kenyan commercial banks do not make an effort to expand their customer base in regions with relatively small average transaction or deposit sizes (Dzombo, et al, 2017). In areas with a limited number of deposits, there is often a low amount of customers, which results in high service expenses. The banks did not think it made any business sense to establish new branches in regions that had low customer numbers and high operating costs. The scenario described above has, however, evolved, and the vast majority of businesses have begun to embrace the idea of financial inclusion, in which they work toward expanding their operations into new regions. Because of this practice, people living in even the most outlying parts of the nation now have access to banking services. As a result, Kenya has received praise from all around the globe for its success in bringing financial services to millions of low-income families via various financial inclusion measures (Tiwari, Schaub & Sultana, 2019). The rise of modern banking has prompted many commercial banks that were previously faced by financial crisis such as; lack of capital adequacy; increasing ratios of non-performing loans and increased competition that were resulting to low returns on investment and loss of credit; to venture into technological innovations to enhance financial inclusion.

Globally, technological innovations are known as digital finance. Yan Shen and Yipping Huang (2016), research on digital finance in China concluded that digital finance significantly lowers the transaction costs; enhance credit risk scoring through data that helps pin risk-based pricing; reduces information asymmetry and expands the set of feasible transaction. China's new business model allows financial service providers to execute a broad variety of financial operations, such as direct fund sales, crowd financing, and mutual fund investments, pensions and the selling of on-line insurance via the use of information communication technology.

In addition to making financial services more accessible, innovations in the financial industry have a significant association with improved economic results and living circumstances in the long term. This is one of the main benefits of technological innovation. People who are unbanked may have access to a greater choice of financial goods and services because to mobile phones, biometric identification, and the internet, says Haider (2018). It's also more convenient and less costly to use digital financial services, as opposed to traditional banking

services that are supplied in physical locations. By participating in the official financial system, low- and middle-income individuals and those in developing nations are given the opportunity to save and borrow money, earn interest and keep their standard of living stable.

Munyoro et.al (2017) studied the importance of portable cash administrations on friendly mobile banking platforms and its impact on financial inclusion in Harare district of Zimbabwe. The review discoveries demonstrated there was an essentially sure connection between mobile banking use, social monetary turn of events and financial inclusion level in Harare. To begin with, the discoveries demonstrate versatile cash administrations as a part of monetary advancements contributed emphatically and essentially to social financial improvement through job opportunity and employment opportunity creation; whereby the mobile service agents were employed to avail mobile banking services to the consumers at the grassroots levels. Secondly, mobile money service uptake and use was noted to have positively enhanced monetary incorporation through profiting monetary administrations to underestimated bunches in the general public; by upgrading cash move administrations and bills installment benefits advantageously and easily from the solace of their homes. The study findings proposition was foundation of administrative legitimate structure and regulations, which will propel forward mobile banking use and uptake, in order to increase financial inclusion rates that will have a ripple effect on the social economic impact on Zimbabweans.

Ndirangu and Nyamongo (2013) studied the effect of economic creativity in Kenya's financial sector, with specific focus on the banking sector. The review discoveries that technological innovation had improved financial inclusion through reducing the percentage of financially excluded people; this was attributed to the improvement in the monetary policy regulation. In contrast to this finding, several academics have a divergent point of view regarding the impact that technological innovations have on financial inclusions. For instance, a research that was carried out by Evangelista, Guerrieri and Meliciani (2014) discovered that the utilization of digital finance in previously mature markets is prone to forced take-up and use. The degree of financial inclusion in industrialized nations is unrelated to the changes and breakthroughs that have been made in financial products, procedures, and channel delivery. With this information, it is clear that there are many different views on the impact that technological innovation has had on access to financial services. There is a hole in the research because of this, and it is critical to examine and investigate further the impact of technological innovations on Kenya's level of financial inclusion.

Customers may use their mobile devices to access a variety of financial services, such as credit cards and savings accounts through mobile banking. According to Etim (2014), mobile banking features may be divided into two types: additive and transformative. The use of a mobile phone as a means of settling financial transactions is what is meant by the term "mobile banking." It enables transfers from one individual to another, with the monies being immediately accessible to the recipient of the transfer. Card infrastructure is used to convey payment instructions and encrypted Short Message Service (SMS) connections are used to confirm receipt of the payment. As a result, mobile banking is best suited for low-value transactions that must be completed quickly.

Customers may now conduct financial transactions using mobile devices such as smart phones and personal digital assistants this is known as m-banking (Mari, 2011)). When it comes to financial transactions, "mobile banking" refers to using a mobile phone as the main communication instrument. It enables transfers from one individual to another, with the monies being immediately accessible to the recipient of the transfer. Mobile payments make use of the card infrastructure in order to transport payment instructions and also make use of encrypted Short Message Service (SMS) communications in order to confirm receipt of the payment to the recipient. Mobile banking is designed for transactions of modest value in which the speed with which they are completed is an important factor. Account inquiries, the transferring of cash, the resetting of passwords, and bill payments are some of the activities that are covered by this product. These services are supplied by very few institutions (Okiro & Ndungu, 2013).

The Kenyan banking sector has always found itself unable to resist the temptations of technological indulgence as a result of the emergence of a new wave of information-driven economy. To make banking more affordable, mobile banking has boomed, which has paved the way for banking in rural Kenya and boosted the use of mobile phones in such areas. As a consequence of this, there has been a rise in the quantity of financial dealings that are executed using non-traditional delivery channels such as mobile banking.

Financial services access is different based on; access at a reasonable price; access by proximity to the residential areas; access to services when needed and access to tailor made products. The availability to financial services considerably aid in financial inclusion of various consumers depending on their product category, for instance, loan facilities enables customers to employ future revenue to manage present obligations. Secondly, the savings facilities allows consumers to tap into income earned and save for insurance needs to shield against susceptible financial shocks, while, funds transfer allows payments services without being at a banking hall.

Statement of the Problem

However, the Kenya Institute of public policy and Research (2020) revealed that during the previous decade the degree of monetary integration in Kenya grew from 26.7 percent in 2006 to 82.9 percent in 2020. Despite these growth 17 percent of the Kenyan population is still financially excluded. According to data relating to financial inclusion based on access to finance by region in Kenya, Nairobi County (95.0 percent) has the highest rank in terms of access to formal financial services. The inclusion rate in the South Nyanza region was 76.02% in 2021 with Kisii County boosting 81.1%. South Nyanza's commercial and microfinance banks, which provide financial services through mobile banking are nevertheless falling behind the rest of the country in financial inclusion. As of 2021, Kisii County had an 81.1 percent financial inclusion rate, lagging behind Homa Bay County (81.8 percent) in the south region, Kisumu (88.2 percent), and Siaya (83.8 percent) in the Nyanza region.

II. LITERATURE REVIEW

Disruptive innovation theory

Joseph Schumpeter is credited with being the first person to use the term "creative destruction," which was originally created in 1942 as cited in McClure and Thomas (2021). The notion was described as the endlessly revolutionizing of the economic structure from inside by ceaselessly establishing a new one. According to Schumpeter, innovations result in market dislocation, which paves the way for the growth of new companies while leading to the collapse of the huge organizations that are already in existence. The process of creative destruction is triggered by inventions that lead to the development of new technologies, processes, and commodities. Clayton Christensen is credited with the development of the disruptive innovation hypothesis in the 1990s. As stated in the Christensen's theory, firm innovate radically in a manner aimed at improving the overall quality of their products. It is believed that these businesses are engaging in sustaining innovations with the intention of catering to a subset of dissatisfied customers who are willing to shell out more cash in exchange for enhancements to the qualities of the product that they buy. On the other hand, according to Christensen's view, innovations aimed at bringing new customers into the market. In other words, the market is untapped because there are not enough people in the market (Si & Chen, 2020).

The disruptive innovation theory assumes that many established firms encounter problems under conditions of discontinuous change. Incumbents fail to invest in new technologies that are not demanded by their existing customers. This argument is grounded in resource dependency theory and the associated assumption that existing customers control a firm's internal resource allocation processes (Martínez-Vergara & Valls-Pasola, 2021). While the problem of disruptive innovation has been convincingly explained, there is still a need for managerial solutions. The theory assumes two related forms of asymmetry. First, the focal (incumbent) firm is treated as a collection of heterogeneous actors with different preferences, incentives and competencies, whereas firms in the surrounding environment are treated as if they contained no such heterogeneity. Second, the theory of disruptive innovation describes incumbents as controlled by their environment, but has failed to recognize that the environment can also be influenced (Christensen, McDonald, Altman & Palmer, 2018).

The critique of this theory is that; the disruptive innovation theory depends on the intellectual oversights and failures of agents who neglect to recognize disruptive opportunities in the existing market and the gaps that arise with the consistently changing customers' needs, tastes and preferences. A company's management is accused of ignoring disruptive innovations because it prefers to concentrate on servicing existing clients in the mainstream market over pursuing a disruptive innovation with lower success probabilities and lower profit margins. More established companies in particular have a tough time introducing disruptive technologies successfully for reasons that are entrenched in the firm's competences.

This theory is pertinent to this study since it leads to disruptive developments such as mobile banking, which has revolutionized the monetary sector all over the globe. In general, the construction of the disruptive progress in the financial sector hypothesis will aid in understanding mobile banking, as well as the influence that mobile banking has on financial inclusion. Through new product and process introduction, disruptive innovations are introduced to the markets; in the financial sector, M-Pesa a service offering Short message service payment service is a product of Vodafone-Safaricom in Kenya, this technological innovation is an example of a new-market disruptive innovation.

Empirical Literature Review

Isabwa (2021) sought to determine the effect of mobile banking on financial inclusion among commercial banks in Kenya. The study adopted a positivism research philosophy. The study adopted an expo-facto research design because secondary data was the primary source data. The target population was 43 commercial banks in Kenya. The sample size was 39 commercial banks, but only ten commercial banks were selected because they had the best mobile banking apps. Inferential statistics adopted were; Pearson correlation and regression analysis. The study results revealed that mobile funds transfers significantly affect financial inclusion. Cash withdrawals via mobile platforms significantly affect financial inclusion. The study concluded that mobile banking has a

significant effect on financial inclusion among commercial banks. In contrast, deposits via mobile platforms have a significant positive effect on financial inclusion.

Akter, Anwar and Cumilla (2021) aimed to explore the effect that mobile banking facilities have on financial inclusion in 17 developing countries. From 2011 to 2017, this study took data from the three dimensions of financial inclusion called "Penetration," "Access," and "Uses". This paper took the Sarma model of Index of Financial Inclusion (IFI) to measure financial inclusion. This paper incorporates mobile money accounts as a "penetration" variable and Mobile banking outlet as an "Access" variable with existing model variables to quantify the effect of mobile banking. This research finds that mobile banking positively impacts the selected countries, though the degree of the changes is not symmetric. African regional countries have improved their financial inclusion after introducing mobile banking much better compared to other regions.

Melubo and Musau (2020) sought to establish the effects of digital banking and financial inclusion of Women Enterprises in Narok County, Kenya. This study used descriptive research design and data was collected from the target population of all the 184 women owned enterprise in Narok County, Kenya. For this study census sampling was adopted to where all the population will be included in study since the number of target population is 184. Primary data was collected using a semi structured questionnaire to be administered to the women business owner through face to face interviews. It was established that digital banking services significantly and positively influenced financial inclusion of women enterprises in Narok County. The study concluded that agency banking, mobile banking, online banking and ATM services significantly influenced the access and use of banking services by the locally based women enterprises in Narok County.

The research conducted by Kim, Zoo, Lee and Kang (2018) focused on the process of financial inclusion in Kenya using mobile banking. In order to investigate the nature and function of financial inclusion as it relates to the stimulation of economic activity, the research looks at Mpesa, a money transfer system that has been very successful in Kenya. The purpose of the research was to investigate and develop a framework that may be used to quantify the extent to which the introduction of mobile banking in Kenya has contributed to increased economic activity. The concepts presented an innovative inspection that blends components of common science with the economic logic in an effort to come up with a framework that can be used to data that is relevant to the topic being discussed. The research focused just on mobile banking and did not take into account any of the other characteristics that the researcher took into account for the present study.

In Nairobi County, Munyilu (2018) explored the impact of mobile banking services on financial inclusion among commercial banks in Kenya. The primary data was collected using structured questionnaires and was analyzed using correlation and multiple regression analysis. The study results indicated that mobile banking has positively improved the level of access to commercial banks financial services, in addition, the customer numbers and market reach for banks has increased through the use of mobile money transfers. In addition, mobile banking transfers services has helped in onboarding more customers who held no account to the banks; this was contributed to by the decrease in transactional fees from bank accounts to mobile wallets and bill payments.

Boro (2017) carried a research to determine how the use of mobile banking influences the degree of financial inclusion in Kenya. As a variable, mobile banking was analyzed based on the counts of new mobile banking service opt-in customers, the number of mobile banking subscribers, and the value of transactions carried out using mobile banking application software. Secondary data from 2007 to 2010 that were made available by the National Bureau of Kenya and the Central Bank of Kenya served as the foundation for this study's research. Descriptive studies were used as a method of research for the purpose of this study. Pearson's connection and regression analyses were carried out so that a deeper comprehension of the relationship that exists between the variables could be achieved. According to the data, there is a constructive and significant connection between mobile banking and financial inclusion. It was also noticed that other factors, such as the level of income, financial literacy, and credit penetration, may have helped to financial inclusion.

Ouma (2017) focused their research on the impact that mobile banking has had on the level of financial inclusion in the countries of Sub-Saharan Africa. The purpose of this study was to determine whether or not there is a correlation between the widespread usage of mobile phones to deliver financial services via mobile money and the promotion of savings mobilization as part of an agenda for financial inclusion. The research was carried out in a number of nations located in sub-Saharan Africa, including Kenya, Malawi, Uganda, and Zambia. The study relied on secondary data that was collected with the use of data gathering sheets for published data from FinAccess national survey data for Kenya 2013 and Fin Scope national survey data for Zambia 2009, Uganda 2013, and Malawi 2014. The research was based on these surveys' findings. Throughout the whole of the process of carrying out the data analysis for the research, descriptive statistics and regression analysis were both used. According to the results of the study, there is a strong connection between mobile banking and financial inclusion in the countries of Sub-Saharan Africa that were investigated. It was also observed that mobile money provides a channel for promoting and mobilizing savings, which was another important finding of the study. Accessibility, cost, convenience, and the perception of lower risk were some of the characteristics that were highlighted as being important in the growth of mobile financial services.

According to Munyoro (2017), the country's social and economic developments, as well as financial inclusion, have been impacted by mobile money services. It was the goal of the research to determine the economic and social significance of mobile money services and the amount of financial inclusion. According to the findings, which were based on primary research, there is a significant link between Zimbabweans' increased use of mobile money, their increased financial inclusion, and the improvement of their socioeconomic status. What's more, the utilization of Ecocash as mobile money service added to social and economic levels betterment through business creation, employment opportunities and improved financial literacy. In addition, the level of financial inclusion was enhanced as residents were in a situation to take care of their bills payment and transacting at the advantageously and easily from the solace of any location.

Mhlanga and Dunga (2020) evaluated the effect that mobile banking has had on the proportion of citizens in Zimbabwe's Masvingo Province who have access to formal financial services. Their research focused on the province's capital city of Masvingo. In designing their survey, the researchers made the assumption that they would use a qualitative technique. 270 participants from a range of places, including members of the informal sector and university students, made up the population percentage that was representative of the general population. Findings from a study suggest that low-income individuals have a strong desire to utilize mobile banking, as well as a positive association between mobile banking and financial inclusion. Additionally, the findings demonstrated that low-income individuals were eager to embrace mobile banking. Due to the fact that the work was carried out in Zimbabwe, there is a paucity of context-related information; filling this void is one of the goals of the present research.

Khan and Ejike (2017) investigated the use of mobile/cell phone banking and the acceptance of mobile cash as a means of achieving financial inclusion in West African countries via research conducted in Nigeria. The evaluation of the usage of cellular phones for banking and other mobile financial services was the primary emphasis of this investigation. Mobile phones are extensively used for communication, but only a tiny fraction of individuals utilize them for high-order operations like mobile banking or mobile cash transactions, according to the results of the research. The research also showed that the use of mobile banking and mobile money increased the number of individuals who had access to financial services. The research only took into account one variable, namely mobile banking; in contrast, the present study attempts to take into account a greater number of factors.

III. RESEARCH METHODOLOGY

Research Design

The study design chosen illustrates the strategy that is used in order to acquire the pertinent data that assists the researcher in answering the research questions in as clear and concise a manner as is feasible. The descriptive research design was used for this particular investigation. A descriptive study identifies the features of a population as well as the relationships that exist between the studied variables.

Target Population

The population that is used as a basis for generalizing the results of the research is known as the target population (Cooper & Schindler, 2013). The 2246 SMEs already registered in Kisii County served as unit of analysis (Kisii County, Department of Trade and Industry, 2022).

Sample and Sampling Design

A sample is a subset of a larger population that a researcher picks with care for the purpose of conducting an analysis on the data contained within (Schindler & Cooper, 2014). Stratified and purposive sampling methods were applied to derive the sample.

Sample Size

A proportional sampling approach formula developed by Taro Yamane (1967) was used to calculate the study's sample size. As a result, Taro Yamane's method yielded a sample size of 340 participants. To cater for non-sampling rate, addition of 30% of the sample size was added. This raised the sample size to 486 participants.

Sampling Frame

A sampling frame is a collection of objects from which the sample is derived, and it is tightly related to the population, as stated by Cooper and Schindler (2014). The frame included selected SMEs in Kisii County as of the time of the study

Sampling Procedure

SMEs were segmented into eleven divisions and these were used as strata. Then proportionate and random sampling methods were applied

Reliability of the Research Instrument

In order to preserve the dependability of a research instrument, it is necessary for such instrument to collect data that are consistent regardless of which sampled populations are employed to collect said data from. For the purposes of this study, the Cronbach alpha (α) coefficient was used to assess the level of dependability shown by the research instrument. In the vast majority of instances, the outcomes of this examination range any place from 0 to 1 (Muzaffar, 2016). All questionnaire items indicated that the Cronbach alpha coefficient was above threshold of 0.7, implying that they were reliable.

Data Analysis

Data was analyzed using descriptive statistical methods of means and standard deviations to understand the characteristics of the variables. Karl Pearson Coefficient of correlation was used to determine the relationship between agency banking and financial inclusion among the SMEs registered in Kisii County. Simple regression analysis enabled the researcher to establish the effect of agency banking on financial inclusion.

IV. DATA ANALYSIS AND DISCUSSION OF FINDINGS

Respondents

Age

The respondents were requested to indicate their age bracket and the results are as shown in table 1

Table 1: Age of Respondents

Age	Frequency	Percentage
18-27 Years	18	4.0
28-37 Years	279	61.5
38-47 Years	108	23.8
48-57 Years	36	7.9
58 Years and Above	9	2.0
Total	450	100

Source: Field Data 2023

The finding affirmed that most respondents were in the age bracket of 28-37 years representing 61.5% of all the respondents. At the same time respondents in age category of 38-47 years were second highest with 23.8%. The least age bracket was 58 and above years with 2% of the respondents. This reveals that very few individuals undertake business ventures at their later years

The study established the association between age bracket and financial inclusions using the chi-square for independence. The results are presented in table 2

Table 2: Chi-Square Test for Association Between age Bracket and Financial Inclusion

	Value	Df	Asymp.Sig.(2-Sided)
Pearson Chi-Square	1033.731 ^a	80	.000
Likelihood Ratio	821.662	80	.000
Linear-by-Linear Association	378.010	1	.000
N of Valid Cases	450		

a. 86 cells (81.9%) have expected count less than 5. The minimum expected count is .02.

Source: Field Data 2023

The results indicate that P value was less than the threshold of 0.05 significance level, implying that age bracket has a statistically significant association with financial inclusions ($P < .05$, $X^2(80, N=450) = 1033.731$). This means that financial inclusion was affected by the age of the respondent.

Business Age

The study sought to determine business age distribution amongst the respondents SMEs businesses and the results are as presented in table 3

Table 3: Business Age Distribution

Age	Frequency	Percentage
1-5 Years	270	60
6-10 Years	137	30.4
11-15 Years	18	4

16 Years and Above	25	5.6
Total	450	100

Source: Field Data 2023

The findings indicate that 60% of the businesses were start-ups with age limit of between 1 and 5 years. The second in the categories were businesses which have been in existence for a period of 6 to 10 years representing 30.4% of the SMEs. Very few businesses had survived for a period of 11 years and above representing a cumulative percentage of 9.6%. This points to the unfavourable economic hardships the businesses are undergoing which makes many of them to close down.

Chi-Square test was used to determine existence of association or independence of business age and financial inclusion. The results are presented in table 4

Table 4: Chi-Square Test for Association Business age Bracket and Financial Inclusion

	Value	Df	Asymp.Sig.(2-Sided)
Pearson Chi-Square	858.043 ^a	60	.000
Likelihood Ratio	761.421	60	.000
Linear-by-Linear Association	345.150	1	.000
N of Valid Cases	450		

a. 64 cells (76.2%) have expected count less than 5. The minimum expected count is .04. The results show that there is an association between business age bracket and financial inclusion ($P < .05$, $X^2(60, N=450)=858.043$). This is the case because the p value is less than the probability level of .05.

Descriptive Statistics

To understand the characteristics of mobile banking means and standard deviations values were computed and the results were as presented in table 5

Table 5: Mobile Banking Descriptive

Statement	VH 5	H 4	M 3	L 2	VL 1	M	SD
Extent mobile banking has been used by SMEs in transfer of funds	360	45	18	18	9	4.70	.729
Extent mobile banking has been used by SMEs in account management	90	270	81	9	0	3.98	.679
Extent mobile payment of goods has increased financial inclusions in SMEs	45	270	90	36	9	3.68	.836
Extent mobile payment of services has increased financial inclusions in SMEs	36	288	99	18	9	3.72	.750
The easiness to operate an account using mobile banking	72	279	63	27	9	3.84	.834

Source: Field Data 2023

The findings in table 5 indicate that mobile banking has been used by SMEs in transfer of funds to a very high extent (M=4.70, SD=.729). This implies that the use of mobile banking by most SMEs owners is a common practice among the targeted respondents. Mobile banking was used to a high extent in account management by the SMEs in Kisii County (M=3.98, SD=.679). This means that the owners of these businesses did not have to get to financial institutions physically in order to cross check their account details. The respondents indicated that mobile payment of goods increased financial inclusion among SMEs to a high extent (M=3.68, SD=.836). Equally the responded agreed that mobile payment of services had increased the level of financial inclusion among SMEs to a high extent (M=3.72, SD=.750). Finally the results indicated that to a high extent it was easy to operate an account using mobile banking application (M=3.84, SD=.834). Generally to a high extent the use of mobile banking was preferred by the owners of SMEs in their operations.

Financial Inclusion

The researcher sought to find out the features of financial inclusion before subjecting it to further analysis and the results as presented in table 6

Table 6: Descriptive Statistics on Financial Inclusion

Statement	VH 5	H 4	M 3	L 2	VL 1	M	SD
Extent of use/access of Loan Services	254	46	48	50	52	3.89	1.466

Extent use/access of saving services	47	247	56	39	61	3.40	1.199
Extent use of payment of goods and services	72	233	46	33	66	3.47	1.265
Extent of access of micro-finance services	54	261	49	42	44	3.53	1.125
Extent of access and use of transfer of funds services	49	230	45	56	70	3.29	1.269

Source: Field Data 2023

The results indicate that loan or credit services were accessible to a high extent (M=3.89, SD=1.466). This implies that SMEs were in a position to access loans easily thus enhanced financial inclusion. It was established that SMEs utilized savings services to a moderate extent (M=3.40, SD=1.199). This finding of moderate saving could be due to poor saving culture or low incomes which leaves no surplus for savings. To a moderate extent payment of goods and services was done (M=3.47, SD=1.265). The finding could be attributed to low volume of business during the period of study. Also on a moderate extent micro- insurance services were utilized (M=3.53, SD=1.125). This could mean low levels of utilization of micro-insurance service by SMEs. The access and use of transfer of funds was found to exist at a moderate level (M=3.29, SD=1.269). This means that owners of SMEs were not very actively accessing and transferring funds from one account to another.

Correlation Analysis

The study sought to determine the relationship between the independent variables and the financial inclusion using Karl Pearson coefficient of correlation.

The results indicated that mobile banking had a strong positive correlation with financial inclusion (r=.926, p=.000). This relationship was found to be statistically significant since the p value was less than .01 significance level.

Simple Regression Analysis

The study sought to determine the effect of mobile banking on financial inclusions of SMEs in Kisii Country and the results are as presented in tables 7, 8 and 9

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.926 ^a	.858	.857	.4680

Source: Field Data 2023

The results from table 7 indicate that r squared value was .858 which means that the use of mobile banking can explain 85.8% of the changes in financial inclusion among SMEs in Kisii County. This effect is substantial and it leaves other all other factors contributing or influencing financial inclusion to account for 14.2% only.

To determine the goodness of fit of the regression model for mobile banking and financial inclusion the ANOVA table 8 was used.

Table 8: ANOVA

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	590.713	1	590.713	2696.588	.000 ^b
	Residual	98.139	448	.219		
	Total	688.852	449			

Source: Field Data 2023

The value of p is .000 which is less than .05 threshold and the F value is at 2696.588 which is high and substantial. This means that the simple regression model for mobile banking on financial inclusion is a good model. The hypothesis that mobile banking has no statistically significant effect of financial inclusion among SMEs in Kisii County was also tested. Since P<.05 level of significance it was then affirmed that the null hypothesis be rejected. This imply that mobile banking has statistically significant effect on financial inclusion among SMEs

The coefficient table 9 showed the level at which mobile banking influence financial inclusion. The findings are as indicated in table 9

Table 4.9: Coefficients

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	-2.854	.125	Beta	-22.895	.000
	MobileBank	1.599	.031	.926	51.929	.000

Source: Field Data 2023

The results demonstrated that mobile banking causes a variation in financial inclusion to the level of 92.6% when all other factors are held constant. It also indicates that 1 unit change in mobile banking causes a 1.599 variation in financial inclusion among SMEs in Kisii County

V. CONCLUSIONS

Mobile banking was found to be highly instrumental in facilitating financial inclusion among SMEs. This means that most SME owners have embraced the use of mobile banking. This is the case because modern clients want convenience of service. Therefore for them to transfer funds, make payment for goods and services from their comfort zone the use of mobile banking has been found to be inevitable.

VI. RECOMMENDATIONS

Small and medium sized enterprise owners should be sensitized through organized training, seminars and workshops on the use of mobile banking in payment of goods and service. This will go a long way in enlightening them on the advantages of embracing mobile banking as a way of saving time and cutting costs in their business activities.

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