Mobile Banking Services and Performance of Informal Businesses in Nairobi, Kenya

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Abstract*: The paper purposed to examine the effect of mobile banking savings mobilization and credit accessibility on performance of informal businesses in Nairobi. The study was anchored on two major theories; namely; financial intermediation theory and modern economic theory which guided research objectives examined in the study. Descriptive research design was used. The population of interest consisted of 11,000 participants of informal businesses in Nairobi County. The sample size for the study was 386 participants drawn from the business categories. The method of data collection instruments involved the use of primary and secondary data. The primary data was obtained from the questionnaire and the secondary data was obtained from desk review. The researcher obtained authorization letter from the University to carry out the data collection. Data was collected using questionnaire. The study employed cross - sectional descriptive design analysis and inferential statistics. The Statistical Package for Social Sciences (SPSS version 24) was used for data analysis. Multiple regression model was used to establish the relative significance of each of the variables on the effect of savings mobilization, and credit accessibility on performance of informal businesses in Kenya. The study found out that mobile banking savings mobilization enhanced performance of their businesses to a very great extent. Credit accessibility was also found to affect informal businesses performance to a very great extent. The study concluded that saving mobilization, credit accessibility, have a positive and significant effect on performance of informal businesses in Kenya. The study recommended enhanced security and safety of data and banking transactions to safeguard the informal business owners from cybercrimes which had become rampant worldwide. Financial Institutions should ensure first grade mobile banking infrastructure to support faster transactions and enhanced security.

***Key words*: savings mobilization, credit accessibility, performance of informal businesses**

I. INTRODUCTION

The penetration of mobile phones, mobile network operators and mobile communication services have enabled informal business sector to enjoy fast and efficient banking services-savings mobilization, credit accessibility, payments and transaction systems which were only available to big corporations and government corporations in the past (Fin Access, 2019). Data collected by Communications Commission Authority of Kenya (CCAK, 2010) indicate there were more than 54.56 million mobile telephone subscribers by the end of 2019, compared to mobile telecommunication services in Kenya, to under 15, 000 in 1999. The abrupt number of users increase, has been as a result of the mobile phone network operators' expansion (GSMA, 2014). This has successfully reduced socio- economic disparities within informal business sector in Kenyan hence closing the digital gap between the rural and urban informal business sector. People used to travel far or use public transport to access banking facilities in major towns. Mobile banking brings financial services to the mobile cell-phone. However, since the introduction of mobile phones globally, they became the most commonly used device in daily life of many individuals. Mobile banking emerged as an alternative avenue where banks and financial institutions provide services to every section of the country worldwide. Nowadays mobile banking is popular among the informal businesses hitherto were not recognized by banks (GSMA, 2014).

Mobile banking is one of the latest success platforms in a series of technological innovations in the contemporary society. The platform offers numerous opportunities from which financial institutions, microfinance institutions, service providers and software developers exploit the platform to offer range of financial services to their customers (Kilonzi, 2017). Across the developing world at least 3.3 billion people have access to mobile phones and are connected to mobile banking (Roxana, 2019). The improved new cell phones security features had increased the demand for mobile banking services, which prompt financial services institutions to realize innovative strategies in providing financial services with a set of new products and services security features designed to extend their clients reach. (Meldi, & et, al 2009).

Most formal sectors viewed informal business sector as uncreditworthy, thereby denying loans to the sector (Kinyua, 2019). Lack of collateral and negative thoughts regarding the informal businesses, adds to the effect of their incapability to get financial services being provided by financial institutions (World Bank, 2012). Poor revenue collection, lack of proper bookkeeping, lack of tangible assets/collateral for security affects their performance (Kinyua, 2019). Informal businesses' credit accessibility from financial institutions is tedious and cumbersome due to low level of capital, irregular revenue collection, absence of records on finance and assets (collateral) for securing credit from banks and this affects their performance. according to Njenga (2009) Platforms such as M-Pesa, provided by Safaricom Ltd service provider, have revolutionized credit accessibility facilities. The informal

businesses observe such platforms for both savings and credit resources. Based on the study done on M-Pesa had a specific pattern of usage among Kenyan citizens who view the platform as more convenient and credit-worthy for their financial needs (Njenga, 2009). The mobile banking loans services assist the informal businesses in accumulating financial assets (savings), for example CBA M-Shwari and KCB M-Pesa encourage its subscribers to save money and borrow on the strength of their savings, which improves on their credit eligibility (Kinyua, 2019).

Statement of the Problem

The importance of informal businesses has increasingly become pivotal in economic development and more so in developing countries like Kenya. The informal businesses in Kenya are estimated to account for almost 80 per cent of the total workforce and 55 per cent of the gross domestic product in sub-Saharan Africa. Employment in the informal sector recorded a growth of 8.2 per cent in 2018 compared to 4.2 percent in 2017 (KNBS, 2019). A total of 784,000 jobs in Kenya were created between 2017 and 2018 in the informal sector (KNBS, 2019). Informal businesses as at December 2018 in Kenya accounted for 5.85 million businesses not registered and formalized. This has led to the necessity of policy makers to create framework to make enabling environment for informal businesses to flourish and become productive and profitable at all levels including globally not only in Kenya (KAM, 2018).The informal business sector despite the government initiatives and support through the policy papers 2005 and the development of information and communication technology, the commercial banking has ignored this sector based on the inherent risks and unreliable nature of the informal businesses.

A survey done by Fin Access, (2019) reported a 13 - year perspective in Kenya financial landscape and found that there was an impressive jump from 26.7 per cent to 83 per cent in 2019 financial inclusion. The impressive jump in financial inclusion had been attributed to exponential growth of mobile money and mobile banking provided by the Fintech companies (GSMA, 2014). Mobile banking (M-banking) service is a platform that is widely accepted in Kenya. The platform has witnessed enhanced growth in the acceptance of mobile banking by financial institutions along with the service providers, Fintech companies. In 2007, a mobile banking platform provided by a major telecom service provider, Safaricom Limited, launched M-Pesa. Within a short period of time, the service provider registered more than 10 million users (Njenga,2009). As a result, the unbanked population of Kenya, which comprise of individuals living in poor infrastructure and rural areas- can now access financial services.

The Safaricom Limited customers can access financial services and short- term loans through mobile apps such as M-Shwari, (Commercial Bank of Africa) M-Kesho and Eazzy 24/7 from Equity bank, Pesa Pap (Family Bank), Timiza from ABSA bank (formally Barclays Bank of Kenya) where one can save and borrow money and M-Coop Cash from Co-operative Bank among others (Safaricom Ltd, 2005). The achievements made have seen individuals in the informal sector access financial services that were once deemed inaccessible (Kinyua, 2019). The informal business sector was a business risk and unsecure to the banks and financial institutions. Extensive literature had been done by various researchers. Njenga (2009) did research to evaluate the impact of mobile banking from customer perspective. The study lacks information on the informal sector and how mobile banking has improved its economic outlook. Moenga (2015) also conducted a study on mobile banking, but did not consider the impact on the informal sector. Studies by Kiiti and Hennink (2016) and Bosire & Ntale (2018) focused on the relationship between the informal sector and the mobile money transfers in Kenya. Mutisya (2016) and Mutio (2019) conducted studies on the role of mobile banking on MSMEs in Kitui and Nairobi counties.

Evidence suggests that little consideration is given to the informal business sector and how the mobile banking platform affects its performance. There was need to examine the effect of mobile banking services and performance of informal sector as an entity to determine whether it has positive or negative effects. Extensive literature exists regarding the evaluation of the financial performance of commercial banks based on the rapid growth of mobile banking but little literature done on the performance of informal businesses (A quantitative survey by Njenga, 2009). Majority of the literature reviewed on performance of businesses have tended to focus on large companies and may have not studied deeply informal businesses and the issue of saving mobilization and credit accessibility as part of the strategic options with significant contribution to their continued existence. It is against this backdrop that a survey focusing on the informal businesses sector in Kenya was paramount with the aim of investigating the influence of mobile banking on performance informal businesses.

Specific Objective of the Study

i. To examine the influence of mobile banking saving mobilization and performance of informal businesses in Kenya
ii. To assess the effect of mobile banking credit accessibility and the performance of informal businesses in Kenya

Scope of the Study

The study was confined to the investigation of influence of mobile banking services mobile banking saving mobilization and mobile banking credit accessibility on the performance of informal businesses in Kenya. The period of this research between from Ist August 2021 to 30th November 2021. The results obtained reflected the most recent issues in the market regarding informal businesses. In addition, the study targeted 11,000 businesses operating in Dagoretti Constituency in Nairobi County impeded by time and financial resources.

Moreover, it was not possible to study the entire target population within limited duration of time. The study was carried out in a period of five months.

Theoretical Framework

This paper was anchored on financial intermediation theory supported by innovation diffusion theory.

The financial intermediation theory was introduced by Gurley and Shaw (1960). The financial intermediation theory builds on the notion that financial intermediaries (banks, insurance companies and societies) are based on information asymmetries and the agency theory. Financial intermediaries are entities that act as middlemen for financial payment transactions between banks and the public, savers and borrowers (Franklin Allen and Antony M. S, 1996). White and Selgin, (1987), both asserted that financial payments transactions and information asymmetry had reduced from the traditional theory, financial intermediation is more increasing with increased technology and innovations. Financial intermediaries have the role to create assets for creditors and liabilities for debtors which are much more attractive for each of them than if the transfer of funds from creditor to debtor were to be made directly between the two parties. The theory distinguishes between the following functions of financial intermediaries: (i) the reduction of transaction costs; (ii) the reduction of liquidity risk; (iii) the information provision; and (iv) the debt renegotiation. The first of these functions concerns the problem of accessibility of financial markets for households/individuals and for firms. The second and the third functions concern the services the banks offer to savers, which cannot be obtained from financial markets.

The technology advancement and proliferation especially with the use of mobile phones, brought new dimensions of how banks interact with their customers, hence improving on information asymmetry. Mobile phones have enhanced the modern banking where customers who did not have bank accounts to conveniently do banking via their mobile phones anytime, anywhere 24/7. The inevitable technology changes in internet and mobile banking through the Fintech mobile network operators have changed completely and lowered the barriers of entering the banking industry. Fintech companies as the new entrants in the financial market have brought stiff competition with banks and have reduced the amount of bank deposits and their credit to the informal businesses (Aaron, M. et. al, 2017). The theory could be helpful in the study of the effects of mobile banking services and performance of informal businesses to answer the research question on saving mobilization and credit accessibility. However, the traditional financial intermediation theory of information asymmetry and agency theory have diversified to include the fintech companies to bring on board the informal sector that had been left by the financial intermediaries.

Innovation Diffusion Theory

This paper was anchored on the innovation diffusion theory. The theory was the development work of E. M. Rogers (1962), He was a communication theorist based in New Mexico University. The theory tried to explain the passage of new idea through different stages of adoption by people through communication. Rogers explained the different categories of people who are involved with the new idea innovation diffusion. The innovators, are people who innovate, take risk and try the idea. The second group are the early adopters who take the initiative to test the new technology and pass it to the society. Third group of people according to Rogers are the early majority who paves the way for use of the technology and innovation within the population. The fourth group of people classified as late majority part of general population who follow the early majority in adopting an innovation as part of their daily life. Laggards are people who lag behind the general population in adopting the new innovation because they are risk - averse in their way of doing things (Rogers, 1962).

Les Robinson (2009) propositioned with the Innovation Diffusion Theory where they agreed to minimize promotion costs, secure strategic owning and gaining competitive advantage, then firms could engage in innovation diffusion. Rogers (1962), did put forward innovation diffusion theory that study on how innovation is diffused among the people using it. Innovation is described as an idea, practice or object that is perceived by new members of a social system. Innovation diffusion theory is defined as the process by which innovation is spread through certain channels to members of social systems to the general population Kithaka, (2014). The theory helps to understand customers' character to embrace the innovations.

Les Robinson (2009) analyzed the theory and portray theta distribution bell-shaped curve that can be grouped in five categories of users based on innovativeness embraced by the adopters of any innovation, classified the users as innovators, early and late majority, early adopters and laggards in their study. There are five critical attributes that influence the rate of adoption. They include relative advantage, complexity, trialability, compatibility and observability (Kithaka,2014). These five features are crucial to the adoption of new innovation based on how an organization adopts the five features. In Kenya, for instant, studies have shown that the benefits of mobile banking success are based on the availability of the tools, compatibility and relative advantage presented by the investment financial institution. The adoption of such innovations, therefore, is faster in some organizations that have prominent mobile banking platforms and information technology departments that some organizations lack.

II. EMPIRICAL LITERATURE REVIEW

Mobile banking Savings Mobilization

Saving mobilization has only been recognized as a major force in microfinance in early 2000 (Atandi, 2017). According to Adrian and Richard (1998), savings is the money left over after spending and is subtracted from the amount of disposable income realized in a given period of time. Savings can be used to increase income through investing in assets which can be realized in a short time. A bank savings account pay interest on cash deposited to attract more savings. M-banking deposits are made by phone or at a retail agent shop. It is generally accepted that savings possess a great deal potential in stabilizing consumption and accumulating money for big cap spending. Recent studies prove savings to be more effective and beneficial, than credit or any other financial product for poor households (Adrian and Richard, 1998).

Unlike conventional banking, mobile banking started with money transfers services for microfinances only. These services are different from real bank accounts. The banks introduced initially, money storing mechanism (mobile wallet) which do not provide any interest on these stored money neither do they charge for it (except for a small subscription fee on the account opening). (GSMA, 2014). It is evident that the unbanked lack safe and reliable saving mechanism, having access to safe and reliable mechanism could be early step towards financial inclusion. Mbiti and Weil (2011) analyzed the impact of M-PESA on a number of economic and social - out comes using a balanced panel of 190 sub- locations in Kenya. The study findings revealed that increased use of M-Pesa have reduced the use of informal savings mechanisms such as ROSCAS, and raised the chances of them being banked.

Jack and Suri (2011) found similar findings which revealed that M-Pesa users with a bank account are much more likely to save, due to enhanced ease of use and security. CBA M-Shwari and KCB M-Pesa encourage their subscribers to save money and borrow on the strength of their savings, which improve on their credit eligibility (Mutio, 2019). Arena and Kahoka (2017) made a conclusion that informal businesses in Kenya benefited largely from M- banking revolution, because it enabled them to save extra cash from their businesses. M-banking services encourage savings to its clients by paying interest on their savings. According to study by Adriane and Richard (1998), found that financial institutions could benefit from the untapped savings to reach out more clients, use it as cheap funding source and possibly improve efficiency and governance in the long run.

Mobile-Banking Credit Accessibility

Credit accessibility refers to the ability of individuals and businesses to obtain external funding to ease working capital problems (Osoro &Muturi 2013). Credit can be provided on the lenders' discretion of the borrower's capability to repay. Informal business owners,' are forced to rely on high- cost sources of finance, personal savings and funds from family members and friends due to lack of short or long-term credit access. These difficulties originate from the financial institutions perception that renders the informal businesses uncreditworthy and risky of lending criteria, (Wambugu,2018). With the introduction of mobile banking, credit facilities are still a problem for the informal businesses due to their limitation in funds and securities to pledge for big loans. Platforms such as M-Pesa, provided by Safaricom service provider, have revolutionized credit access facilities. Based on the study done by Njenga (2009), M-Pesa has a specific pattern of usage among Kenyan citizens who view the platform as more convenient and credit-worthy for their financial needs. The mobile banking loans services assist the informal businesses in accumulating financial assets (savings), for example CBA M-Shwari and KCB M-Pesa encourage its subscribers to save money and borrow on the strength of their savings, which improve on their credit eligibility (Mutio, 2019). Lack of banking financial services means that informal business owners cannot effectively save or borrow capital.

Study conducted on the effect of mobile banking services on the growth of women- owned businesses in Kisumu County suggest that access to credit facilities has a direct correlational impact on improved cash management and profit generation (Ouma and Rambo, 2013). The study examined 190 women-owned businesses in Kisumu County. The study reports that access to mobile banking credit facilities greatly improves sales, net profit, employees' salaries paid and liabilities/ expenses paid. A cross- sectional study in Thika Kiambu County, involving 285 Small businesses demonstrated that there is an increase in mobile banking credit facilities use (Muiruri, 2014), the study reported that there is an increase in credit borrowing among informal businesses. According to Wambugu, (2018), studied the impact of financial credit access and found that financial inclusion of the informal business sector contributed to the financial sector deepening and overall economic performance. Financial inclusion of informal businesses enhances business liquidity and minimizes financial constraints, encourage investment which influence performance, firm size and competition (Mbiti and Weil 2011).

Conceptual Framework

Conceptual framework is an illustrative representation depicting the hypothesized relationship between variables of study. In this study, the dependent variable was the performance of informal businesses while the independent variables are mobile banking saving mobilization and Mobile-banking credit accessibility. The conceptual framework illustrates the interaction between mobile banking saving mobilization and Mobile- banking credit accessibility as independent variables and performance of informal businesses as the dependent variable as depicted in Figure 1.

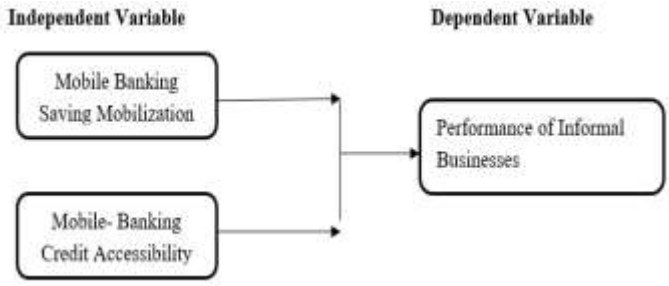

Figure 1: Conceptual Framework

III. METHODOLOGY

Target population for this survey consisted of 11,000 informal businesses which comprise of artisans, metal fabricators, tailors and dressmakers, automobile garages, carpenters, kiosks, salons and hairdressers in Dagoretti South Constituency (NMS, Licensing Department, 2020). The proximity of Dagoretti South Constituency to the CBD and affordable housing and business premises, more people find informal sector more viable source of employment and the demand for mobile banking services in the area provide the target population of 11,000 participants for this study, with a stratified sample of 386 randomly selected by using Sloven's formula ($n = N/(1+Ne^2)$), Where:

N= total population

n = number of samples

e = error margin/ margin error of 0.05%

Assumed error of tolerance = 0 95%.

Thus, to achieve a precise sample size from the target population of 11000 respondents;

$$n = \frac{11000}{1+ 11000* 0.05*0.05)}$$

$n = 11000/ 28.5$

$n= 385.964$

$n = 386$

To achive a proportionate representation of various business stratified categories, Neyman allocaton formula suggested by Mathew et al (2013), was applied to achive the best sample size for each category. Neyman allocation formula; $nh = (Nh / N) * n$

Whereby;

N- Total target population size

nh- The sample size for stratum h

Nh= Total population for stratum h

n= Total Sample size.

Table 1: Sample Size

Business Category	Population	Sample Size
Automobile Garages	1000	35
Motor bike garage	600	21
Metal fabricators	2000	70
Dressmakers	1500	53
Carpenters	600	21
Hairdressers	1000	35
Barber shops	500	18
Groceries	3000	105
Car washers	600	21
Artisans	200	7
Total	**11000**	**386**

Source: Research Data, 2022

Primary data was collected from participants selected using a guided structured questionnaire with the endeavor to provide informed focused responses.

Descriptive statistics and regression analysis were used to evaluate the main constructs of the survey. Respondents were from the business categories. The collected data was analyzed by the use of both descriptive statistics and regression analysis.

IV. SUMMARY OF MAJOR FINDINGS

According to Kothari (2004), research design is a comprehensive roadmap that directs a research work so as to meet the objectives and answer the questions set out. The study employed cross-sectional descriptive design in the study. The research design also aided study to obtain relevant data relating to influence of mobile banking saving mobilization and Mobile- banking credit accessibility on performance of informal businesses in Kenya. In addition, the target population consisted of 11,000 informal businesses which comprise of artisans, metal fabricators, tailors and dressmakers, automobile garages, carpenters, kiosks, salons and hairdressers in Dagoretti South Constituency (NMS, Licensing Department, 2020). The study comprised of a stratified random sample of 386 respondents. The businesses were located in Nairobi County, Kenya. The study adopted stratified sampling and simple random sampling techniques to identify the study sample. The study respondents were chosen using Sloven's formula and Neyman allocation formula by Mathew et al., (2013) so as to eliminate biasness in obtaining a final sample of 386 respondents. Primary data was collected through administration of questionnaires to the selected respondents through drop and pick later approach to give respondents sufficient time to respond.

The study questionnaire was piloted using 38 respondents which was 10% of the sample size of 386 and they were left out in the main study. The completed questionnaires were collected from the respondents selected. The main constructs

of the study were analyzed by the use of descriptive statistics to provide a possible response. Data collected was analyzed by the use of descriptive statistics and regression analysis. The study utilized SPSS software version 24.0 to analyze the collected data. The study statistical model involved two independent variables and one dependent variable.

Mobile-banking saving mobilization and Mobile-banking credit accessibility as independent variables and performance of informal businesses

The model assumed the expression:

$Y= \beta 0 + \beta 1\ X1 + \beta 2\ X2 + \varepsilon$

Where: Y = Performance of informal businesses, X1 = Mobile-banking Saving Mobilization,

X2 = Mobile-banking Credit Accessibility; $\beta 0$ = the intercept (value of Y when X = 0),

ε = error term

Response Rate

According to Babbie (2009), 50% response rate is deemed adequate and one can proceed with data analysis while a response rate of 70% and above is deemed good and representative.

The sample size was 386 persons operating informal businesses in Nairobi, Kenya whereby 354 questionnaires were successfully filled and returned for data analysis. This translates to a response rate of 91.7%. This response rate was deemed to be appropriate for the data analysis to continue to answer the study objectives.

Table 1: Return Rate

Response	Frequency	Per cent
Response	354	91.7
No response	32	8.3
Total	**386**	**100.0**

Reliability Results

According to (Mugenda & Mugenda, 2003) reliability of the items of the study variables outlined in the questionnaire, were tested using Cronbach's test. The results of the test indicated that M-Banking saving mobilization posted an alpha of 0.797, credit accessibility depicted a value of 0.856 and the item of performance of informal business posted coefficient value of 0.864. The result of the pilot study indicated that all the items of the variables recorded an alpha value greater than the threshold of 0.70 which is deemed reliable according to Hair& et al (2012).

Table 2: Reliability Analysis Results

Scale	No. of Items	Cronbach's Alpha
Saving Mobilization	10	0.797
Credit Accessibility	7	0.856
Performance of informal Business	1	0.864

V. DESCRIPTIVE ANALYSIS

Mobile Banking Services Saving Mobilization

The findings in Table 3 shows that all the respondents (n=354, 100%) indicated that they had used mobile banking services. This therefore improves the reliability of the information given by the respondents. The respondents were further asked to indicate the duration they have been using the mobile banking services. Figure 4.3 shows the duration of using mobile banking services by the respondent.

Table 3: Use of Mobile Banking Services on saving mobilization

Responses	Frequency	Percentage
Yes	354	100.0
No	0	0
Total	**354**	**100.0**

The findings in Table 4 showed that the respondents agreed that they can save money anytime/anywhere with no minimum requirement (mean score = 4.47); and also agreed that they could compare banks rates of interest policy and make informed decision (mean score =4.29), and could also control their future savings (mean score = 4.13). In addition, the respondents agreed that they could withdraw their savings without any restrictions; and that they could make informed decisions on their savings as shown by a mean score of 4.05 respectively. The respondents also agreed that they made savings on their phone to their mobile banking account, and that they could diversify their assets for hard economic times, as shown by a mean score of 3.84 respectively. There were respondents however neutral on whether they had developed a saving plan to their account as shown by a mean score of 3.37.

Table 4: Saving Mobilization

Saving mobilization	Mean	Std. Deviation
I make savings on my phone to my mobile banking account	3.84	0.963
I have developed a saving plan to my account	3.37	0.862
I can make informed decisions on my savings	4.05	0.881
I can control my future savings	4.13	0.766
I can diversify my assets for hard economic times	3.84	1.096
I can compare banks rates of interest policy and make informed decision	4.29	0.826
I can save money anytime/anywhere with no minimum requirement	4.47	0.603
I can withdraw my savings without restrictions.	4.05	0.646
Average Mean	**4.01**	**0.830**

The findings in Table 5, 47.5% of the respondents indicated that savings mobilization enhanced performance of their business to a very great extent while 37.3% indicated that business performance was enhanced to a great extent. However, 15.2% of the respondents were of the opinion that savings mobilization enhanced performance of their business to a moderate extent. From the findings, it can be deduced that savings mobilization enhanced performance of informal

businesses in Kenya. The study findings are in agreement with Jack and Suri (2011), where they found that the use of M-Pesa had brought a new avenue that encourage savings. Likewise, CBA M-Shwari and KCB- M-Pesa platforms encourage their subscribers to save money and borrow on the strength of their savings. Also, Arena and Kahoka (2007) made a conclusion in their study that informal businesses in Kenya had benefitted largely from the m-banking revolution, since it has enabled them to save extra cash from their businesses which attracts some interest to encourage savings.

Table 5: Extent Mobile banking Saving Mobilization Enhance Business Performance

Extent	Frequency	Percentage
Very great extent	168	47.5
Great extent	132	37.3
Moderate	54	15.2
Little extent	0	0
No extent	0	0
Total	**354**	**100.0**

Mobile banking Credit Accessibility

Credit accessibility through mobile banking services, the findings in Table 6 shows that the respondents agreed that no initial capital outlay required to operate a mobile banking account (mean score = 4.25); and that their daily banking with m-bank service provider determined the amount of credit they could access (mean score = 4.17). The respondents also agreed that their income level determined their credit limit (mean score = 4.10); and that using their savings in the account they could access more finances (mean score =3.70). The respondents were however neutral when asked whether using their mobile banking they could access any financial institution or bank through MNO providers, as shown by a mean score of 3.53. The study findings are in agreement to Wambugu (2018), where he studied the impact of financial credit accessibility and found that financial inclusion of the informal business sector contributed to the financial sector deepening and overall economic performance. Financial inclusion targets the unbanked population into the formal banking system to enhance them access a wide range of financial services such as savings, payments, money transfers and credit accessibility. Credit accessibility platforms such as M-Shwari and KCB M-Pesa have made credit access facility easier for the informal businesses as Mutio, (2019) asserted.

Table 6: Credit Accessibility

Credit Accessibility	Mean	Std. Deviation
My income level determines my credit limit	4.10	0.735
Using my saving in the account I can access more finances	3.70	1.067
My daily banking with m-bank service provider determines the amount of credit I can access	4.17	0.772
Using my banking I can access any FI /bank through MNO Providers	3.53	0.999
No initial capital outlay to operate a mobile banking account	4.25	0.736
Average	**3.95**	**0.8618**

Inferential Analysis

The survey used multiple regression to assess the effect of predicators on the dependent variable using SPSS software Version 24.0. The summary of the model is depicted in Table 9. The coefficient of determination was utilized to determine the degree of variance between the dependent variable and independent variables in the study. R-squared is a statistical expression that show the ratio of the variance for a dependent variable that is accounted for by the predictors or independent variables in a model. (Bowen, 2009)

The regression results in Table 7 shows that the value of regression coefficient (R) is 0.777 which implies that there is high relationship between the variables. The results further shows that the value of co-efficient of determination (adjusted R Square) is 0.577 which implies that there was a variation of 57.7% between performance of informal businesses and the two predictors – mobile banking saving mobilization and mobile banking credit accessibility. The remaining percentage can be due to unexplained variables not included in the study.

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.777(a)	0.603	0.577	0.23672

a Predictors: (Constant), mobile banking saving mobilization, mobile banking credit accessibility

Table 8 shows the output of the ANOVA analysis and whether there is a statistically significant difference between the variables in the study. The results recorded a significance value of zero (i.e., p = 0.001), which is below 0.05 and, therefore, there is a statistically significant difference between the variable in the study.

Table 8: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.066	2	11.533	16.203	0.000[b]
	Residual	208.753	351	.595		
	Total	**231.819**	**353**			

a. Dependent Variable: Business Performance
b. Predictors: (Constant), Mobile Banking-Saving mobilization, Mobile Banking-Credit

It was found that mobile banking saving mobilization had a positive and significant relationship with performance of informal businesses in Kenya, as shown by B= 0.398, and p = 0.001 which is below 0.05. It also suggests that a unit rise in mobile banking saving mobilization resulted to an increase in performance of informal businesses by 0.398 units. Moreover, there was a positive a significant relationship between performance of informal businesses and credit accessibility (B=0.465, p= 0.001<0.05). The results indicated that a unit increase in mobile banking credit accessibility caused an increase in performance of informal businesses by 0.465units. This implied that the two predictors, that is, mobile banking

saving mobilization, mobile banking credit accessibility have positive and significant influence on performance of informal businesses in Kenya.

The regression analysis yielded the following equation:

$Y= \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$

Where: Y = performance of informal businesses;

X_1 = Mobile banking saving mobilization

;X_2 = Mobile banking credit accessibility

β_0 = The Regression coefficient;

ε = error term

Thus, the equation becomes: $Y=1.020 +0.398 \mathbf{X_1} +0.465 \mathbf{X_2}$

Table 9: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.020	0.458		2.227	0.030
Saving Mobilization	0.398	0.085	0.629	4.713	0.000
Credit Accessibility	0.465	0.109	0.419	4.258	0.000

a Dependent Variable: Business Performance.

VI. SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

The findings revealed that mobile-banking saving mobilization has a positive and significant relationship with performance of informal businesses in Kenya. It also suggests that a unit rise in mobile banking saving mobilization resulted to an increase in performance of informal businesses by 0.398 units. From the findings, the study found that they can save money anytime/anywhere with no minimum requirements; and they also agreed that they could compare banks' rates of interest policy and make informed decision, and could control their future savings. In addition, the respondents agreed that they could withdraw their savings without restrictions; and that they could make informed decisions on their savings. Besides, the findings showed that they make savings on their phone to their mobile banking account, and that they could diversify their assets to caution against hard economic times.

On mobile banking-credit accessibility, the results indicated that mobile banking-credit accessibility has a positive and significant effect on performance of informal businesses in Kenya. The results indicated that a unit increase in mobile banking credit accessibility caused an increase in performance of informal businesses by 0.465 units. The findings also established that there was no initial capital outlay to operate a mobile banking account in majority of mobile banking platform. The respondents agreed that their daily banking with mobile banking service providers determined the amount of credit they could access; and that using their savings in the account they could access more credit finances.

Conclusion

Based on the analyzed outcomes, the study concluded that mobile-banking saving mobilization has a positive and significant relationship with performance of informal businesses in Kenya. The study concluded that they can save money anytime/anywhere with no minimum requirements; and they also agreed that they could compare banks' rates of interest policy and make informed decision, and could control their future savings. In addition, the study concluded that they could withdraw their savings without restrictions; and that they could make informed decisions on their savings. Besides, the study concluded that they make savings on their phone to their mobile banking account, and that they could diversify their assets to caution against hard economic times.

On mobile banking-credit accessibility, the study concluded that mobile banking-credit accessibility has a positive and significant effect on performance of informal businesses in Kenya. The study further concluded that there was no initial capital outlay to operate a mobile banking account in majority of mobile banking platform. Additionally, the study concluded that their daily banking with mobile banking service providers determined the amount of credit they could access; and that using their savings in the account they could access more credit finances.

Recommendations

From the foregoing, the study also recommends that financial institutions should develop or design savings plan and credit facility tailored for small scale business operators. The savings plan should be designed in a way that they encourage the business people to save more while the credit facility should be easily accessible by the business persons with no collateral requirements and increase the loan repayment period. This would greatly enhance the growth and performance of the small informal businesses in Kenya.

Since security and safety of data and banked funds is key concern at the height of cyber-crime, the study recommends that both the financial institutions and MNOs offering the mobile banking services should ensure there is adequate security measures to protect the users. This would encourage more business persons to use the mobile banking platforms without fear for the purposes of growing their businesses.

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