

**EFFECT OF MOBILE PHONE BASED LOANS ON  
PERFORMANCE OF SMALL AND MEDIUM SIZE ENTERPRISES  
IN KISUMU COUNTY**

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**A RESEARCH REPORT SUBMITTED IN PARTIAL FULFILMENT  
FOR THE REQUIREMENTS OF AWARD OF THE DEGREE OF  
MASTER OF BUSINESS ADMINISTRATION FINANCE OPTION  
SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI.**

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**DECLARATION**

This research proposal is my original work and has not been presented for award of degree in any other university.

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## **ACKNOWLEDGEMENT**

Several people worth appreciation for the contribution they made to towards fulfillment of my study.

I would like to appreciate my supervisor senior lecturer Dr Joshua Wanjare for professionalism and guidance during my course work not forgetting moderator DR Omoro

I will also thank my colloquies at work who gave me conducive environment to study in spite the pressure at work.

It would not be possible to accomplish the study without God giving me life and enabling to get resources to finish the study

## **DEDICATION**

To Lelo family members for the support they accorded me during the study which enabled me to realize my dream.

To my family members Gladys and Amani who gave me required support and umble time to undertake my course.

## ABSTRACT

More than 60% of small and medium enterprises collapse before their fifth birthday and among the prominent reason for collapse is lack of capital or cash flow problems, yet the benefits of thriving small and medium enterprises in an economy like Kenya cannot be gainsaid. Many studies have been conducted in the area of mobile phone based loans and their effect on performance within the small and medium enterprises. However, such studies have focused on different variables and cannot be said to have addressed every gap available. It was therefore necessary for the current study to conduct a scientific research on the effect of mobile phone based loans on performance of small and medium enterprises focusing on three variables such as nature of use, repayment method, as well as convenience. The study employed diffusion innovation theory and technology acceptance theory in a correlation study design. The total sample size of the study was 383 while the instrument of data collection was questionnaire. Data analysis was done using both inferential and descriptive analysis methods with the use of SPSS version 23 to compute the primary data collected. The findings divulged that independent variable which was mobile phone based loans explained 43.6% ( $R^2 = 0.436$ ) disparity of the dependent variable which was performance. In particular, nature of use had a significant positive effect on performance ( $\beta = 0.430$ ,  $p < 0.05$ ). Similarly, the study divulged that convenience had a significant positive effect on performance ( $\beta = 0.420$ ,  $p < 0.05$ ). However, the study establish insignificant negative relationship between repayment method and performance ( $\beta = -0.182$ ,  $p < 0.133$ ). The study concluded that nature of use and convenience should be supported while energy should not be spent on repayment method.

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## **ABBREVIATIONS AND ACRONYMS**

**TAT:** Technology Acceptance Theory

**DIT:** Diffusion of Innovation Theory

**SME:** Small and Medium size enterprise



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# CHAPTER ONE INTRODUCTION

## 1.1 Background of the Study

Financial transaction on mobile devices is relatively a new development particularly in developing economies, but the level at which they have been accepted paints a picture of their significance. According to Nguruiya, Bosire, and Kamau (2014) mobile phone based loans have seen tremendous growth given the proliferation of mobile phones, technological advancement and even affordability of mobile devices. Essentially, it has made even people from the lowest level of the pyramid to afford a mobile phone device. The understanding that financial transactions using technology as enabler is both effective and efficient coupled with the fact that loans on such platforms can be as low as possible, has not only made the number of customers for the loans high, it has made it the most necessary financial solution among, hitherto, financial excluded majority.

Good number of theories have been put forth to explain mobile based loans and their influence on businesses, particularly, SME enterprises. Technology acceptance theory (TAT) as Taherdoost (2018) points out, assumes that technological advancement is accepted on the basis that such technology is either useful or easy to use. Mobile phones have relatively easy to use interfaces and the fact that mobile phone based loans help beneficiaries to start or grow their enterprises makes technology acceptance theory relevant for the current study. Another relevant theory is Diffusion of innovation theory (DIT). The theory according to Lekvall and Wahlbin (1973) posits that innovation take time to be totally accepted in the society because of inherent factors within the technology as well as

the risk appetite of the people the innovation is intended. Early adopters are people who are willing and ready to use the innovation immediately while laggards take time. However, once the innovation, just like mobile phone based loans, has been accepted, it becomes difficult to do without in the wider scheme of economic development especially by SME.

SME enterprises as Ruchkina, Melnichuk, Frumina, and Mentel (2017) propounds, is a necessary cog in the developmental interest of any economy. SME enterprises not only contribute to job creation, they are also essential drivers for poverty eradication, reaching the lower pyramid of the economy as well as sustainable development of any society. This is true particularly given that no government is able to create sufficient employment for her people, yet the need for human beings, some of which are basic cannot be postponed for long. Mutinda (2014) points out that the growth and development of SME enterprises is dependent on unsecured loans such mobile phone based loans. Such loans help the SME enterprises to grow their enterprises while simultaneously contributing to the economic growth of an economy.

Ivatury and Mas (2008) estimates that people with low income are likely to use mobile phone for financial transaction, compared to developed countries where most of transaction can be done via visa card and automated teller machines are within their reach. SMS in Kenya have adopted the use of mobile phone for transaction based on phone affordability and it provide user friendly way to transact on it Mbogo (2010)

### **1.1.1 Mobile Phone Based Loans**

Mobile phone based loans according to Ngaruiya et.al (2014) are micro-loans provided through telephones. Mobile phone based loans are therefore available to those with mobile

phones to which the loan is directed. Kirigano, Muturi and Atandi (2014) points out that mobile phone based loans are loan facilities made available through mobile devices, and whose requirements to access are not restrictive and are given according to certain parameters defined by the lender. It is therefore possible that different borrowers can get different amount of money in terms of the loan facility. Murunga (2017) points out that mobile phone based loans are small loans advanced to the borrower without the need for collateral but channeled through mobile phones in conjunction with telecommunication companies. The line of commonality of such definitions is that mobile phone based loans are small in lone size, can differ from person to person, are given through mobile phone device and so are repayable within a short period of time.

The nature of usefulness of mobile phone based loans according to Donner and Tellez (2008) warrants the use of the loans. For example a business owner may want to buy stock for business and given that mobile phone based loans is easy to get provided that one has a mobile phone, such a business owner is more likely to borrow the money. Bjorkegren and Grissen (2018) also points out that the repayment method of mobile phone based loans also enable their uptake. Inherent in the repayment method is the possibility to take another loan immediately after repayment which makes it easier for business owners to take a longer period with the borrowed money before full repayment. On the other hand, Mararo (2018) points out that convenience is another factor that contributes to uptake of mobile phone based loans in the sense that one can borrow the money at any time and without the need to travel to the bank for the money. This means that business owners can obtain borrowed money and make business transactions unhindered. Ndegwa (2014) contends that affordability of the mobile phone based loans makes it possible the uptake. The interest

of such loans are low and the cost of basic mobile devices are also low hence making it affordable even to the people at the bottom of the pyramid. Zachary (2013) asserts that accessibility of the money is also central to its uptake in the sense that the loan can be in all sizes to enable each according to his ability.

### **1.1.2 Performance**

Performance according to Kangarlouei, Aziz, Furahani, and Motavasel (2012) is the indicator to the extent to which an objective has been achieved or otherwise and which can either be financial or non-financial. Financial performance as Kangarlouei et.al (2013) further asserts, are the measures of an organization that are purely financial in nature. Such measures include return on assets, return on investment, return on sales, as well as economic value added. Such measures therefore, looks at how the revenue that comes into the company can be said to be profit of the company after the necessary deductions and expenses. On the other hand, there are non-financial performance, in which case, financial resources are not the focus of consideration. Ahmad and Zabri (2016) asserts that non-financial performance measures other elements that contribute to the betterment of the organization and may differ from organization to organization. Such measures may include growth in sales, employee training and development, increase in market share, as well as increased advertising budget. The current study will measure non-financial performance given that it looks at the organization beyond the financial element which is narrow in scope.

Other researchers have used different measurements to measure performance. Ngaruiya et.al (2014) measured performance using sales turnover while Mitinda (2014) measured

performance using business increment. On the other hand, Mararo (2018) measured performance using growth of SME enterprises. Masocha and Dzomanda (2018) measured performance using structured equation modelling. On the other hand, Kangarlouei et.al (2013) measured performance using financial indicator such as economic value added.

### **1.1.3 SME Enterprise in Kisumu County**

SME enterprises have been defined differently in different countries and contexts. Dar, Ahmed, and Raziq (n.d) propounds that in Japan and within the construction, manufacturing, transportation and mining sectors, SME enterprise are those business establishments with less than 300 employees and have a total turnover of 100 million yen or \$935,015. In Germany, SME enterprises are those business organizations with less than 100 employees while in France the number of employees of a SME enterprise is not more than 500 employees. SME enterprises are thus not just defined by the number of employees they have, but also the countries they are situated as well as the industries they belong. In Kenya according to Kenya National Bureau of Statistics (KNBS) (2016), SME enterprise is a terminology that encompasses micro, SME enterprises, have less than 99 employees and has a turnover of no more than Ksh. 500,000 or 4,813.22 United States of American dollars.

SME enterprises in Kisumu County according to Abayo and Oloko (2015) are beneficiaries of mobile phone based loans in a number of ways including the nature of use, repayment method as well as convenience provided by such loan facilities. SME enterprise use the loans to purchase stock for their businesses. The immediate borrowing after repayment also enable the businesses to develop their business before the money is completely repaid.

Similarly, the convenience provided by the loan facility from the mobile phones enable SME enterprises to transact business at any time of the day. According to KNBS (2016), the SME enterprises in Kisumu County are mostly involved in wholesale and retail; manufacturing and construction; service provision such as ICT, education and health; as well as transportation and storage.

Kenya National Bureau of Statistics (2016) further points out that SME enterprises creates 14.9 billion in employment which is the highest level of employment and thus contribute 33.8% to the GDP of the country. However, despite the significant contribution of SME enterprises to the economic development, Ombongi and Long (2018) points out that more than 40% of the already established businesses collapse within five years of their establishments majorly because of financing. This makes SME enterprises a suitable subject for empirical investigation.

## **1.2 Research Problem**

Mobile based loans according to Kirigano et.al (2014) is central to uptake of mobile based loans in the sense of the nature of use of such loans. For instance, the loans can be used for purchasing of stock for the business and hence makes their uptake inextricably linked with their usage. Mhammad et.al (2019) points at the repayment method of mobile based loans. The repayment model allows users to borrow money immediately after repayment which makes it possible for the loan to operate in the business of the borrower for a considerable period of time and hence makes it possible for the borrower to grow business. On the other hand, Mutinda (2014) asserts that convenience provided by mobile phone based loans makes it possible for borrowers to access the loans at any time and hence contribute



considerably to the growth and development of the businesses for which borrowing is premised.

In Kisumu county, according to Orinda (2014) despite the fact that businesses use mobile phone based loans to purchase stock and run day to day business activities, many SME enterprises still collapse within 5 years of their existence. Abayo and Oloka (2015) further asserts that although repayment method is flexibility for SME enterprises in Kisumu County, financial challenge still remains the biggest harmful for the establishments. SME enterprises still lack capital for expansion, advertising budget is still low and so is business growth. According KNBS (2016), SME enterprises rely on convenience as a result of micro-loans but the innovation to provide adequate financial requirements according to the uniqueness of every business is still lacking. Therefore, many businesses still suffer from lack of financial muscle to push their businesses to the next level.

A lot scientific studies have also been conducted on the subject. For example, Bjorkegren and Grissen (2018) empirically investigated loan repayment and mobile phone utility in the United States of America. On the other hand, Anwar (2016) conducted a research to establish credit and prospects of SME enterprises using mobile devices in Bangladesh. On his part, Mutinda (2014) studied money transfer and performance of small businesses in Nairobi County in Kenya. The study by Muchiri (2018) was also conducted in Nairobi Kenya and was designed to establish mobile banking and the association with SME enterprises. Other studies have focused in Kisumu County, for example, Abayo and Oloko conducted a study to look at small credit and performance of SME enterprises in Kisumu County. Orinda (2014) looked at challenges related to finance and performance implication among SME enterprises in Kisumu County Kenya. The above studies are feasible, however

they did not look at mobile phone based loans and their effect on SME enterprises in connection with nature of use, repayment method, as well convenience. What is the effect of mobile based loans on performance of SME enterprises in Kisumu County?

Some of SME don't have a system where they can record all expenses and income hence they cannot prepare financial report which is need by formal bank to make a decision whether to give them loan or not them, firms with no proper financial statement will borrow from mobile loan which don't require financial report to issue loan. Sometimes SME might need money urgently to enjoy the discount offered by suppliers if that window of the opportunity is shorter formal bank loans cannot sort SME on time so they can use mobile which can be process in few minutes and they have money ready to buy goods on discount. In some cases the entrepreneur might have some money that he/she want to pay the loan on time if technology can allow to make repayment without closing the shop and moving to the bank , it might reduce the cost of travelling , save time and the business will continue to run as repayment of loans is being made simultaneously. Due to better credit facilities some of banks requires securities such as collateral for them to issue loan, sme without title deed or any other form of collateral will not have access to loan which can help the to perform better .Some banks require the history of the business how they have been banking and making withdrawals to determine their ability to pay the loan. This can prevent those with potential for growth but they lack good banking statement from accessing funds. After capping of loan interest rate by the central bank most of the banks were only willing to lend to institution with lower risk such as government or repeatable intuition which can pay without any problem, this means than most of them SMEs which are riskier cannot access funds Karffmann (2010). Despite such salient challenges, no empirical study has sought to

examine the effect of mobile phone based on performance of small and medium sized enterprises in Kisumu County with respect to three variables namely: nature of use of the loan, repayment method, and convenience. What is the effect of mobile phone based loans on performance of small and medium sized enterprises in Kisumu County?

### **1.3 Objective of the Study**

The objective of the study was to examine the effect of mobile phone based loans on performance of SME enterprises in Kisumu County.

### **1.4 Value of the Study**

The study could be useful in theory building. The theories guiding the study are technology acceptance theory as well as diffusion of innovation theory. The study could be useful in building technology acceptance theory in the sense that the theory presumes that technology is accepted on the basis of its usefulness and easiness of use. Therefore, the application of telephones in financial transactions especially in borrowing loans would mean that the technology is accepted and it is useful hence building the theory with the evidence from the study. The study could also help in building diffusion of information theory. The theory presumes that spread of innovation such as mobile phone loans is slowly given the characteristics inherent on the innovation and the dynamics of the audience. But once it has gotten to the people, it becomes difficult to do without. A large number of people using the mobile phone for borrowing loans could therefore support the theory with empirical evidence.

The study could also be used for management practice by the lenders. Lenders who use mobile phones as enabler could understand the variables that contribute to the performance of SME enterprises. For instance, if nature of use, repayment method, as well as convenience contribute to performance of SME enterprises, then such variables could be enhanced by such lenders. The reason is because when SME enterprises do well, then the chances of loan repayment increases to the benefit of not just the lenders but also the borrowers and hence managers of organizations who adopts mobile phone lending could be keen on the study because they could use it to leverage their businesses

Policy formulation is another area that the current study could provide much value. The County government of Kisumu could rely on the study to create policies that supports growth of SME enterprises using mobile phones. The reasons for such policy is that it could help the County government to enable entrepreneurship environment which could create more jobs for the residents and hence increasing the economic growth of the region. The national government could also use the study to develop policies around how best SME enterprises can leverage on mobile phone based loans not just to enable government get more taxes from new businesses, but also to meet the Kenya vision 2030 as demonstrated in the vision 2030 blue print.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter presents the introductory part of the literature review. It also presents theories underpinning the study, in which case, technology acceptance theory and diffusion innovation theory are basic. It also looks at empirical review of literature as well as summary of gaps. Finally, it looks at conceptual framework that operationalizes the variables of the study.

### **2.2 Theories that Underpin the Study**

The theories that underpin the current study are technology acceptance theory as well as diffusion innovation approach. Technology acceptance theory as well as diffusion innovation theory are preferred for the current study given that the subject of investigation is based on mobile phone based loans which is technologically driven.

Technology acceptance theory (TAT) also known as technology acceptance model (TAM) according to Scherer et al (2019) was developed by Richard Bagozzi and Fred Davis between 1980s and 1990s majorly within the information and communication technology. Technology acceptance theory therefore means accepting to use technology as opposed to refusal to do the same. Although technology acceptance theory was particularly developed to address issues in information technology, it has been used in the field of education, economics and finance to explain the reasons for or against technology adoption and to find ways to make technology more appealing for the merits inherent in the technology adoption.

As Taherdoost (2018) propounds, technology acceptance theory has two major assumptions namely, ease of use as perceived by the intended audience as well as the usefulness as perceived by the beneficiary of the technological system or tool. Ease of use means that there is reduced complexities such complex interfaces and hard ware operations that makes it difficult for intended beneficiaries to deploy or use the technology as required. Usefulness is the extent to which the said technology contribute to or enhances performance of an individual or organization better than when technology is not utilized. The line of commonality between the current study and technology acceptance theory is clear. As Scherer et al (2019) technology acceptance theory contribute to efficiency to every area it is applied. It follows that in the field of finance and particularly mobile phone based loans, it helps with the nature of use such as getting money for business growth. It also helps with repayment method such as borrowing immediately after repayment which further enhances business growth. It is also relevant in the sense that it helps with convenience, in which case, ability to borrow money at any time contribute to the wellbeing of SME enterprises.

Diffusion of innovation theory (DIT) is another of the theories that has been applied extensively in financial research. According to Kirigano, Muturi, and Atandi (2014), diffusion of innovation (DOI) theory was propounded by Everett Rogers in 1962 in communication studies. The theory was basically an attempt to understand the time it takes for innovation to be adopted by the population. The theory has since been used in communication, marketing and finance to explain different ways in which the population take innovation. For instance, early adopters are group of people who need minimal information to take up innovation. On the other extreme, there are laggards who are

traditional by nature and hence take a lot of persuasion to adopt innovation. The difference in innovation adoption are inherent in the complexity of innovation, lack of explicit information, as well as traditions and general orientation of the population.

The central assumption of the theory according to Lekvall and Wahlbin (1973), the underlying assumption of diffusion of information theory innovation takes time to permeate society but finally becomes invincible tool for economic growth. In the current study, mobile phone based loans is an example of innovation that Kirigano et.al (2014) points out that it takes time to defuse or spread to the general population but finally propels economic growth. Mobile phone based loans have now been adopted by majority including laggards and contribute to economic development especially within SME enterprise in several ways. For instance, in the nature of use, SME enterprises use mobile phone based loans to purchase stock for the organization. In repayment method, borrowed money can be repaid and another loan taken immediately which does not make business to suffer because of the repaid loan mobile phone based loans also provide convenience in the sense that there is no paper work which reduces time to process loan and hence effectiveness and efficiency of operating SME enterprises.

### **2.3 Mobile Based Money and Performance of SME Enterprises**

According to Kirigano et.al (2014) postulates that nature of use of mobile based loans is important for performance of the business. For instance, using the loan from a mobile phone provider enable a SME enterprise to purchase stock which is the used to enhance performance. Masocha and Dzomonda (2018) asserts that SME enterprises are able to grow their sales portfolio if they have enough stock that customers can find as and when they

need. The money that is borrowed from mobile phones therefore play a crucial role in ensuring that owners of SME enterprise can put in place sufficient stock for their customers. Consequently, the net effect is sales growth for the particular SME enterprise.

Repayment method is another area of mobile phone based loans to be considered. Muhammad, Bambale, & Ibrahim (2019) implies that inherent in the repayment methods of mobile phone based loans lies the mechanisms of promoting SME enterprises in any sector of the economy. For example the borrowed money can be repaid and the borrower takes another loan of a bigger size than the previous loan immediately. This means that the borrower can stay for a long period of time with the borrowed money and so invest in in business to realize increased market share of a particular market vertical. Flexibility in repayment method as Masocha and Dzomonda (2018) points out, also improve performance of SME enterprises. The mobile phone based loan may require instalment repayment as opposed to lump sum repayment which further invigorates the success of the SME enterprise.

Just like repayment method, convenience provided by mobile phone based loans is also crucial in ensuring performance of SME enterprises. Mutinda (2014) points out that convenience as a result of mobile based loans and business performance are indissolubly linked so much so that ability to borrow money at any time within 24 hours make it possible for business owners to proceed with their business operations without the necessity of physically going to the bank. Convenience therefore reduce the difficulties associated with getting loan from the mobile phone based lenders leading to increased market share. Such is because, when there is convenience in accessing loans with little or minimal difficulties, SME enterprises are able to focus on business operations and increased their market share.



## **2.4 Empirical Review of Literature**

A study conducted by Donner and Tellez (2008) investigated mobile banking loans and usage in India. The study used meta-analysis design. Thematic content analysis was also applied to analyze data. The study results showed that utilizing mobile loans on petty cash improved business performance. A different study conducted by Ky, Rugemintwari, and Suviat (2017) was intended to examine mobile money and saving behavior in Burkina Faso. Questionnaire was used to collect data and the data was analyzed using inferential statistics. The study showed that mobile phone based loans helped business to sort emergencies of the business. Chale and Mbamba (2014) also performed a study on mobile money and business growth in Tanzania. The study used questionnaire as the main study instrument. The study then used simple random sampling technique to include 100 respondents in the sample. Inferential statistics was used to process data. The study finding revealed that mobile phone based loan increased purchase of stock and hence increased volume of sales. Similarly, the study by Ndagijimana (2017) investigated mobile money and financial performance of financial organizations. The study used secondary data and established that mobile based loans did not improved performance of the organizations. The study of Abayo and Oloko (2015) was intended to establish the influence of micro-credit and business growth. The study used simple random sampling and sampled 77 respondents. The study utilized questionnaire for data collection. The study then applied descriptive statistics to analyze data. The study established that mobile money contributed to business development.

A study conducted by Zachary (2013) focused on interest rate and loan demand in Kenya. The study used correlation design as well as questionnaire as the main instrument of data collection. A total of 50 respondents were sampled. The study utilized descriptive statistics to analyze data. The findings showed that low interest rate contribute to performance of SMEs. The study by Ombima (2014) investigated flexibility and sales performance. Using simple random sampling, the study sampled 48 respondents and used descriptive statistics for data analysis. The study established that flexibility of loan repayment resulted in sales performance. Odongo (2014) focused his study on credit terms and performance of SMEs. The study used questionnaire to collect data and inferential statistics for data analysis. The study found that immediate borrowing after repayment did not contribute to performance of SMEs. The study of Anwar (2016) was mainly intended to investigate credit rating and SME performance in Bangladesh. The study was meta-analysis in design and utilized descriptive statistics to analyze data. The study established that good credit rating contributed to SME performance. Quainoo (2011) sought to establish effect of small loans on small businesses in Ghana. The study utilized simple random sampling to sample 100 SMEs. Descriptive statistics was applied and the study found out that bigger loans sizes contributed to performance of SME enterprises.

Another study was conducted by Mararo (2018) which investigated mobile money and SME growth in Kenya. Descriptive survey was used together with a sample of 100 SME enterprises. Both inferential and descriptive statistics was used. The study established that ability to borrow at any time contributed to business growth. Chalu and Lubawa (2018) also conducted another study to determine influence of multiple borrowing on organization performance. The study utilized questionnaire and sampled 102 respondents. Inferential

statistics was applied to analyze data. The results showed that multiple borrowing contributed to business growth. The study conducted by Osano and Languitone (2016) concentrated on access to finance among SME enterprises in Mozambique. The study sampled 324 respondents while descriptive and inferential statistics were used to analyze data. The study established that convenience of not using collateral did not contribute to SME performance. Chakava (2015) studies paperless adoption and performance of paperless business in Kenya. The study utilized cross-sectional design. The study employed 222 respondents. Thematic content analysis was used. The study established that paperless transaction improved performance of SME enterprises. Muchiri (2018) on the other hand sought to examine the influence of mobile money on SME enterprise in Kenya. The study utilized descriptive survey design. The study sampled 176 respondents the study. The study also used descriptive analysis and established that the convenience of not travelling to the bank improved SME performance.

## **2.5 Summary of Literature Review and Gaps**

The exposition of empirical literature review has generated a number of issues. The literature reviewed has had certain methodological limitations such as the use of meta-analysis design, yet it lacks inclusion and exclusion criteria that is acceptable among researchers. The empirical literature exposition has also revealed that the studies have mainly focused on individual variables and how such variables affect SME enterprises across a wide scope not just organizations but also locations. The studies therefore, did not look at how the nature of use, repayment methods, as well as convenience of mobile phone based loans affect SME in Kisumu County Kenya. Consequently, the effect of mobile phone based loans on performance of small and medium sized enterprises in Kisumu

County with respect to the aforesaid variables is not clearly spelt out giving room for a gap in knowledge.

## 2.6 Conceptual framework

Figure 2.1 demonstrate the conceptual framework of the study with the variables. The nature of use of mobile phone based loans such as buying stock for business contribute to the uptake of such loans and hence better performance of the business, Repayment methods such as the possibility of borrowing a higher amount immediately after repayment enable SME enterprises to have more money within the business and hence contributing to performance of business . Convenience is pivotal in the performance of SME enterprises. The ability of an enterprise owner to borrow money from anywhere makes it possible for quick decision making that ultimately contribute to business growth.

The performance of the SME can be measured through various methods which includes sales growth, employees training and development, increase in market share and increase on advertisement budget, but under this study I will use sales growth as a measure of performance.

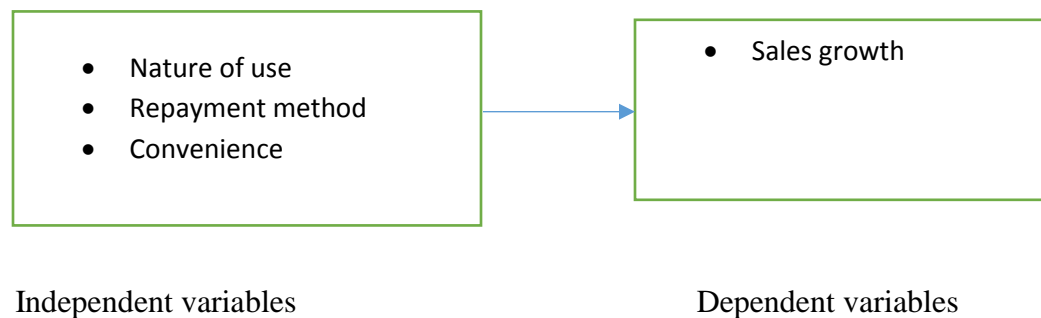


Figure 2.1 Conceptual framework

Source: Author (2019)

## **CHAPTER THREE: METHODOLOGY**

### **3.1 Introduction**

This section provided information on six major sub themes. The introduction presented the contents of the section. It also presented the research design adopted by the study. The study population was also dealt with, just like the sample design. It went on to present data collection as well as data analysis techniques.

### **3.2 Research Design**

Correlation study design was preferable for the current study. Meller (2001) argues that correlation study design is one that relates two main variables such as the independent and dependent variables and provides the extent of their relationship for purposes of generalization. Correlation also allows for the use of quantitative techniques. The current study used quantitative techniques which made correlation study design more appropriate. The study therefore recognized that the said design contributed to reliable generalization and ultimately reliable conclusion of study findings.

### **3.3 Population**

The number of registered SME enterprises, and which the study targeted is 40,200 within Kisumu County. The targeted population was ideal and therefore understood the pertinent issues that formed part of the investigation of the study. The study recognized that relevant population contributed to reliable responses and hence reliable study outcome.

### **3.4 Sampling Design**

The study used a sample size estimation Table as cited by Saunders, Thornhill and Lewis (2012) and which was scientific enough to draw the sample size. According to the Table, the right sample size for a population of 40,200 was 383 respondents. Therefore, the sample size of the study was 383 respondents. The table used a confidence level of 95% and the margin of error was 5% making it to be reliable for sample calculation.

### **3.5 Data Collection**

Primary data was preferred by the study and consequently questionnaires were the tools for data collection. Meller (2001) contends that questionnaire is a form of study instruments with the same questions for the respondents. The greater benefit of questionnaire was its ability not just to collect data from many respondents, but also at low cost and within a short period of time.

### **3.6 Data Analysis**

Both inferential and descriptive statistics were used. For descriptive statistics generated by the study, frequencies and percentages as well as mean and standard deviation ensued. For inferential statistics, the study used regression and correlation. To generate results statistical package for social science (SPSS) was adopted.

The following multiple regression model was employed

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3$$

Where

Y=sales growth

$\beta_0$ =constant

X1=mobile loan nature of use

X2=mobile loan repayment method

X3=convince

## **CHAPTER FOUR: DATA ANALYSIS RESULTS AND DISCUSSIONS**

### **4.1 Introduction**

Analysis of data was in due cognizance of the study variables and so was results as well as discussions. The study managed to get 78% of the filled questionnaires meaning that 300 participants were able to give back their filled questionnaires while 83 questionnaires could not be traced. The variables of the study were nature of use, repayment method, as well as convenience. The analysis was however begun by addressing the demographics of the participants who answered the questions.

### **4.2 Demography Dynamics of Participants**

Reliability of generalization made it imperative to look at the dynamics of the study participants in terms of their demography. Out of such solemn thought, the researcher decided to look at how the study participants identified themselves as far as gender is concerned. Formal education attainment followed and lastly, the researcher looked at how old the research participants were.

#### **4.2.1 Identification by Gender**

On the question of gender, the researcher included every gender within the study scope. The Table and Figure that follows stipulates that 33% of participants were female and the greater number (67%) were male participants.



**Table 1: Identification by gender**

Gender identification	Percentage	Frequency
female	33%	100
male	67%	200
Total	100	300

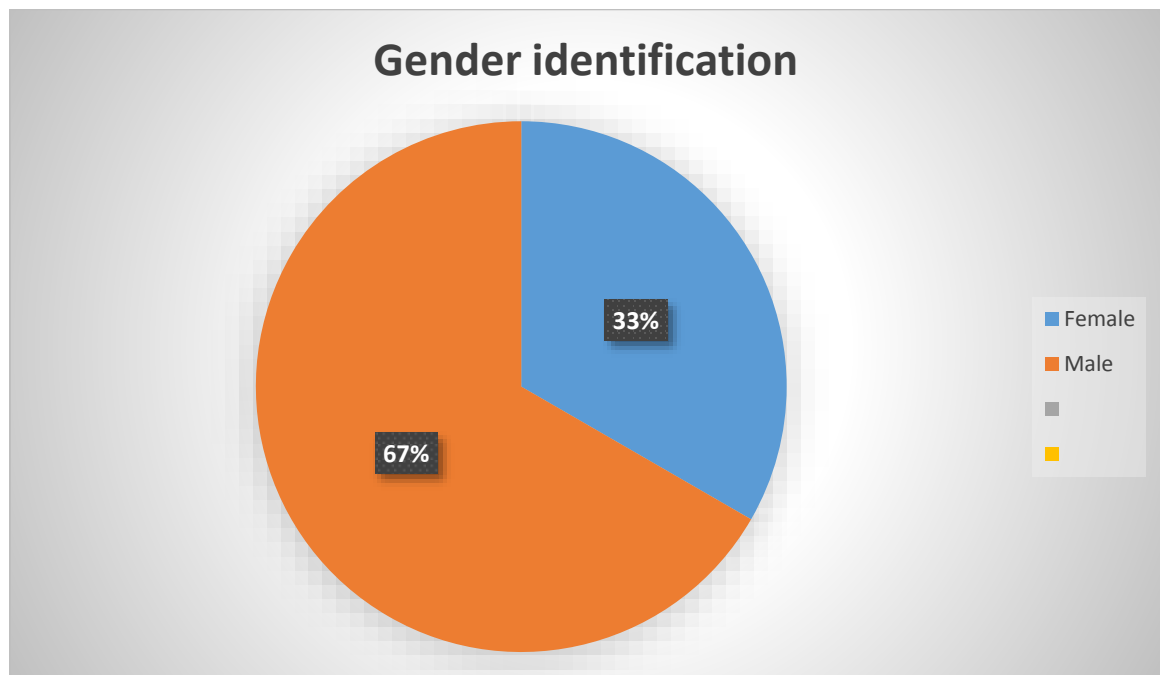


Figure 1: Gender Identification

Source: Study data (2019)

## 4.2.2 Identification by Education

As a way to further ascertain reliability the study thought it necessary to address educational achievement of the study participants. It is specified in Table 2 and figure 2 the outcome of education achievement analysis of the study participants.

**Table 2: Identification by education**

Identification by education	Percentage	Frequency
University	17%	50
Secondary	50%	150
Tertiary	33%	100
Total	100	300

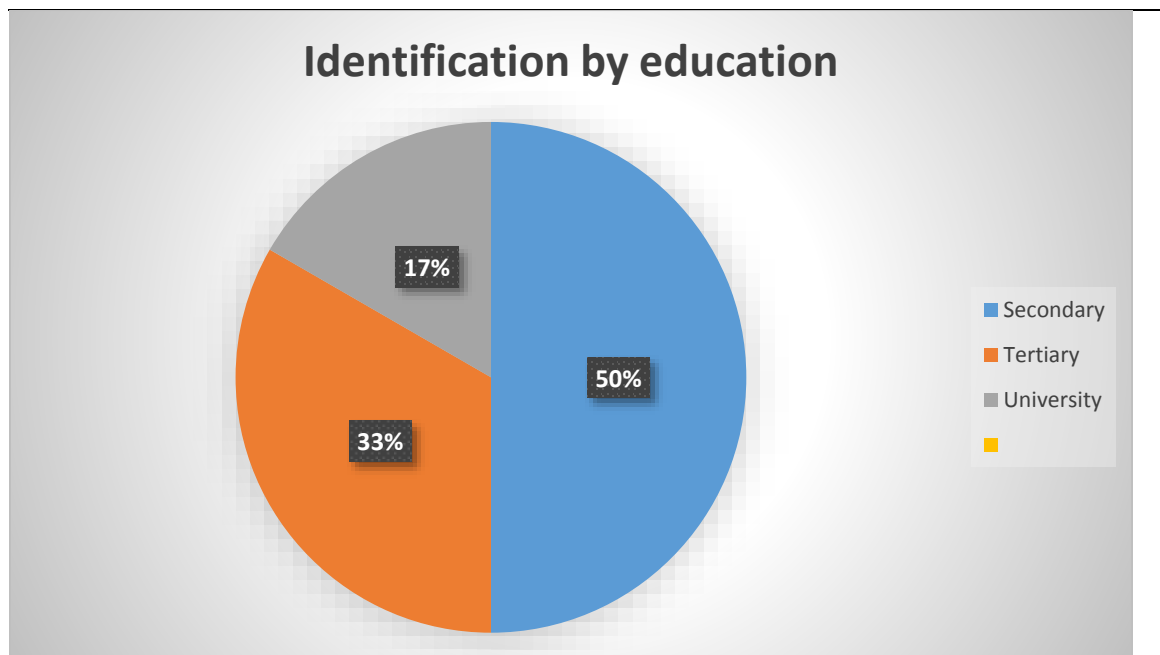


Figure 2: Identification by education

Source: Study data (2019)

### 4.2.3 Identification by Age

Within the parameters of the demography dynamics, the researcher thought it wise to also include a parameter of how old the respondents were. Such parameter helped in further ascertainment of reliability of the answers given by the participants. In similar connection the Table 3 and Figure 3 that follows specifies the outcome in totality. Participants who were over 56 years represented 3.3%; 51-55 represented 5%; 46-50 represented 8.3%; 41-45 represented 6.7%; 36-40 represent 10%; 18-25 represent 13.3%; 26-30 represent 33.3% while the greater number (20%) were associated with participants aged 31-35 in the same category.

**Table 3: Identification by Age**

Identification by age (in years)	Percentage	Frequency
Over 56	3.3%	10
51-55	5%	15
46-50	8.3%	25
41-45	6.7%	20
36-40	10%	30
31-35	20%	60
26-30	33.3%	100
18-25	13.3%	40
Total	100%	300

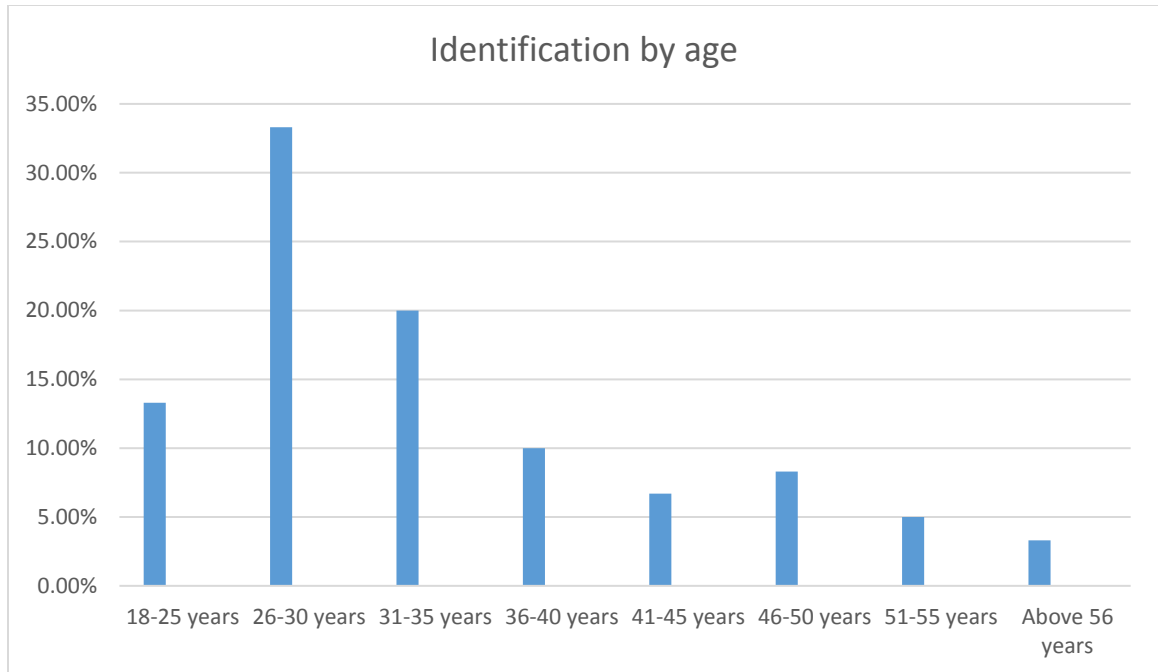


Figure 3: Identification by age

Source: Study data (2019)

### 4.3 Descriptive statistics

In looking at the descriptive statistics, the researcher examined the extent of each variable. This was necessary not just to address the variables of the study, but also to know their extent of influence. The specific variables were nature of use, repayment method and convenience.

#### 4.3.1 Nature of Use

The nature of use was established and Table 4 specifies the outcome of the analysis. Using mobile loan for petty cash had a mean and a standard deviation of 2.96 and 0.902 in that order. Using mobile loan for business emergencies: 3.52 and 0.811; using mobile loan for stock purchase: 3.91 and 0.023; Using mobile loan for business travel: 4.71 and 0.524;

using the mobile loan for business development: 3.89 and 0.452 in which case the first number represent the mean while the second represent the standard deviation. Overall, the mean was 3.798 while the standard deviation being 0.630 in the same list.

**Table 4 Nature of use**

Proposition	N	Max	Min	Mean	Std. Deviation
Use for petty cash	300	5	1	2.96	.902
Use for business emergencies	300	5	1	3.52	.811
Use for stock purchase	300	5	1	3.91	.023
Use for business travel	300	5	1	4.71	.524
Use for business development	300	5	1	3.89	.452
<b>Overall mean and Standard deviation</b>				3.798	.630

### 4.3.2 Repayment Method

Dimensions of repayment method were also tested. Table 5 specifies the mean and the standard deviation in that order against the dimensions. In regard to enhancing loan repayment as a result of low interest rate, the factors were 4.01 and 0.002; in regard to flexibility enhancing repayment rate: 2.33 and 0.901; in regard to good borrower rating enhancing repayment rating: 3.96 and 0.484; and in regard to growth of loan size enhancing repayment the factors were 3.59 and 0.429 in that order. Overall factors were 3.524 and 0.360 for mean and standard deviation.

**Table 5 Repayment Method**

Proposition	N	Max	Min	Mean	Std. Deviation
Low interest rate enhance repayment	300	5	1	4.01	.002
Flexibility in repayment terms enhance repayment	300	5	1	2.33	.901
Immediate borrowing after repayment enhance repayment	300	5	1	3.73	.163
Good borrower rating upon repayment enhance repayment	300	5	1	3.96	.484
Growth of loan size after repayment enhance repayment	300	5	1	3.59	.249
<b>Overall mean and Standard deviation</b>				3.524	.360

### 4.3.3 Convenience

Convenience of the loan from mobile phone was also part of the variables. Table 6 provides the results from participants. In a format of presenting the mean followed by standard deviation, enhancing convenience as a result of borrowing at any time had 4.33 and 0.822; enhancing convenience because of absence of collateral requirement had 4.01 and 0.721; enhancing convenience because of borrowing from multiple sources had 3.31 and 0.163; enhancing convenience because of absence of paper work had 3.81 and 0.428; enhancing convenience because of absence of travelling to the bank to get money had 3.08 and 0.202

as mean and standard deviation with overall being 3.708 and 0.593 for mean and standard deviation.

**Table 6 Convenience of the Loan**

Proposition	N	Max	Min	Mean	Std. Deviation
Borrowing at any time enhances convenience	300	5	1	4.33	.822
Absence of collateral requirement enhances convenience	300	5	1	4.01	.721
Borrowing from multiple sources enhance convenience	300	5	1	3.31	.163
Absence of paper work enhances convenience	300	5	1	3.81	.428
Absence of travelling to the bank to get money enhances convenience	300	5	1	3.08	.202
<b>Overall mean and Standard deviation</b>				3.708	.593

### 4.3.3 Performance

It was also necessary to analyze the factor of performance which was necessary for regression. The standard deviation was 1.001 while the mean was 3.81 for the participants who specified that use of mobile phone based loans helped them realize sales growth.

**Table 7: Performance**

proposition	N	Max	Min	Mean	Std. Deviation
Use of mobile phone based loans helps my business realize sales growth	300	5	1	3.81	1.001

**4.4 Inferential Analysis**

Inferential statistics addressed summary of the model, analysis of variance and regressions coefficients. As specified in in Table 8, 2.401 which is the Durbin-Watson value meant that there was no effect among the variables themselves. The Table also shows that independent variable explained 43.7% of variation. R square was 0.436 and the model was sound for use since the F factor was significant which suggested that the independent variable influence the dependent one.

**Table 8: Summary of the Model**

R square	R square change	F Change (Sig.)	Durbin-Watson
.436	.437	.000	2.401

a. Nature of use, repayment method, and convenience (constant predictors)

b. Performance (dependent variable)

According to analysis of variance as depicted in Table 9,  $F(3, 70) = 20.438, p < 0.01$ . This implied that the model could be used since it was fit. Therefore, the dependent variable contribute to the explanation of the study subject.



**Table 9: Analysis of Variance**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	20.321	3	7.112	20.438	.000 <sup>b</sup>
Residual	21.451	70	.341		
Total	41.772	73			

a. Performance (dependent variable)

Table 10 shows that nature of use had a significant Beta coefficient of ( $\beta =0.430$ ,  $p< 0.05$ ) while repayment method had insignificant Beta coefficient of ( $\beta =-182$ ,  $p< 0.133$ ) in the same list. On the other hand, convenience had a significant positive Beta coefficient of  $\beta =0.420$ ,  $p< 0.05$ )

**Table 10: Regression Beta Coefficients**

Variables	Standardized Coefficients
Constant	Y=1.249
1 Nature of use	$\beta =0.430$ , $p< 0.05$
2 Repayment method	$\beta =-182$ , $p< 0.133$
3 Convenience	$\beta =0.420$ , $p< 0.05$

a. Performance (dependent variable)

$$Y = 1.249 + .430X_1 - .182X_2 + .420X_3 \dots \dots \dots \text{equation 4.1}$$

$$R^2 =0.436 (43.6\%)$$

### 4.5 Discussions

The first variable was on the nature of use in regard to the mobile phone based loans. The study revealed with an overall mean of 3.798 that nature of use had a greater extent of

influence as a variable of mobile phone based loan. The overall mean of 0.630 showed that the variability was small and hence the participants were consistent in their answers. The study further established that the nature of use had significant positive influence on performance ( $\beta = 0.430$ ,  $p < 0.05$ ). The study findings are in conformity with the study conducted by Chale and Mbamba (2014) in Tanzania who established that mobile phone loans had a significant positive relationship with organization performance. The finding also supports technology acceptance theory whose main assumption is that technology is accepted on the basis that the technology can help the organization or an individual or on the basis that technology is easy to use. Therefore, the fact that mobile phone technology is both easy to use and helpful, the reason why there is a positive correlation, means that the finding support the theory.

Repayment method was another of the variables of the study. The descriptive findings showed that the extent of repayment method was great in the sense that the ultimate mean was 3.524 while standard deviation was 0.360 indicating low variability of responses. The Beta coefficient for regression pointed out that there was insignificant negative correlation between repayment method and performance ( $\beta = -0.182$ ,  $p < 0.133$ ) meaning that repayment method did not influence performance. The study contradicts a study conducted by Zachary (2013) who established that customer friendly loan repayment methods enhance repayment and by and large contributed to performance. The findings supports diffusion innovation theory which stipulates that innovation does not permeate society and contribute to performance at the same time. For instance early adopters may take information and make it work and ensure performance in their organizations, but on the other hand laggards do not accept innovation immediately which can have a negative impact on organizations.

Convenience also found itself in the mix of variables operationalized by the study. The descriptive statistics revealed that the extent of convenience as a variable on mobile phone based loan was huge given the overall mean of 3.708 and a standard deviation of 0.593 in the same list. The low standard deviation meant that the answers were consistent among the research participants. The regression analysis showed that there was a significant positive correlation between convenience and performance ( $\beta = 0.420$ ,  $p < 0.05$ ). The finding supports the study conducted by Chalu and Lubawa (2018) which revealed that convenience in terms of multiple borrowing contributed to performance. The finding also supports technology acceptance theory which posits that the ease of use of technology is central to its employment. Therefore, given that mobile phone technology is central to mobile phone loans, it follows that the ease of use of the phone provides convenience for the user and hence supports the technology acceptance theory in that way.

## **CHAPTER FIVE: SUMMARY, CONCLUSIONS**

### **AND RECOMMENDATIONS**

#### **5.1 Introduction**

Here is the last section of the report. It present summary according to the variables of the study just like it does conclusions. The section also draws recommendation for policy and for further study. It finally presents the limitations of the study.

#### **5.2 Summary of the Study Findings**

Nature of use was the first variable that the study measured. The findings divulged that nature of used had a significant positive influence on performance ( $\beta = 0.430$ ,  $p < 0.05$ ). Another of the variables that was measured by the study was repayment method of the loan facility obtained by the borrower. The study data divulged that repayment method had insignificant influence on performance of small and medium enterprises ( $\beta = -0.182$ ,  $p < 0.133$ ). Furthermore, convenience of loans from mobile phones was also tested by the researcher. The study findings could not be more clear having established that convenience had a positive influence on performance ( $\beta = 0.420$ ,  $p < 0.05$ ).

#### **5.3 Conclusion**

On the nature of use of the mobile phone based loans, the study concludes that the nature of use of the loans are crucial in ensuring performance of small and medium enterprises in Kisumu County. In regard to repayment method of the mobile phone based loans, the study concludes that repayment methods are not important in ensuring performance of small and

medium enterprises in Kisumu County. The study also measured convenience of the mobile phone based loans and concludes that convenience is crucial in ensuring performance among small and medium enterprises in Kisumu County.

#### **5.4 Recommendations**

Given the study findings and conclusion, the study recommends that the nature of use of mobile phone based loans should be supported by all stakeholders, key among them being mobile phone based lenders since it not only contribute to performance of the borrower, but also loan repayment to the lender. The researcher also recommends that resources should not be directed towards improving repayment method as a contributor to performance given that repayment method does not influence performance in any significant and positive way. In addition, the researcher recommends that convenience of mobile phone based loans should be supported by stakeholders given that it contribute to performance of the small and medium enterprises.

#### **5.5 Limitations**

Just like anything else, the current study could not go without some limiting factors. The study employed correlation study design yet the researcher was keenly aware that correlation is not the same thing as causation. Such limiting factor was mitigated in the sense that correlation is a scientific method accepted by researchers and that its use in the study was a scientific undertaking. Another limiting factor was the narrow scope of the topic. There are many things that can be investigated in line with mobile phone based loans yet the study only focused on three variables namely, nature of use, repayment method, as

well as convenience. The limitation was mitigated by the fact that the literature survey was not only limited to the study scope, it went beyond it.

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**APPENDIX I: QUESTIONNAIRE**  
**SECTION A: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS**

*Kindly tick the box that corresponds to your answer in the boxes provided. Answer all questions as honestly as possible. The answers you provide will only be used for academic purposes and your name will not be associated with the answers, therefore do not write your name anywhere in the questionnaire.*

**1. Gender**

- Male
- Female
- Other

**2. Level of Education**

- Secondary education
- Tertiary education
- University education

**3. Age of respondent**

- 18-25
- 26-30
- 31-35
- 36-40
- 41-45
- 46-50
- 51-55
- Above 55

## SECTION B: NATURE OF USE OF MOBILE PHONE BASED LOANS

*In this section, the study is interested to find out your views in regard to nature of use of mobile phone based loans. Kindly, tick the boxes that responds to your views.*

Statement for response	Strongly agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
I use mobile phone based loans for petty cash in my business					
I use mobile phone based loans for business emergencies					
I use mobile phone based loans for purchase of stock for my business					
I use mobile phone based loans for transport for my business					
I use mobile phone based loans for business development					

## SECTION C: REPAYMENT OF MOBILE PHONE BASED LOANS

*In this section, the study is interested to find out your views in regard to repayment of mobile based loans in your business. Kindly, tick the boxes that responds to your views.*

Statement for response	Strongly agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
Low interest rate charged by mobile phone based loans makes my business grow					
Flexibility in repayment helps me plan for repayment and hence help business growth					
Immediate borrowing after payment makes me have more time with the money which contributes to my business growth					
Good rating posted for me when I pay loan in time provides me with opportunity to borrow again for growth of my business					
Growth of loan size after repayment contributes to the growth on my business					

## SECTION C: CONVENIENCE OF MOBILE PHONE BASED LOANS

*In this section, the study is interested to find out your views in regard to convenience of mobile phone based loans. Kindly, tick the boxes that responds to your views.*

Statement for response	Strongly agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
Borrowing at any time makes me attend to immediate business requirements					
Absence of collateral requirement makes it possible for me to borrow without assets					
Borrowing from multiple sources makes it possible for me to have sufficient funds for business					
Absence of paper work makes it possible for me to get the loan more quickly					
Absence of travelling to the bank makes it possible for me to save travelling cost for business					

## SECTION C: Performance

*In this section, the study is interested to find out your views in regard to performance indicators of your organization. Kindly, tick the boxes that responds to your views.*

Statement for response	Strongly agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
Use of mobile loans helps my business realize Sales growth					