

**EFFECT OF MOBILE LENDING ON PERFORMANCE OF MICRO
AND SMALL ENTERPRISES IN NAIROBI COUNTY CENTRAL
BUSINESS DISTRICT, KENYA**

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DECLARATION

I, the undersigned, declare that this is my original work and has not been presented to any institution or university other than the University of Nairobi for examination.

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This research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

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ABBREVIATIONS AND ACRONYMS

CBK	Central Bank of Kenya
FSD	Financial Sector Deepening
GDP	Gross Domestic Product
KNBS	Kenya National Bureau of Statistics
MMS	Mobile Money Services
MSE	Micro and Small Enterprises
MSME	Micro, Small and Medium Enterprises
R&D	Research and Development
RBV	Resource Based View
TAM	Technology Acceptance Model

ABSTRACT

In spite of new innovations in technology, many nations have not yet realized optimal utilization of mobile lending. Facts available show that innovations in the banking sector are critical in creating value for banks and their clients. The research on mobile credit has always been pointed towards the access to mobile credit from the point of financial institutions while little attention has been pointed to how mobile credit impacts performance of MSEs in Kenya. The objective of this research study was establishing how mobile lending impacts performance of SMEs in Nairobi County CBD. The research adopted the technology acceptance model and the diffusion of innovation theory. This study utilized a descriptive survey design. The study population was the 1539 SMEs in Nairobi County CBD while the sample was 10% of the population (155). The target respondents were owners or managers of the SMEs. Data was from 132 of the 155 that was a response rate of 85.2%. The study used primary data obtained from the original sources using questionnaires. The questionnaires were issued using drop and pick later method and emails via Google form. Data obtained using questionnaires was converted from simple responsive into a quantitative form to be useful in the analysis that was done using SPSS. This process generated descriptive statistics which included frequencies and percentages and inferential statistics. A simple linear regression model showed the relation between the dependent and independent variables. Findings reveal that the SMEs in Nairobi CBD have greatly adopted mobile lending. The study findings also reveal that mobile lending influenced firm performance positively. The regression and correlation results support the results as there existed a positive substantial relation between mobile lending and firm performance. The study recommends the need for having SMEs adopt mobile credit as this will boost their sales, reduce cost, increase profits, enhance customer satisfaction and employee retention and ultimately lead to improved firm performance. The study also recommends the need to have more providers of mobile loans as this will provide SMEs with options and eventually lead to reduced costs of the loans.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The performance of Micro and Small Enterprises (MSEs) in the long-term together with their competitiveness is hampered by inaccessibility to funds in the developing countries (Jack & Suri, 2014). Limited accessibility of MSEs to loans has been pointed out as a powerful constraint facing the sector in developing countries (Soderbom, 2001). The difficulties in obtaining loans from main stream banks has seen the establishment of other products such as mobile credit aimed at providing finance access to this underserved yet critical sector in the country. According to World Bank (2017), new technologies such as money lending apps, transformative business models and ambitious reforms have helped scale up universal access to financial services. It increases access to basic financial services by lowering the time and distance to the closest bank branches and lower the requirements to acquire a loan (Munaye, 2009). The expectation is that improved access to mobile credit will aid performance of MSEs as they usually face difficulties in obtaining loans from main stream banks (Tchouassi, 2012).

Mobile lending is increasingly becoming an important part of the fabric financial services ecosystem and banks. Access to monetary services as well as products is growing to be more manageable than always, in particular for customers who reside in the rural areas with no forms of a present financial system. Mobile lending is offering technological solutions meant to achieve convenience, speedy turnaround times and efficiency in operations. Though several scholars have pointed out that payments space is the most advance segment among the mobile lending (Douglas & Janos, 2015). Mobile lending

has been able to impact various stakeholders in the financial sector. It has improved asset management services by offering wealth management services to retail customers by simplifying systems, proposing algorithms that support the process of making decisions and artificial intelligence management of portfolios using robots.

This study's theoretical foundation was built on the technology acceptance model and the diffusion of innovation theory. Technology Acceptance Model (TAM) explains the manner in which clients utilize an innovation. The theory will be applicable in establishing how technology acceptance impacts the adoption of mobile credit among MSEs. Diffusion of Innovation is the manner in which a novel idea is communicated within a social system through a preferred medium. Innovations must be acceptable in a wide region to remain sustainable. The theory has been utilized in the adoption of several technological innovations by businesses. The Resource Based View (RBV) theory of the firm states that performance is centered on how the resources and capabilities controlled by a firm enable it to acquire competitive advantage edge. The resources that are held by a Micro and Small Enterprise (MSE) together with the technological innovation will have an extensive impact in the generation of improved performance.

1.1.1 Mobile Lending

Ross (1998) defines mobile lending as the use of mobile phones in applying for and obtaining loan approvals from financial institutions by customers. The use of a mobile phone basically acts as a channel to conduct transactions. Even though provisions of financial solutions by many phone networks have been given a variety of definitions, the current study will utilize the term "mobile money" to signify the merge between mobile telephony and financial services. Kigen (2010) stated that, mobile money is the use of a

mobile devices to conduct financial transaction related to a client account. According to Kingoo (2011) mobile lending is the provision and processing of loans using mobile telecommunication devices.

Mobile banking has revolutionized the ways in which money is transferred around the developing and is presently in a position to offer more complex banking transactions world that will change people's lives. This form of banking can be tailored to offer several services such as giving account information, which involves giving customers an alert on the updates and transactions happening in their accounts using their mobile phones. Another service will be that it will enable individuals to receive short messages on their phones giving them information on their immediate transactions from their bank accounts. The technology also facilitates the settlement of utility bills, deposits, withdrawals, transfers, airtime purchases, bank statement requests and other key banking functions, all in a timely fashion using mobile devices (Mutua, 2013).

In Kenya, mobile lending is in various models. These include the ones that make use of mobile phone applications, payroll lending, mobile money wallets and through a variety of types of providers like mobile network operators, banks and SACCOs. Most of these are not regulated. Many make use of the client's mobile phone-based data like SMS records, call and mobile money transaction history in order to establish a credit score and the amount to loan (Mohamed, 2018). The most common among these lenders is M-Shwari which provides a savings account and loans from CBA through the platform of M-Pesa. Different approaches are taken by others. For instance, to acquire Branch loan, a user downloads the application from Google play store, install it and then grant permission so that the app will use data and details from their phone. Branch then

analyzes this data and establishes whether the person is credit worthy and how much they can lend. Tala and Saida are other examples (Suri, 2017).

1.1.2 Firm Performance

Richard, Yip, Johnson and Devinney (2009) stated that firm performance is the accomplishment of an enterprise's intended mission that is obtained by proper management, continuous efforts and good governance to accomplish the set out goals. The performance criteria that is associated with not-for-profit firms include ability to respond to changes, to be flexible, the cost, productivity, asset efficiency utilization and being reliable (Chang, Tsui, & Hsu, 2013). The performance of an enterprise is heavily dependent on the activities done by the entity while fulfilling its mission. The outputs are the visible aspects determining an Enterprise's performance (Valmohammadi & Servati, 2011).

Other measurements include productivity, share of the market, profitability, growth, competitive edge and satisfaction of stakeholders (Kantor, 2001). It is important to note that financial aspects are not the sole indicators of firm performance measurement (Chesbrough, 2010); the performance of a business performance can take four angles, rational goals, internal processes, human relations and open system, in which each element is given by changes in its variables. There is no standard measure of enterprise performance. This is because there is a number of views concerning the most desirable outcomes expected of an organization in terms of its effectiveness and performance is tied to the theory and purpose to which the study is being conducted (Carton & Hofer, 2006). A number of them utilize financial measures as the criteria of measuring the success or failure that is related to an action.

Richard et al. (2009) discussed the performance of an enterprise based on three outcome areas; financial performance in terms of profits, return on investment and return on assets; product performance given by market share, sales volume; and returns on investments made by stockholders which is inclusive of total stockholder return and economic value added. A number of challenges however arise when using these measures; first and foremost, most managers are not willing to give the researchers access their financial records, there exists an inconsistency in savings from one year to another, there is a constant change in the environments which renders comparisons of savings from one year to the next difficult.

1.1.3 Micro and Small Enterprises in Nairobi County, Kenya

The SME Act No. 55 of 2012, states that “small enterprise” is defined as a firm, service, trade, business activity or industry with an annual turnover rate of between five hundred thousand and five million shillings and whose employees range between ten and fifty with a total asset capacity and investments in the manufacturing industry ranges between 10 to 50 million; and for firms in the service and farming sectors, between 5 and 20 million shillings. From the MSME Survey of 2016, medium enterprises are entities employing between 1-99 staff. The survey stated that the county governments had licensed roughly 1.56 million MSMEs distributed across the country while approximately 5.85 Million MSME, did not have a license. Most of these MSMEs operate in the service industry undertaking both retail and wholesale trade, repair of motorcycles and motor vehicles and food service and accommodation activities just to mention a few.

Data derived from the Kenya National Bureau of Statistics (KNBS, 2019), shows that MSEs in Kenya are responsible for about 25.6% of total GDP output. The recent

Economic Survey of Kenya report (2018) shows that more employment opportunities are being created in the informal sector which makes it a crucial sector in the economy. The report states that the sector has created over 700,000 new jobs in 2018 which is approximately 83.4% of all new jobs in the country. The employed people include laborers who work for households in factories, farms and the transport sector which showed an overall substantial growth in the sector.

Nairobi County is one of the most populous counties in Kenya. A good number of this population earns a living in micro and small businesses which are mostly family owned. A number of family owned businesses are also located within the Central Business District because of its centrality and business opportunities that the City presents (Nairobi City Council, 2018). Few have permanent shelters while most of the businesses are either on temporary shelters or conducted by mobile traders who move from one place to another selling their products. Statistics have shown that very few of these businesses survive long enough to even reach their potential. The factors affecting performance, growth strategies and sustainability of micro and small business enterprises in Nairobi need to be established and strategies put in place to promote their performance.

1.2 Research Problem

In spite of the emergence of new innovations in technology, many nations have not yet realized the optimal use of mobile lending. Venkatesh et al., (2013) stated that among the many technologies in banking, mobile lending is the most current and rapidly growing banking technology in the world; yet e-commerce, that involves the adoption and use of electronic banking system, is yet to develop among developing countries. From available information, innovations in the banking sector are critical in value creation for banks and

their clients. Customers have the ability to conduct banking transactions without using the conventional methods of banking (Karungu, 2014). The study on mobile credit has been pointed towards accessing mobile credit from financial institutions' view with little attention being paid to how mobile credit impacts performance of MSEs in Kenya.

As noted by the Central Bank of Kenya (CBK), transactions made using mobile phones rose by 27.7% to KSh3.2trn (\$32bn) in 2018, compared to KSh2.63trn (\$26.34bn) in 2017. The competition between mobile money companies like Safaricom Mpesa, Airtel Money, Mobikash, Tkash, Tangaza Pesa and Equitel are varied, and range from loan products which allow users to make savings and borrow money using their mobile phones to settle urgent bills such as electricity. Kenya witnessed a penetration in mobile services of approximately 89.7% as at June 2018. The drivers of such growth include the increase in use by merchants and individuals owing to its convenience, cost-effectiveness and security of using mobile phones to access, confirm and track financial accounts (CBK Report, 2015). Based on this development, it is important to establish whether increased access to mobile credit impacts performance of MSEs in Kenya.

There are significant research gaps along theoretical, conceptual, contextual and methodological spheres which is what this study sets to investigate. In Nigeria, Adewoye (2013) investigated the Mobile lending by Commercial Banks. The study used 125 questionnaires distributed to all employees. Descriptive research design was applied and the results were that mobile banking improves bank's service delivery as measured by savings of time and transaction time. It was found that mobile lending has revolutionized the methods by which people in developing nations transfer money and is presently expected to offer complex banking services that would transform people's lives. Types of

services offered can range from account information, which gives customers an alert on updates and transactions concerning their accounts through their mobile phones. In India, Manali (2014) studied the benefits and drawbacks that emerge from mobile lending to firms in the banking industry. The study adopted a descriptive design. Data obtained was mainly primary and secondary in nature. According to the findings, it was noted that mobile lending increased the volume of sales, lowered operational costs and satisfaction owing to the many diversified products. The study concluded that the drawbacks associated with Mobile lending in the country is that customers are skeptical about the security of their finances, the limitations faced when accessing services in areas with poor network coverage and processing errors.

In Kenya, Nganga et al., (2011) opined the influence of infrastructure on small and micro enterprises' growth (wood enterprises). Descriptive research design was used and the study was done in Uasin Gishu, Nakuru and Kericho counties. The results indicated that the infrastructure (communication, roads, energy and water) of the SMEs in the wood industries were accessing was poor, which led to the poor growth of wood enterprises. The study recommends that SMEs should have proper communication channel to ensure the growth of the firm. Ndumba and Muturi (2014) found that adoption rate is below target. Customers' perceived risk of loss of money through sending to wrong account and loss of personal information negatively affected the adoption of M-lending service, while perceived convenience was found to positively affect adoption of M-lending. It was found that the reliability of services also had positive effect. This study employed a descriptive research design, 67 customers were sampled and questionnaires were used. That it was more advantageous to us mobile lending compared to traditional banking.

According to the world economic forum (WEF) 2015, financial innovation is deliberate, predictable and has the greatest effect when they use business models that are based on platforms and are also data intensive. Collaboration between the incumbents, new entrants and regulators is required to ensure that the impact, effect of financial innovation and risk profile of the industry is examined.

This current study used a descriptive cross sectional survey research design because it was utilized in describing the relation between the two variables of mobile lending and performance. Cross sectional survey was used because it cut across micro and small enterprises in Nairobi County CBD, Kenya. Primary data was used to establish the effect of mobile lending on performance of MSME's in Nairobi County, Kenya. This study attempted to address the gaps demonstrated along conceptual, contextual and methodological front. The research attempted to answer the research question; What is the effect of mobile lending on performance of micro and small enterprises in Nairobi County CBD, Kenya?

1.3 Research Objectives

The study's objective was to examine the effect of mobile lending on performance of micro and small enterprises in Nairobi County Central Business District. Specifically, the objectives were:

- i) To determine the level of adoption of mobile loans among micro and small enterprises in Nairobi County Central Business District, Kenya.
- ii) To establish how mobile lending impacts the performance of micro and small enterprises in Nairobi County Central Business District, Kenya.

1.4 Value of the Study

The study may contribute to future references for future academicians. The study may identify further areas of research by highlighting related topics critiquing to point out the study gaps. The study contributes significantly to mobile lending in the economy.

Policy makers will be enlightened by the study findings, by showing mechanisms by which regulators will use to improve firm performance which forms the framework by which economic and development goals of vision 2030 will be achieved. The study will also be helpful to MSEs that have not yet adopted the use of mobile credit. The management of such firms will be able to determine the suitability of mobile credit and how it will enhance enterprise growth and performance.

Findings from the study will also form a foundation from which effective implementation of mobile credit practice will take place. The study will be helpful to the Government of Kenya in formulating and implementing policies for improved MSE performance. Through findings from the study, the MSEs will find ways in which more benefits can be realized for optimum performance. Practitioners will also benefit from this study as they will understand the relationship between mobile credit and performance of MSEs and take the necessary action to enhance efficiency of mobile credit.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Included in this chapter, is a discussion of the theoretical framework that will be applied in the investigation. It gives a detailed review of prior studies done on conducted on mobile lending and firm performance. The sections included are theoretical and empirical review, conceptual framework and a summary.

2.2 Theoretical Foundation

The theoretical review is a detailed discussion of the knowledge surrounding the topic which will form a framework for interpreting research findings so as to overcome the shortcomings of earlier studies. The knowledge reviewed includes the theories explaining the relation between mobile lending and firm performance. The theories covered are technology acceptance model and diffusion of innovation theory.

2.2.1 Technology Acceptance Model

TAM as discussed by Davis (1989) explains the manner in which customers acquire and use innovations. The model states that once an offering of an alternate innovation is made to clients, a number of factors impact their selection on the mechanisms and utilization period. This includes its perceived convenience and usefulness. TAM uses the causal chain of genuine conduct convictions, goal and disposition. This was produced by social clinicians from the hypothesis of contemplated activity. Davis' work recognizes two components; seen convenience and usefulness (Davis et al., 2002).

From alternative studies on technology, TAM has been widely utilized and has a massive contribution to developing of a pattern of technology use by individuals (Fishbein & Ajzen, 2010). Predicted usability impacts the perceived usefulness and the intent to adopt the technology (Davis, 1989). Despite being a useful theory studying technology adoption, TAM has many drawbacks which includes the initial reason for the design of the model which is parsimony and generality (Dishaw & Strong, 1999), without considering the non-organizational settings of an institution (Davis & Venkatesh, 2000), and ignores the aspects of ICT adoption (Sun & Zhang, 2006).

The theory has impacted studies on technology acceptance. In this investigation, TAM will be useful in discovering how technology improves performance MSEs and how access to it influences the utilization of mobile credit among Kenya's MSEs. The relevance of the theory is that it explain how technology acceptance impacts the adoption of mobile lending which reportedly influences MSE performance in the long term.

2.2.2 Diffusion of Innovation Theory

Mahajan and Peterson (1985), stated that innovation is an idea, practice or object introduced to a social system for the first time and diffusion of innovation is the manner in which it is conveyed by use of specified channels over a time period within the same system. In this study, the theory will describe the adoption system and use of mobile credit within the system (Clarke 1995).

Sevcik (2004) stated that the process of adopting an innovation is not instantaneous but takes time. Additionally, it argued that the diffusion of innovation is impacted on by resistance to change because it derails the adoption process. Five major characteristics

influence the Innovation adoption process. These are: its advantages, compatibility, complexity, observability and triability (Rogers, 1995). He argues that adoption of new innovations was dependent of the perception of an entity towards these characteristics. If an entity in Kenya observes the advantages associated with mobile credit, then the entity will adopt this innovation provided all the prerequisite tools are availed. The adoption of an innovation is quicker in organizations with an ICT department and access to the internet in comparison to those without. The theory is relevant in this investigation since it explains the adoption of innovations like mobile credit.

2.3 Empirical Review

Jack and Suri (2014) observe that the unbanked rural population who are users of mobile lending has increased overtime. Mobile lending involves the following activities such as savings mobilization where lenders especially commercial banks mostly depend on deposits from savers to accumulate funds. These institutions offer lower rates of interest on deposits than the lending rate of interest. On the other hand, Ewert, Szczesmy and Schenk (2000), studied the determinants of the performance of mobile lending in Germany. He used credit file data consisting of 260 medium-sized firm borrowers in the period 1992 through to 1998. The aim of the study was to test several theories on collateral requirements to interest rate premiums and consequently the lending performance. The finding of the study was that rise in the collateral pledged lead to increase in interest rate premium, contrary to the earlier discussed theories which support charging of higher interest rate premium to customers pledging less collateral.

Manali (2014) studied the benefits and drawbacks of mobile lending to firms in the banking sector. He used a descriptive design for this study. Data of a primary and

secondary nature was selected in this case. Findings showed that mobile lending had the effect of increasing sales volume, lowering costs of operation and improved customer satisfaction owing to the many different products on offer. From the study, it was also discovered that the disadvantages related to Mobile lending included clients being skeptical towards security of finances, challenges in accessing services in areas of poor network coverage and processing errors. In a similar study, Daniel (2015) studied the association between mobile lending and financial inclusion in Kenya. More specifically the focus of the study was to determine the impact that financial innovations had on firm profitability in the banking sector. A descriptive design was chosen for this study together with data from a span of twelve years from 2004 to 2016. The multiple regression analysis was useful in determining the extent of the relation between financial inclusion and mobile lending. Findings showed a direct correlation among the variables studied.

Mabwai (2016) studied the linkage between mobile lending and profitability of financial institutions in Kenya using a descriptive study design. Eight financial institutions that offer mobile lending were examined. Secondary data was employed which was obtained using financial reports. From the study, it was established that there existed a direct correlation between the variables. In contrast, Mago and Chitokwinda (2014) using an empirical study investigated how mobile lending impacts financial inclusion at Masvingo Province, Zimbabwe. The study sampled 270 respondents who were selected as; 50 from the formal sector, 50 from the informal sector and 20 tertiary scholars. The study was conducted in Chivi, Bikita, Gutu and Masvingo districts which represented the province. The findings showed that poor individuals were ready to embrace mobile lending ad

reasons given were that it is readily available, convenient, less costly, easy to use and offers security.

Ishengoma (2011) investigated mobile lending through mobile device system coverage for financial inclusion in Tanzania at the coastal region and specifically at Kibaha district. The study targeted people who had registered and subscribed to mobile services and agents that offered this service in which close to 20.4 million Tanzanians have obtained a subscription with mobile service operators. From the results of the study, there existed a substantial positive relation between mobile banking and financial inclusion. In a similar study, Achieng (2011) studied how the strategic nature of responses in Kenya Commercial Bank had an impact on mobile lending transfer in the country and findings showed that the service sector could be classified as developing, fast growing at a high rate within the Kenyan market and other emerging economies. Findings showed that the planned placing of mobile telkom distributors and the need to have financial establishments linked to the Mobile money transfer gives a leverage to maintain relevance while having a share in the massive potential availed to mobile subscribers.

Ngugi (2012) did an empirical investigation of mobile lending and financial inclusion in Kenya. The study employed a descriptive methodology, in which the researcher utilized secondary data from 2006 to 2014. A multiple regression analysis was then used in testing the linkage between inclusion and mobile lending services and it was established that mobile lending transfer services have a positive relation to financial inclusion in Kenya. Additionally, the researcher found out that services availed through mobile lending have increasingly contributed to financial markets deepening primarily out of financial products being linked sound mobile lending channels. Njenga (2009) asserts

that the mode of usage is mostly influenced by missions and marketing strategies of Mobile lending service providers. Mobile lending users tend to use the service in many ways depending on the nature of activities and urgency, however, the “hype factor” is a unique dimension of use. Here, the usage of mobile lending is caused by excitement and imagination originating from the mobile lending utilization environment. Banks might be better off by offering the service at lower costs to entice more customers and not focuses on high charges which scare off potential customers. This way banks can increase their revenue sources through increased transactions volume.

Omwansa (2009) established that the loss of a mobile device does not automatically translate to loss of money since a personal identification number is needed to access one’s mobile money account. Mobile banking has proven to be not only convenient but safe and users can carry their E- money and perform withdrawal services at a small fee without inconveniences. In using a mobile payment system, an individual should have the belief in the safety and trust in the providers of the payment system. Users of such systems usually care about the Security and safety of mobile transactions. Safety refers to minimal delays and completeness of a transaction and confidentiality of information on transactions. Such security and privacy issues are maintained through the use of secret codes for personal identification attached to every transaction. The recommendation from the study was that the confidentiality of customer information, transactions, integrity of data and security were the key requirements for conducting any mobile transactions.

Merritt (2011) stated that mobile money has its own risks, which is similar to other forms of payments like; privacy and security, money laundering, user protection, fraud, credit and liquidity. The findings of this study showed that mobile money lowered the risks

associated with cash payment services, which improved transparency in cash flows and enabled risk management by regulating the payment systems. Among the recommendations made by the study was a consideration of several issues that would minimize risks associated with mobile phone payments. Other key players in the industry who are not banking institutions but make mobile payments, like telecom firms', their agents and other vendors may create additional risks. The study found out that there exists unique risks that are posed by telecom firms that may not be discovered or controlled by financial institutions and their regulators because of lack of experience. The many regulations associated with banking and telecom sectors are to be blamed since they have autonomous operations and have limitations associated with joint cooperation that is necessary to effectively oversee mobile money transfers. A need therefore arises to merge the two different sectors to have an effective regulatory environment across all industries conducting mobile money transfer.

Mbogo (2010) applied theory of Technology Acceptance Model (TAM) on his study on the impact of mobile payments on the success and growth of micro-business in Kenya. The TAM model was extended to include other factors capable of predicting success and growth in microbusinesses. The study revealed that acceptance of the mobile money transfer technology and its influencing factors like accessibility, cost, convenience and security were related to perceived use and actual usage by the MSEs to improve their success and hence growth. According to a survey, the Information Economy Report (2007-2008) gave some statistics and empirical evidence on the benefits of ICT on the economic characteristics of a number of nations. In the same survey it was found that the growth in technology lowered money held in pockets the crime rate. In regards to IT

Knowledge, Yuen (2013) stated that it impacted education and income levels, and more men than women were more likely to use online banking systems.

Halili (2014) in her study found that education was a crucial variable that impacted utilization of online banking. The reason given for this was that a good education was closely tied to a well-paying job, which increased the involvement in online banking (Lambrecht & Seim, 2006). In an investigation of the of the success of M-Pesa by Oloo (2013) the findings showed that the technology utilized in mobile money services had risks such as financial fraud, money laundering and operational risks. The Kenya Bankers Association (KBA) raised concerns that Mobile Network Operations (MNOs) gave services similar to those used by financial institutions thereby increasing competition.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section gives a description of the methodology applied to objectively establish the effects of mobile lending on performance among MSEs in Nairobi County, Kenya. It additionally discusses the design, the population selected, data collection criteria and analysis.

3.2 Research Design

Khan (2008) described this as a methodology used by the researcher which will be helpful in providing accurate, valid and objective answers to the study questions. Wanyama and Olweny (2013) noted that, the purpose of a design is to improve the ability of the study to conceptualize an operational plan to utilize several techniques available in completing the research while simultaneously ensuring procedures utilized are sufficient to acquire valid, objective replies to research queries.

Descriptive cross-sectional survey design was used for the study. This type of study aims to discover the what, where and how of a phenomena. It is suitable since it allows the researcher to utilize both quantitative and qualitative data so as to establish how mobile lending impacts performance of MSEs in Nairobi County CBD, Kenya. Descriptive cross sectional design was used by the researcher to obtain facts, make a summary, present and interpret findings to clarify issues.

3.3 Population of the Study

Population is defined as a group of individuals or entities to which the findings of the

sample are to be generalized (Cooper & Schindler, 2008). A target population refers to a elements in which we seek to make deductions about (Cooper & Schindler, 2008). According to records from the Nairobi County Council, there are 1539 MSEs found within the Nairobi’s Central Business District. The study targeted MSEs that have been in operation for more than five years at the time of the study. The target population consisted of MSEs from different sectors including general trade, transport and communication, agriculture, hospitality, professional and technical, education and entertainment and manufacturing. The population distribution that shows classification of MSEs is presented in Table 3.1 below.

Table 3.1: Population Distribution

Classification of SMEs	Population
General Trade	247
Transport and Communications	231
Agriculture	211
Hospitality	205
Professional and Technical	217
Education and Entertainment	207
Manufacturing	221
TOTAL	1539

Source: Nairobi County Council, 2019

3.4 Sampling Design and Sample Size

The study used stratified sampling technique where the population was divided into seven strata depending on the sector the firm is operating in. Simple random sampling methodology was then applied within each stratum to select a sample from the population. Stratified sampling enables the researcher to representatively sample each subgroup in the population hence higher statistical precision. Simple random sampling avoids biased selection and ensures that each object has an equal chance of selection

hence satisfying the statistical regularity principle, which proposes that random selection of a sample implies that it possesses similar attributes as the entire population. Since stratified sampling technique has high statistical precision, it requires a small sample size hence the study took 10% of the target population of 1539 hence obtaining a sample of 155 MSEs as respondents.

Table 3.2: Sample Size

Classification of SMEs	Population	Sample size
General Trade	247	25
Transport and Communications	231	23
Agriculture	211	21
Hospitality	205	21
Professional and Technical	217	22
Education and Entertainment	207	21
Manufacturing	221	22
TOTAL	1539	155

Source: Nairobi County Council, 2019

3.5 Data Collection

Primary data was used in the study. The primary data was obtained using structured questionnaires by the Likert Scale. The respondents targeted were owners and representatives of the MSEs. These were the people involved in managing the entity and broadly understand the affairs of their business.

The researcher administered the questionnaire to one respondent in each enterprise giving a total of 155 respondents. The questionnaire consisted of open-ended and close-ended questions. Close-ended questions were used to collect structured responses to make more tangible recommendations. The study tool was personally administered by the researcher so as to ensure that all the questionnaires were distributed to the respondents and a register was kept to ensure all were returned. The researcher guided the respondents in

filling the questionnaire for ease of clarifying the questions they might find difficult understanding.

3.6 Data Analysis

The primary data collected by the questionnaire was checked, edited and coded. The coded data was then inputted into Statistical Package for Social Sciences (SPSS) and analyzed using descriptive and inferential statistics. Descriptive analysis involving computation of mean, frequency distribution, standard deviation and percentages were carried out to determine frequencies and percentage distributions. Correlations and regression analysis was conducted to draw inferences to the entire population. Simple linear regression model was used in analyzing the quantitative data since it included one dependent variable and several independent variables. This was used to analyze the existence of a relation between one dependent variable and several independent variables. The simple regression model used was represented as:

$$Y = \alpha + \beta_1 X_1 + \varepsilon$$

Where;

Y= Firm performance

α =Constant

β_0 = the model's constant

β_1 = the regression coefficient

X_1 = Mobile lending

ε = error term

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF RESEARCH FINDINGS

4.1 Introduction

This section presents the results from the study. The sections in this chapter include the general information section encompassing the response rate and demographic information. The chapter also outlines the descriptive and inference statistics in relation to the study objectives.

4.2 Response Rate

In survey research, a response rate is the number of responses obtained divided by the number of target respondents. The response rate is also denoted as the completion rate or return rate and it is usually expressed percentage form. Information on the rate of response for this research is displayed in Table 4.3.

Table 4.3: Response Rate

Response Rate	Frequency	Percent
Returned	132	85.2
Unreturned	23	14.8
Total	155	100

Primary Data (2020)

Table 4.1 showcases that 155 questionnaires were issued to owners of SMEs in Nairobi County CBD or their representatives. The findings exhibit that out of the 155 issued questionnaires to the target respondents, only 132 responses were made with adequate information and returned which translated to an overall 85.2% study response rate. This is in line with Neil (2009), who stated that a study with 70% response rate and above is sufficient for analysis and making conclusions.

4.3 General Information

This section presents the findings on the descriptive statistics for the demographic profiles of all the respondents and the firm's background information.

4.3.1 Gender

The target respondents were requested to specify their gender. Results demonstrate that the proportion of respondents who were male was 52.3% while the rest 47.7% were female. This depicts that the SMEs uphold gender diversity as there is no great disparity between the number of male and female among the target respondents. The results are as shown in Table 4.4

Table 4.4: Gender

Gender	Frequency	Percentage
Male	69	52.3%
Female	63	47.7%
Total	132	100%

Primary Data (2020)

4.3.2 Position in the Business

The study additional needed to ascertain the job positions the respondents held. Table 4.5 below tabulates the study results.

Table 4.5: Position in the Business

Designation	Frequency	Percent
Business Owner	78	59.1
Manager	54	40.9
Total	132	100.0

Primary Data (2020)

It was noted that most (59.1%) of the respondents were the business owners of the SMEs in while 40.9% were the business managers. These results show that the researcher

sought information from respondents who were in a position to apprehend how mobile lending influences performance of SMEs in Nairobi CBD.

4.3.3 Type of Ownership

The respondents were asked the type of ownership of their respective firms, from the results, sole proprietors were the majority, constituting 54.2% of the responses. Companies constituted 34.1% while the rest (11.7%) were partnerships as shown in the Table 4.6

Table 4.6: Type of Ownership

Ownership	Frequency	Percentage
Sole Proprietor	72	54.2%
Partnership	15	11.7%
Company	45	34.1
Total	132	100%
Primary Data (2020)		

4.3.4 Number of Employees

The study also needed to know the size of the SMEs in Nairobi CBD by virtue of the number of employees. Table 4.7 shows the results.

Table 4.7: Work Experience with Current Employer

Employees	Frequency	Percentage
1-5	81	61.4%
6-10	32	24.2%
11-15	11	8.3
Over 16	8	6.1%
Total	132	100%
Primary Data (2020)		

The results indicated that 61.4% had between 1 and 5 employees, 24.2% had 6 to 10 employees, 8.3% had 11-15 employees and 6.1% had over 16 employees. This goes to

show that majority of SMEs in Nairobi CBD are micro as they have less than 10 employees.

4.3.5 Number of Branches

The researcher was also interested in establishing the number of branches that each SME had. Table 4.8 gives an illustration of the results. The study established that all the SMEs operating in Nairobi CBD had less than 5 branches. This can be attributed to lack of adequate capital to expand since most of the SMEs in CBD relied on the owners' fund. 78% had only one branch while the rest (22%) had between 2 and 5 branches.

Table 4.8: Number of Branches

Branches	Frequency	Percentage
1	103	78%
2-5	29	22%
Total	132	100%

Primary Data (2020)

4.4 Descriptive Statistics

The subsection describes the descriptive findings for each of the variables under study, presented in terms of percentages, means and standard deviations.

4.4.1 Mobile Lending Apps in Use

The respondents were further asked to specify the financial mobile apps they were using. Table 4.9 presents the findings. It was established that most (27.7%) of the respondents were using Mshwari followed by 19.4% who were using KCB-M-Pesa. Further, 16.1% of the respondents were using Tala while 14.4% were using Branch. Another 9.1% were also using Eazzy Kopa. These results are an indication that SMEs in Nairobi CBD greatly rely on mobile credit.

Table 4.9: Descriptive Statistics for Mobile Financial Apps

Mobile Financial Apps	Frequency	Percent
KCB-M-Pesa	77	19.4
Eazzy Kopa	36	9.1
Tala	64	16.1
Branch	57	14.4
M-Shwari	110	27.7
Micro mobile	28	7.1
Mjiajiri	25	6.2
Total	397	100

Primary Data (2020)

4.4.2 Mobile Lending

The mean and standard deviation for the specific attributes of mobile lending are as presented in Table 4.10. Results demonstrate that the SMEs in Nairobi CBD used mobile loans to a great extent. This is supported by the fact that on a five-point likert scale, the mean scores for attributes related to mobile lending was greater than 3.

The respondents agreed that through use of mobile lending apps, they able to obtain credit from financial institutions, mobile lending apps have enabled them gain enough finances to grow my business, through mobile lending apps, they are able to obtain mobile overdrafts to cater for operating expenses and that ability to access mobile lending apps enables them to have a quick response to customers' needs. Further, mobile lending apps have enhanced the efficiency of doing business. The statement that through mobile lending Apps, they are able to obtain mobile credit from financial institutions had the highest mean implying greatest agreement while the statement that mobile loans enables them to quickly respond to customer needs had the least agreement.

Table 4.10: Descriptive Statistics for Mobile Lending

Statement	N	Mean	Std. Dev
Through use of mobile lending apps, am able to obtain credit from financial institutions	132	4.08	0.63
Mobile lending apps have enabled me gain enough finances to grow my business	132	4.04	0.88
Through mobile lending apps, am able to obtain mobile overdrafts to cater for my operating expenses	132	3.65	0.96
Access to mobile lending apps enables my quick response to customers' needs	132	3.60	1.11
Mobile lending apps have enhanced the efficiency of doing business	132	3.94	1.02
Average		3.86	0.92
Primary Data (2020)			

4.4.3 Firm Performance

The mean and standard deviation for the specific attributes of firm performance are as presented in Table 4.11. Results demonstrate that firm performance among SMEs in Nairobi CBD have improved to a great extent. This is supported by the fact that on a five-point likert scale, the mean scores for attributes related to firm performance was greater than 3.

Table 4.11: Descriptive Statistics for Firm Performance

Statement	N	Mean	Std. Dev
Sales	132	3.43	1.35
Cost reduction	132	3.23	1.47
Customer satisfaction	132	3.25	1.38
Profitability	132	4.00	0.55
Number of customers	132	3.91	0.67
Employee retention	132	3.82	0.80
Average		3.61	1.04
Primary Data (2020)			

The descriptive statistics regarding firm performance reveal that since the introduction of mobile lending, sales revenue have increased, costs have reduced while customer

satisfaction, profitability, number of customers and employee retention have all improved.

4.5 Inferential Statistics

The inferential statistics for the study are presented in this section. The inferential statistics were Pearson correlations and simple regression. Pearson correlations was used to establish the relation between mobile lending and performance of SMEs in Nairobi County, CBD.

4.5.1 Correlation Analysis

The correlation analysis aided in demonstrating the association between the dependent and independent variable. This entailed the r coefficient and whether the association is positive or negative. This is as illustrated in Table 4.12.

Table 4.12: Correlation Results

		Mobile Lending	Performance
Mobile Lending	Pearson Correlation	1	.520**
	Sig. (2-tailed)		.000
Performance	Pearson Correlation	.520**	1
	Sig. (2-tailed)	.000	

** . Correlation is significant at the 0.01 level (2-tailed).
b. Listwise N=132

Primary Data (2020)

The correlation results demonstrate a strong, positive and significant association between mobile lending and performance as reflected by a Pearson correlation coefficient of 0.520 and a P-value of 0.000. This is an indicator that increased mobile lending to SMEs translates to improved performance.

4.5.2 Regression Analysis

The regression analysis encompasses the model fitness, the Analysis of Variance (ANOVA) and the regression coefficients. This is as demonstrated in below.

Table 4.13: Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.520 ^a	.271	.265	.3960561

a. Predictors: (Constant), Mobile Lending

Primary Data (2020)

Mobile lending is considered satisfactory in explaining performance of SMEs in Nairobi County CBD as presented in Table 4.13. This is as reflected by an R square of 0.271. This thus implies that mobile lending explain 27.1% of the variations in performance with the difference being explained by other factors beyond the study. The other implication is that the model linking the variables relationships is satisfactory. The R value of 0.520 implies that a strong relation exists between the predictor variable (mobile lending) and firm performance.

Table 4.14: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.568	1	7.568	48.245	.000 ^b
	Residual	20.392	130	.157		
	Total	27.960	131			

a. Dependent Variable: Performance

b. Predictors: (Constant), Mobile Lending

Primary Data (2020)

Results in Table 4.14 confirm the significance of the model and this is shown by F statistic of 48.245 and a p value of 0.000. This shows that mobile lending is a good

predictor of firm performance. The regression analysis helped to demonstrate the magnitude of influence mobile lending has on firm performance.

Table 4.15: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.783	.306		5.832	.000
1	Mobile Lending	.618	.089	.520	6.946	.000

a. Dependent Variable: Performance

Primary Data (2020)

Results demonstrated a positively significant relationship between mobile lending and firm performance (β 0.618, P 0.000). This illustrate that increase in mobile lending by one unit would cause an improvement on firm performance by 0.618 units.

The resulting regression model is as follows:

$$Y = 1.783 + 0.618X_1 + \epsilon$$

Where

Y = Firm performance,

X_1 – Mobile lending

ϵ – Error term

4.6 Discussion of Findings

This study sought to establish the extent of mobile lending among SMEs in Nairobi County, CBD and to determine the influence of mobile lending on firm performance among these firms. Primary data was collected using questionnaires and analyzed through descriptive, correlation and regression analysis. The findings indicate that mobile lending has been adopted by SMEs in Nairobi CBD to great extent and that this has significantly enhanced firm performance among these firms.

The findings of this study concurs with those of Daniel (2015) who studied the link between mobile lending and financial inclusion in Kenya. In particular, the study sought to determine how financial innovations impact profitability of firms in the banking sector. A descriptive design was used in which secondary data from 2004 to 2016 was utilized. A multiple regression analysis was used in establishing the existence of a relation between financial inclusion and mobile lending. Findings showed that there existed a direct correlation between the variables.

The findings are also in line with Ishengoma (2011) who studied mobile lending through mobile system coverage for financial inclusion in Tanzania's coastal district of Kibaha. The study targeted individuals who had registered and subscribed to mobile services and agents that offered mobile banking system in which close to 20.4 million Tanzanians have registered with service provider companies. The results showed the existence of a positive substantial relation between mobile banking and financial inclusion.

This study was based on two theories namely the technology acceptance model and diffusion of innovation theory. The findings of the study are in support of the theories.

This theory has influenced technology acceptance. TAM was utilized to discover technology impacts the performance of Kenya's MSEs and how its accessibility impacts the utilization of mobile credit among Kenya's MSEs and it was revealed that indeed the SMEs have adopted mobile lending which has led to improved performance. Diffusion of innovation theory communicates how technologies are adopted in organizations and in the current study it explained how mobile lending is adopted and the extent of adoption.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary, conclusion, and recommendations. The summary, conclusion, recommendations for improvements for the study are presented in line with the study research objectives. Recommendations for further research and limitations of the study are also presented in this chapter.

5.2 Discussion of Findings

The research aimed at finding out the effect of mobile lending on firm performance among SMEs in Nairobi County, CBD. The study also sought to establish the extent of mobile lending among these firms. Descriptive research design was adopted in this study. The study targeted 155 respondents one from each of the 155 SMEs in Nairobi County, CBD. Data was obtained from 132 giving a response rate of 85.2% which was considered adequate for this study. Respondents were given questionnaires to facilitate collection of primary data. Types of statistics used were descriptive and inferential. The descriptive analysis included mean and standard deviation. Inferential statistics included use of Pearson's correlation and regression analysis.

This section provides the summary of the findings for each of the research objectives. The study also established the demographic characteristics of the respondents. The results showed that the gender distribution was close to 1:1. This reveals that there is no gender discrimination as far as entrepreneurship is concerned among SMEs in Nairobi CBD. The study also confirmed that majority of the SMEs have 10 or less employees and that most

of them have only one branch. This might be explained by lack of financial resources to operate in large scale.

The study findings reveal that mobile lending influenced firm performance positively. The respondents agreed that through use of mobile lending apps, they able to obtain credit from financial institutions, mobile lending apps have enabled them gain enough finances to grow my business, through mobile lending apps, they are able to obtain mobile overdrafts to cater for operating expenses and that ability to access mobile lending apps enables them to have a quick response to customers' needs. Further, mobile lending apps have enhanced the efficiency of doing business. The statement that through mobile lending Apps, they are able to obtain mobile credit from financial institutions had the highest mean implying greatest agreement while the statement that mobile loans enables them to quickly respond to customer needs had the least agreement. The descriptive statistics regarding firm performance reveal that since the introduction of mobile lending, sales revenue have increased, costs have reduced while customer satisfaction, profitability, number of customers and employee retention have all improved.

5.3 Conclusions

This section presents the conclusions drawn from the research findings for each of the research objectives. The study found that mobile loans have been adopted to a great extent by SMEs in Nairobi County CBD. Most of the SMEs have more than one mobile lending apps in their phones and they obtain loans from several of them. The most used mobile lending App is Mshwari followed closely by KCB MPesa. Tala and Branch are also widely used. Other mobile apps in use include Eazzy kopa, Mjiajiri and micromobile.

The study also concluded that mobile lending influenced firm performance positively. This was reflected by the regression and correlation results which support the results as there existed a positive substantial relation between mobile lending and firm performance. The descriptive statistics regarding firm performance reveal that since the introduction of mobile lending, sales revenue have increased, costs have reduced while customer satisfaction, profitability, number of customers and employee retention have all improved.

5.4 Recommendations for Policy and Practice

The study revealed that mobile lending influenced firm performance positively. The study thus recommends that SMEs in Nairobi CBD should be more vibrant in adopting mobile loans available as this would boost their firm performance and thereby sharpen their competitive edge. To achieve this, the study also recommends the need for policymakers and to come up with policies that make it easy for SMEs in Nairobi CBD to obtain mobile credit from providers.

It was the findings of this study that mobile credit influences performance of SMEs in Nairobi CBD in a positive and significant manner. It is thereof recommendation of the study that more firms should continue offering FinTech solutions to SMEs as this will promote their performance with respect customer satisfaction, employee retention, sales, profitability, cost reduction and market share..

5.5 Limitations of the Study

Firstly, this study relied on primary data collected with an aid of a questionnaire, some target participants failed to fill the questionnaires. Others filled certain options and skip others thus affecting the reliability of the results. The researcher had to make regular

follow up both on mail and phone calls. Further, some of the respondents feared of their confidentiality while answering the questions. However, the researcher assured them that the information will be used for academic purposes only.

The focus was on some factors that are hypothesized to influence firm performance among SMEs in Nairobi CBD. Specifically, the study focused on mobile lending. In reality however, there are other variables that are likely to influence firm performance among these firms some which are internal such as technology adoption, knowledge management, growth strategies, process improvements and outsourcing while others are external such as exchange rates, inflation and political interference.

To complete the analysis of the data, simple linear regression model was used. Because of the limitations involved when using the model like erroneous and misleading results resulting from a change in variable such as firm performance, it would be impossible for the researcher to generalize the findings with accuracy. In case of an addition of data to the regression model, the model may not perform as per the previous.

5.6 Suggestions for Further Research

Additional studies should focus on gaps discovered in this study. This study focused on effect of mobile lending on firm performance among SMEs in Nairobi County, CBD. Therefore, a similar study can be done in other SMEs in Kenya or other firms in Kenya for purposes of comparisons.

This study did not exhaust all the factors influencing firm performance among SMEs in Nairobi County, CBD and therefore gives a recommendation that future studies be based on other variables such as growth strategies, knowledge management, innovations,

internal controls, outsourcing, technology adoption among other variables. By determining how each of the variables affects firm performance, the policy makers will be able to implement an appropriate mechanism to enhance firm performance.

Finally, this study was based on a simple linear regression model, which has its own limitations like errors and misleading results resulting from a change in variable. Future researchers should focus on models like the Vector Error Correction Model (VECM) in exploring the various relations between mobile lending and firm performance.

REFERENCES

- Burns, N. & Burns, S. (2008). *The Practice of Nursing Research: Conduct, Critique and Utilization*: St Louis, Elsevier Saunders
- Carton R.B. & Hofer C.W. (2006). *Measuring Organizational Performance: Metrics for Entrepreneurship and Strategic Management*. Edward Elgar Publishing Limited.
- Chang, Tsui, G. & Hsu K., (2013). A Conceptual Model of performance measurement for non-profit organizations, *Management Decision*, 41, (7), 635-642
- Chesbrough, H. (2010). *Open Services Innovation*. London: John Wiley & Sons
- Cooper, R., & Schindler, S. (2008). *Business Research Methods*. New York: Mc Grawhill
- Government of Kenya. (2009). *Economic recovery strategy for wealth and employment creation*. Nairobi: Government Printer
- GOK (2016). *Kenyan Government Successful Information Technology Projects*
- Kantor, P. (2001). *Innovation and Business Performance*. Chicago: Chicago International Publishers.
- Kenya Bureau of Statistics. (2016). *Economic Survey Report*. Nairobi.
- Khan, J. A. (2008). *Research Methodology*. New Delhi. APH Publishing Corporation
- Kigen, K. P. (2010). *The impact of mobile banking on transaction costs of microfinance institutions*, Unpublished MBA Thesis, University of Nairobi
- Kingoo, H. (2011). *The relationship between electronic banking and financial performance of commercial banks in Kenya*. Unpublished MBA Thesis, University of Nairobi
- Mohamed, H. (2018). *Blockchain, Fintech, and Islamic Finance: Building the Future in the New Islamic Digital Economy*. Walter de Gruyter GmbH & Co KG.
- Mutua R. W. (2013). *Effects of mobile banking on the financial Performance of commercial banks in Kenya*, Unpublished MBA Thesis, University of Nairobi.
- Ngugi, J. K., Gakure, R.W., & Kahiri, J. (2013). The influence of intellectual capital on growth of enterprises in Kenya. *International Journal of Arts and Entrepreneurship*, 1 (3), 1-2.
- Njenga, A. (2009). Mobile phone banking: Usage experiences in Kenya. *Journal of Management*, 36(2), 214-225
- Nyang.A., Momanyi, D., Machani W., & Moenga, k. O. (2013). Effect of electronic mobile money transfer on financial liquidity and growth of micro and small enterprises: a case of Nairobi city, Kenya. *International Journal of Research in Computer Application & Management*, 3(5), 36-45

- Olweny, T., & Shipho, T.M (2011). Effects of banking sectoral factors on the profitability of commercial banks in Kenya, *Economic and Finance Review*, 1, 5, 1-30.
- Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: towards methodological best practice. *Journal of Management* 35(3), 718- 804.
- Söderbom, M. (2001). The determinants of survival among African manufacturing firms. *Development and Cultural Change*, 54, 3, 533-555
- Suri, T. (2017). Mobile money. *Annual Review of Economics*, 9, 497-520.
- Tchouassi, G. (2012). Can Mobile Phones Really Work to Extend Banking Services to the Unbanked? Empirical Lessons from Selected Sub-Saharan Africa Countries, *International Journal of Development Societies*, 1, (2), 2012, 70-81
- Valmohammadi, C. & Servati, A. (2011). Performance measurement system implementation using balanced scorecard and statistical methods. *International Journal of Productivity and Performance Management*, 60(5), 493-511.
- Wanyama, D.W. &Olweny T. (2013). Effects of Corporate Governance on Financial Performance of Listed Insurance Firms in Kenya. *Public Policy and Administration Research*, 3(4), 96-116
- Wanyonyi, P. W., & Bwisa, H. M. (2013). Influence of Mobile Money Transfer Services on the Performance of Micro Enterprises in Kitale Municipality. *International Journal of Academic Research in Business & Social Sciences*, 3(5), 121-139

APPENDIX

Appendix 1: Research Questionnaire

Effect of mobile lending on performance of micro and small enterprises in Nairobi County, Kenya

SECTION A: GENERAL INFORMATION

1) Name (Optional)

.....

2) Gender

Male []

Female []

3) Position held in the business (tick appropriately)

Owner []

Manager []

4) Type of ownership

Sole []

Partnership []

Company []

5) Number of employee

1-5 []

6-10 []

11-15 []

>16 []

6) Number of branches

1 []

2-5 []

>6 []

7) What is the source of capital?

a) Own Funds () b) Banks () c) Mobile lending apps () d) Other

SECTION B: MOBILE LENDING

Which of the following mobile lending apps do you use?

Branch [] Eazzy Kopa [] KCB-M-Pesa [] Micro mobile [] Mjijiri [] Tala []

M-Shwari [] others specify.....

In the following section, use the following scale to show your level of agreement with the statements there in Rating Scale

1=Strongly disagree 2=Disagree 3= Uncertain 4 =Agree 5=Strongly Agree

Component	1	2	3	4	5
Through use of mobile lending apps, am able to obtain credit from financial institutions					
Mobile lending apps have enabled me gain enough finances to grow my business					
Through mobile lending apps, am able to obtain mobile overdrafts to cater for my operating expenses					
Access to mobile lending apps enables my quick response to customers’ needs					
Mobile lending apps have enhanced the efficiency of doing business					

SECTION C: FIRM PERFORMANCE

In your own opinion how would you rate the growth indicators below after adopting mobile credit in the firm?

Performance Indicator	Greatly Improved	Improved	Constant	Reduced	Greatly Reduced
	5	4	3	2	1
Sales					
Cost reduction					
Customer satisfaction					
Profitability					
Number of customers					
Employee retention					

Thank you for taking your time to fill this questionnaire