EFFECT OF MOBILE LENDING ON THE FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN FINANCE, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

DECEMBER, 2017

DECLARATION

I declare that this research project is my own work and it has not been submitted for any degree or examination in any other university.

Signature: …….. Date:……

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D63/87344/2016

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

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DEDICATION

This research project is dedicated to my guardian Munyangeyo Samson, sisters, brother, lovely cousins and workmates.

ACKNOWLEDGEMENT

I wish to acknowledge almighty God for the gift of life and chance to come this far. I also wish to express my appreciation to my supervisor Dr. Duncan Ochieng Elly for his guidance throughout the whole research writing process, also the contribution and encouragements made by my family members especially for their caring support and all those who made this research project a success

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ABSTRACT

Mobile lending is a service provided by financial institutions in cooperation with mobile phone operators. It allows customers with busy lives to conveniently do their banking using their phones anytime. It is about getting banking services to the unbanked, those who do not have bank access or bank accounts, and those who are at the bottom of the economic pyramid often living in remote areas. The study sought to determine the effect of mobile lending on financial performance of commercial banks in Kenya. Cross sectional descriptive survey was employed in this case. This informed who how and what about the mobile banking in commercial banks in Kenya and as a one –time event. The study adopted a census method where all the commercial banks practicing mobile lending in Kenya were studied. The study made use of secondary data from the Audited Financial Statements of the banks, those deposited at the Nairobi Securities Exchange and financial performance data from CBK annual banking survey reports. The data collected was cleaned, coded and systematically organized in a manner that facilities analysis using the Statistical Package for Social Sciences (SPSS). Data was analyzed on the basis of the mean and the F test statistic was computed at 5% significance level. To test for the strength of the model and the effect of mobile lending on the financial performance of commercial banks in Kenya, the study conducted an Analysis of Variance (ANOVA). From the regression model, the study found out that there were mobile lending variables influencing the financial performance of commercial banks in Kenya, which are; interest rates, capital adequacy and liquidity. They influenced it positively. The study found out that the 5 independent variables that were studied which included Total Mobile Loan Applicants, Total amount of mobile loans, interest rates, capital adequacy and liquidity explain 47.4% of financial performance of commercial banks in Kenya as represented by adjusted R^2. The study therefore concludes that mobile lending positively and significantly affects the financial performance of commercial banks in Kenya. The study recommends that policy makers consider mobile lending in their formulation of policies because of the technological developments and the expected switch from physical branch networks to technologically supported banking services. The study further recommends that commercial banks keep adopting and using mobile lending in their operations because the number of people with access to a mobile handset is increasing everyday. This study recommends that, a study be conducted to assess the effect of mobile lending on the economic growth. This will be interesting to see whether a relationship exists between financial performance and economic growth.

ABBREVIATIONS AND ACRONYMS

ANOVA	-	Analysis of Variance
EPS	-	Earnings Per Share
NSE	-	Nairobi Stock Exchange
ROA	-	Return on Assets
ROE	-	Return on Equity
SMS	-	Short Message Service
SPSS	-	Statistical Package for Social Sciences

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Mueller (1995) defined mobile lending as the ability to use your smartphone or tablet to apply for, gain approval on and check status of a loan. In this world of digital era, the mobile phones are key to changing trends of conducting the business. By the use of the mobile phone application, customers are able to apply for the loans, this has greatly reduced the transaction costs involved in the transfer of money among the commercial banks involved with their customers especially in Kenya. According to Wood (1988), financial performance is the general measure of the financial health of a company over a certain period of time. Financial performance is key because it will act as a management tool. It is through the financial performance that we are able to gauge the company whether it is operating efficiently or not.

Mobile lending is based on the theory of bank focused theory Lyman (2006) which concluded that commercial banks can derive more benefits from adopting technologies such as mobile lending in the provision of services to their customers, innovation diffusion theory Mitchell(1990) which asserts that mobile lending is an innovation which came as a need to continue the provision of the financial services, agency theory Mitnick (1986) which proposed that mobile lending is planned and executed by managers who are motivated on maximizing their own interest and financial intermediary theory Medoff (2007) which concluded that mobile lending costs as a link between surplus spending unit and deficit spending unit.

In the recent times, mobile lending has acquired significant concern among the commercial banks operating in Kenya because of its importance. Commercial banks profitably have greatly improved after the introduction of mobile lending. Almost half of the low income earners in the Kenya's population are using this platform of mobile lending. It is expected in the coming years even bigger business will embrace this mobile lending as opposed to the traditional lending which is tedious with a lot of formalities required (Shirley, 2006).

1.1.1 Mobile Lending

Ross (1998) defines mobile lending as the process of using a mobile phone to apply for and get an approval for a loan by a financial institution by a customer. The use of a mobile phone basically acts as a channel to conduct transactions. Mobile lending is measured by the total amount of mobile loans, the total mobile loan applicants interest rate as measured by the average lending rate, transaction costs as measured by the average cost of transactions and liquidity as measured by the total mobile loans to total assets.

Many commercial banks in Kenya have adopted the mobile lending model and the aim of this is to better the delivery of the services minimizing the costs of operations in terms of paper works and the time which used to be wasted by clients, traveling in order to visit their bankers. The mobile lending is one significant innovation that is continually becoming popular among the commercial banks in Kenya. The developing counties have experienced rapid spread of mobile phones in the recent times Lyman (2006).

According to Adedoyin (1992), lending is a critical component among the commercial banks; the management needs adequate skills to manage this vital component since it determines the success of the banks. The core activities of the banks are to allow room for investment activities as well as the lending activities to its clients in times of financial difficulties. By offering the financial solutions to the business people and the state, it acts as a boost to economic growth in various sectors of the economy.

1.1.2 Financial Performance

Any business entity is in the world of business to prosper to greater heights. Prosperity of any entity normally relates to its performance in monetary terms. Business entities can gauge the survival of the businesses by analyzing their overall output in monetary terms to determine how they have effectively and efficiently employed their resources to maximize the returns for the shareholders. For the business entities to know their worth in terms of growth, they can employ either modern performance measures or traditional measures to measure the performance by employing comparative methodologies or historical measures to ensure the returns for the stakeholders are maximized. Therefore, the financial performance can be assessed through the efficiency, effectiveness and adaptability (Elly, 2012).

Financial performance tries to measure how any business organization has employed its available resources with an aim of generating revenues. Business organization's can improve the financial performance by ensuring they are liquid all the time. This will ensure all the obligations which are due are met within the appropriate time. This will

ensure the objectives of commercial banks are met since financial performance normally acts as the important indicator of the overall financial health of commercial banks (Mueller, 1995). The financial performance measures the companies' policies in operations in monetary terms. These results are reflected in the firm's profitability ratios, liquidity ratios and gearing measures. Majority of business entities have always used profit as the basis for business prosperity. However, the real determinant of business growth how efficiently the business entities have been in the employment of the capital in the business. Due to the shortcomings in the traditional approaches, the experts in the finance field devised the profitability ratios to measure the financial performance (Wood,1998).

1.1.3 Mobile Lending and Financial Performance

Mobile lending is aimed at increasing the customer base which can in turn increase the profitability of the commercial banks. The mobile application has made it easy for the commercial banks to transact especially lending loans to its customer throughout the county regardless of the distance. Stiff competition among the commercial banks has forced the commercial banks to invest more in mobile lending to remain competitive in this competitive environment (Ross, 1998). According to bank focused theory, Lyman (2006), Commercial Banks can derive more benefits from adopting technologies such as mobile lending in the provision of services to their customers.

According to this theory, mobile lending has more benefits which translates to improved financial performance of banks. Mobile lending has enhanced increased transactions by the commercial banks. this in turn leads to improved financial performance. Increase of transactions acts as a diversifying factor for the risks involved.

Mobile lending targets millions of customers of lower class who uses this platform as a savings and credit services this eventually benefits the commercial banks in terms of profitability from the improved financial performance. The rapid growth of mobile lending has ensured the access of formal financial services to the poor people who constitute a greater percentage of the population hence increased financial performance by reducing the holding cost to income ratio (Mitchell, 1990).

1.1.4 Commercial Banks in Kenya

Kenya has approximately 43 commercial banks, but only Equity Bank, Commercial Bank of Kenya, Co-operative Bank and Commercial Bank of Africa have adopted fully mobile lending. The going is really tough for commercial banks, the release of the financially results for the first quarter of 2017 is evident that all commercial banks are struggling with the business of lending. The income on the interest and loan advances greatly declined for the top 10 largest banks in Kenya. Loan applicants grew but were mostly for small loans and the small loans were mostly offered through the mobile phones. The introduction of mobile lending has really shaped the banking sector ranging from savings and lending. Mobile lending has been on the rise in recent times, usually mobile lending is undertaken in order to improve the financial performance of the firms involved.

Many commercial banks in Kenya have posted impressive results courtesy of the mobile lending platform. Technology is now considered as a real driver of financial services in this technological changing environment. Since the launch of the KCB- MPESA, the KCB M -PESA loans are on the rise. In 1 year, the KCB- MPESA loans approximately stand at 7billion shillings. This has been necessitated by the M–PESA super-agency relationship KCB has already established throughout the country which acts as a good avenue for the transactions. Monthly transactions have constantly increased, an average of 3 loans is processed in this KCB-MPESA platform which is also key to the profitability of the commercial bank which is the largest bank in Kenya by assets. Mobile lending has really contributed to the improved financial performance of Kenya Commercial Bank.

Commercial banks of Africa has really reaped from the launch of M-Shwari which is a mobile application which allows customers to save and apply for loans. Since its launch in 2013, the amount of loans disbursed through this platform has really increased. By the end of 2014 the M-Shwari platform had disbursed loans amounting to more than 21million to more than 3 million borrowers, this has necessitated the opening of new savings account and the disbursement of new loans.

The cooperative Bank of Kenya offers a variety of mobile lending services through its MCo-op cash platform. One of such product is MCo-op cash business loan which allows customers to apply for loans of upto 200,000 which is on the rise. The non-funded income averagely stands at 4million which is majorly through mobile loan. Equitel has

continued to positively impact on the financial performance of equity bank, through this platform, customers are able to access instant loans anywhere, anytime straight from their mobile phones with the interest rates of 1.21% per month and is conveniently repaid through their mobile phones. According to the Equity Bank holding group, Equitel mobile loans grew 5times in the year 2016 to hit 40billion from 8billion in 2015. The Equitel mobile users also rose to 3M up from 1.5M over the same period of time. The total number of transactions also greatly increased in 2015. The number of transactions processed through the Equitel platform stood at 230.4 million. In 2016 the number of transactions processed rose to 95.3million which is a 13% rise.

1.2 Research Problem

The banking sector in the world is continually adopting mobile lending as the means of allowing their clients to perform the banking services conveniently from their mobile phones. Mobile lending is convenient since it allows customers with busy schedules to perform any transactions anytime from any place. The clients will not need to go into the banking halls for the banking services, they are able to apply for, gain approval on and check status of a loan. Mobile lending has really revolutionized the banking industry, clients in the limited geographical areas no longer worry since they are able to access the banking services conveniently, the high transactions processing costs is a thing of the past because of the little charge on the transactions by the mobile phones (Mitchell, 1990).

The mobile lending in Kenya is continually transforming and shaping the banking industry. The banking industry in Kenya has put more emphasis on mobile lending as a strategic tool in achieving the corporate objective of profit maximization and cost minimization. The banking bureaucratic process was a disqualifying factor especially for the poor rural people to open the accounts with the banks. The introduction of mobile lending services which include M-shwari of the commercial bank of Africa, KCB-MPESA of Kenya Commercial Bank, M-Co-op cash of cooperative bank of Kenya and Equitel of the Equity Bank will eliminate geographical barriers to the customers and guarantee convenience in carrying out transactions (CBK, 2010).

Several studies have been done on mobile lending, Agboola (2006) conducted a study to determine the effect of information technology on the financial performance of banks in Ghana between 2001 and 2005. From his findings, there was no significant effect of the information technology on the financial performance. The study however used a shorter time period of study. A study by Mohamed (2013) concluded that financial performance of commercial banks in India greatly improved after the introduction of mobile banking however the criteria for commercial banks selection was not elaborate.

Omondi (2015) investigated the effect of mobile banking on the financial performance of commercial banks listed at the NSE in Kenya between 2010 and 2014. From his findings, the commercial banks underperformed after the adoption of mobile banking. The study however never employed any model in the analysis. Many study findings have confirmed mixed outcomes on the financial performance after the adoption of mobile lending.

The study by Agboola (2006) found no significant effect of mobile banking, a study by Mohamed (2013) concluded that mobile banking improved the financial performance of banks. However, the study by Omondi (2015) concluded that commercial banks underperformed after adoption of mobile banking. Therefore, the current study was to answer this research question: what is the effect of mobile lending on the financial performance of commercial banks in Kenya?

1.3 Research Objective

The main objective of this research was to investigate the effect of mobile lending on the financial performance of commercial banks in Kenya.

1.3.1 Specific Objectives

(i) To investigate mobile lending approaches.

(ii) To determine the relationship between mobile banking and financial performance.

1.4 Value of the Study

The study is significant to the scholars to conduct academic research. It acts as a source of empirical literature and acts as aground in conducting further studies in mobile lending.

The findings of this research is significant as a strategic tool for the managers to make decisions on mobile banking. From the analysis of the profits, they will be able to decide to adopt mobile lending fully or stop the implementation by analysis of the costs and the benefits associated with mobile lending.

The study is of importance to the telecommunication service providers companies Safaricom, and Airtel on the decision making on the continued partnership with commercial banks. The telecommunication service providers will evaluate the financial gains from the partnerships with the commercial banks. If there are little financial gains associated with the partnerships, the companies will think of terminating the contracts.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter entails the literature on mobile lending, the highlights on the theoretical review, the determinants of financial performance, empirical literature, conceptual framework and ends with the summary of the literature review.

2.2 Theoretical Review

Various theories on mobile lending have been proposed and they include; agency problems theory Mitnick (1986), bank focused theory Layman (2006),innovation diffusion theory Mitchell (1990) and financial intermediation theory Medoff (2001).

2.2.1 Agency Theory

Mobile lending is planned and executed by managers who are motivated on maximizing their own interest (Mitnick,1986). Sometimes, management does not really care about the welfare of the shareholders which is wealth maximization. Instead, their own interest by awarding themselves huge salaries than what shareholders would consider to be justified, they might not work industriously to maximize shareholders wealth if they feel that they will not fairly share in the benefits of their labour.

One of the common strategy by the shareholders is to agree on the deciding rules for managers to implement the business policies in the business entities. It is the responsibility of the shareholders to monitor the activities of the managers to ensure their actions are for the benefit of the shareholders. Ross, (1985) criticized the agency theory

by arguing that the agent can choose, an action which might negatively affect the business in the long run mobile lending has greatly increased among the commercial banks in Kenya. This is done by managers who want to cater for their own interest. Managers sometimes work to gain personal objectives. Ross, (1985) criticized the agency problems by arguing that the agent can choose an action which might negatively affect the business in the long run. Mobile lending has greatly increased, this is done by managers who want to cater for their own interest.

2.2.2Bank Focused Theory

According to Lyman (2006), commercial banks can derive more benefits from adopting technologies such as mobile lending in the provision of services to their customers. Mobile lending is anytime banking since customers are able to transact anytime unlike the traditional normal banking procedures where customers must avail themselves into the banking halls or through the agency banking which is a waste of time. There is easy access of the services, customers are able to access the financial records anytime anywhere and also perform transactions.

According to Gurley (2008), although the bank focused theory is more advantageous to the Commercial banks concerned, it has its limitations for example the security of the transactions are exposed to hacking which poses a greater security threat to the financial transactions involved. Bank focused theory is relevant to the mobile lending since it brings out the benefits accrued from the adoption of technologies.

2.2.3 Innovation Diffusion Theory

New inventions like mobile lending and internet is adapted and becomes successful in the conducting of the business. Innovation involves deliberate application of information aimed at the generation of unique ideas Mitchell (1990). In Kenya, mobile lending is an innovation which came as a need to continue the provision of financial services like lending through the mobile application. New technology is key to innovation and is influenced by its usefulness, compatibility, complexity and observability. This new technology has increased the number of transactions undertaken by the mobile platform. Innovation is useful because it speeds up the work by ensuring maximum number of transactions are achieved. Commercial banks in Kenya which have adopted mobile lending have posted increased volumes of transactions.

According to the commercial bank of Africa, the amount of loans disbursed through the M-shwari platform hit 21 million by the end of 2014. For mobile lending to be successful, transactions should be compatible. Compatibility is the extent to which things are able to work together without any problem. In mobile lending, setting, customers should be able to transact without any difficulties through the mobile platforms. Complexity on the other relates to the energy or effort required to comprehend the technological changes innovation diffusion theory brings out the need for commercial banks to adopt new inventions to conduct the businesses to improve the financial performance.

2.2.4 Financial Intermediation Theory

This theory asserts that intermediaries are introduced to minimize the costs of transactions costs in mobile lending Medoff (2002). Financial intermediaries are institutions and individual which acts as the middleman in the business financial transactions. They act as institutions which offers the channel for the transfer of funds between the savers and the investors .A financial intermediary writes a separate contract with the surplus spending unit and deficit spending unit, providing each some economic value.

Financial intermediaries hold direct claims on deficit spending units as financial assets and issue direct claims to surplus spending units as liabilities. The financial intermediation theory is relevant to our study as it points out the significance of intermediation as a value creating economic process. This has been evidenced by the adoption of mobile lending by commercial banks in Kenya for example the adoption of M-shwari by commercial banks of Africa aimed at reducing transaction costs. However, Stiglitz (2003) criticized the financial intermediation theory by arguing due to the developments in deepening of financial markets, financial intermediation has become useless.

2.3 Determinants of Financial Performance of Commercial Banks

A determinant is a factor that decisively affects the nature or outcome of something Frank (1989). Financial performance aims at assessing how well companies can prudently utilize their assets to maximize on the profits within a given period of time. Financial performance is determined by; liquidity, asset quality, capital adequacy and management efficiency.

2.3.1 Liquidity

Frank (1989) defined liquidity as the ability of the commercial banks to fulfill the short term obligations when due. Commercial banks can be exposed to liquidity risks as a result of bankrun. Bank run is a scenario whereby a large number of customers withdraw cash from deposit accounts at the same time and transferring such money into other assets on fear that the bank might become insolvent. Bank runs can leave the commercial banks in serious financial constrains which will eventually affect the day to day operations. Therefore, liquidity management is a significant factor as far as financial performance of commercial banks in concerned.

Commercial banks need to manage their own liquidity adequately, this will help them in times of financial distress or any financial crisis. When banks hold more liquid assets, their liquidity risk decrease and this is considered a liquidity cushion which will help them in times of increased liquidity pressure to meet its obligation Ken (2008). A banks assets and liabilities are key to the management of liquidity, adequate liquidity is positively related to bank financial performance.

2.3.2 Asset Quality

According to Myers (2005) assets are economic endowment by business entities and they provide the benefits in the future. The future cash flows are the resultant benefits which arise from the forecasted operations. On conversion of the asset into cash, positive future cashflows will rise. Commercial bank assets include its current assets, fixed assets, long-term investments loans which comprises short term and long term loans. Loans are the important assets of commercial banks because they have a relationship with the financial performance of the commercial banks. Prudent management of loans will positively impact the financial performance in terms of the profitability by ensuring lower default rates. The lower the default rate, the higher the financial performance.

2.3.3 Capital Adequacy

Capital is what the owners of a business entity can claim (Wood, 1988). This is the total amount individuals put into banks to support them during the times of financial crisis. Enough capital in the banks will prevent the banks from financial distress. According to Altman, (1954) financial distress begins when the firm is unable to meet schedule of payments or when cash flow projection indicate that it will soon collapse. The firm is unable to pay its debt. Due to the rise of the commercial banks going under receivership in Kenya, the Central Bank of Kenya which is the regulator as set the minimum capital required for the banks to operate in so that during the financial crisis the depositors are protected against the loss of their money. Capital adequacy evaluates how strong the commercial banks are internally. If the capital adequacy is high, the financial performance is high and vice versa.

2.3.4 Management Efficiency

According to Johnson (2005), management efficiency signifies a situation where by the resources are prudently applied to maximize the output levels. Management efficiency aims at the reduction of the use of available resources by maximizing the returns for example stock waste to improve efficiency and sharing of duties for example chief executive officer can equally act as the managing director. Operational efficiency deals with the management of the operating expenses. The management should ensure resources are deployed efficiently, operating costs are minimized and profit is maximized.

Management efficiency is measured by proxy Management ratio which is the measure of the operating expenses to total assets of an entity. The higher the proxy management ratio the greater the financial performance, management efficiency therefore improves the financial performance of the commercial banks.

2.3.5 Bank Size

Commercial banks normally depend on Interest income as the key source of the income and are majorly from the loans advanced. The loan book will also determine the financial performance of the commercial banks. It is the responsibility of the banks to control the deposits since they have ultimate effect on the banks performance. Banks should ensure cost effective strategies are put in place since they translate to improved performance. When banks are large in size, they are advantageous since they can access large amounts of deposits unlike smaller banks hence good financial performance (Myers, 2005).

2.4 Empirical Review

A review of empirical literature reveals conflicting results on the effect of mobile lending on the financial performance of the firms concerned. According to the early empirical literature, mobile lending impacted positively on the financial performance. However, other empirical works concluded that there was no significant change in the firm's financial performance as a result of the introduction of the mobile lending.

Omondi (2015) examined the effect of mobile banking on the financial performance of commercial banks listed at the Nairobi Securities Exchange in Kenya between 2010 and 2014. He sampled 11 commercial banks from 17 commercial banks, he analysed the secondary data which were readily available from the company websites and he computed financial performance measurement ratios to conduct a comparative analysis. He concluded that commercial banks underperformed after the adoption of the mobile banking.

Gakure (2013) conducted a survey on the mobile banking and the financial performance of commercial banks in Kenya. The aim was to assess the mobile banking and its effect on the financial performance. The study used a sample of 8 commercial banks and the financial performance ratios were computed before and after mobile banking. According to him, the financial performance of the commercial banks greatly improved after the adoption of mobile banking.

Mohamed (2013) studied how mobile banking influenced the financial performance of banks in India between 2007 and 2010. 23 commercial banks were selected for the study. ROE, ROA and EPS were computed after and before the adoption of mobile banking for comparison purposes. Secondary data was analysed using the SPSS software. He concludes that the profitability of Commercial banks in India greatly improved after the introduction of mobile banking.

Maina (2012) did a study to assess the contribution of mobile banking to financial performance of commercial banks in Kenya between 2010 and 2011. The study relied on the secondary data from the published financial statements between 2010 and 2011. Data was analysed using the SPSS software for the 10 commercial banks selected out of the 20 commercial banks she concluded that mobile banking improved the financial performance of the commercial banks in Kenya.

Ngaruiya (2012) studied the effect of mobile banking on the financial performance of commercial banks in Kenya between 2009 and 2011. A sample of 9 Commercial banks was chosen from the study. Secondary data was analysed using the SPSS software for the data from the published financial statements before the adoption of mobile banking and after the adoption of mobile banking. She concluded that mobile banking had no significant effect on the financial performance of the commercial banks in Kenya.

Fatima and Kiran (2011) did a study to assess the impact of mobile banking on financial performance of the Commercial Banks in Pakistan between 2006 and 2010. 20 banks were selected from the study. Secondary data from the annual published financial statements were analysed using the SPSS. Financial performance ratio were also computed and analysed. They concluded that the financial performance of the Commercial banks in Pakistan greatly improved after the introduction of mobile banking.

Kigen (2010) conducted a study to assess the effect of mobile banking on transaction costs of 2008 microfinance entities in Kenya between 2008 and 2010. The population of his study was all the microfinance institutions. However, due to financial constraints 15 microfinance institutions were selected for the study. The research used secondary data in the analysis and linear regression model was employed in the study. From his findings, mobile banking improved financial performance.

Frank (2010) conducted a survey on the impact of mobile banking on the financial performance of the companies listed at the New Yorkstock exchange between 2001 and 2008. Secondary data of the companies listed and had adopted mobile banking was analysed using the SPSS software from the sample of 25 companies that were selected. Financial performance ratio were also computed and analysed. The study concluded that the financial performance of the Commercial Banks listed at the New York stock exchange greatly improved after the adoption of mobile banking.

Bhasin and Harrison (2006) studied the effect of information technology on the performance of banks in America between 1999 and 2004. Using a sample of 29 commercial banks in the United States of America to assess the impact of information technology on profitability of banks. They concluded that the profits of the commercial banks rose after the adoption of the information technology on the banking industry. This was after the analysis of the secondary data using the SPSS software from the published financial statements.

Agboola (2006) conducted a study on the effect of information technology on the financial performance of Banks in Pakistan. Secondary data was collected from the company websites for the 31 commercial banks which were practicing mobile banking between 2001 and 2005. Financial performance measurement ratios which included ROA, ROE and EPS were computed and compared before and after the introduction of the mobile banking. According to the study, there was no significant effect of information technology on financial performance.

The different research finds are of great concern since different researchers came up with different opinions. However, Omondi (2015) in his study he never used any model in the analysis, Gakure (2013) in his study, the sample size was limited, Mohamed (2013), the criteria for firm selection was not elaborate, Maina (2012) did a study only on the commercial banks, Fatma and Kiran (2011) in the study there was no cross section analysis and comparison, Ngaruiya (2012) in his study the period of study was short,

Kigen (2010) used a limited sample size, Bhasin and Harrison (2006) never applied any model in the study and Agboola (2006) used a shorter time period in the analysis. Mobile lending is key to the financial performance of banks in Kenya, therefore this research was determine the significance of mobile lending.

2.5 Conceptual Framework

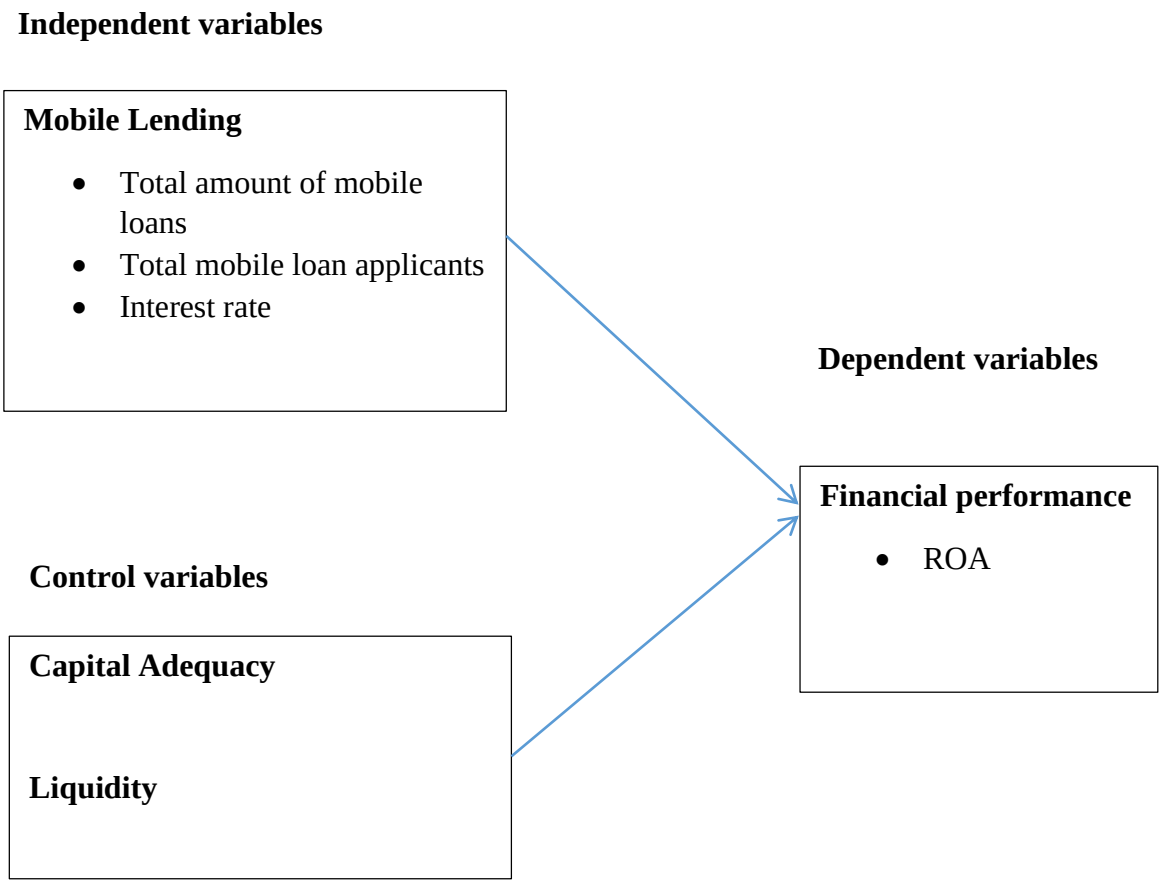

Figure 2.1: Conceptual Framework

From the diagram above, independent variables are mobile lending which is measured by the total amount of mobile loans which is the value of loans applied and approved via the mobile phones, the total mobile loan applicants is the total number of customers who applied and got the approval of the mobile loan and interest rate which is the average lending rate by the commercial bank. Control variables which are; Capital adequacy which is measured by capital adequacy ratio and liquidity which was measured by the total loans to total customer deposit. The dependent variable is financial performance which was measured by return on assets.

2.6 Summary of the Literature Review

The literature review encompasses the evidence on mobile lending which include, Kigen (2010), Maina (2012), Gakure (2013), Fatima and Kiran (2010), Mohamed (2013), Shirley and Shushat (2006) and Frank (2010). However, Omondi (2015) concluded that mobile lending led to the decline of the financial performance of the business entities involved while the study by Ngaruiya (2012) and Agboola (2006) concluded that mobile lending has no effect on the financial performance of the companies involved. Many studies have been done on the effect of mobile banking on the financial performance of the business entities involved, the current study will be narrowed to effect of mobile lending on the financial performance of the commercial banks in Kenya.

Table 2.1: Summary of the Literature

Author	Focus of Study	Methodology	Findings	Research Gaps
Omondi (2015)	Effect of mobile banking on the financial performance of commercial banks listed at the NSE in Kenya	Study analyzed financial ratios	Commercial banks underperformed after the adoption of mobile banking.	There were no models that were applied.
Gakure (2013)	Mobile banking and financial performance of commercial banks in Kenya.	Study analyzed financial ratios.	Financial performance of commercial banks greatly improved.	Sample size was limited.
Mohamed (2013)	How mobile banking influenced financial performance of commercial banks in India.	Study analyzed financial ratios.	Financial performance of commercial banks improved after the introduction of mobile banking.	Criteria for firm selection were not elaborated.
Maina (2012)	Contribution of mobile banking to financial performance of commercial banks in Kenya.	Correlation and regression analysis.	Mobile banking improved financial performance of commercial banks in Kenya.	Shorter time period used.
Ngaruiya (2012)	Effect of mobile banking on the financial performance of commercial banks in Kenya.	Study analyzed financial ratios.	Mobile banking had no significant effect on financial performance.	A shorter time period was applied.
Fatma and Kiran (2011)	Impact of mobile banking on the financial	Study analyzed financial ratios.	Financial performance of commercial	No cross section analysis and

	performance of commercial banks in Pakistan.		banks greatly improved after the adoption of mobile banking.	comparison.
Kigen (2010)	Impact of mobile banking on transactions costs of microfinance institutions in Kenya.	Study analyzed financial ratios.	Mobile banking greatly reduced the transaction costs of microfinance institutions in Kenya.	Sample size was limited.
Frank (2010)	Effect of mobile banking on the financial performance of companies listed at the New York Stock Exchange.	Study analyzed financial ratios.	Financial performance of commercial banks listed at the New York Stock exchange greatly improved after the adoption of mobile banking.	Criteria for firm selection not elaborate.
Shirley and Sushanta (2006)	Impact of information technology on banking industry in the United States of America.	Financial performance ratios were analyzed.	Profits of the commercial banks rose after the adoption of information technology.	Sample size was limited
Agboola (2006)	Impact of information and communication technology on the financial performance of commercial banks in Nigeria.	Financial performance ratios were analyzed.	There was no significant impact of the mobile banking on the financial performance.	A shorter time period was applied.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology that was used in conducting the study. They include, the research design, population, sample, data collection, validity and data analysis.

3.2 Research Design

Research design entails the methods used to conduct the research. This study used the descriptive research design since it helped in the description of the phenomena under study. This type design is applicable in obtaining information about the current status of the phenomenon with respect to variables or conditions in a situation. It also involves the correlation study which investigates the relationship between variables. This research design summarizes the various variables under the study.

3.3 Population

A population entails a collection of items to be investigated Mugenda (2005). The population of study comprised all the four commercial banks in Kenya using mobile lending, but due to small size of the population no sampling was conducted.

CBK(2010).

3.4 Data Collection

This research relied on the secondary data from the published financial statements which was obtained from the Nairobi Securities Exchange and the respective company from their financial statements in the websites because the secondary data was readily available. Data that was collected included total assets, net income, total amount of mobile loans, total mobile loan applicants, interest rates total capital total loans and total customer deposit.

3.5 Diagnostic Tests

The diagnostic tests that were carried out on the data to ensure it suits the basic assumptions of classical linear regression model include; Kurtosis and Skewness of the distribution of data which tested for normality, multicollinearity was tested by variance inflation factor and correlation coefficient, heteroscedaciticity was measured by the weighted generalized least square to establish the relationship.

3.6 Data Analysis

Mugenda (2005) defined data analysis as the process of bringing order and meaning to the information collected. Secondary data was collected, coded and tabulated according to each dependent and independent variable and analyzed using the descriptive statistics in terms of the mean values. Skewness and Kurtosis was considered to determine the validity of data quality.

The multiple linear regression model that was used is;

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + e$$

Where Y is the financial performance of commercial banks as measured by the return on assets.

β_0 is the free term of the equation.

$\beta_1, \beta_2, \beta_3, \beta_4 \; and \; \beta_5$ are the coefficients of independent variables and they measure the responsiveness of Y to unit change in variable x.

x_1 = The total amount of mobile loans.

x_2 = The total mobile loan applicants.

x_3 = Interest rate as measured by the average lending rate

x_4 = capital adequacy as measured by the ratio of total capital to total asset

x_5 =Liquidity as measured by the ratio of total loans to total customer deposit

e = the error term

An F-test at 5% significance level was conducted to determine the strength of the model, and the effect of mobile leading on the financial performance of commercial banks in Kenya.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND INTERPRETATION

4.1 Introduction

This section presents the analysis of the data obtained. This study used the secondary data of the commercial banks. This section presents the analysis of the data obtained. This study applied the secondary data for the commercial banks in Kenya. In section 4.2 data was analysed in terms of descriptive statistics and in section 4.3, data was analyzed in terms of inferential statistics which included correlation analysis regression analysis and the analysis of the variance and section 4.4 presents discussions of the findings.

4.2 Descriptive Statistics

The independent variables analyzed here included the capital adequacy, liquidity, interest rates, total mobile loan applicants and the total amount of mobile loans while the dependent variable was the return on assets. The means, standard deviations, the minimum values, the maximum values of the variables under study were tabulated as shown below.

Table 4.1: Descriptive Statistics Analysis

Variable	N	Minimum	Maximum	Mean	Standard deviation
Total mobile loan applicants	40	0.00	9.30	4.21	3.22
Total amount of mobile loans	40	0.00	15430.00	3533.83	4872.35
Interest rates	40	3.66	9.00	6.79	1.98
Capital adequacy	40	0.10	1.50	0.29	0.35
Liquidity	40	0.06	2.54	0.85	0.58
Return on assets	40	0.01	0.06	0.04	0.01

From the findings, the minimum number of total mobile loan applicants was 0.00, the maximum number was 9.30, the mean was 4.21 and the standard deviation was 3.22 which indicated a small variation in the total mobile loan applicants. The minimum number of total amount of mobile loans was 0.00, the maximum number was 15430.00, the mean was 3533.83 and the standard deviation was 4872.35 which show the large variations. The minimum number of interest rates was 3.66 the maximum number was 9.00, the mean was 6.70 and the standard deviation was 1.98 which shows a small variations. The minimum number of capital adequacy was 0.10, the maximum number 1.50 the mean was 0.29 and the standard deviation was 0.35 which shows a wider variations. The minimum number of liquidity was 0.06, the maximum number was 2.54. The mean was 0.85 and the standard deviation was 0.58 which shows a small variation. The minimum number of return on assets was 0.01, the maximum number was 0.06, the mean was 0.04 and the standard deviation was 0.01 shows small variations.

4.3 Diagnostic Statistics

The diagnostic tests for the secondary data normally are shown by the following histograms.

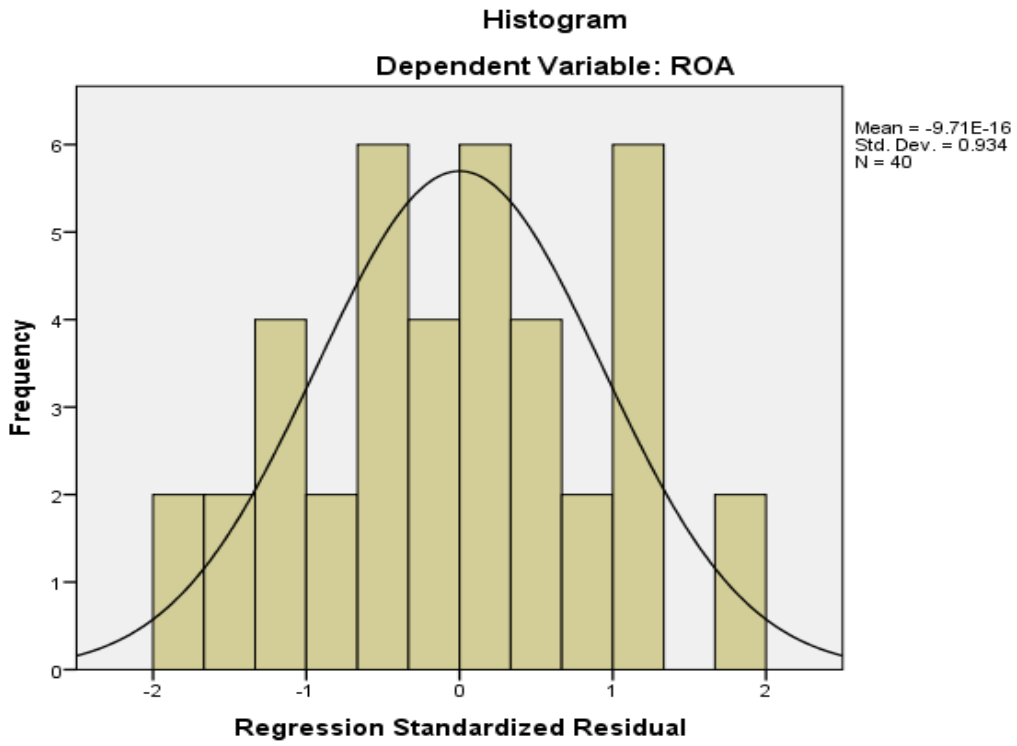

Figure 4.1: Histogram

4.4 Correlation Analysis

Table 4.2: Correlation Matrix

		Total mobile loan applicants	Total amount of mobile loans	Interest rates	Capital adequacy	Liquidity	ROA
Total mobile loan applicants	Pearson correlation	1					
	Sig. (2-tailed)						
	N.	40					
Total amount of mobile loans	Pearson correlation	0.268	1				
	Sig. (2-tailed)	0.094					
	N.	40	40				
Interest rates	Pearson Correlation	0.646	-0.003	1			
	Sig. (2-tailed)	0.000	0.987				
	N.	40	40	40			
Capital adequacy	Pearson correlation	0.273	0.312	0.244	1		
	Sig. (2 –tailed)	0.089	0.05	0.13			
	N.	40	40	40	40		
Liquidity	Pearson Correlation	0.242	-0.217	0.328	0.08	1	
	Sig. (2-tailed)	0.133	0.179	0.039	0.738		
	N.	40	40	40	20	40	
ROA	Pearson Correlation	-0.152	-0.216	0.167	0.535	-0.079	1
	Sig (2-tailed)	0.349	0.181	0.482	0.015	0.741	
	N.	40	40	40	40	40	40

The results of the correlation analysis above shows that a negative relationship exists between total mobile loan applicants and when each factor increases the financial performance decreases as measured by the return on assets however the relationship is not significant. The correlation coefficient was -0.152 and the p-value was 0.349 which is greater than 0.05. The findings showed further that total amount of mobile loans is negatively related to financial performance, interest rates is positively related to financial performance, capital adequacy is positively related to financial performance and the effect is significant since the correlation coefficient is 0.535 and the p value is 0.015 which is less than 0.05 b and finally liquidity is negatively related to financial performance and the effect was not significant.

4.4.1 Regression Analysis

Table 4.3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.736	0.542	0.474	0.00993

The value of the correlation coefficient from the table above is 0.736 which implies that a strong positive relationship exists between the study variables. The adjusted R square is 0.474 this implies that 47.4% of the influence of the total mobile loan applicants, total amount of mobile loans, interest rates, capital adequacy and liquidity is explained by the model.

Table 4.4: Summary of One Way ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.004	5	0.001	8.034	0.000
	Residual	0.003	34	0.000		
	Total	0.007	39			

The results in table above shows the value of F statistic was 8.034 at 5% level of significance and the statistic was significant the P-value was 0.000 which is less than 0.05 implying that the overall model was significant.

Table 4.5: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	0.027	0.011		2.377	-.032
	Total mobile loan applicants	-0.001	0.002	-0.227	-0.596	0.561
	Total amount of mobile loans	-0.007	0.000	-0.258	-0.85	0.410
	Interest rates	0.002	0.002	0.244	0.857	0.406
	Capital adequacy	0.025	0.008	0.617	2.984	0.10
	Liquidity	-0.003	0.005	-0.114	-0.568	-0.013

The findings of the regression analysis show that the total amount of loan applicants is inversely related to financial performance. It implies that any unit increase in the total amount of loan applicants will lead to a reduction in the financial performance by 0.001. Total amount of mobile loans will lead to decrease in the financial performance. Total amount of mobile loans is negatively related to financial performance. This implies that increase in the total amount of mobile loans will lead to decrease in the financial performance. The interest rates are directly related to the financial performance, this implies that increase in interest rates will lead to an increase in financial performance, capital adequacy is directly related to the financial performance which implies that a unit increase in scores of the capital adequacy will increase in financial performance by 0.025 units and finally liquidity is inversely related to financial performance, which means that as the level of liquidity increases the financial performance will decrease.

The standardized beta coefficient of total mobile loan applicants was -0.0227 which means that total mobile loan applicants have a strong effect on the financial performance. The standardized beta coefficient of total amount of mobile loans was -0.258 which implies that total amount of mobile loans have a strong effect on the financial performance, the standardized beta coefficient of capital adequacy was 0.617 meaning a moderate effect of the capital adequacy on the financial performance and the beta coefficient of liquidity was -0.114 which implies a strong effect of liquidity on the financial performance.

4.5 Interpretation of the Findings

The results of the descriptive statistics shows that on average, the total amount of mobile loan applicants have been increasing every year since 2012 to 2016. There has been an increase over the years. It implies a positive relationship exist between the total amount of mobile loan applicants and the number of years. The total amount of mobile loans has been on the rise with the highest amount of loan applicants in 2016 and the lowest in 2012. More customers are shifting to mobile lending platform. However, the interest rates remained the same over the same period of time. As the number of years increased the interest remained the same. It means the bank never increased the charges which would otherwise have affected its financial performance. Capital adequacy, liquidity and return on assets posted mixed results. It implies that there was no a definite relationship between the number of years and the capital adequacy, liquidity and return on assets mean the time factor was significant.

From the regression analysis results the research established a number of mobile lending variables that affect financial performance and they include total mobile loan applicants, total amount of mobile loans, interest rates, capital adequacy and liquidity and the intercept for all these factors was found to be 0.026 for the years analyzed. The five independent variables which were analyzed which included the total mobile loan applicants, total amount of mobile loans, Interest rates, capital adequacy and liquidity were able to explain their effect on the financial performance up to 47.4% as shown by adjusted R square. This implies that the five independent variables inputs 47.4% on the financial performance and the remaining 52.6% is contributed by the factors not studied.

This research found out that the coefficient of total mobile loan applicants was -0.001 meaning that total mobile loan applicants negatively influences financial performance. The total amount of mobile loans is also negatively related to financial performance this means that as the total amount of mobile loans increase, the financial performance decreases. Interest rates are positively related with the financial performance this is evident form the value of the coefficient of 0.002 and finally liquidity is negatively related to the financial performance since the coefficient of liquidity was -0.003and this effect is significant because the p value is -0.013 which is less than 0.05. In general, mobile lending affects the financial performance. This study concurs with the study by Agbola (2013) who concluded that mobile lending affects the financial performance of the commercial banks in Nigeria.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary, conclusion, recommendations for policy, limitations of the study and recommended areas for further research.

5.2 Summary of the Findings

The objective of this study was to establish the effect of mobile lending on the financial performance. The study established that a strong relationship exist between capital adequacy and the financial performance of the commercial banks. This is based on the fact that capital is a major driver of the banks business. Capital is key especially when a bank is faced with adverse situations. The capital of the commercial banks is capable of creating liquidity this is based on the fact that the bank deposits are in most cases prone to bank runs due to the fact that they are very fragile. When the bank capital is greater, it is able to reduce, any chance of financial distress, which negatively affect the commercial banks in the long run. The main source and cheap fund for capital, adequacy comes from the adequate deposits, which will guarantee the commercials banks of risk free situations for example the market and operational risks which the commercial banks are exposed to. The mitigation of these risks is key because it will ensure the customer deposits are projected.

The capital adequacy is a major indicator of the internal strength of the commercial banks which will enable them to withstand any losses in cases of the occurrence of a crisis. The ratio of the capital adequacy has a direct impact on the profits of commercial banks because it determines its exposure to risks hence the financial performance. There was a negative relationship between liquidity and the financial performance of commercial banks. Liquidity is a major factor that determines the financial performance of commercial banks. It shows the capacity of commercial banks to be able to meet any obligations that are due and that is majorly of the depositors.

Interest rates were found to be positively related with the financial performance from the study. On average the interest rates which were charged by the commercial banks remained the same over the years. The trend of performance of the different variables under study which included total mobile loan applicants, total amount of mobile loans, interest rates, capital adequacy, liquidity and return on assets was captured by the descriptive analysis. The ANOVA was employed to determine how strong the model was in the analysis. Based on the analysis of the regression statistics, the research concluded that the five factors which include total mobile loan applicants, total amount of mobile loan interest rates, capital adequacy and liquidity affected the financial performance of commercial banks in Kenya. The five independent variables were able to explain their influence on the commercial banks up to 47.4% and the rest is contributed by other factors not considered in this study meaning the model was significant.

5.3 Conclusions

From the study, a weak negative relationship was found to exist between total mobile loan applicants and the return on assets, the correlation , coefficient was found to be -0.103 which was also not significant because the P value of 0.667 was found to be statistically insignificant (P>0.05). A negative relationship exists between total amount of mobile loans and return on assets, the correlation coefficient was -0.221 and again the relationship was not significant. The P value was 0.349 which is greater than 0.05. A positive relationship exist between interest rules and return on assets, because the correlation coefficient was 0.167 although the relationship was weak. This relationship was not significant (p>0.05).

The capital adequacy is positively related with the return on assets, the relationship was moderate. The liquidity of the commercial banks was found to be negatively correlated with the financial performance which was measured by the return on assets. From the descriptive statistics it was evident that the total mobile loan applicants have been increasing over the years. The total amount of loans transacted by the mobile phones has been increasing at an increasing rate for the years under study. Based on the data from the findings, on average the total amount of mobile loans has been increasing since the adoption of mobile lending by the commercial banks. The rate of interest charged by the commercial bank over the years that were studied remained constant over the years which were studied.

The capital adequacy of the commercial banks that were analyzed shows that on average, the capital adequacy posted mixed results. It shows that the amount of own fund that was available in supporting the bank's business was changing over time. The ability of the commercial banks to meet its obligations posted mixed results from the findings of the study .The financial performance of the commercial banks posted mixed results over the years that were analyzed . There was no common trend for the financial performance.

Based on the outcome of this research, it concludes by saying that mobile lending contributes positively to the financial performance of commercial banks in Kenya. This is based on the fact that a number of variables studied proved the existence of positive relationship between mobile lending and financial performance and they included interest rates, capital adequacy and liquidity. This implies that interest rates directly affect the financial performance. The higher the interest rates the better the financial performance and the proportion of total capital to total asset is also another component that affect the financial performance. This is in agreement with Okumu (2013) who argued that stiff competition in the banking sector has led to emergence of alternative strategies like mobile lending to better the financial performance.

5.4 Recommendations

From the outcome of this research, the study recommends the adoption of mobile lending by the policy makers. This is based on the fact that due to technological advancements many business entities are switching from the physical branch networks to technology enabled networks due to the benefits associated with them. The effect of mobile lending

can be made more significant if sufficient changes are made in terms of the adoption and full implementation of this technology. This study recommends the adoption of mobile lending because it support the bank focused theory which states that commercial banks can derive more benefits from adopting technologies such as mobile lending in the provision of services to their customers. Mobile lending is anytime banking since customers are able to transact anytime unlike the traditional normal banking procedures where customers must avail themselves into the banking halls or through the agency banking which is a waste of time

This study recommends the adoption of mobile lending, this new technology has increased the number of transactions undertaken by the mobile platform. Innovation is useful because it speeds up the work by ensuring maximum number of transactions are achieved. Commercial banks in Kenya which have adopted mobile lending have posted increased volumes of transactions.

The study recommends that all commercial banks in Kenya move with urgency by ensuring that mobile lending is adopted and implemented due to the benefits associated with mobile lending. From the findings of the study, only four commercial banks in Kenya have fully adopted and implemented this mobile lending platform out of the possible 43 registered commercial banks in Kenya. This is also due to the fact that the population of people who can access the mobile phones are on the rise every single day.

5.5 Limitations of the Study

The sample for this study was very small. Only four commercial banks out of the possible 43 registered commercial banks in Kenya. This means that the results of this study may not conclusively prove the effect of mobile lending on the financial performance.

Time constraint, considering the fact that this study relied on data from the multiple sources which included the Central Bank of Kenya, Capital Markets Authority, the individual companies and the Nairobi Securities Exchange, more time was needed for the entire exercise of data collection and analysis. But despite the limited available time, it was well utilized to achieve the intended objective of the study.

The data that was employed in this study was only the secondary data which was not able to capture, the qualitative aspects of financial performance which are also significant for example offering goods and services of high quality to the customers.

5.6 Suggestions for Further Research

This study recommends that a similar study be conducted but now in the Eastern Africa region which involves the incorporation of the commercial bank in Kenya, Uganda, Tanzania, Burundi and Rwanda to compare the outcome with the Kenyan banking industry.

This study recommends that a study be conducted to assess the effect of mobile lending on the economic growth this will be interesting to see whether a relationship exists between financial performance and economic growth.

This study examined the effect of mobile lending on the financial performance of commercial banks in Kenya. From the study findings, the study recommends that in the near future, a research to be conducted which should incorporate the primary data for example the use of qualitative aspects of financial performance.

This study recommends that a study be done to establish the effect of mobile lending on the financial performance of the companies which are the major providers of this mobile lending platform.

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APPENDICES

APPENDIX I: DATA

Total Mobile Loan Applicants (Millions)								
	2012	2013	2014	2015	2016			
Kenya Commercial Bank	0	0	0	1.3	5.6			
Cooperative Bank of Kenya	0	0	2.7	5.1	6.9			
Commercial Bank of Africa	2.1	4.3	5.6	7.2	8.4			
Equity Bank	3.2	6.9	7.4	8.1	9.3			
Total Amount Of Mobile Loans								
Kenya Commercial Bank	0	0	0	2450	7550			
Cooperative Bank of Kenya	0	0	173	750	5250			
Commercial Bank of Africa	85	165	10370	11150	15430			
Equity Bank	112	873	3150	8180	9200			

Interest(%)								
Kenya Commercial Bank	3.66	3.66	3.66	3.66	3.66			
Cooperative Bank of Kenya	7	7	7	7	7			
Commercial Bank of Africa	7.5	7.5	7.5	7.5	7.5			
Equity Bank	9	9	9	9	9			

	Total Capital	Total Assets	Total Loans	Customer Deposit	Net Income	Capital Adequacy	Liquidity	ROA
2012								
Kenya Commercial Bank	53881725	304751807	187022664	2233493278	13821870	0.176805268	0.0837	0.0454
Cooperative Bank of Kenya	29367000	200588000	123824000	163149000	9812786	0.146404571	0.759	0.0489
Commercial Bank of Africa	14230118	137703400	48145350	25450000	2320780	0.103338901	1.8918	0.0169
Equity Bank	51555000	243170000	135692000	167913000	12080000	0.212012173	0.8081	0.0497

2013								
Kenya Commercial Bank	61763039	322684854	198370069	237212782	12856993	0.191403588	0.8363	0.0398
Cooperative Bank of Kenya	35097777	228874484	10252392	174776225	9108186	0.153349453	0.0587	0.0398
Commercial Bank of Africa	15338575	145998378	68640329	27000000	3740700	0.1050599	2.5422	0.0256
Equity Bank	42916000	277729000	171363000	94364000	13278000	0.154524735	1.816	0.0478

2014								
Kenya Commercial Bank	75631497	490338324	283732205	377271886	17646147	0.154243495	0.7521	0.036
Cooperative Bank of Kenya	41815328	282689097	18269487	216174313	8014997	0.147919847	0.0845	0.0284
Commercial Bank of Africa	87315000	57444735	11903282	10997307	3384221	1.519982641	1.0824	0.0589
Equity Bank	344572000	344572000	214170000	245582000	17775000	1	0.8721	0.0516
2015								
Kenya Commercial Bank	81253607	558094154	345968686	424390833	11670476	0.145591217	0.8152	0.0209
Cooperative Bank of Kenya	48793461	339549811	19271212	263709415	11705559	0.143700451	0.0731	0.0345
Commercial Bank of Africa	36953065	89586158	39973044	33862183	4615261	0.412486324	1.1805	0.0515
Equity Bank	72136000	428062000	269893000	303206000	10467000	0.168517645	0.8901	0.0245
Average								

2016								
Kenya Commercial Bank	80885958	504775429	353900051	386611187	10138450	0.160241472	0.9154	0.0201
Cooperative Bank of Kenya	161314523	351856250	236935564	260153437	9135115	0.458467124	0.9108	0.026
Commercial Bank of Africa	21681898	211200114	112925594	164468970	1091049	0.102660446	0.6866	0.0052
Equity Bank	81976000	473713000	266068000	337204000	17387000	0.173049927	0.789	0.0367
Average								