THE EFFECT OF FINANCIAL INNOVATIONS ON THE COMPETITIVENESS OF COMMERCIAL BANKS IN KENYA

BY

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DECLARATION

This research project is my original work and has not be any other university or institution of higher learning.	been submitted for the award of a degree in
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DEDICATION

To my Parents the late George Onyango Ogutu and Justine Juma Onyango, thanks for your unconditional support and for giving me the chance to prove and improve myself through all my walks of life. I am honored to have you as my parents.

To the late mama Sherfine Aoko and the late Mama Hellena thanks for the continuous advice you gave me whenever I came across hard-times in life and thanks for instilling in me the virtues of diligence, dedication and discipline as I grow up to face this cruel world today. I really cherish you for the times we had together.

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May the Lord God richly bless you all.

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TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
LIST OF ACCRONYMS	vii
LIST OF TABLES	viii
ABSTRACT	ix
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the Study	1
1.1.1 Financial Innovation	2
1.1.2 Competitiveness of Commercial Banks	4
1.1.3 Effect of Financial Innovation on Competitiveness of Commercial Banks	6
1.1.4 Commercial Banks in Kenya	6
1.2 Research Problem	7
1.3 Objective of the study	9
1.4 Value of the Study	9
CHAPTER TWO	11
LITERATURE REVIEW	11
2.1 Introduction	11
2.2 Theoretical Review	11
2.2.1 Traditional Theory of Financial Innovation	11
2.2.2 Financial Constraints Theory	12
2.2.3 Strategic Theory of Financial Innovation	12
2.3 Types of Financial Innovations	13
2.3.1 Financial Systems Innovations	13
2.3.2 Financial Institution Innovations	14

2.3.3 Process Innovation	14
2.3.4 Product Innovation	15
2.4 Empirical Review	16
2.5 Summary of Literature Review	17
CHAPTER THREE	19
RESEARCH METHODOLOGY	19
3.1 Introduction	
3.2 Research Design	19
3.3 Target Population	19
3.4 Data Collection Method	20
3.4.1 Data Reliability and Validity	20
3.5 Data Analysis	20
3.5.1 Data analytical Model	21
CHAPTER FOUR	23
DATA ANALYSIS, RESULTS AND DISCUSSION	NS23
4.1 Introduction	23
4.2 Findings	23
4.3 Interpretation of the Findings	29
CHAPTER FIVE	31
SUMMARY, CONCLUSION AND RECOMMENI	DATIONS 31
5.1 Introduction	31
5.2 Summary	31
5.3 Conclusion	
5.3 Conclusion5.4 Policy Recommendations	33
5.4 Policy Recommendations	
5.4 Policy Recommendations 5.5 Limitations of the study 5.6 Suggestions for further research	
5.4 Policy Recommendations 5.5 Limitations of the study	

LIST OF ACCRONYMS

ATM Automated Teller Machine

BBK Barclays Bank of Kenya

CBK Central Bank Kenya

DPF Deposit Protection Fund

DTB Diamond Trust Bank

EFTPos Electronic Funds Transfer at Point of Sale

FI Financial institutions

IT Information Technology

IPO Initial Public Offering

KCB Kenya Commercial Bank

KSH Kenya Shillings

MFI Micro Finance Institutions

NBFI Non Banking Financial Institutions

NSE Nairobi Security Exchange

RTGS Real Time Gross Settlement

SPSS Statistical Package for Social Science

LIST OF TABLES

Table 4.1: Cards Transactions/Usage (Millions)	23
Table 4.2: Extent to which financial innovations have benefited commercial banks	24
Table 4.3: Model summary	25
Table 4.4: ANOVA (b) Analysis	26
Table 4.5: Coefficients (a) of determinants	27

ABSTRACT

Improvement of financial innovations is widely recognized as one of the essential elements in strengthening the competitiveness of an entity. A sharp acceleration in the pace of innovation, deregulation and structural change in recent years has transformed the international financial system in many important ways and the advances in computer and telecommunication technologies make many of the innovations possible in the present world.

For the purpose of this study the researcher sought to determine the effect of financial innovations on the competitiveness of commercial banks in Kenya. This study adopted a descriptive research design as it is concerned with finding out the what, where and how of a phenomenon. The focus of descriptive research is the careful mapping out of circumstances, situation or set of events to describe what is happening or what happened.

The target population of the study constituted of 43 registered commercial banks in Kenya who were senior managers, relationship/branch managers finance officer at commercial banks in Kenya. The study administered the questionnaires which included structured and unstructured questions to all respondents since it was the most appropriate way to gather information also secondary data was derived from banks websites, central banks websites and various publications. Descriptive statistics as mean, standard deviation and frequency of distribution were used to analyze the data. Data presentation was done by use of tables for ease of understanding and interpretation.

This study found out that there is a direct relationship between financial innovations and competitiveness of commercial banks. The absolute values indicate that Process and technological innovations had greater weight when it comes to determining the competitive level of a commercial bank. This study recommends that commercial banks should put more emphasis on technological advancement so as to enhance the processes they offer to the general public and this will enable the bank to offer efficient and effective services to the public and as a result of this they will be very competitive in the markets.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Innovation generally refers to the introduction or use of new ideas, or ways of doing things. Financial innovation consists of firms' developing new products or services or new production processes. These new products are often based on new processes; sometimes also new organizations are involved.

A sharp acceleration in the pace of innovation, deregulation and structural change in recent years has transformed the international financial system in many important ways (Suzuki, 1987). In many respects, innovation has improved the efficiency of international financial markets, mainly by offering a broader and more flexible range of instruments both for borrowing and hedging interest and exchange rate exposures (Tufano, 2003).

Much of the theoretical and empirical work in financial economies (Merton and Miller, 1986; Silber, 1977; Tufano, 1986; Rohalfs, 1974 Wesley and Levine, 1989) considers a highly stylized world in which there are few types of securities (debt and Equity) and maybe a handful of simple financial institutions (Banks or exchanges.) However, in reality there is a vast range of processes that these products, many different types of financial institutions and a variety of processes that these institutions employ to do business (UNEP FI, 2002; Matsushita, 1996).

Ross (1989) and Tufano (2003) contend that one of the features of world economy in recent years is the further acceleration of economic globalization, particularly the strengthening of relationship between the emerging economies and the industrialized countries. Another feature is the progress of horizontal division of labor among various economies in the world, which is occurring with the intensified division of labor, is specialization by individual countries in one area of a specific industry, perhaps in one specific intermediate good or in one specific manufacturing process.

Rapid economic globalization is largely attributed to the fast industrialization of the emerging economies, achieved through improved industrial infrastructures and transfers of technology from the industrialized countries. Propelled by such changes in the real economy, the financial

markets are also undergoing globalization, and at an even faster pace. The major driving force has been the rapid progress in information processing and telecommunications technology.

New types of financial instruments such as derivatives and securitized products have grown rapidly in financial markets in recent years. These new instruments have been developed owing to progress in computer technology, which has facilitated statistical analysis and management of risks (Fame and White, 2004).

1.1.1 Financial Innovation

Tufano (2005) Defines financial innovation as the act of creating and popularizing new financial instruments and technologies, institutions, and markets.

All instruments, markets and financial techniques that exist now in various financial systems were at one time created. The idea of financial innovation is therefore not a new phenomenon. The ranges of products that result from financial innovation as well as the frequency of these innovations form the basis of interest in the study of financial innovation.

Solans (2003) defines financial innovation as referring both to technological advances which facilitate access to information, trading and means of payment, and to the emergence of new financial instruments and services, new forms of organization and more developed and complete financial markets. To be successful, financial innovation must either reduce costs and risks or provide an improved service that meets the particular needs of financial system participants. Akhtar (1984) argues that innovations can be grouped by functional basis, "aggressive" or "defensive". Aggressive innovation is the introduction of new product or process, in response to perceived demand. Defensive innovation is the response to changed environment or transaction cost.

Merton and Miller (1986) and Allan and Gale (1994) argue that stimulus financial innovation is strong, arising from the interaction of changing regulatory environment, expanding technology, and volatile markets and growing competition among financial institutions. Competition among financial institutions brings forth and fosters the development of new products in the markets. Regulations that impede the free flow of capital and competition among financial institutions

motivate the development of financial products and trading strategies to get around these restrictions. The global pattern of financial wealth transforms financial markets from local markets into globally internationalized financial markets.

Innovations that pass the test of time provide more efficient mechanisms for redistributing risks. Others may just represent a more efficient way of doing things. Tufano (1989) observes that the ultimate causes of financial innovation are: Increased volatility of interest rates, inflation, equity prices and exchange rates, advances in computer and telecommunication technologies, greater sophistication and educational training among professional market participants, financial intermediary completion, incentives to get around existing regulations and tax laws and changing global patterns of wealth.

Increased Volatility comes with the need for certain market participants to protect themselves against unfavorable consequences, which means new or more efficient ways of risk sharing in the financial market. Many of financial products require the use of computer to create and continually monitor them Grinblatt and Longstaff (2000). The advances in computer and telecommunication technologies make many of the innovations possible. Although financial products and trading strategies created by some market participants may be complex for other market participants to use.

Campbell (1988) and Schumpeter (1950) contend that unstable macroeconomic and microeconomic factors such as interest rates, inflation rates, create uncertainties and risks thus are likely to spur more innovation, than would be a stable macro and micro environment.

Financial Innovation has got several impacts on financial system. Lawrence and White (2001) argue that functions of financial innovations are Broadening, deepening, Diversification, structural transformation, internalization and sophistication of financial system.

1.1.2 Competitiveness of Commercial Banks

Competition is at the core of success or failure of firms. Thompson and Strickland (1998) argue that for a firm to be very competitive it must have a plan. They further states that a competitive strategy concerns the specifics of management's game plan for competing successfully and achieving a competitive edge over rivals. There are many competitive strategies as there are competitors. However, beneath the superficial differences, there are impressive similarities between competitive strategies when one considers a company's target market and the type of competitive advantage the company is trying to achieve.

Competitiveness of a commercial bank is how it is able to apply a competitive strategy so as to respond to various changes within the operating environment. Ansoff and Mcdonell (1990) define competitive strategy as the distinctive approach, which affirm uses or intend to use to succeed in the market. Firms Develop competitive strategies that enable them develop strategic initiatives that enables them develop strategic initiatives and maintain a competitive edge in the market (Grant, 1998).

Thompson and Strickland (2003) argue that a firm's core competitive strategy consists of internal initiatives to deliver superior value to customers, but it also includes offensive and defensive moves to counter the maneuvering rivals, actions to shift resources around to improve the firms long term competitive capabilities, market position and tactical efforts to respond to whatever market conditions prevailing at the moment.

Kotler and Gertner (2002) contend that competitiveness may lead to higher productivity of domestic firms through access to new ideas, technologies and organizational skills either through direct exposure to overseas markets or inward investors, or indirectly, through knowledge spillovers. Furthermore, they may stimulate competition as foreign firms compete with domestic ones, both for resources (e.g. labor, land, equipment and raw materials) and in the markets for products and services.

Churchill (2007), argues that financial institutions begun as SMEs, and grow through the five stages of small business development from simple firm to a complex institution with very

sophisticated combination of products and systems. Along the growth path competition intensified and those firms that were able to face or challenge the competition in the market strived and these firms changed in size, geographical coverage, the range and complexity of product and service they offer in the market.

Companies pursue competitive strategies to gain competitive advantage that allows them to outperform and achieve above average profits. This on the other hand enables companies to find a position in the industry where it is able to defend itself against competitive forces or use the forces in their favor and in turn focuses on improving the competitive position of a company's products within the specific market segment that the company serves (Wheelan and Hunger, 1996).

Thompson and Strickland (1998) observed that cost leadership strategy enables a firm to be the low cost producer in its industry for given level of quality. This can be at an average industry price to earn profits higher than the competition or below the average price to grow the market share. This becomes handy in the price war environment where the firm may retain some profits and the competition booking losses.

Pearce and Robinson (1997) assert that differentiation enables firms to produce products and services that are unique in ways that are valuable to customers and that can be sustained by the firm. For firms to embark on this they need to critically study the needs and preferences of the buyer to consider what is important to them and what value are they willing to pay for this. Porter 1980 strengthens that the uniqueness of the products may be in the form of customer service, design, brand image or technology.

Porter 1980 argues that firms tend to employ focus strategy to narrow down to a particular segment in the market and attempts to achieve either a cost advantage or differentiation within the segment. The target segment may be defined by geographical uniqueness, specialized requirements in using the product or by special attributes that only appeal to the segment members. This is based on the assumption that by focusing entirely on a specific segment, the

firm will be able to serve it better.

1.1.3 Effect of Financial Innovation on Competitiveness of Commercial Banks

Innovations are often credited with helping fuel strong growth in the many economies (Coombs *et al, 1987*). It seems apparent then that, innovation affects not just banking and financial services, but also the direction of an economy and its capacity for continued growth. Innovation has enhanced ease access, storage, processing, transportation or transfer and delivery of products and services.

Alu (2002), argues that innovations in financial institutions eases enquiries, saves time, and improves service delivery. In recent decades, investment in IT by commercial banks has served to streamline operations, improve competitiveness, and increase the variety and quality of services provided. It has brought revolution in the functioning of the banks and the financial institutions. It is argued that dramatic structural changes are in store for financial services industry as a result of the Internet revolution.

Many banks are making what seem like huge investments in technology to maintain and upgrade their infrastructure, in order not only to provide new electronic information-based services, but also to manage their risk positions and pricing. At the same time, new off-the-shelf electronic services such as online retail banking are making it possible for very small institutions to take advantage of new technologies at quite reasonable costs. These developments may ultimately change the competitive landscape in the financial services.

1.1.4 Commercial Banks in Kenya

Commercial banking took root in Kenya at the turn of the 20th Century with the partitioning of the Africa by the European Imperial Powers. The first bank to establish operations was the National Bank of India, which started a branch in Mombasa in 1896. By 1972, there were a total of 12 commercial banks operating in the Kenyan-market. As at December 2012, the banking sector comprised of 43 commercial banks, 1 mortgage finance company. (Central Bank of Kenya website 2012)

The banking industry in Kenya today operates in a liberalized economic environment with a rapidly changing environment due to the presence of many players in the industry most of them being local banks with a huge presence of multinational banks such as Barclays Bank of Kenya (BBK), Standard Chartered Bank (SCB), and Diamond Trust Bank (DTB) among others. Most banks have segmented their banking business into key divisions with almost similar names for the segments, Personal Business Banking (PBB) that takes care of banking needs of individuals, while Corporate Business Banking (CBB) takes care of large corporates' banking requirements. Therefore the operating environment is very competitive where all the banks have gone to the extent of hawking their services by the roadside, participating in numerous road-shows and also in offices. (MacDonald and Koch, 2006).

The major issues affecting the Commercial bank is how to reduce costs of operations, finding new ways or innovations that will enable them be more competitive than other banks in the industry, a bloated workforce especially at the management level, low levels of customer service, frequent cases of fraud and forgeries. All these issues can be attributed to its many procedures and policies when it comes to accessing bank products especially credit facilities.

The innovation of Safaricom limited's Mpesa and Airtel Kenya's Airtel Money transfer technology among others, has redefined how funds transfers were done traditionally through banks. The retail sector has been revaluation by replacing full service branches with the plastic – debit and credit –card and other automated payments while the wholesale or corporate banking is affected in a way that deposit taking, foreign currency transaction and many other roles do not require a physical presence in a given market centre.

1.2 Research Problem

The concept of financial innovation is fundamental as it spurs competition of financial institutions worldwide. Presently, innovation is a continuous process geared towards providing a wider range of financial products and financial intermediation which is a crucial factor in determining competitiveness of financial institutions (Mohanty & Panda, 2004). Financial innovation is a key feature of the world economy, and has important implication for management of risk and for

securities and political system yet it remains little studied outside the economics and business studies (The Economist, 2005).

The Kenyan banking and investment industry has improved tremendously in the last Decade and its relatively more developed than those of many countries in Africa (Banking Survey 2008). The finance sector has widened and deepened through the development of more financial institutions and better products. Financial institutions in Kenya today operates in a liberalized economic environment with a rapidly changing environment due to the presence of many players in the industry most of them being local banks with a huge presence of multinational banks. Therefore the operating environment is very competitive where all the banks have gone to the extent of hawking their services by the roadside, participating in numerous road-shows and also in offices. This research seeks to determine the effect of innovation on the competitiveness of commercial banks as the banking industry has become very dynamic and developed with customers having growing complex needs and globalization challenges.

Currently the financial sector has widened and deepened through the development of more financial institutions and constant growth of customer's needs and globalization challenges. The research deems banking sector fertile context to carry out this research so as to determine whether innovation as enhanced the competitiveness of commercial banks. The study done by Silber (1983) just confirmed various factors that initiated financial innovation in America, which is a different setup to the current Kenyan economic situation. The Previous Kenyan scholars who have shed light on the aspects of innovation in Kenya did not relate the innovation to the competitiveness of commercial banks in Kenya. This Include Mwangi (2007) who studied the factors that influence financial innovations in Kenya's securities market in the NSE and in his study he found out that regulatory factors influence financial innovations. Chege (2008) analyzed the common strategies applied by Equity Bank to remain competitive in the market. In a study on effect of financial innovation on the financial performance of Commercial banks Otoo (2010) in his study found out that there was a significant relationship between financial innovation and financial performance of commercial banks. Mugo (2012) showed that financial innovations were a crucial growth strategy adopted by various Micro Finance Institutions. Both Otoo and Mugo did not relate the innovation to competitiveness.

Apparently, the above scholars did analyze innovation but left out the aspect of competitiveness of financial institutions and how this competitiveness affects growth of the institutions. Therefore this research sought to fill the knowledge gap by answering the questions; What are the types of financial innovation adopted by commercial banks in Kenya? And how these innovations types affect the competitiveness of commercial banks in Kenya?

1.3 Objective of the Study

To establish the effect of financial innovation on the competitiveness of Commercial banks in Kenya.

1.4 Value of the Study

The study findings will help reinforce the existing innovation theories by providing a clear impact of innovation on the competitiveness of commercial banks. The study findings will also add to the existing theory of financial innovation the correlation between financial innovation and competitiveness, which will be resourceful to future scholars, for reference and academic advancement purposes.

The research findings will give insight to managers to enhance their precision in the practice by selection of the best innovations at various development stages. In addition the findings will shed light on the relationship of innovations and the competitiveness of commercial banks.

To the regulators it will provide useful information regarding the innovations and its effects and hence help regulators to supervise commercial banks. It will also assist in setting-up of favorable policies and creation of condusive environment to encourage innovation at different levels (Llanto and Fukui, 2003).

To the General Public who would like to like to know more about innovations so as to build on their existing knowledge would find this material very important in the area of financial innovations. The study findings will enable the Customers and Clients to appreciate the impact that innovation has brought in redesigning how commercial banks operate in the market today as compared to the olden days.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focuses on the theoretical part and empirical evidence of financial innovation. The theoretical part explains theories of innovation, types of innovation and the benefits of financial innovation in the banking sector and the industry competitiveness. The empirical review looks at previous studies done relating to financial innovations in financial institutions.

2.2 Theoretical Review

Different Scholars have looked at financial innovation in different contexts, while analyzing different variables they have given different theories behind the experienced financial innovation.

2.2.1 Traditional Theory of Financial Innovation

This Theory was stipulated by Sundbo in 1997, where he suggested two paradigms based on the causal patterns, namely Technology-economic paradigm and entrepreneur paradigm based on two different models of innovation process. Technology-economic paradigm emphasizes on the technological development as the core of innovation process which was pegged on the random technology advancements.

Smith, Smithson & Wilford, (1990) observed that advances in information and technology support sophisticated pooling schemes that we observe in the securitization while IT and improvements in telecommunications (and more recently the Internet) has facilitated a number of innovations (not all successful), including new methods of underwriting securities (e.g., openIPO), new methods of assembling portfolios of stocks (folioFN), new markets for securities and new means of executing security transactions. White (2000) refers to this phenomenon as the technological view of financial innovation.

In the entrepreneur paradigm of innovation Sundbo (1997) pointed out that financial innovation is largely driven by the entrepreneurial act of the players in the market. It involves the developments of new financial entrepreneurs and managing of the old entrepreneurships in

addition to the products and process innovation. Today we see companies investing heavily in technology so as to be able to design new ways of doing business in order to be very efficient and effective in their operations so as to remain competitive.

2.2.2 Financial Constraints Theory

The Theory of constraints dates back to 1950 when Shumpeter revealed that firms innovate to address the constraints and inconveniences caused by market imperfections, regulations, operation costs and taxes. Silber (1983) also added that financial innovation is done to lessen the financial constraints that limit the firm's earning capacity, therefore firms innovate to optimize the returns on capital in the light of the firm's goals. Silber further suggested that firms need to continuously renew themselves to prosper in this dynamic environment.

According to Tufano (2002) financial innovation came about as a result of high interest rates, taxes and regulation. Therefore, individuals and firms innovated to circumvent these constraints to lessen the cost of borrowing, reduce expenses and improve investment options. Innovation also seeks to tackle the financial investment constraints through low deposits, less interest income, constrained lending, consequently less demand for deposits and the entire efficiency, among others.

Miller (1991) contends that financial innovation is not a new phenomenon and argues that it is a response to the increasing volatility in the financial markets. He argues that there are three main reasons for the increasing volatility: The oil crises in the early 1970s and early 1980s that directly and indirectly resulted in the significant drops in the stock prices and increase in commodity price volatility; the increased inflation and interest rate risk; and the breakdown of Bretton Woods system and the end of fixed exchange rates for most industrialized countries.

2.2.3 Strategic Theory of Financial Innovation

Sundbo (1997) emphasized that firms strategy is core determinant of the innovation. Consequently, innovation is formulated within the firm's strategy and must be kept within the firm's strategy to prevent firm's activities from getting out of hand. These often involve deliberate financial engineering, where innovation is systematically planned and strategically

operationalised to improve performance of specific sections. Tufano (1989) noted that innovation makes the financial market complete, wide and efficient. This reduces the cost of transactions and gives the participants greater freedom of investment of choice thereby satisfying all the participants in the finance industry.

Merton (1992) holds that the period from mid-1960s to mid-1980s shows that financial innovation has been a critical persistent part of the economic landscape of the world financial markets. He holds that financial markets have continued to produce a multitude of new products, including many new forms of derivatives, alternate risk transfer products, and exchange traded funds. In his view we see companies today coming up with new products that are less costly and friendlier to customers as they are designed to meet the dynamic environment which they operate and thus this strategy enhances their competitiveness in the market.

2.3 Types of Financial Innovations

Financial engineers have placed greater emphasis on being able to tackle the new challenges by innovating new products, better processes and implementing more efficient solutions to tackle the increasingly complex financial problems (Tufano, 2002). Financial innovation therefore represents a systematic process of change of instruments, institutions, operating procedures and policies that determine the products and the structure of our financial system. Lariviere and Martin (1998) classified micro finance innovations into various categories.

2.3.1 Financial Systems Innovations

Financial system innovation is the deliberate changes in the systems employed from manual book records to interconnected computer systems and currently to interconnected financial and other financial institutions. According to Omasaja (2007) as Micro finance institutions, the staff and the managers get overwhelmed by volume of tasks, necessitating for the need for better systems that are faster, effective in reports generation, improve performance and support high volume business.

Mugo (2012) showed that financial innovations were a crucial growth strategy adopted by various Micro Finance Institutions. He showed that most Micro Finance Institutions (MFIs) have innovated new services like mobile banking, business accounts, SME loans, school fee loans, financial trainings and partnerships. Other Micro Finance Institutions (MFIs) have networked their offices, opened new branches and innovate new products in a bid to grow their firms. Besides, there was strong positive correlation between financial growth and reason like addressing clients' needs, clients' retention and reducing transaction time.

2.3.2 Financial Institution Innovations

This is the introduction of new institutions or redesigning of the institutions to strategically serve the target market segments appropriately. It involves merging, splitting institutions to their specialties or inclusion of the related services. This enables these institutions to maximize on capital and serve different target groups effectively. Institution innovation has introduced economies of scale and uses of technology effective innovations have brought costs and interest rates down for MFIs. It has brought a vast opportunity for MFIs to offer more micro financial products to both rural and urban household under one roof. These include additional loan products, such as housing, auto and education; new insurance schemes for health, life and assets, bill payment hence benefitting through economies of scale.

Imady and Seibel (2003) argue that financial institutions innovate to expand the product distribution channels. Innovation has increased the distribution channels to reach more people in rural and urban centers by use of cheap and affordable means of distribution like agencies of some commercial banks have gone viral in the country today like KCB Mtaani, Co-op Jirani, Equity agent and these cuts down costs of operation.

2.3.3 Process Innovation

These are technological processes that increase efficiency and effectiveness with regards to payment systems, communication, computing and transactions clearing methods. These are aimed at reducing transaction costs, reduce idle cash balances I response to higher interest rates and take advantage of quicker computer transactions (Finnerty, 1988). The notable feature of

process innovation among the commercial banks is the electronic banking which all the commercial banks in Kenya have introduced in the form of ATMs, internet banking and telephone banking to access the banking services very conveniently, fasts and around the clock. Also the RTGS system which is a type of funds transfer mechanism where transfer of money takes place from one bank to another on real time and Gross basis. Real time means the transactions are processed as they are received. Gross settlement means the transactions are settled on one to one basis without batching with any other transaction. RTGS system is primarily for large value transactions. As soon as transactions are remitted by the paying bank they are credited in the receiving bank.

Kamotho (2009) carried out a study on mobile Phone Banking: Usage Experiences in Kenya. The study covered the two main dominant mobile banking service providers- Safaricom and Zain – during the three year period 2006-2008, from inception with total outlets of 8000 agents. This number tripled compared to 876 branches and 1424 ATM for commercial banks (CBK, 2008). Kamotho; observed that Competition triggers innovation and creativity. Continuously innovation not only yield new products but rather promotes efficiently in the performance of activities. Hence lowering the transaction cost. Contrary to popular wisdom that mobile phone money services are meant for funds transfer and remittances, his findings concluded that 96% of respondents used M-Banking service as form of saving of funds.

2.3.4 Product Innovation

This is Products diversification through the development of either new instruments or modification of the existing financial products and services to align them with the client's needs. Product innovation can also be seen as bringing to life new way to solve the customer's problem that benefits both the customer and the financial institution. Product innovation is done through the ongoing research and development of new products, services or ideas which are more flexible and tailor made to satisfy customers. Product innovations in commercial banks are introduced to respond better to changes in market demand or to improve the efficiency of services provided. Examples of product innovations include; Airtel and Safaricom introduced mobile phone money transfer services M-pesa and airtel money to tap the potential for small scale transactions at reasonable costs. Equity Bank has partnered with Safaricom to introduce

the Mkesho service. Bank accounts tailored for specific age groups such as Co-operative Bank's Jumbo, Junior account, Diva and X Bank accounts of Standard Chartered Bank, Bankika and Biashara accounts of Kenya Commercial Bank

Orry (2011) in his study on product differentiation as a strategy for sustainable competitive advantage in Banks issuing credit cards found out that banks do operate in a very competitive market and with product differentiation strategy they will achieve a sustainable competitive advantage and with this commercial banks need to recognize visa and master cards and identify its appropriate market for processing payments methods as they will help the banks develop their own brand image and separate themselves from their competition by being different thus achieve a sustainable competitive advantage.

Companies persistently are striving to create mechanisms for differentiating themselves from their competitors within the market (Barney, 2001). Commercial banks have been forced to dissect their business processes for the purpose of determining what product to develop and offer to the market so as to attain a competitive advantage, the adoption of bank credit and debit cards in delivering financial service has been a key to grasping and retaining competitive advantage (Foster and Kaplan, 2001).

2.4 Empirical Review

During the innovation time between 1960s and 1990s the percentage of non-interest income rose tremendously as new products add off-balance sheet activities increased. The high interest rates can be reduced by increasing completion and financial innovation. Franklin and Federic (1995) analyzed the effect of innovation on the bank's income within the innovation period.

Generally financial innovation brings about financial deepening, increased lending, financial flexibility and ability to monitor loan recipients that eases burden of default for lenders, which allows reduced interest rates on loans (Rousseau, 1998). Fame and White (2004) in their study on innovation among banks revealed the number of branches of a bank induces centralization therefore necessitating for the adoption of innovation technology to encourage better decision

making. Regulation does spur financial innovation while diffusion of new technologies by banks is positively relates to institution size. Also the adoption of new technologies by consumers is positively related to an individual's education and income. The welfare effects of financial innovation appear to be generally positive. Moreover this study targeted the American banking sector which is somehow very different from the Kenyan banking sector.

Chege (2008) notes that the success of financial innovation can be pinpointed quite precisely to the method of its implementation. A successful innovation lies in the commercializing the new products quickly to benefit from first mover advantage. Kihumba (2008) analyzed the reason for innovation and performance of 43 banks between 2000 and 2007, how each factor caused innovation in the Kenyan market and how innovation has increased annual revenue, business volume, customers' turnover, and reduced costs of operation, facilitate expansion of the market share and geographical coverage of the bank. According to Kihumba (2008) some financial institutions do innovate to utilize their excess capacity and to maximize its revenue within the existing capacity.

Mugo (2012) showed that financial innovations were a crucial growth strategy adopted by various Micro Finance Institutions. He showed that most Micro Finance Institutions (MFIs) have innovated new services like mobile banking, business accounts, SME loans, school fee loans, financial trainings and partnerships. Other Micro Finance Institutions (MFIs) have networked their offices, opened new branches and innovate new products in a bid to grow their firms. Besides, there was strong positive correlation between financial growth and reason like addressing clients' needs, clients' retention and reducing transaction time.

2.5 Summary of Literature Review

Financial innovation is a key feature of the world economy, and has important implication for management of risk and for securities and political system yet it remains little studied outside the economics and business studies (The Economist, 2005). Today the financial market is very competitive and customer complex needs keep changing all the times and for commercial banks

to be competitive in the banking industry they need to realign their financial innovations with their strategies that impact their competitiveness in order to gain a competitive edge over other players in the market if not then they will close shop. This will be resourceful to the future scholars and other interested parties in the financial markets, as it will reinforce the existing knowledge pertaining to reasons for innovation, types of innovations and effect of financial innovation.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines how the research was conducted and how data was analyzed, with different sections showing the research design, target population, sample size, data collection and data analysis.

3.2 Research Design

This research problem was studied through the use of a descriptive survey design that was aimed at examining the effect of financial innovation on the competitiveness of commercial banks in Kenya. According to Donald and Pamela (1998), a descriptive study is concerned with finding out the what, where and how of a phenomenon. Descriptive surveys are used to develop a snapshot of a particular phenomenon of interest since they usually involve large samples. The focus of descriptive research is the careful mapping out of circumstances, situation or set of events to describe what is happening or what happened (Donald, 2005).

3.3 Target Population

The population study comprised of all the registered commercial Bank (appendix I) who were all drawn from the finance directory obtained from Central Bank of Kenya. There were 43 commercial banks as at 31st December 2012 whose mandate is to receive deposit and give credit to customers. A census survey was conducted on all the forty three (43) registered commercial banks. This is because the population was considerably small and manageable.

3.4 Data Collection Method

Data was collected from primary source using semi- structured questionnaire based on a six point likert scale. Strauss (1990) argues that a six point scale eliminates the clustering which is common for an odd numbered likert scale. The research questionnaire targeted the managers and senior employees of commercial banks assumed to be knowledgeable on matters of innovation. The questionnaire consisted of both closed and open ended statements to contextualize and understand the respondents' perception with regards to both quantitative and qualitative aspects of financial innovation. It had three parts namely firm's details, financial innovations and the effect of innovations on competitiveness. To ensure reliability of the data, the questionnaire was self-administered, which enabled the researcher and the respondents to interact and obtain reliable and accurate response. A drop and pick later method was used.

3.4.1 Data Reliability and Validity

Reliability of questionnaire was evaluated be use of Cronbach's Alpha which measured the internal consistency. Cronbach's Alpha was calculated by the application of SPSS for reliability analysis. The value of alpha coefficient ranged from 0-1 and was used to describe the reliability of factors extracted from dichotomous and or multipoint formatted questionnaires or scales. A higher value shows a more reliable generated scale. Cooper & Schindler (2008) has indicated 0.7 to be an acceptable reliability coefficient.

3.5 Data Analysis

Data was analyzed to be understood very easily by a common man. Before analysis, the researcher picked the questionnaires from the respondents thoroughly examined the data and checked for completeness, edited, classified and coded the data. A descriptive statistic analysis was used to analyze the coded quantitative data by use of SPSS software and presented through percentages, frequencies, mean scores and standard deviation. The presentation of the data was done through tables for ease of understanding and analysis. Content analysis was used to test the qualitative data or the aspect of the data from the open ended questions to capture the effect of financial innovation in their operations.

3.5.1 Data analytical Model

After data analysis the research variables' relationship was portrayed in a model to link the

competitiveness to innovation variables. Analytical model is a mental construct consisting of a

set of elements in interrelation (Hagen 1961). The Researcher used multiple regression analysis

because we were studying the relationship between a dependent variable and more independent

variables. Competitiveness that was used for the purpose of this study constituted the element of

financial performance; that is operational (functional) competiveness being the depend variable

on the regression model.

The variables of the study comprised of the competitiveness of commercial banks as the

dependent variable and the financial innovations as the independent variables. The Multiple

regression model was used to test the effect of financial innovation on competitiveness of

commercial banks in Kenya. The basis of the regression model was to express Competitiveness

as a function of financial innovations in the study.

The multiple regression analysis model equation used was:

Competitiveness = $\beta 0 + \beta 1$ (Institution innovation) + $\beta 2$ (Product Innovation) + $\beta 3$ (Process

Innovation) + β 4 (Technological innovations) + ϵ

This model was simplified to;

 $Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \epsilon$

Where by

Y = represents Competitiveness of Commercial Banks a dependent variable.

X1 = Institutional innovations

X2 = Product Innovations

X3 = Process innovations

X4 = Technological innovations

21

- $\beta 0$ = is the constant factor value of the intercept of variables Y and Xi measuring average value of Y when Xi=0
- β 1, β 2, β 3 and β 4 are coefficients of determination
- ε = Error term being the difference in value between the ith observation and the model expected to be equal to 0.

The study used the ANOVA to test the level of significance of the model of the independent variables on the dependent variable at 95% level of significance.

For measuring independent variables, in order to determine their values, the following criterion was used;

Institutional innovation - where there was an agency relationship the value that was assigned was 1 and where an agency relationship did not exist the value that was recorded was 0.

Product innovation - where there was product innovation the value that was assigned was 1 and where there was no product innovation the value that was recorded was 0.

Process Innovation - where there was wide access to banking services the value that was assigned was 1 and where there was no wide access to banking services the value that was assigned was 0.

Technological innovations - where there was use of credit and smart cards in doing business the value that was assigned was 1 and where there was no use of credit and smart cards the value that was assigned was 0.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

The chapter presents the results of the analysis, findings and interpretations on the effect of financial innovations on the competiveness of commercial banks in Kenya. The results were then presented in the form of tables where qualitative data was analyzed through MS Excel and SPSS statistical software analyzed through coding.

4.2 Findings

The target Population of the study was 43 banks where by 38 respondents out of 43 registered commercial banks returned the filled questionnaire that was given out to them and secondary data collected from various publications and banks websites. This represents 88.4% response rate which is actually a good representation of the target population.

From the data collected from the questionnaires, 98% of the respondents agreed that there is a direct relationship between financial innovation and profits, growth of banks. The respondents noted that without financial innovation, many banks in Kenya could have collapsed or have very serious financial problems. The questionnaires collected qualitative data as well as small insignificant quantitative data that provided information on the level of financial innovation adopted by commercial banks.

Based on the secondary data collected from banks publications, websites and the central bank of Kenya, there was enough evidence to suggest that Kenya commercial banks have had leap in profitability especially when the first ATM started to gain ground with customers.

Other related studies carried out by Paul Volcker, suggested that some types of financial innovations are driven by improvements in computer and telecommunication technology. For example (Paul Volcker, 1998) suggested that for most people, the creation of the ATM was a greater financial innovation that asset-backed securitization. Others types of financial innovation affecting the payment system include credit and debit cards and online payment systems like

Paypal. These types of innovations are notable because they reduce transaction costs especially for the banking sector.

4.2.1 Effect of card transactions on sales of commercial banks

Table 4.1: Cards Transactions/Usage (Millions)

MEASURE	2011	2012	Change (%)	
Number of Cards	10.1	10.7	5.9	0.0594059
Number of ATMS	2,205.0	2,381.0	8.0	0.0798186
POS Terminal Number	16,604.0	18,478.0	11.3	0.1128644
Transaction Volumes	122.4	224.6	83.5	0.8349673
Transaction Values	577,852.0	1,009,758.0	74.7	0.7474336

Source: Research Findings

Table 4.1 shows that payments card usage grew strongly in terms of automated Teller machine (ATMs) cards, credit & debit cards, and point of Sale (POS) terminals in 2012 compared to 2011. The number of transactions and the equivalent value increased from 122.4 Million transactions worth KES 577.9 Billion in 2011 to 224.6 Million transactions worth KES 1,009.8 billion in 2012. From this increase we see a direct relationship increase in card issued results into an increase in the card users thus we see the volume of transactions and values in 2012 increased by 83.5% and 74.7% respectively, it shows that many people are embracing technology.

4.2.2 Extent to which Innovations have benefited Banks

Five statements were used to assess the extent to which innovations has benefited commercial banks operations. A summary of the responses are contained in table 4.2.

Table 4.2: Extent to which financial innovations have benefited commercial banks

Qualitative Variable	VLE f	LRE f	LE f	HE f	GE f	VGE f	Total f	Mean	Standard Deviation
Customer satisfaction	0	0	0	7	7	24	38	5.45	0.80
Transaction time	1	1	1	8	4	23	38	5.16	0.74
Reduced customer queue									
in the hall	0	0	0	8	9	21	38	5.34	0.77
Client retention	2	4	1	5	6	20	38	4.82	0.68
Enable Banks fight competition	0	0	0	10	11	17	38	5.18	0.73

Source: Research Findings

Table 4.2 shows the extent of the effect of innovations on the competitiveness of commercial banks. From the findings Customers satisfaction, reduced customer queue in the halls, transaction time, and enables banks fight competition have been enhanced by financial innovations in commercial banks operations to a very greater extent as indicated by a mean of 5.45, 5.34, 5.16 and 5.18 with a standard deviation of 0.80, 0.77, 0.74, and 0.73 respectively. The study found out that financial innovation does have a great impact on client's retention as indicated by a mean of 4.82 and standard deviation of 0.68. This clearly indicate that financial innovations affect the competitiveness of commercial banks as it enhances customers satisfaction, reduces transaction time and customer queues in banking halls and enables banks to fight competition in the market to a very greater extent.

4.2.3 Regression Analysis

A multivariate regression model was applied to test the relationship between financial innovation and competiveness of commercial banks in Kenya.

The regression used in this model was

$$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \epsilon$$

Where by

Y = represents Competitiveness of Commercial Banks which is dependent variable.

X1 = Institutional innovations

X2 = Product Innovations

X3 = Process innovations

X4 = Technological innovations

 $\beta 0$ = is the constant factor value of the intercept of variables Y and Xi measuring average value of Y when Xi=0

 β 1, β 2, β 3 and β 4 are coefficients of determination

 ε = Standard Error

Model summary

Table 4.3: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	0.916 (a)	0.839	0.744	0.4436		
a. Predictors (Constant), product, process, Institutional technology						

Source: Research Findings

From table 4.3 the study results under column R square is the measure of how the variability in the outcome is accounted for by predictors and it's called the coefficient of determination. It gives the extent to which competitiveness of commercial banks varies with variation in types of financial innovation. From the table above the value of R square is 0.839 which means that product, process, institutional and technological innovations accounts for 83.9 % of the level of variability on the changes of sales of commercial banks at a confidence level of 99.95%. The adjusted R square gives us how well our model generalizes from the table, 0.744 is the value for Adjusted R square which means it would account for 74.4% variance in change of sales of commercial banks.

Table 4.4: ANOVA (b) Analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.534	3	1.267	7.563	0.0236 (a)
1	Residual	9.307	35	2.327		
	Total	3.465	38			

Source: Research Findings

A) predictors: product, process, Institutional and technological innovations

B) Dependent Variable Competitiveness

The strength of variation of the predictor variables influences the competitiveness of commercial banks variable at 0.023 significant levels. The Multiple regression results indicate there is a significant relationship between the variables of financial innovation and the level of competitiveness of commercial banks in Kenya with F-test 7.563 at significant level of 5%.

Coefficients of Determinants

Table 4.5: Coefficients (a) of determinants

Model		Unstanda Coefficie		Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
1	(Constant)	1.157	0.335		3.454	0
	Product Innovation	0.797	0.213	0.167	3.741	0
	Process Innovation	0.897	0.241	0.076	3.721	0.012
	Institutional Innovation	0.843	0.215	0.186	3.92	0
	Technological Innovation	0.88	0.225	0.186	3.9111	0.011

Source: Research Findings

The study results under table 4.5 indicate that there is a direct relationship between competitiveness and technological and process innovations while the rest of the variables remain positive on their relationship with competitiveness. From the above regression model it was found that competitiveness of commercial banks would be at 1.157 holding product, process, institutional and technological innovations constant. A unit increase in product innovations would lead to increase in sales in commercial banks by a factor of 0.797, a unit increase in process innovation would lead to increase in sales by a factor of 0.897, while a unit increase in institutional and technological innovations would lead to increase in sales by a factor of 0.843 and 0.88 respectively.

Test at 5% (0.05) significance level, all the variables under review are significant since their P values (sig) is greater than 0.05 (p>0.05) for all of them. The study used values under unstandardized coefficients B for the coefficients for the variables. This indicates the extent to

which each of the variables affect competitiveness and it further gives weight of each and every one of them on competitiveness.

Y=1.157+0.797X1+0.897X2+0.0843X3+0.88X4

Where

X1 = Institutional innovations X2 = Product Innovations X3 = Process innovations

X4 = Technological innovations

The study found out that there is appositive relationship between competitiveness and process and Technological innovations in commercial banks in Kenya clearly indicating that effective process and improvement in technology enhances commercial banks to perform very much effective and efficiently thus influencing the financial performance of banks in Kenya.

4.3 Interpretation of the Findings

The researcher sought to determine the relationship between competitiveness of commercial banks and financial innovations where the researcher conducted a regression analysis to determine the coefficient of each variable on the competiveness. From the model study results the R square is a measure of how much the variability in the outcome is accounted for by the predictors. It was found out that its value is 0.839 which means that product, process, institutional and technological innovations accounts for 83.9% of the level of variability on the changes of competitiveness of commercial banks. The adjusted R square informs us of how well our model generalizes the variables. The adjusted R square is 0.744 indicating that there was a variation of 74.4% of competitiveness with variation in financial innovations practices. This reveals that there exists strong positive relationship between competitiveness and financial innovations types influencing the competitiveness of commercial banks in Kenya clearly indicating that effective implementation of process, product institutional and technological innovations influences the competitiveness of commercial banks in Kenya.

The study results indicate that Technological innovations has a direct relationship with competitiveness of commercial banks meaning where technological innovations are implemented

then the banks performance was up and competitiveness of the bank had a positive relationship with the process banks offered to the customers meaning that whenever the competitiveness moves in a particular direction, technology and process innovations being implemented will also move in the same direction. The study results has been looking at the absolute values indicated that process innovations has a greater weight when it comes to determining the competiveness of commercial banks as it had 0.89 followed by technology at 0.88 then Institutional (0.84) while product innovation (0.80) was the least.

Commercial banks have stepped up efforts to open more branches. This move is meant to tap into huge deposits and facilitate faster processing of loan applications according to the Central Bank of Kenya (CBK) Bank Supervision Annual Report 2012. Latest data from the CBK shows that total branch network of the Kenyan banks have risen by 20 per cent to 209 branches in the last three years despite agency banking model being in force. The total number of outlets grew to 1,272 in 2012, up from 1,063 in 2010. CBK projects more branches as the county governments undertake various measures to increase their economic activities. Bank branches increased by 111 branches last year with Nairobi County accounting for the highest number of new branches in 2012.

Nairobi County recorded a growth of 53 branches followed by Mombasa County with 10 branches and Kiambu County nine branches. However, branchless banking model, which was proposed in the budget for 2009 /2010 financial year, allows banks to extend their footprint through agencies with wide distribution networks. The introduction of agent banking has enabled financial institutions to provide banking services in a cost effective way, which has benefited customers. It has also enhanced financial access and inclusion, especially for the unbanked population. It is argued agency banking is unlikely to undermine or destabilize the branch system. It may only rationalize it, since agents typically do not replace existing branches. They only extend their reach and agents require branches as hubs for cash handling services and banks require locations which can provide oversight for surrounding agents.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the research findings on financial innovations adopted, its effects on the competitiveness of commercial banks, recommendation for policy and practice and lastly the suggested areas for further research on financial innovation.

5.2 Summary

The objective of the study was to determine the effect of financial innovation on the competitiveness of commercial banks in Kenya. The study addressed financial innovation in terms of the process, product, institutional and technology innovations that are being used by commercial banks in Kenya.

This study adopted a correlation analysis so as to determine whether there exist a relationship between the predictor and dependent variables of the study. The target population of the study constituted of 43 registered commercial banks in Kenya who were senior managers, relationship/branch managers. The study administered the questionnaires which included structured and unstructured questions to all respondents since it was the most appropriate way to gather information, secondary data was derived from banks websites, central banks websites. Descriptive statistics as mean, standard deviation and frequency of distribution were used to analyze the data. 38 respondents out of 43 registered commercial banks who returned the filled questionnaire that was given out to them. This represents 88.4% response rate which is actually a good representation of the targeted population.

From the findings the study established that process and technological innovations affect the competitiveness of commercial banks to a very great extent. The study established that many of the respondents agreed that there is a direct relationship between financial innovation and financial

performance in terms of profits and growth of banks. The respondents noted that without financial innovation, many banks in Kenya could have collapsed or have very serious financial problems.

From the research findings, the Kenyan commercial banks should conceptualize financial innovation as a means to be competitive in the market. Commercial banks make decisions to conceptualize financial innovation due to the banking industry pressure in offering quality products, enhancement of effectiveness of the banks and improve competitiveness in the market. Most of the commercial banks have opened a branch or more in the last 5 years so as to be able to bring banking services more closure to customers. Most banks have collaborated with other agencies in providing some banking services in their behalf like Pesa point, Kenswitch, which offers a wide range of access to various banks network thus enables customers to access their accounts at any point in time without necessarily going to their banks to access money. Also Safaricom for money transfers and also it has enhanced mobile banking via the palm of customer's hands thus enabling banks to offer services to customers round the clock.

The research findings proved that financial innovation has contributed to the expansion of the services offered by banks in the market. It has brought about the degree of openness. Implementation of financial innovation makes commercial banks to save great resources and reduces costs of operations, reduces cost per transaction in banks operations and enables commercial banks in Kenya to satisfy their customers' needs. With the implementation of product, process, institutional and technological innovations makes commercial banks become more flexible in their operations as it leads to production of quality products and expend the banks market shares.

The study found out that financial innovation as enabled commercial banks differentiate their products, develop new products in the market and improve quality of existing products, increase its specialization and division of labor.

5.3 Conclusion

From the summary, it can be concluded that financial innovations has a strong positive correlation with competitiveness of commercial banks as shown in table 4.5, therefore the research encourages the industry to adopt financial innovation to promote their competitiveness.

The study concludes that commercial banks in Kenya have conceptualized financial innovation as a means to create impact in their performance in the industry due to the dynamic nature of the ever changing customer needs.

From the results it can be concluded that the introduction of agent banking has enabled financial institutions to provide banking services in a cost effective way, which has benefited customers. It has also enhanced financial access and inclusion, especially for the unbanked population. It is argued agency banking is unlikely to undermine or destabilise the branch system. It may only rationalise it, since agents typically do not replace existing branches. They only extend their reach and agents require branches as hubs for cash handling services and banks require locations which can provide oversight for surrounding agents

5.4 Policy Recommendations

Based on the findings of the study financial innovation greatly contributes to the competitiveness of financial institutions and it should be employed by firms who wants to increase or achieve success in their financial performance in commercial banks.

The research also recommends that a well strategized innovation process preceded by a market research to ascertain the market needs and competition trends is fit to spur commercial banks performance.

From the finding, it is recommended that management of commercial banks in Kenya should invest in the latest technology such as internet banking and mobile banking as a way of providing banking services. This is because more and more Kenyans are acquiring mobile phones and would be desirable for commercial banks in Kenya to tap in to this huge and growing market to improve their profits.

5.5 Limitations of the Study

Finance industry is a very competitive industry thus many respondents had fear of disclosing some pertinent information which could be instrumental in coming up with a good and reliable findings.

The study focused on the concept of financial innovation as a key contributor to competitiveness of commercial banks although there are other factors that contribute to competitiveness of commercial banks whose effect could not be disregarded from the financial innovations.

The limitation of time constraints in undertaking the research project as a lot of time was spent on planning, finding instruments to collect data, analyzing data and all other processes necessary to make and implement the project.

5.6 Suggestions for Further Research

This study identified a number of suggestions for further research.

The study determined the effect of financial innovation on competitiveness of commercial banks in Kenya. The study recommends that further study should be carried out to investigate the challenges of financial innovations on competitiveness of commercial banks.

The study also recommends a study on the perceptions of customers on financial innovation since the pace of financial innovation by commercial banks in Kenya is still not fully embraced.

The study recommends a further research should be carried out to determine the challenges affecting implementation of financial innovations in banking institutions focusing on commercial banks.

Legal and regulatory framework is not well harmonized across borders in case of mobile banking, customer/consumer protection in the area of mobile banking and lack of global technology standards; this should be the focus on future research.

The role of technology in spurring new financial innovations. Do innovations occur every time new technology comes into place? The study recommends as to whether new innovations occur whenever new technology is realized.

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Appendix I:List of Ccommercial Banks in Kenya as at 31 December 2012

- 1. African Banking Corporation Ltd.
- 2. Bank of Africa Kenya Ltd.
- 3. Bank of Baroda (K) Ltd.
- 4. Bank of India
- 5. Barclays Bank of Kenya Ltd.
- 6. CFC Stanbic Bank Ltd.
- 7. Charterhouse Bank Ltd.
- 8. Chase Bank (K) Ltd.
- 9. Citibank N.A Kenya
- 10. City Finance Bank Ltd.
- 11. Commercial Bank of Africa Ltd.
- 12. Consolidated Bank of Africa Ltd.
- 13. Co-operative Bank of Kenya Ltd.
- 14. Credit Bank Ltd.
- 15. Development Bank of Kenya Ltd.
- 16. Diamond Trust Bank (K) Ltd.
- 17. Dubai Bank Kenya Ltd.
- 18. Ecobank Kenya Ltd.
- 19. Equatorial Commercial Bank Ltd.
- 20. Equity Bank Ltd.
- 21. Family Bank Ltd.
- 22. Fidelity Commercial Bank Ltd.
- 23. Fina Bank Ltd.
- 24. First Community Bank Ltd.
- 25. Giro Commercial Bank Ltd.
- 26. Guardian Bank Ltd.
- 27. Gulf African Bank Limited.
- 28. Habib Bank A.G Zurich
- 29. Habib Bank Ltd.
- 30. Imperial Bank Ltd.
- 31. Investment & Mortgages Bank Ltd
- 32. Kenya Commercial Bank Ltd
- 33. K-Rep Bank Ltd
- 34. Middle East Bank (K) Ltd.
- 35. National Bank of Kenya Ltd
- 36. NIC Bank.
- 37. Oriental Commercial Bank Ltd
- 38. Paramount Universal Bank Ltd.

- 39. Prime Bank Ltd.
- 40. Standard Chartered Bank Kenya Ltd
- 41. Transnational Bank Ltd.
- 42. UBA Kenya Bank Ltd.
- 43. Victoria Commercial Bank Ltd.

Source: Central Bank of Kenya website www.centralbank.go.ke

Appendix II: Research questionnaire

PART A: BANK INFORMATION

Please tick the category you fall in where appropriate

1.	Name of your bank
2.	Your post in the Bank
3.	Number of managerial levels?
4.	Number of employees
	Below 50 () 51-100 () 101-500() 501-1000 ()
	Over 1000 ()
5.	Number of branches?
	Below 10 () 11-30 () 31-50() over 50 ()
6.	Has your bank adopted an agency relationship? Yes () No ()
7.	Company Ownership. Please tick appropriately
	a) Is the bank a Public or Private company?
	i. Public ()
	ii. Private ()
	b) Is the bank a local or Foreign Bank (foreign=50% foreign ownership)
	i. Local ()
	ii. Foreign ()
	c) Does the Government of Kenya own any of your shares? Yes () No ()
	If Yes, what Percentage of the total share%
	d) Is the bank listed in the Nairobi Security Market? Yes () No ()
	e) Is the bank listed in any other stock Exchange? Yes () No (). If Yes
	Please indicate which stock exchange and
	country

PART B: FINANCIAL INNOVATION

8.	Indicate the number of new branches that your bank has opened in the last 5 years
9.	Has your bank teamed up or collaborated with any other organization? Yes () No ().
	If yes, specify the firms involved iii
	iiiiviv
10	. Is the bank keen on innovation of new products and services? Yes () No (). If yes , how
	often are the new products and services produced
	a) Annually ()
	b) Quarterly ()
	c) Bi - Annually ()

11. Table below shows different kind of products and services kindly indicate **YES/NO** whether these products and services were available in your banks in the years mentioned?

Categories	2008	2013
ATM		
Mobile Banking		
Money transfers		
services		
E-Banking/Internet		
banking		
SMS banking		
Branch network		
expansion		
Islamic banking		
products		
Loans (SME, Group,		
mortgage, asset		
finance)		
Agency banking		

Credit & smart cards	

12. In the table below indicate the extent to which each of these variables has benefited from financial innovations in a scale of 1 to 6. With 1 Strongly Disagree and 6 Strongly Agree please mark (**X**) where appropriate

Qualitative Variable	1	2	3	4	5	6
Customer satisfaction						
Transaction time						
Reduced customer queue in the hall						
Client retention						
Enable Banks fight competition						
Others (Please specify)						

PART C: GENERAL INFORMATION

Please kindly rate the below statements by ticking in the appropriate box;

Key: 1-Strongly disagree; 2-Fairly disagree; 3-Disagree; 4-Agree; 5-Fairly Agree;

6-Strongly agree

Product Innovation	1	2	3	4	5	6
Being on the fore front with new product innovation and solutions to beat competition increases sales						
Being laid back and only respond after the competition has launched something new that challenges your comfort						
Offering of mobile money transfer services enhances banks tap the potential for small scale transactions at reasonable costs						
Developing products and services tailored for specific groups increases market concentration						
Creating several product and service options targeting the same customer segment increases bank sales						
Having a specific customer segment with a relatively low pricing increases the banks market share						
Having specific product features that make it stand out from the competition increase market share						

Process Innovation	1	2	3	4	5	6
ATMS saves customers time in service delivery						
Telephone Banking provides increased convenience, significant time saving to customers						
Internet banking offers more convenience and flexibility to customers and control over their banking						
EFTPos saves customers time and energy in getting to bank branches or ATMs						
Branch networking offers quicker rate of inter- branch transactions as the consequence of distance and time are eliminated thus increase bank productivity						
PC banking establishes a branch in the customers' home enhances customer satisfaction						
Use of RTGS and EFT payment systems has enhanced banks clearing customers payments in real time						

Institutional Innovation	1	2	3	4	5	6
Has restructuring in commercial banks paid off						
in terms of efficiency and profitability Contracting professional service provider to operate their core products and services within the bank as agents of the banks increases bank sales						
Having staff hawk from office to office and pitch desks at malls increases customer base						
Having designated officer to approach customers in a given segment increase customer satisfaction						
Opening many branches closer to customers increases market share of the bank						
Getting in stock brokerage services increase banks market share						

Working longer hours enables the bank to				
increase service delivery to customers				

Technological Innovation	1	2	3	4	5	6
Technological tools and techniques that support the sales process increases market reach						
Technological innovations ensure that the bank offer services and products that are adapted to the needs and wants of focus customers						
Has a positive impact on transfers, payments, deposits and withdrawals in financial transactions of small businesses						
It is a cost effective, reliable and simple way of conducting business and reduces the instances of human error						
Lowers the costs of serving low-income customers						
Use of radios, television and internet channels as enhance marketing of banks products						
Through use of technology the bank is able to offer services professionally						

THANK YOU FOR YOUR SUPPORT

Appendix III: Questionnaire Cover letter

September 2013,
Dear Respondent,
Re: MBA Research Project:
This Questionnaire is designed to gather data/information pertaining to financial innovation in Commercial banks in Kenya for academic purpose only.
The study is being carried out for management project paper as partial fulfillment of the Degree of Masters in Business Administration at the University of Nairobi.
Your responses shall be treated with maximum confidentiality and in no instance your name will be mentioned in my report.
Your cooperation will be highly appreciated.
Yours Sincerely,
Ogutu Victor Onyango
MBA Student
REG NO. D61/60403/2010