APPLICATION OF ELECTRONIC BANKING AS A COMPETITIVE STRATEGY BY COMMERICAL BANKS IN KENYA

BY

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DECLARATION

I declare that this research project is my original work and to the best of my knowledge, it has not been submitted to any other institution.

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The research project has been submitted for examination with my approval as the University supervisor.

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DEDICATION

I dedicate this project to my late parents, Christine Itumbi and James Nzau, who taught me the value of hard work.

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ABSTRACT

The Banking industry has been undergoing significant transformation in an endeavor to offer world class service to its customers. The model of this transformation has been the change in technology and therefore innovation has been taking place from time to time.ICT is at the centre of great change and transformation and therefore banks would not like to lag behind. It is in line that commercial banks have been investing heavily on technological upgrade in order to keep abreast with modern developments and improve on service delivery to the customers. The study focused on the application of e-banking as a competitive strategy by commercial banks in Kenya. The aim of the study was to establish the level of adoption of electronic banking by the commercial banks in Kenya. The population consisted of all the 43 commercial banks and a self administered questionnaire was sent out to all the E-Channels managers in each of the 43 banks. The study showed that majority of the banks undertaking e-banking belonged to Tier II with an asset base of between 50billion and 60billion with a representation of 46.4%. The most popular services were Electronic funds transfer and Swift services and were ranked the highest (71.4%). Another finding showed that customers generally look for convenience while banking and they prefer channels that enable them to save time. The study recommends that the Government should issue licenses to banks when new products and services are introduced to the market. The study revealed that there are various challenges while dealing with e-banking services and one of them was lack of secure networks which could lead to loss of customers' funds. The future researchers may study on how to make e-banking secure and offer solution(s) to the banks with a view to improve on the threat of insecurity. Another future study may address connectivity to the rural areas as compared to the urban centers. This will enable the rural population to access e-banking services. Due to unauthorized access by fraudsters, the future researchers may also study on system developments that can detect fraud or criminal activities on line. The implication of this study on Resource based view theory and Dynamic capabilities is that the commercial banks of Kenya have gained competitive advantage by adopting new technology to meet the demands of their ever changing consumption habits of their customers. The study suggested various measures to the banks' management and the CBK which is a regulating authority for banks. Some of the measures included tightening the security of the e-banking products and services in order to safe guard the customers' funds. Practically, commercial banks have to keep abreast with the rapid change in technology and constantly invest in the latest technology in order to sustain their profitability.

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ABBREVIATIONS AND ACRONYMS

ATM	-Automated Teller Machine
CBK	- Central Bank of Kenya
E-Banking	-Electronic Banking
E-Channels	- Electronic Channels
E-Commerce	- Electronic Commerce
EFT	-Electronic Funds Transfer
I.B	-Internet Banking
ICT	-Information, Communication and Technology
IT	-Information Technology
M.B	-Mobile Banking
RBV	-Resource Based View

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

A strong banking industry is important in every country and can have a significant effect in supporting economic development through efficient financial services. In Kenya, the role of the banking industry needs to change to keep up with the globalization movement, both at the procedural level and at the informational level. This change includes moving from traditional distribution channel banking to electronic distribution channel banking (Salim & Arthur, 2008).

Resource Based View theory as coined by (Birger Wernefelt, 1984), advanced the idea that strategy of a firm is a function of the complement of the resources held. The essence of the Resource Based Model is that competitive advantage is created when resources that are owned exclusively by the firm are applied to developing unique competencies. The resulting advantage can be sustained due to lack of substitution and imitation by the firm's competitors. Companies are different collections of resources (tangible and intangible assets/capabilities). A company will be positioned to succeed if it has the best and most appropriate stock of resources relevant for its business and strategy. Competitive advantage ultimately can be attributed to ownership of valuable resources that enable the company to perform its activities better than competitors. Organizational capabilities are defined by the complex combination of assets, people and processes that companies use to transform inputs to outputs. The nature of RBV is inimitability, durability, appropriability, substitutability and competitive superiority. The theory is an efficiency based explanation of sustained superior firm performance, (Barney, 1991).

Dynamic capabilities approach endeavours to analyse the sources of wealth creation and capture by firms. Dynamic capabilities are defined as the firm's ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments. Dynamic capabilities thus reflect an organization's ability to achieve new and innovative forms of competitive advantage given path dependencies and market positions (Leonard-Barton, 1992). Dynamic capabilities thus are the organizational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve and die (Teece, pisano and Shuen, 1997).

Commercial banks of Kenya have realized tremendous growth in the last five years and some of them have expanded to the East African region. The banking industry in Kenya has also involved itself in automation, moving from the traditional banking to better meet the growing complex needs of their customers and globalization challenges. However, there has been increased competition from mobile financial services, local banks as well as international banks, some of which are new players in the country. The banking industry is changing rapidly. Even if we are satisfied with our strategies today, competitive pressures can create problems for us tomorrow. Banks should use electronics in banking as a weapon or a tool to monitor the market and also to save labour, (Dimitris, 1987). According to (Consoli, 2003), until the early 1980s and 1990s there were many regulatory restrictions which prevented banks to adopt new technology. As a result, there was heavy reliance on traditional branch based delivery of financial services and little pressure to change. The increasing importance of Information Communication Technology (ICT) brought stiffer competition and pressure for faster change.

1.1.1 The Concept of Strategic Management

Strategic management is a set of managerial decisions and actions that determines the long run performance of corporations. It includes environmental scanning (both internal and external), strategy formulation (strategic or long range planning), strategy implementation and evaluation and control (Wheelen and Hunger, 2005).These scholars also, state that strategic management requires application of various principles, techniques and advanced tools in strategic management in light of a corporations competitiveness.

Mintzberg (1994) defines strategy as a plan, a ploy, a pattern, a perspective and a position. Strategy as a plan since strategy defines the means through which organisations move from one state to another, usually from bad to good state. A pattern since it is concerned with repetitive activities over a period of time, a perspective since it provides a clear vision and a sense of direction where the organization is heading; a ploy to decoy the competitors in the industry and a position which means that organizations are willing to offer particular products and services to new markets other than existing markets. Ansoff and McDonnell, (1990) define strategic management as a process through which a firm manages its relationship with the environment in which it operates.

To gain competitive advantage, a firm's strategy should have the objective of manipulating the various resources over which it has direct control and these resources have the ability to generate competitive advantage. Lewis,(2004) notes that these attributes can include access to natural resources, such as high inexpensive power, or access to highly trained and skilled personnel human resources. New technologies such as information technology can provide competitive advantage, whether as a part of the product itself, as an advantage to the making of the product or as a competitive aid in the business process. Barney, (1991) points out that competitive advantage is attained when an organization acquires an attribute that allows it to outperform its competitors in the form of access to natural resources or some high grade or cheaply available raw material or access to highly trained and skilled human capital or develops some new technologies like information technology either to be included as a part of the product or to assist in making it.

1.1.2 Competitive Strategy

Dess et al, (2006), explains that a strategy is the direction and scope of an organization over the long term, which achieves advantage for the organization through its configuration of resources within a challenging environment, to meet the needs of markets and to fulfill stakeholder expectations. The strategy should relate to the extent to which the scope of a business' activities are narrow versus broad and the extent to which a business sought to differentiate its products. The achievement of competitive advantage is not always permanent or even long lasting.

Reuer, (2004), notes that once a firm establishes itself in an area of advantage, other firms will follow suit in an effort to capitalize on their similarities and advises firms to strive to have a sustainable competitive advantage. He explains that a firm is said to have a "sustainable" competitive advantage when its competitors are unable to duplicate the benefits of the firm's strategy. In order for a firm to attain a "sustainable" competitive advantage, its generic strategy must be grounded in an attribute that meets four criteria. Porter, (1998) defines three generic strategies that firms may use to gain competitive advantage: cost leadership, differentiation, and focus. A firm utilizing a cost leadership strategy seeks to be the low-cost producer relative to its competitors. A differentiation strategy requires that the firm possess a "non-price" attribute that distinguishes the firm as superior to its peers. Firms following a focus approach direct their attention to narrow product lines, buyer segments, or geographic markets. "Focused" firms will use cost or differentiation to gain advantage, but only within a narrow target market.

Huber, (2004) pointed out that when competing products or services are similar, buyers may perceive a difference based on company or brand image. Thus companies must work to establish images that differentiate them from competitors. A favorable brand image takes a significant amount of time to build. Everything that a company does must support their image including advertisements, production, sales floor presentation, and customer service. Lewis, (2004), explains that process innovation is anything new or novel about the way a company operates and they are important because they often reduce costs, and it may take competitors a significant amount of time to discover and imitate them.

1.1.3 Electronic Banking

According to (Muzividzi 2013), Electronic banking is the newest form of delivery of banking services and products. Brown and Molla, (2005) described electronic banking as an electronic connection between bank and customer to prepare, manage and control financial transaction. However, a more comprehensive definition of electronic banking is given by Singh and Maholtra, (2004) as the deployment of banking services and products over electronic communication networks directly to customers. This means the provision of information or services by a bank to its customers via a computer, television, telephone or mobile phone (Daniel, 1999).

According to (Dzaja, 2007), Electronic Banking refers to the provision of retail and small value banking products and services through electronic channels. Such products and services include deposit taking, lending, account management, the provision of other electronic payment products and services such as electronic money. Gup, (2003) defined electronic banking as any banking activity accessed by electronic means. It includes Automated Teller Machines (ATMs), automated call centres, digital cash, internet banking and screen telephones. Sethi & Bhatia, (2007) also defined electronic banking as the use of technology which allows customers to perform banking transactions electronically without visiting a brick and mortar institution.

1.1.4 The Financial Sector in Kenya

The banking industry in Kenya is governed by the Companies Act, the banking Act, the Central Bank Act and the various prudential guidelines issued by the Central Bank of Kenya (CBK). The banking sector was liberalized in 1995 and exchange controls lifted. The CBK, which fell under the Ministry of finance, is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system. Kenya's banking sector is cut-throat business arena and it is comprised of 43 commercial banks, 1 Mortgage Finance company, two credit reference bureaus, 97 Forex Exchange bureaus and 8 deposit taking micro finances (CBK 2012).The sector is also comprised of insurance companies and there are 44 insurance companies in Kenya and they are regulated and supervised by the Insurance Regulatory Authority which also has the mandate to issue licenses (Ministry of Finance report, November 2011).

Capital Markets Authority is tasked with the regulation and supervision of the Nairobi Securities Exchange. The NSE comprises various public companies that trade with stocks. There is only one Stock Exchange in the economy and there are 55 listed companies (Ministry of Finance report 2011). Financial sector is wide and also oversees the pension sub sector. There are four pension schemes in the country namely; the public service pension schemes, The National Social and Security Fund, Occupational retirement benefits schemes and individual retirement benefits schemes. The pension sub sector is regulated and supervised by the Retirement benefits authority (RBA) and there are 1216 provident funds/retirement benefits companies. There are 31 registered Administrators, 16 registered fund managers, 11 registered administrators and 6 actuaries (Ministry of Finance report, November 2011).Sacco Societies Regulatory Authority is a body registered under the ministry of Finance to license, regulate and supervise the 275 Saccos in the country (Sacco supervision report, 2011).

1.1.5 Commercial Banks in Kenya

According to the bank supervision annual report 2012 (CBK 2012), in Kenya we had forty three commercial banks, one mortgage finance institution and seven deposit taking microfinance institutions. The bank supervision annual report further cites that the banking sector witnessed various initiatives in line with vision 2030. These initiatives were geared toward mobile financial services with trading volume of Kenya shillings 1,545 billion being transacted in 2012. The adoption of internet banking was also embraced with 26 commercial banks offering various internet products to their customers (CBK 2012).

The Central Bank of Kenya granted banks authority to introduce various banking products in 2012 (CBK 2012). There were six large banks in 2012 which accounted for 53.7% of the market share. The banking sector total customer deposits were Kshs. 1,707 billion in 2012. The Automated Teller Machines (ATMs) as cost effective channels grew by 8% in 2012, by December we had 2,381 ATMs (CBK 2012). The gross loans stood at Kshs 1,330 billion in 2012.

1.2 The Research Problem

Strategic management is defined as the set of decisions and actions that result in the formulation and implementation of plans designed to achieve a company's objectives. Strategic management involves the planning, directing, organizing and controlling of a company's strategy –related decisions and action. By strategy, managers mean their large-scale, future-oriented plans for interacting with the competitive environment to achieve company objectives. Strategy is a company's game plan. A strategy reflects a company's awareness of how, when and where it should compete; against whom it should compete and for what purposes it should compete, (Pearce Robinson, 2007).

The study, therefore, sought to establish the application of electronic banking as a competitive strategy by commercial banks in Kenya. Electronic banking aids in providing information or services by a bank to its customers through a computer, television, telephone or mobile phones. The use of electronic banking has been necessitated by the rapid growth of technology. The banking industry as a whole needs to adopt new strategies of sustaining their growth due to stiff competition being witnessed. Commercial banks provide banking services to the population and the services are very crucial because they contribute to the growth of the economy. The research, therefore, focused on the 43 commercial banks.

Several studies have been done on competitive strategies adopted/applied by different companies in different industries. For instance Kotikash, (2012), studied competitive strategies adopted by Tata chemicals Magadi limited in Kenya. Osage, (2012) focused on Electronic banking adoption by Kenyan Commercial banks. Murunga, (2012), researched on competitive strategies adopted by the Kenyan Ministry of tourism to attract tourists while Gakumo, (2005), studied the application of Porter's generic strategies by Commercial banks in Kenya.

From the above studies, it is evident that each industry adopts different competitive strategies depending on its environment and therefore making it unique. The study, therefore, sought to determine the effect of electronic banking among the commercial banks in Kenya and it was guided by the following question; what is the level of adoption of Electronic banking among the commercial banks of Kenya? The focus was on various security threats and features of electronic banking that threaten the transactions.

1.3 Research Objectives

The objectives of the study were;

i) To establish the level of adoption of electronic banking by the commercial banks in Kenya.

ii) To determine the effect of electronic banking and if it affected the revenue of the commercial banks in Kenya positively.

1.4 Value of the Study

The importance of the study will enable the commercial banks gain competitive advantage if they apply the use of electronic banking through innovation of new products and services.

The study will help strategy makers of the commercial banks to make concrete decisions on how to improve the security of e- banking products and services. Central

Bank, as a regulator, will use forums like the monthly policy committees to discuss any emerging issues that may arise from the use of electronic banking in order to gauge its competitiveness. The study will also help the policy makers to understand and appreciate the electronic banking and thus work towards formulating and implementing policies to govern the electronic banking. Policy makers are becoming increasingly aware of the greater potential impact of macroeconomic policy on capital movements (Sarita, 2012).

The study sought to bring out information on the application of electronic banking and competitiveness that could be used by future scholars wishing to undertake further studies on application of electronic banking. It will also add on to the existing body of knowledge and assist academic researchers to enhance theory coupled with industry practice on "application of electronic banking as a competitive strategy by commercial banks in Kenya".

Resource based view theory states that competitive advantage is created when resources that are owned exclusively by the firm are applied to develop unique competencies and therefore, this study will enable the commercial banks reduce on operational costs if they apply the electronic banking. Dynamic capabilities theory looks at the organizations' ability to achieve new and innovative forms of competitive advantage when they operate in environments of rapid technological change. This study will therefore enable banks remain competitive by ensuring that they adopt new technology in order to remain in business.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter presented the literature that had been done by other scholars on the areas of electronic banking. Literature was reviewed from journals, books, working papers, reports and periodicals. Literature review helps to orient the reader on the role played by Electronic Banking among the commercial banks of Kenya. According to Saunders, Lewis and Thorn Hill (2000), literature review forms the framework on which the research is based as it helps to develop a good understanding of insight into relevant previous research and emerging trends.

2.2 Theoretical Framework

Resource based view as coined by Birger Wernefelt, (1984), advanced the idea that strategy of a firm is a function of the compliment of the resources held. The essence of the Resource Based Model is that competitive advantage is created when resources that are owned exclusively by the firm are applied to developing unique competencies thus resulting advantage can be sustained due to lack of substitution and imitation by the firm's competitors. Competitive advantage ultimately can be attributed to ownership of valuable resources that enable the company perform its activities better than competitors. Organizational capabilities are defined by the complex combination of assets, people and processes that companies use to transform inputs into outputs. The nature of RBV ensures; inimitability, durability, appropriability, substitutability and competitive superiority.

Dynamic capabilities approach endeavours to analyse the sources of wealth creation and capture by firms. Dynamic capabilities are defined as the firm's ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments. Dynamic capabilities thus reflect an organization's ability to achieve new and innovative forms of competitive advantage given path dependencies and market positions (Leonard-Barton, 1992). The dynamic capabilities framework analyses the sources and methods of wealth creation and capture by private enterprise firms operating in environments of rapid technological change. Products are the final goods and services produced by the firm based on utilizing the competences that it possesses. The performance of a firm's products relative to its competitors at any point in time depends upon its competencies which over time depended on its capabilities. Effective dynamic capabilities in high-velocity markets are simple, not complicated as they are in moderately dynamic markets. Simple routines keep managers focused on broadly important issues without locking them into specific behaviours or the use of past experience that may be inappropriate given the actions required in a particular situation.

The advance of communication and computer technology and the availability of the internet have made it possible that one can do most banking transactions from a remote location even without stepping into a physical financial structure i.e. the emerging of e-banking (Boyes and Stone, 2003). According to Dimitris, (1987), bank management is being challenged more than ever before. We need not only to adopt to services which were render, but also to the relation of the bank to its environment. Due to continuously changing conditions, the pressure comes from two ends: one is the markets themselves and the competitive situation; the other is the rapid evolution of computers and communications technology. Porter, (1985) introduced three generic strategies namely: Cost leadership is the drive to be the lowest cost operator in the field. To be a cost leader, investment is required in "state of the art production technology and high quality staff. Cost leadership organisations are lean form with small hierarchies, large spans of control, operative autonomy, small procedures and excellent salaries and terms and conditions of employment.

Focus concentrated on a niche and taking steps to be indispensable. The purpose is to establish a long term and concentrated business relationship with distinctive customers, based on product confidence, high levels of quality, utter reliability and the ability to produce and deliver the necessary volumes of product to customers when required. Differentiation means offering homogenous products on the basis of creating a strong image or identity as outlined earlier. Porter argues that the common factor in all successful strategies is clarity and that this stems from adopting one of these positions.

Banks increasingly look like large scale information and communication centres. They mastered a flood of information growing daily; handled an ever increasing number of business transactions in the shortest possible time; and do so with total reliability. The omnipresent competition gives rise to the steady development of new services and banking products-which must be not only be developed but also understood and digested (Dimitris, 1987).

According to Dimitris,(1987) a financial institution is no longer considered to be a simple service organization divided in front-and back office (logistics) operations. The modern bank is a network. What it does and what it does not is influenced in many ways by fast expanding business activities, many of them of an international nature. If the bank is an information system, the banker is an information manager. To serve these clients, the banker has to accomplish a myriad of requests. His/her expertise is challenged daily; he/she has to be a specialist and a generalist at the same time. Dimitris, (1987) notes that financial institutions which undertake universal banking business and work on a global basis face the greatest challenge the banking industry has ever had. They have the task of determining the relative importance electronic banking will play in their business strategy. They have the mission of evaluating the role 24-hour banking should play for growth and survival.

2.3 Electronic banking and performance

Perceived organisational performance refers to a manager's perception that e-banking application would improve a bank's performance. If internet technology could improve performance then the bank would be able to gain advantage in a competitive environment. Bhuian, (1997) examined the relationship between market orientation and banks' performance in Saudi Arabia. He argued that unlike most developed countries, developing countries are experiencing rapid growth in markets and that the growth would probably continue until markets matured and become competitive.

Examining the relationship between the e-commerce adoption and organisational performance, another study by Scupola, (2002) found that cost is not an important factor in the e-commerce adoption decision. This would lead to the banks gaining advantage in a competitive environment. Perceived organisational performance should be related to: profitability, market environment and employee productivity.

2.4 Competitiveness of organizations

Most developing economies, like Kenya, e-banking facilities enabled banks to expand their geographical coverage even in areas where they do not have branches by forging alliances with other banks and mobile phones providers allowing them to serve their customers through their partnership thus enhancing customer services. Gikandi noted that competitive forces were motivators of adoption of e-banking because adoption is viewed as a defensive measure against competitive activities and thus a competitive necessity within the industry. A bank will lose out to competitors if its management fails to plan for times of turbulence and does not prepare accordingly its human, financial and other resources.

The slowly but firmly established concept of “a banking industry” has deeply influenced the ways and means of doing business. There are competitive forces that affect banks in general. These are; international money centres, deregulation, the contest for new services, technology and positioning in the money market. In a fiercely competitive environment, the advantages which one financial institution has over another can be found in the value –added services it is ready to offer.

As banks faced extremely intensive competition from non-banking sector, the banking industry has adopted a more aggressive approach in the development of new e-banking services. As an integral part of the e-business, the e-banking industry has been growing at a rapid pace, to help banks cut costs, increase revenue and become more convenient for customers (Halperin, 2001).

Strategically, most small banks are motivated to develop e-banking services for potential future cost savings and gaining a competitive edge in the competition (Timmons, 2000). There is also a gap in perceived benefits from e-banking services between larger banks and smaller banks.

The problem in performance management of commercial banks, in the rapid development of financial markets, is that commercial banks are facing intense competition. In the rapid and complicated changing of business environment, banks are facing challenges from the external environment. If the banks do not correctly analyze the external environment and reflect what it is during the process of performance management, they cannot not give an accurate analysis of their own strengths and disadvantages; it cannot not understand the opportunities and threats facing either, so it is difficult to win in the fierce competition.

2.5 Challenges of electronic banking

The changing financial landscape brings with it new challenges for bank management, regulatory and supervisory authorities. The major ones stemmed from increased cross-border transactions resulting from drastically lower transaction costs and the greater ease of banking activities, and from the reliance on technology to providing banking services with the necessary security. There must be strong security to do away with hackers who want to access information (Donnelie, 2013).Back up must be there in times of power cuts since customers cannot access their accounts if the server with the bank was down. Effective laws could vastly accelerate the development of internet banking –especially laws concerning digital signatures. Effective privacy protection laws considering the internet environment would help to build trust and consumer confidence (Tinashe, 2013).

One of the important risks faced by banking institutions in offering e-banking services is the customers' resistance to use the services which significantly hinder the growth of e-banking. Unauthorized use of personal information to conduct e-banking activities and the increasing number of high-profile internet security breaches were becoming an urgent issue for all Kenyan banks to address (Sherah, Fei and Yi, 2007).

Reputational challenge; breaches of security and disruptions to the system's availability can damage a bank's reputation. The more the bank relies on electronic delivery channels, the greater the potential for reputational risks. If one electronic bank encountered problems that caused customers to lose confidence in electronic delivery channels as a whole or to view bank failure as system wide supervisory deficiencies, these problems could potentially affect other providers of electronic banking services (Sarira, 2012).

Security challenge; Internet banks collect and keep some very important personal information from each client. As internet technology advanced, so did the ability of criminals to hack into an internet bank and steal important client information, according to financial expert Steve Ellis, writing on the computer world website.

Internet banks must constantly update security measures and stay updated on the latest viruses and hacker tools in order to protect client information.

Operational challenge; the reliance on new technology to provide services makes security and system availability the central operational risk of electronic banking. Security threats can come from inside or outside the system, so banking regulators and supervisors should ensure that banks had appropriate practices in place to guarantee the confidentiality of data, as well as the integrity of the system and the data. Banks' security practices should be regularly tested and reviewed by outside experts to analyse network vulnerabilities and recovery preparedness. Managing heightened operational risks needed to become an integral part of banks' overall management of risk, and supervisors need to include operational risks in their safety and soundness evaluations (Sarira, 2012).The Government of Kenya can mitigate these risks/challenges by providing adequate regulatory support through the Ministry of communication.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presented the research design that was used in the study and it also provided the linkage between the conceptual perspective, the research objectives and the data collected. It also showed the data collection techniques and how the data collected was analysed. This section specifies the framework or blue print for the entire research so that the objectives of the study could be achieved.

3.2 Research design

A research design is a process of meticulous selection of methods used to answer the questions and solve the research problem. According to Creswell et al, (2007, research designs are the procedures for collecting, analyzing, interpreting and reporting data in research studies. It took into consideration certain key criteria, for instance accuracy and credibility of the method. The study adopted a cross-sectional survey across the commercial banks in Kenya and the data obtained was used to analyse the application of electronic banking as a competitive strategy.

A cross-sectional survey as a research design was used in observing a defined population at a given time. In the study the researcher obtained data from 43 commercial banks. A questionnaire was administered to the E-channels managers in each of the 43 banks to qualify the primary data and information gathered.

3.3 Population of the study

Cooper and Emory (1995) defined population as the total collection of elements about which the researcher wished to make some inferences. The population of the study was all the licensed commercial banks in Kenya. According to Bank supervision annual report, there are 43 operating commercial banks in Kenya, (CBK, 2012).” All these banks were studied”.

The attention focused on all commercial banks and the E Channels managers were the target population. There was no need to sample since the study population was small (only 43 banks).

3.4 Data collection

The main type of data collected was primary data and a semi structured questionnaire was used to allow for uniformity of responses to the questions. The questionnaire is a fast way of obtaining data as compared to other instruments (Mugenda & Mugenda, 2003). Questionnaires give the researcher comprehensive data on a wide range of factors. Closed-ended questions were used and the respondents were the electronic channels managers in the 43 banks. Questionnaires allow greater uniformity in the way questions are asked thus ensuring greater compatibility in the responses. The questions were designed so as to get responses specific to research questions and meet objectives the study was proposing to answer.

A total number of 43 respondents were interviewed. The questions were structured as follows; section A; background information, Section B; Electronic banking services currently offered, Section C; Operational impact of electronic banking services and section D; the future direction of e-banking.

3.5 Data analysis

The data collected was quantitative and it was analysed using descriptive statistics which include measures of central tendency, measures of variability and measures of frequency. Variables such as mean, standard deviations and percentages were derived from the data and analysed to address the research question.

The analysis was quantitative and qualitative and therefore used regressions and correlation. The measurement items were anchored on a five-point Likert scale ranging from “not at all”(1) to” very great extent”(5) in which participants were asked to indicate an appropriate response, the intent of the Likert scale is that the statement represent different aspects of the same attitude (Brace, 2004). The statistical package for social scientists (SPSS) program was used to do the regression analysis using the generated data. The researcher practiced good ethics in order to ensure data accuracy, reliability and consistence to deliver on the set out objectives.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION OF RESULTS AND DISCUSSION

4.1 Introduction

The study was carried out to establish the application of electronic banking as a competitive strategy by commercial banks in Kenya. The population consisted of the 43 commercial Banks in Kenya. However, Charterhouse bank Ltd is under statutory management and therefore was not considered as part of the population to be studied. This left the researcher with a total population of 42 commercial banks and information required was obtained from them.

A total of 42 questionnaires were distributed to the Information, communication and Technology managers in the 42 commercial banks identified. Of these, 28 questionnaires were successfully completed and returned by the respondents from 28 banks, giving a response rate of 67%. The questionnaire was the instrument of choice primarily because of its freedom from researcher's biasness, cost effectiveness and time efficiency.

4.2 Background information

The respondents were asked to indicate their academic qualifications. The findings are shown below in table 4.1;

Table 4.1: Respondent's academic qualification

	Frequency	Percentage
Secondary Level	1	3.6
Degree level	19	67.9
Masters level	8	28.6
Total	28	100.0

According to the findings as presented in table 4.1, majority of the respondents had attained a bachelor's degree (67.9%). Employees with a master's degree were few and they represented (28.6%).

The respondents were asked to indicate the duration in years they had worked in the bank. The period ranged from one year to over five years.The results are as shown below;

Table 4.2: Years of experience of the respondent in bank

	Frequency	Percentage
1yr	4	14.3
2yrs	3	10.7
3yrs	5	17.9
4yrs	3	10.7
>5yrs	13	46.4
Total	28	100.0

The table 4.2 shows that majority of the respondents had worked for more than five years (46.4%) and 17.9 % of them for a period of three years. Some respondents had worked for their banks for 2 years and four years and this represents 10.7% respectively.

4.3 Organizational characteristics

The respondents were asked to indicate the number of employees in the bank and they were expected to fill in the questionnaire. There was no indicate figures were given. The findings are shown in table 4.3 below;

Table 4.3: Number of employees in the bank

	Frequency	Percentage
Less than 1000	20	71.4
More than 2000	7	25
More than 4000	1	3.6
Total	28	100.0

As per the above table, majority of the banks had less than 1000 employees (71.4%). The banks that had more than 2000 employees represented 25% while only one bank had more than 4000 employees (3.6%).

The respondents were asked to indicate the duration their banks had been in operation. The duration ranged from five years to over twenty years. The results are as given below in table 4.4;

Table 4.4: Duration of bank in operations

	Frequency	Percentage
For 5yrs	1	3.6
For 10yrs	4	14.3
For 15yrs	1	3.6
For 20yrs	4	14.3
More than 20yrs	18	64.3
Total	28	100.0

The findings as presented in table 4.4 show that majority of the banks were in operation for more than twenty years (64.3%). Banks that had been in operation for ten and twenty years represented 14.3% respectively. Two banks were in operation for five years and fifteen years (3.6%).

The respondents were asked to indicate the asset base of their banks. The industry is atriving one and the amounts ranged from less than Kshs.10billion to over Kshs.100 million. The results are as presented in table 4.5;

Table4. 5: Total bank assets

	Frequency	Percentage
Less than Kshs. 10billion	3	10.7
Between Ksh.10billion-50billion	13	46.4
Between sh.50billion-100billion	9	32.1
More than kshs.100billion	3	10.7
Total	28	100.0

The findings of table 4.5, indicate that majority of the banks had assets to the tune of ten billion to fifty billion (46.4%). Banks with fifty to one hundred billion assets represented (32.1%).

The respondents were asked to indicate the number of customers that had been registered for e-banking services. They were expected to give their estimates in percentage form. The results are given as shown in table 4.6;

Table 4.6: No. of customers

	Frequency	Percentage
0-20%	8	28.6
21-40%	10	35.7
41-60%	8	28.6
61-80%	1	3.6
>80%	1	3.6
Total	28	100.0

As per the above table, majority of the banks had registered customers between 21% - 40% and this represented 35.7% of the total banks that responded. Eight banks (28.6%) had registered up to 20% and between 41%-60% respectively.

4.4 Electronic banking services offered

The respondents were asked to indicate when their banks had launched the e-banking. This service is fairly new in the banking industry and the period ranged from less than one year to seven years. The results were as shown below;

Table 4.7: No of years after launching E-banking services

	Frequency	Percentage
Less than1yr	4	14.3
Between 1-3yrs	10	35.7
Between 3-5yrs	9	32.1
Between 6-9yrs	4	14.3
More than 10yrs	1	3.6
Total	28	100.0

According to the findings in table 4.7, majority of the banks had launched the e-banking services for periods between one and three years (35.7%). The banks that had launched the services for periods between three and five years represented (32.1%).

The respondents were asked to indicate the extent to which internet banking was offered as a service. The results are given in the following table;

Table 4.8: Extent to which internet banking was offered by the respondent's bank

	Frequency	Percentage
To some extent	9	32.1
Neutral	4	14.3
To a great extent	4	14.3
To very great extent	11	39.3
Total	28	100.0

The findings presented above in table 4.8 show that 39.3% of the respondents agreed to a very great extent that internet banking was a service offered by the banks. 14.3% of the respondents were neutral and the same was also for those who agreed to a great extent.

The respondents were asked to indicate the extent to which mobile banking was offered as a service. The results were given as shown in table 4.9;

Table 4.9: Extent to which mobile banking was offered by the respondent's bank

	Frequency	Percentage
Not at all	4	14.3
To some extent	3	10.7
Neutral	4	14.3
To a great extent	7	25.0
To very great extent	10	35.7
Total	28	100.0

According to the findings shown in the above table , 35.7% of the respondents agreed to a very great extent that mobile banking was offered as a service. 14.3% were neutral while another 14.3 % did not agree at all that mobile banking was being offered by their banks.

The respondents were asked to indicate the extent to which EFT was offered as a service. The results are as summarized below;

Table 4.10: Extent to which EFT was offered by the respondent's bank

	Frequency	Percentage
To some extent	1	3.6
Neutral	1	3.6
To a great extent	6	21.4
To very great extent	20	71.4
Total	28	100.0

Table 4.10 shows that majority of the respondents agreed that EFT was a service offered (71.4%). The respondents who were neutral and those who agreed to some extent represented 3.6% respectively while the rest agreed to a great extent (21.4%).

The respondents were asked to indicate the extent to which ATMs were offered as a service. The results were given as below;

Table 4.11: Extent to which ATMs were offered by the respondent's bank

	Frequency	Percentage
Not at all	3	10.7
To some extent	1	3.6
Neutral	2	7.1
To a great extent	6	21.4
To very great extent	16	57.1
Total	28	100.0

Table 4.11 indicates that majority of the respondents had agreed to very great extent that ATMs were offered by the commercial banks (57.1%). 21.4% of the respondents agreed to a great extent. Those who were neutral represented (7.1%).

The respondents were asked to indicate the extent to which SWIFT services were offered by the commercial banks. The results were given as shown below;

Table 4.12: Extent to which SWIFT was offered by the respondent's bank

	Frequency	Percentage
To a great extent	8	28.6
To very great extent	20	71.4
Total	28	100.0

The findings as presented in table 4.12 above show that 71.4% of the respondents agreed to very great extent that SWIFT was a service offered by the commercial banks while 28.6% agreed to a great extent.

The respondents were asked to indicate the extent to which E-commerce was offered as a service. The results were given in the following table;

Table 4.13: Extent to which E-commerce was offered by the respondent's bank

	Frequency	Percentage
To some extent	4	14.3
Neutral	8	28.6
To a great extent	4	14.3
To very great extent	12	42.9
Total	28	100.0

The table 4.13 shows that 42.9% of the respondents agreed to a very great extent that E-commerce was offered as a service by the commercial banks. 28.6% of the respondents were neutral. Those who agreed to some extent and to a great extent represented 14.3% respectively.

The respondents were asked to indicate the extent of various benefits experienced by the customers. These benefits included convenience, saving of time and easy to use and affordability. The results are summarized in the following tables;

Table 4.14: Extent to which convenience was a benefit to the customers

	Frequency	Percentage
Not at all	1	3.6
To some extent	3	10.7
To a great extent	7	25.0
To very great extent	17	60.7
Total	28	100.0

According to the findings presented in table 4.14, the respondents felt to a very great extent that convenience was a benefit enjoyed by the customers (60.7%). 25% felt that convenience was experienced to a great extent.

The respondents were asked to indicate the extent to which time saving was a benefit to the customers. The findings are shown in table 4.15;

Table 4.15: Extent to which time saving was a benefit to the customers

	Frequency	Percentage
To some extent	1	3.6
To a great extent	11	39.3
To very great extent	16	57.1
Total	28	100.0

The above table shows that the respondents agreed to a very extent that savings of time was crucial to the customers (57.1%). 39.3% felt that saving of time was to a great extent and only 3.6% of the respondents agreed to some extent.

The respondents were asked to indicate the extent to which ease of use of e-banking services was a benefit to the customers. The findings are shown;

Table 4.16: Extent to which ease of use was a benefit to the customers

	Frequency	Percentage
Not at all	1	3.6
Neutral	9	32.1
To a great extent	12	42.9
To very great extent	6	21.4
Total	28	100.0

The findings presented in the above table 4.16 show that 42.9% of the respondents felt that ease of use of the services was a benefit to the customers. 32.1% of the respondents were neutral and 21.4% agreed to a very great extent.

The respondents were asked to indicate the extent to which low cost of service was a benefit to the customers. Affordable services are popular with the customers so that they utilize as many of them as possible. The findings are as shown below;

Table 4.17: Extent to which low cost was a benefit to the customers

	Frequency	Percentage
To some extent	4	14.3
Neutral	11	39.3
To a great extent	9	32.1
To very great extent	4	14.3
Total	28	100.0

According to the findings presented in table 4.17, majority of the respondents were neutral on whether low cost of service was a benefit to the customers (39.3%). 14.3%

agreed to a very great extent that low cost of service was a benefit while those who agreed to a great extent represented (32.1%).

The respondents were asked to indicate the extent to which various services were beneficial to the banks. The benefits included growth in profits, diversification of services, customer satisfaction and reduced operational costs. The results were given in the following tables;

Table 4.18: Extent to which growth in profits was a benefit to the bank

	Frequency	Percentage
To some extent	3	10.7
Neutral	7	25.0
To a great extent	14	50.0
To very great extent	4	14.3
Total	28	100.0

As per table 4.18, 50% of the respondents agreed that growth in profits was a benefit to the banks to a great extent. The respondents who believed to a very great extent were 14.3% while those who were neutral represented 25%.

The respondents were asked to indicate to what extent was diversification of services was a benefit to the banks. The results are as shown below;

Table 4.19: Extent to which diversification of services was a benefit to the banks

	Frequency	Percentage

To some extent	1	3.6
Neutral	2	7.1
To a great extent	15	53.6
To very great extent	10	35.7
Total	28	100.0

According to the findings presented in table 4.19, 53.6% agreed that diversification of services was a benefit to the banks to a great extent.35.7% agreed to a very great extent while 7.1% of the respondents were neutral.

The respondents were asked to indicate to what extent was customer satisfaction beneficial to the banks. The findings are as shown below;

Table 4.20: Extent to which customer satisfaction was a benefit to the banks

	Frequency	Percentage
Neutral	4	14.3
To a great extent	11	39.3
To very great extent	13	46.4
Total	28	100.0

The findings presented on table 4.20 showed that 46.4% of the respondents agreed to a very great extent that customer satisfaction was a benefit to the banks. 39.3% of the respondents agreed to a great extent that customer satisfaction was beneficial to the banks.

The respondents were asked to indicate to what extent the reduced operational costs were beneficial to the banks. The findings are as shown below;

Table 4.21: Extent to which reduced operational cost was a benefit to the banks

	Frequency	Percentage
Not at all	1	3.6
To some extent	1	3.6
Neutral	7	25.0
To a great extent	9	32.1
To very great extent	10	35.7
Total	28	100.0

According to the findings presented in table 4.21, 35.7% of the respondents agreed to a very great extent that reduced operational cost were beneficial to the banks. 32.1% agreed to a great extent while the respondents who were neutral represented 25%.

The respondents were asked to indicate the extent to which various customers were using e-banking transactions. The customers included individuals, businesses and employed customers. The findings are shown in the following tables;

Table 4.22: The extent to which business customers used the E-banking transactions

	Frequency	Percentage
Not at all	1	3.6
To some extent	1	3.6
Neutral	4	14.3
To a great extent	15	53.6
To very great extent	7	25.0
Total	28	100.0

The above table 4.22 indicates that 53.6% of the respondents agreed to a great extent that business customers use the e-banking transactions. 25% of the respondents agreed to a very great extent that businesses use e-banking transactions.

The respondents were asked to indicate to what extent employed customers used e-banking services. The findings are as shown below;

Table 4.23: Extent to which employed customers used the E-banking transactions

	Frequency	Percentage
Not at all	2	7.1
To some extent	1	3.6
Neutral	13	46.4
To a great extent	9	32.1
To very great extent	3	10.7
Total	28	100.0

Table 4.23 shows that 46.4% of the respondents were neutral on whether employed customers used e-banking transactions. 32.1% of the respondents agreed to great extent that employed customers used e-banking transactions.

The respondents were asked to indicate the extent to which e-banking services enhanced competitive advantage. The results are given below;

Table 4.24: Extent to which e-banking services enhanced the banks' competitive position in the market

	Frequency	Percentage
To a great extent	12	42.9
To very great extent	16	57.1
Total	28	100.0

According to the findings presented in the above table 4.24, 57.1% of the respondents believed to very great extent that e-banking services enhanced competitive position in the market and 42.9% of them believed to great extent.

The respondents were asked to indicate the extent to which customers' personal information security had improved as compared to when the services were launched. The results are as shown below;

Table 4.25: Extent to which customers' personal information security had improved

	Frequency	Percentage
To some extent	1	3.6
Neutral	2	7.1
To a great extent	18	64.3
To very great extent	7	25.0
Total	28	100.0

As shown in table 4.25, 64.3% of the respondents believed that customers' personal information security had improved to a great extent. 25 % of the respondents believed to a very great extent that the customers' personal information security had improved too. 7.1% of the respondents were neutral.

4.5 Future direction of e-banking

The respondents were asked to indicate the challenges faced by banks when dealing with e-banking. The various challenges experienced were lack of proper training, lack of awareness, lack of data security and unsecure networks. The results are given in various tables as shown below;

Table 4.26: lack of proper training

	Frequency	Percentage
Not at all	2	7.1

To some extent	10	35.7
Neutral	7	25.0
To a great extent	6	21.4
To very great extent	3	10.7
Total	28	100.0

According to the findings as presented in table 4.26, 35.7 % of the respondents felt that lack of training was a challenge to the banks to some extent. 25 % of the respondents were neutral and 21.4% of them believed to a great extent.10.7% represented those who agreed to a very great extent.

The respondents were asked to indicate if lack of awareness was a challenge faced when dealing with e-banking services. The findings are as shown below;

Table 4.27: Lack of awareness

	Frequency	Percentage
Not at all	1	3.6
To some extent	11	39.3
Neutral	10	35.7
To a great extent	5	17.9
To very great extent	1	3.6
Total	28	100.0

Table 4.27 above shows that 39.3% of the respondents believed to some extent that lack of awareness was a challenge faced by the banks. 35.7% of the respondents were neutral.

The respondents were asked to indicate if lack of data security was a challenge faced when dealing with e-banking services. The findings are shown;

Table 4.28: lack of data security

	Frequency	Percentage
Not at all	2	7.1
To some extent	10	35.7
Neutral	10	35.7

To a great extent	5	17.9
To very great extent	1	3.6
Total	28	100.0

According to the findings as presented in table 4.28, both respondents who were neutral and those who believed to some extent that lack of data security was a challenge represented 35.7% each.17.9% of the respondents believed to very great extent that lack of data security was a challenge to the banks.

The respondents were asked to indicate if unsecure networks were a challenge faced when dealing with e-banking services. The findings are as shown in the following table;

Table 4.29: Unsecure networks

	Frequency	Percentage
Not at all	11	39.3
To some extent	7	25.0
Neutral	5	17.9
To a great extent	4	14.3
To very great extent	1	3.6
Total	28	100.0

As per the table 4.29, 39.3% did not believe at all while 17.9% were neutral on whether unsecure networks were a challenge to the banks or not. 25% of the respondents believed to some extent and 14.3% to very great extent.

4.6 Discussion

The findings concluded that banks were keen in improving their profitability and reduce their operational costs. Therefore, they should invest heavily in acquiring net technologies. This will enable them to have a competitive advantage in the market place. Money transfers were the most common amongst all the banks and the popular methods were Electronic money transfers and Swift.

Customers preferred convenience and saving of time as far as bank transactions were concerned. Customer satisfaction was very important to the banks and therefore they should constantly review their products and services to suit the customers always.

Common users of e-banking services were found to be the businesses since it offered convenience.

The study found out that the commercial banks had to differentiate themselves by offering products and services that were easily affordable by the majority of the customers. Gakumo, (2005), studied the application of porter's generic strategies by commercial banks and found out that those banks that were ready to adopt technological advancement were bound to have competitive advantage and survive for a long time. The environment has been changing with the rapid change in technology and therefore the banks have to invest in upgrading its technology in order to survive for a long time.

According to Osage, C (2012), studied electronic banking adoption by the Kenyan commercial banks and found that the banks enjoyed increased efficiency as a result of adopting the electronic banking. He also found out that technological investments were taking a larger share of the banks' resources and technology was one of the resources allocated the highest cost together with the human resources. Therefore, in the current study, banks have to control their operational costs of human capital by investing heavily on technology.

The research determined the challenges that were encountered during the application of electronic banking by commercial banks of Kenya. Some of the challenges included low connectivity and this hindered smooth operations because the systems are expected to be online throughout. Another challenge encountered was lack of training to both the staff and the customers thus affecting the application of electronic banking. The study also revealed that lack of secure data information was a demotivation for the majority of customers to register for electronic banking because they feared for the safety of their funds.

Consequentially, the study determined that convenience and saving of time were the most attractive elements which meant the customers register for electronic banking. Diversification of services and growth in profits were the major benefits for the commercial banks as found out by the study.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

In this chapter, the researcher presented the summary of the important elements of the study, discussion of major findings as well as recommendations for improvement and suggestions for further research.

5.2 Summary

The main objectives of the study were to establish the level of adoption of electronic banking by the commercial banks in Kenya and to determine the effect of electronic banking and if it affected the revenue of the commercial banks in Kenya positively. The study sought to answer the following research question; "what is the level of adoption of electronic banking among the commercial banks of Kenya?"

Of the services offered under e-banking plat form, EFTS and SWIFT services were the most used as compared to the other services of Internet Banking, Mobile banking, ATMs and E-Commerce

Most of the respondents believed that customers were looking for convenience banking while registering for e-banking services. Saving of time was another benefit sought by customers while using e-banking channels. Banks benefited the most through ensuring that customers were satisfied while consuming the e-banking services.

Individual customers were the ones who transacted under e-banking plat form to great extent while businesses were utilizing the same services to a great extent. Banks were in a position to enhance their competitive position to very great extent if they continued applying e-banking services.

Customers' personal information security was key and most of the banks to a great extent believed that it had great improved as compared to when the banks launched the e-banking services.

5.3 Conclusion

The results of this research offer a number of implications for both managers and policy makers. Customer satisfaction is the main concern of any bank management and when satisfied, the customers can use the services more and hence enable banks to improve on profitability. More efforts have to be put in place in order to train the members of staff and the public (customers) on the usage of e-banking services. This will ensure that banking halls are decongested and the staff may be used to support the e-channels either in front/back office.

The application and growth of e-banking activities have raised concern to the government and regulatory bodies. The results of this study indicate that data security is also a concern among the consumers of the e-banking services and the government should impose a stiff penalty for fraud perpetrators so that it can deter other would be fraudsters from committing cyber crime. This would create confidence among the users in that their personal information and data are safe from being accessed illegally. The government should give incentives to the banks in form of waving duty on the systems so that banks could install modern and upgraded systems in order to improve on efficiency.

Studies in emerging markets indicate that top management generally does not understand what e banking is all about and this lack of understanding or ignorance lead them to underestimate the impact of electronic banking and prefer to be followers than leaders in the application of e-banking. In order to benefit fully from the benefits of electronic banking, banks must fully accept it by making managers and the staff aware of the benefits of e-banking and encourage each member of staff to cross sell the e-banking services.

From this study, we can conclude that there exists a positive relationship between the government policy and the extent of electronic banking adoption among the banks in Kenya. Policy makers should promote the use of e-banking by customers by installing information web sites similar to those offered by the governments of developed countries.

5.4 Recommendations

5.4.1 Implications on policy, theory and practice

The study found that the use of e-banking was on the rise due to the number of banks using the services and the number of customers being registered on a daily basis. Banks' management should work towards reducing down lines/offline so that services could be accessed throughout without any disruptions. The services should be charged at a reasonable fee in order to attract many users .Training of staff and customers should be easily accessed through the websites so that knowledge and skills on how to maximize on the benefits are utilized fully.

The study also found that the use of e-banking was beneficial to both the customers and the banks. It is therefore recommended that banks should be innovative enough and come up with their own platform instead of using the one for the mobile phone companies like safaricom and airtel. This would give them a competitive advantage since they would not share any fees with the mobile companies unlike what is happening currently.

It is, therefore, recommended that the government should offer support to the commercial banks by enabling licensing for various products and services that the banks may be willing to launch into the market in order to gain competitive advantage and hence improve on the existing products and services.

5.4.2 Suggestions for further research

From the findings, it was suggested that various challenges affected the consumption of e-banking services. One of them was lack of secure networks which could lead to loss of customers' funds. The future researchers may study on how to make e-banking secure and offer solution(s) to the banks with a view to improve on the threat of insecurity.

Another future study may address connectivity to the rural areas as compared to the urban centers. This will enable the rural population to access e-banking services. Due to unauthorized access by fraudsters, the future researchers may study on system developments that can detect fraud or criminal activities on line.

5.5 Limitations of the study

The study was inhibited by non response of some respondents due to the confidential nature of commercial banks. Majority indicated that they were to obtain authority from their mother companies abroad in order to respond to the questionnaire. Another limitation was inaccessibility to the commercial banks' premises due to the prevailing insecurity in the country.

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APPENDIX A: QUESTIONNAIRE

APPLICATION OF ELECTRONIC BANKING AS A COMPETITIVE STRATEGY BY COMMERCIAL BANKS IN KENYA

Introduction

This questionnaire seeks to gather information in relation to the application of electronic banking as a competitive strategy by commercial banks in Kenya. Information given by the respondents will be treated with strict confidence and will be used only for academic purposes. Kindly cooperate.

Part A: **Background information**

1. Name of bank (Optional)………………………………………….
2. What is your job title?..
3. Academic qualifications
   (i) Secondary school level ( ) (ii) Diploma ( )
   (iii) Bachelor's Degree level ( ) (iv) Masters degree level ( )
   Others (please specify)……………………………………………
4. How long have you worked in the bank?
   (i) One year ( ) (ii) Two years ( ) (iii) Three years ( ) (iv) Four years ( )
   (v) Over five years ( )
5. How many employees does the bank have?...................................
6. For how long has your Bank been in operation in Kenya?
   (i) Five years ( ) (ii) Ten years ( ) (iii) Fifteen years ( )
   (iv) Twenty years ( ) (v) Over twenty years ( )
7. What are the total assets of your bank?
   (i) Less than kshs.10 billion ( )
   (ii) Between kshs.10 and 50 billion ( )
   (iii) Between kshs.50 and 100 billion ( )
   (iv) More than kshs.100 billion ( )

8. Based on your estimate, how many of your customers have been using e-banking services?

0 to 20% ( )

21% to 40% ( )

41% to 60% ( )

61% to 80% ( )

Over 80% ( )

Part B: **Electronic banking services currently offered**

9. When did your bank launch the E-banking services?

Tick where appropriate

(i) Less than one year ( )

(ii) One to three years ( )

(iii Three to five years ( )

(v) Five to seven years ( )

10. To what extent do you agree that the following services are offered by your bank?

1-Not at all, 2-To some extent, 3-Neutral, 4- Great extent, 5-Very great extent

Internet banking	1	2	3	4	5
Mobile banking					
Electronic funds transfer					
Automated teller machine					
Swift services					
E-commerce					

11. To what extent do you agree with the following benefits derived from the use of the above services by the customers?

1-Not at all, 2-To some extent, 3-Neutral, 4-Great extent, 5-Very great extent

Convenience	1	2	3	4	5
Saves time					
Easy to use					
Cheap					
Accessibility					

12. To what extent do you agree with the following benefits derived from the use of the above services by the bank?

1-Not at all, 2-To some extent, 3-Neutral, 4-Great extent, 5-Very great extent

Growth in profits	1	2	3	4	5
Diversification of services					
Customer satisfaction					
Reduced operational cost					

13. To what extent do the following customers use the E-banking transactions?

1-Not at all, 2-To some extent, 3-Neutral, 4-Great extent,5- very great extent

Individuals	1	2	3	4	5
Businesses					
Employed customers					

C. Operational impact of e-banking services

14. To what extent does your bank believe that e-banking services will enhance your competitive position in the market?

1-Not at all

2-To some extent

3-Neutral,

4- Great extent

5-Very great extent

15. To what extent does your bank believe that the customers' personal information security is better now than it was before?

1-Nor at all,

2-To some extent,

3-Neutral,

4-Great extent

5- Very great extent

D. Future direction of e-banking

16. What challenges has your bank faced when dealing with e-banking?

1-Not at all, 2-To some extent, 3-Neutral, 4-Great extent, 5- Very great extent

	1	2	3	4	5
Lack of proper training					
Lack of awareness					
Lack of data security					
Unsecure networks					
Others					

(v) Others. List them…………………………………………………………………

…………………………………………………………………………………………

17. What recommendations would you like to make to the Commercial Banks in order to improve on the electronic banking application?

…………………………………………………………………………………………

Thank you for your cooperation.

APPENDIX B

COMMERCIAL BANKS IN KENYA

1. African Banking Corporation Ltd
2. Bank of Africa Ltd
3. Bank of Baroda Ltd
4. Bank of India Ltd
5. Barclays bank of Kenya Ltd
6. CFC Stanbic Bank Ltd
7. Charterhouse Bank Ltd (Under statutory Management)
8. Chase Bank (K) Ltd
9. Citibank N.A Kenya
10. Commercial Bank of Africa Ltd
11. Consolidated bank of Kenya Ltd
12. Co-operative bank of Kenya Ltd
13. Credit Bank Ltd
14. Development Bank of Kenya Ltd
15. Diamond Trust bank Kenya Ltd
16. Dubai Bank Kenya Ltd
17. Eco bank Kenya Ltd
18. Equatorial Commercial Bank Ltd
19. Equity Bank Ltd
20. Family Bank Limited
21. Fidelity Commercial Bank Ltd
22. Fina Bank Ltd
23. First Community Bank Limited
24. Giro Commercial Bank Ltd

25. Guardian Bank Ltd
26. Gulf African Bank Limited
27. Habib Bank A.G Zurich
28. Habib Bank Ltd
29. Imperial Bank Ltd
30. I & M Bank Ltd
31. Jamii Bora 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 Ltd
37. Oriental Commercial Bank Ltd
38. Paramount Universal Bank Ltd
39. Prime Bank Ltd
40. Standard Chartered Bank Kenya Ltd
41. Trans-National Bank Ltd
42. UBA Kenya Bank Limited
43. Victoria Commercial Bank Ltd

APPENDIX C: LETTER OF INTRODUCTION

The respondent

P.O. Box

Nairobi.

Dear Sir/Madam,

RE: REQUEST FOR RESEARCH DATA

I am a postgraduate student at the University of Nairobi pursuing a Master of Business (MBA) course. As a requirement of this degree, i am undertaking a research on "Application of Electronic Banking as a Competition strategy by commercial Banks in Kenya". The purpose of the research is to determine the application of electronic banking in your institution.

The attached questionnaire has been designed to help the researcher gather data from the respondent with respect to this purpose and i therefore seek your authority to carry out the study in your organization. Kindly facilitate the data collection necessary by answering the questions precisely and accurately as possible. The information sought is purely for academic purposes and it will be treated with utmost confidentiality.

Yours Faithfully,

Francisca N. Nzau

Registration No.D61/72520/2012