# **ROLE OF INTERNET BANKING IN ENHANCING CROSS**

# **BORDER BUSINESS IN EAST AFRICA**

BY

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# **REQUIREMENTS FOR THE AWARD OF MASTER OF BUSINESS**

### ADMINISTRATION, SCHOOL OF BUSINESS, AND UNIVERSITY OF

NAIROBI

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#### **DECLARATION**

This research project is my origin work and has not been presented for examination in any other university.

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# DEDICATION

This project is dedicated to my darling Wife, my loving Children, and my supportive Parents.

#### ABSTRACT

The East Africa Community provides a large platform for multinational corporations, with the midyear population projection in the EAC region estimated at 133.1 million persons in June 2010, representing a 2.8 percent growth from 129.5 million projected in June the previous year. Kenyan Banks have been in the forefront of taking advantage of the EAC integration to access the large market. The influx in internet connectivity has provided banks operation in the East African Region a tool for doing business and a means of providing new services through internet banking. The purpose of the study thus sought to determine the extent in which internet banking has played to enhance cross border business in East Africa. The study adopted a cross sectional survey approach aimed at researching the transactions carried out over the internet in all commercial banks operating in Kenya, and whose transactions transcend the Kenyan borders. All commercial banks operating in Kenya as at 2012 were studied. The data in this study was collected using a questionnaire, which had been carefully structured to cover variables which were able to answer the research question. The respondents to this questionnaire were the branch managers in headquarter branches of the banks within Nairobi. Data analysis was carried out using quantitative method through descriptive statistics and qualitative methods. The study found out that contention that the influx in internet connectivity has provided banks operation in the East African Region a tool for doing business and a means of providing new services through internet banking. The study found out that Kenyan banks significantly expanded their staff numbers to drive the growth of new business-lines and products as the business landscape shifts away from the traditional drivers of growth. The study also found out that banks have introduced internet banking, mobile banking and other e-banking facilities, to enhance delivery channels to their customers and the use of internet banking has gradually increased from recent past. The study concludes that a wide customer base is established among the banks in terms of internet banking. The uptake of internet banking is high and gradually increasing over the years. Aside from the wide customer base, internet banking has further enhanced customer satisfaction through improvement in a variety of aspects including convenience, personalized service, and efficiency, resolution of complaints and cost-benefit analysis to a very large extent. With an enhanced business environment and competition, there has been increase in size of local banks brought about by pressure on banks to expand their products and services to people who do not have bank accounts as well as those who are under banked. Internet banking can thus be said to enhance cross border business in East Africa.

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#### **CHAPTER ONE: INTRODUCTION**

#### 1.1 Background of the study

International business is the situation where the production or distribution of goods or services crosses country borders (Carpenter & Dunung, 2011). Companies around the world at setup aspire to grow to be a multinational corporation (MNC) or a multinational enterprise (MNE). Established companies in the same breath expand their business internationally as a means of; growth strategy, increase of product life cycle, board's growth ambitions or even labour advantages such as skilled labourers or cheap labour among many others. Governments of countries around the world encourage international business by championing the removal of strict trade barriers, at the same time they look at international business as a way of growing their economy by exporting their production surpluses and importing their deficits.

For companies to stay in business they must have an advantage over their competitors. One way of staying a head of the competition is by being an international company, and taking advantage of the benefits that come with being international such as longer product life cycles, incentives by foreign governments, new markets, and access to resources that are not available in their home countries etcetera.

International business takes many forms each with their advantage and disadvantage. These forms include; Exporting, Licensing, Franchising, Management Contracts, Turnkey Operations, Contract Arrangements and Foreign Direct Investments

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The East African region has been involved in cross border business since the countries in the region, (Kenya, Uganda, Tanzania, Rwanda & Burundi) attained independence. Kenya's domination of the manufacturing sector in the region has seen it export finished products to the other countries, especially Uganda and Tanzania. The port of Mombasa acts as the port of choice for all goods entering and leaving Uganda. The East Africa community has brought with it immense business opportunities that have seen many business persons from the region set up businesses in the other countries other than their own in the community. International banks and local banks have been at the forefront by setting up branches in the region in order to facilitate the business transactions of these businesses.

As at December 2008 there were 46 banking firms, fifteen micro finance organizations and one hundred and nine forex bureaus in Kenya. The banking sector in Kenya has seen tremendous growth in assets, deposits profitability and products offering. Players in this sector have experiences increasing competition, resulting from increased innovation among the players and new entrants into the market, driving competition.

#### 1.1.1 Theory of International Business

International business is all international dealings of a country that relate to the exchange of goods, services and information for purposes of making money (Kefalas, 2008). Cross border business is defined as the buying and selling of goods and services between businesses in, contiguous countries, with the buyer being in one country and the seller in the other. The trading of goods among countries can be classified into two categories namely; supply differences, that is, differences in countries' material or technological endowments, and demand differences, that is, differences in consumer preferences (Kefalas, 2008).

International services are defined as transactions in intangible products by private individuals and or corporations that cross national boundaries. Exchange of money involves the movement of money across national boundaries for the exclusive purpose of earning money. The form in which international business takes is dependent on the players and their overall objective in engaging in international business.

An importer sells products and services that are sourced from other countries; an exporter, in contrast, sells products and services in foreign countries that are sourced from their home country. Importing and exporting aside, some companies have working offices in other countries; this forms the basis for their level of foreign direct investment,(Carpenter & Dunung, 2011).

#### 1.1.2 Concept of Internet Banking

In the previous past, the East African banking industry has been dominated by international banks with Standard Chartered Bank and Barclays Bank holding the top positions. With an enhanced business environment and competition, there has been increase in size of local banks brought about by pressure on banks to expand their products and services to people who do not have bank accounts as well as those who are under banked.

A bank exists to facilitate the interaction between two parties. A bank accepts deposits from customers with capital surpluses and lends out to customers with a deficit in capital. In order to enhance service delivery, banks have taken up the use of technology. Internet banking is one of such innovations that have been adopted by many banks. (Hadden & Whalley, 2002)and (Hiltunen, Heng, & Helgesen, 2004) defines internet banking as the delivery of banks' information and services to its clients using a variety of platforms that can be implemented with different terminal or remote devices such as a computer, a mobile phone, personal digital assistants, and other hand-held devices having internet access.

#### 1.1.3 Cross Border Business in East Africa

The Permanent Tripartite Commission for East African Co-operation was first formed in 1967 as the East African Community. It collapsed in 1977 due to political differences. Following the dissolution of the organization, former member states negotiated a Mediation Agreement for the organization, which they signed in 1984. However, as one of the provision of the Mediation Agreement, the States agreed to explore areas of future co-operation and to make concrete arrangements for such a co-operation. During a one-day summit in Arusha, on 22 January 1999, the heads of state of Tanzania, Kenya and Uganda resolved to sign the treaty re-establishing the East African Community (EAC) by the end of July 1999. In addition to a decision to re-establish the East African Community by the end of 1999, other issues raised at the EAC summit of January 1999 included the signing of a Memorandum of understanding on the Foreign Policy Co-ordination; Zero tariff rates to be adopted by 1 July 1999 and the implementation of COMESA's 80% tariff reduction among others (*East African Community*, 2013).

A key objective for the adoption of the East African Community (EAC) customs Union was to enhance economic gains through elimination of non-tariff barriers within the member states. Several non-tariff barriers continue to exist and some have persisted. The non-tariff barriers that have persisted for more than three years include a long list of customs documentation requirements, cumbersome formalities, and limited testing and certification arrangements. Other non-tariff that exist include: un-standardized weighbridges; several road blocks; lack of individual country's standards; and the existence of several un-harmonized standards (Okumu & Nyankori 2010)

The East African Community secretariat is located in Arusha, Tanzania. As (Davoodi, n.d.) notes the East African Community faces four challenges; how to balance the prospective benefits of a large common market against the greater complexity that comes with a more diverse membership, how to ensure that all countries benefit from regional integration, how to advance the customs union and common market and finally how to determine the appropriate pace of moving beyond a common market to monetary union.

The efforts of integrating the East Africa Community (EAC) has not gone unnoticed it has brought with it many business opportunities, with companies from the East African region finding new markets in each other's countries. Large companies such as East African Breweries have spread their tentacles into Tanzania and Uganda. In the service industry companies offering different types services form Information Technology to training companies have also spread their operations into the other countries within the East African region to take advantage of the new markets and increase their bottom line.

As a result of these companies spreading their operation base, many banks have taken the opportunity to serve these companies who have a need for banking solutions in the same light the banks themselves have found a large market base brought about by this merger

of five states. Many banks have set up subsidiary companies and opened new branches in different territories of the EAC.

Fast and easy to access internet in this region brought about by the new undersea cables laid, connecting the East Africa countries and the rest of the world has seen many companies including banks offer services online. This coupled with advancement of sophisticated Information Technology gadgets has seen internet banking grow tremendously in the recent past.

#### **1.2 Research Problem**

International business is a term used to collectively describe all commercial transactions (private and governmental, sales, investments, logistics, and transportation) that take place between two or more nations. Daniels, Radebaugh & Sullivan (2007). Businesses that operate on a global scale are referred to as multinational enterprise (MNE), these companies have operations in more than one country. They are also referred to as multinational corporations (MNC). To transact these companies need to move funds across border lines to their respective areas of operations or to suppliers from different geographical regions. For this transfer of funds to occur they need commercial banks to effect such transactions.

The East Africa Community provides a large platform for multinational corporations, with the midyear population projection in the EAC region estimated at 133.1 million persons in June 2010, representing a 2.8 percent growth from 129.5 million projected in June the previous year. Kenyan Banks have been in the forefront of taking advantage of the EAC integration to access the large market. The banks have a strong presence in the

region with KCB, Equity and Diamond Trust Bank on the lead. Equity has a presence in Tanzania, Uganda, and Rwanda. DTB is in Burundi, Uganda and Tanzania. Fina Bank is operating in Uganda and Rwanda while Kenya Commercial bank covers the five East Africa countries. The use of internet in offering and accessing services has grown in the recent past. This growth can be attributed to the introduction of undersea cables linking East Africa and the world. There are three undersea cables that supply East Africa with internet connectivity. Seacom, the first to be up and running in 2009, it links East Africa to Europe, India and South Africa. The second one is Teams which links the region to United Arab Emirates and the last one, Eassy which went live in July 2010, links countries along the East African coast. The landing stations that connect East Africa to the rest of the world are in Kenya, (Bergano, 2010). The influx in internet connectivity has provided banks operation in the East African Region a tool for doing business and a means of providing new services through internet banking Maitha (2010)

Little research has been done to investigate the role of internet banking in enhancing cross border transactions in East Africa. Maitha (2010) looked at the effects of E-banking in commercial banks in Kenya in promoting International business. Otunga (2006) surveyed on consumer adaptation of mobile phone banking in Kenya. Otieno (2006) on the other hand investigated the internet banking technology adaptation among commercial banks in Kenya.

Several authors have also delved into e-banking and not particularly looked at whether internet banking enhances business transactions in East Africa. Sachin (2005) says the convenience of executing simple transactions and sending information or alerting a customer on the mobile phone is often the overriding factor that dominates over the skeptics who tend to be overly bitten by security concerns. (Brogdon, 1999, Jayawardhena and Foley, 2000) say the main benefits to banks are the cost savings, reaching new segments of the population, efficiency, enhancement of the bank's reputation and better customer service and satisfaction. The single most important driving force behind the implementation of full internet banking by banks is the need to create powerful barriers to customer exiting (Sheshunoff, 2000). These authors touch on internet banking in general and its characteristics there in, but none have looked at what this study is looking at and that is drilling down to the East African region and looking at the enhancements if any of internet banking on business in the region.

There is no study so far that has investigated the role of internet banking in enhancing cross border business in East Africa. This study therefore aims to fill this knowledge gap. As such, the study sorts to answer the following research question.

What role has internet banking played to enhance cross border business in East Africa?

#### **1.3 Research Objectives**

The studies objective is to determine the extent in which internet banking has played to enhance cross border business in East Africa.

#### 1.4 Value of the Study

Attainment of the proposed study's objective discussed above will make significant contributions to understanding of cross border banking and the effect of internet banking on cross border business in East Africa. The Study is important to Government, Banks and Academician. Bearing in mind that many studies have focused on international business in whole and not paying critical attention to the small components in it, this study will contribute significant knowledge to government whose mandate is to provide policies on business in the region.

In relation to banks the investigation will give valuable information that will assist in decisions such as value placed on Internet Banking for their customers in the region and whether there should or should not be emphasis on the service. It will also unwrap the modes that are most used in the region for internet banking, this would assist the bank to better know the areas of concentration for service delivery.

To academicians and researches, the study will provide reference material for future studies on Internet banking in the East African region.

#### **CHAPTER TWO: LITERATURE REVIEW**

#### 2.1 Introduction

In this chapter we delve into past work that has been done in this area of study. In particular we review banking and its roles, Cross border business in a broad view, Internet banking and its technologies, then we narrow down to cross border banking in the East Africa region.

#### 2.2 Role of Banks in International Business

The banking section plays an important role in international business. Presently most major banks have branches and subsidiaries in major cities across the globe. Many banks have entered into collaboration agreements with banks in other countries to better serve their daily growing international business fraternity. Banks bring a bond of trust between buying and selling deals in the international arena. For individuals, banks offer services such as forex, traveler's cheque, and electronic funds transfer etcetera. For businesses and companies, banks deliver services such as 'Documentary Collection' and 'Letter of Credit'.

One area where international banks play a pivotal role is the foreign exchange market. Two main functions of the foreign exchange market are to convert the currency of one country into the currency of another and to provide some insurance against unpredicted foreign exchange risk. International banks provide foreign exchange services to their commercial business clients to complete their business transactions. These banks act as a broker between commercial clients and foreign exchanges across the globe. It can be seen that international banks play critical roles in all these transactions.

#### 2.3 Cross Border Business

Cross border business refers to the buying and selling of goods and services between businesses in, contiguous countries, with the buyer being in one country and the seller in the other.

Understanding and studying the role of cross border transactions is a major on-going topic of discussion across the globe. Eliminating hurdles that restricts transactions and business development to geographical boundaries plays an important role in stimulating demand for goods and services, increasing the size of the local market-place and improving competitiveness in a region.

Cross border business can be operated in three major forms, namely: By setting up a subsidiary in the other country of interest, by starting a branch, engaging in cross border transactions. This work dwells, on cross border business based on the third form but in a sense it is coupled with the remaining two forms. It looks at cross border transactions via internet banking. The cross border transactions of this nature are coupled with the other forms of cross border business in the sense that an over internet transaction can be between one bank and another subsidiary in the other country, between one bank and one of its branches in the other country or between a bank and any other business entity in the other country.

A major merit of cross-border banking is its effect on risk diversification. From portfolio theory (Markowitz, 1952), it is known that an entrepreneur can reduce the risk in his portfolio by investing in several assets and or a combination, in lieu of one. In a similar manner, cross-border banking allows for such diversification, in the sense that, if a domestic bank invests in another country, it becomes less vulnerable to domestic shocks. This reduces the volatility of its asset portfolio. Reduced asset volatility, almost implies reduced the chances of a bank's failure in the domestic economy.

Another advantage of cross-border banking is affiliated to competition. Entry of foreign banks to domestic market increases competition in the domestic banking arena. In most cases, stiff competition among banks lowers lending rates which further increase the profits for borrowers, again leading to lower borrowers risk (Boyd & Nicolo, 2005).

With existence of country trading blocks and communities, cross border transactions are critical for development and strengthening these ties. In Africa these communities include SADC, EAC etc. These communities play a big role in enhancing cross border transactions. Restrictions on international capital flows determine the nature and extent of foreign banking services that can be offered. Opening new bank branches in foreign countries depends on the current restrictions to foreign direct investment. The communities act and strive to minimize barriers to international capital flows and soften barriers to starting bank branches in foreign countries.

The bank's intentions for venturing into a foreign market have been traditionally grouped into four main categories (Heinkel & Levi, 1992), namely: Servicing exporters from the

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home country, Servicing foreign subsidiaries of home country clients, Participating in the host country's capital markets, and Participating in the host country's banking system.

#### 2.4 Development of Internet Banking

In recent years, developments in information technology and the subsequent evolution of internet banking have fundamentally changed the ways in which banks implement their business and consumers conduct their everyday banking activities (Eriksson, Kerem, & Nilsson, 2005).

(Hadden & Whalley, 2002) and (Hiltunen et al., 2004) define internet banking as the delivery of banks' information and services to its clients using a variety of platforms that can be implemented with different terminal or remote devices such as a computer, a mobile phone, personal digital assistants and other hand-held devices having internet access.

Internet banking has totally revolutionized the banking industry. Internet banking enables clients to save time by minimizing visits to banks physical locations (Brick mortar building). For customers classified as internet banking users, online banking services is ranked third when these lots are choosing an institution to bank with, falling just behind rates and fees charged, and general customer relations. The financial industry first introduced basic internet banking about 10 years ago, since then banks have introduced a myriad of functionalities for internet banking.

Internet banking services offered by banks can be categorized into three main categories, namely: The Basic Level Service, here a bank's websites usually sends information on

different products and services offered to the clients and may receive and respond to customers' needs through e-mail, Simple Transactional Websites, in this kind of website a customers can apply for services or query their account details, including balances but does not allow any monitory transactions, Fully Transactional Websites, in this kind of website clients are allowed all functionalities of basic level service and simple transactional websites and in addition they can do all monitory transactions, including payment of bills and transfer of funds.

To sum this up (AlAbdullah et al., 2010) discusses functional and non-functional requirements for the web-based banking system. They state Internet banking brought new changes in the banking sector. When implemented, it illuminates its qualities and characteristics to those ones using it and other players who are not using it. Its characteristics are felt across the domain. Some characteristics of internet banking are: It eliminates the geographical barriers and boundaries since it can reach clients of different countries, It has brought in a new touch to different forms and types of risks traditionally linked to banking, minimizing some of them while at the same time amplifying others, Concerns to all players in the banking industry, such as security of banking transactions, customers' privacy, etc., have taken different forms knowing that the internet is available for use by the general public, both with good and bad intentions, It brings a strategic risk of loss of business to those banks which aren't embracing this new technology, since it brings efficiency and reduces transaction costs to the bank using Internet banking, A new form of competition has come up both from players in banking and non-banking sectors for example Safaricom's MPESA service.

#### 2.4.1 **Risks Associated With Internet Banking**

Internet banking being part of information technology acts like a double edged sword in terms of risks, it acts as a tool to control risks at the same time it also heightens risk. The first risks we look at is Transactional risk, this is the most common risk associated with internet banking. It takes the form of unauthorized access to information, breach of confidentiality and erratic transactions, it is enhanced by employees knowingly or unknowingly, giving computers leeway to access the system. Secondly is the Legal risks, this comes due to the fact that the banks sometimes enter into agreement with clients using electronic means. Sometimes the customer is not properly educated on the kind of contract he/she is entering into and might miss to read all the information about the contract given in the electronic media. Thirdly is the Security risk, proper safeguarding of customers data and information is critical to banks. Banks need to invest in robust systems so as to minimize the risk of data loss or data leak. Fourthly is the Reputational risk, information technology failures cause embarrassments to companies. Failure of internet banking systems can cost a banks reputation and in extreme cases make the bank to lose customers.

#### 2.4.2 Factors Affecting Client Adoption of Internet Banking

(Lichtenstein & Williamson, 2006) gave a theoretical framework for studying factors affecting customer adoption of internet banking. They highlight eight factors, beginning with the bank catching the customers' *attention*. The bank draws the customers' attention to the advantages of internet banking, mainly convenience, usability, accessibility and self-efficacy, which are closely related. These also form factors to client adoption of internet banking. Other factors are risks and associated costs, relative advantages of

internet banking compared to other forms and how knowledgeable the bank staff is about internet banking and the nature of support the bank offers to the client.

Other authors have also identified similar factors as these ones and others. Some of these factors include Service quality, compatibility, trialability, complexity, demographics factors, consumer attitudes and beliefs, security, privacy and risk issues, lack of awareness, adaptability, computer and technology, confidence and knowledge (Kolodinsky, Hogarth, & Hilgert, 2004).

#### 2.4.3 Technologies and Tools Supporting Internet Banking

Originally, the main tool that was used to support internet banking was a personal computer with internet connection and this connection was through a telephone land line. These land line connections were mired by low quality connections and line drops. Currently these technologies have improved greatly with provision of high speed internet via a myriad of devices. New and sophisticated phones have entered the market and they are allowing users to connect to internet on the fly. It is now a common phenomenon, experienced on a daily basis, to hear of "smart phones".

Many internet banking users have now shifted from using personal computers with an internet connection, to using their phones to do many if not all their banking transactions online. Using their cell phones they can connect to the banks website and access the banks application that allows them to transact.

#### 2.5 Cross Border Business and Banking in East Africa

The EAC is a regional Inter-governmental Organization made up of five countries as of 1/07/2011 these countries were; the Republic of Kenya, Republic of Uganda, Republic of Burundi, the Republic of Rwanda, and the Republic of Tanzania.

The EAC was established by a treaty signed in 1999 and came into force in 2000. The original member countries were the Republics of Kenya, Uganda, and Tanzania. The Republics of Burundi and Rwanda joined the community in 2007. With the EAC integration, many banks have taken the opportunity to serve this large market base. Kenya having the largest economy in the community has seen its companies venture into countries.

The countries found in the East African region despite forming a common market are in completion with one another for business. Kenya dominates the manufacturing industries in the region and is fighting hard to be the technological hub of the region. This is being done by adopting activities found in the governments, 2030 strategic vision, like building the techno city Konza. Rwanda on the other hand has similar ambitions and has made doing business there very easy with business permits and licenses taking short periods of time to be issued.

The East African region is slowly discovering its rich natural resources, with oil discoveries in Northern Uganda and Northern Kenya and huge gas reserves in Tanzania. The business opportunities that these resources are bringing are without bound.

ICT adoption in the East Africa has risen up quickly. This has been supported by the fact that many institutions are offering ICT related courses hence raising awareness among the people. Internet access is being advanced in the region with many government organizations also starting to offer online services in the EAC countries.

The recently launched undersea cable, by three different companies, has increased connectivity between countries in the East Africa region and also with the rest of the world. Seacom, the first to be up and running in 2009, it links East Africa to Europe, India and South Africa; Teams links the region to United Arab Emirates; and Eassy which started its operations in July 2010, links countries along the East African coast. The landing stations that connect East Africa to the rest of the world are in Kenya.

Internet connectivity has really supported internet banking in this region. This has allowed cross border transaction due to availability of this facility in most parts of the EAC block.

#### **CHAPTER THREE: RESEARCH METHODOLOGY**

#### **3.1 Introduction**

In this section, the target population and the envisaged methodology used to conduct the study and answer the research questions is discussed. This covers from study preparation, data collection to data analysis and format for presentation of results. This chapter is divided into the following section: discussion on the target population, data collection methods and data analysis methods, which entails both qualitative and quantitative methods.

#### **3.2 Research Design**

The study adopted a cross sectional survey approach aimed at researching the transactions carried out over the internet in all commercial banks operating in Kenya, and whose transactions transcend the Kenyan borders. The aim is to deduce whether the number of transactions over the internet occurring between the Kenyan banks and their subsidiaries or other banks in the other countries in East African region relate to the enhancement of cross border business in the region. Correlation is defined as a statistical term giving the strength of linear relationship between two random variables (Covel, 2012).

#### **3.3 Population of Study**

All commercial banks operating in Kenya as at 2012 were studied. Complete lists of commercial banks operating in Kenya obtained from the Central Bank of Kenya (CBK)

indicate that there are 44 Commercial banks as at February 2012 (Appendix I). The Kenyan banking sector consists of multinational, local, large and small banks operating mainly in urban areas. According to the ownership structures of these banks, some banks are wholly private local owned, while others are wholly private foreign owned, partly state and public owned and partly public and privately local owned. The focus of the study was the head offices of all commercial banks situated in Nairobi.

#### **3.4 Data collection**

The data in this study was collected using a questionnaire, which had been carefully structured to cover variables which were able to answer the research question.

The respondents to this questionnaire were the branch managers in headquarter branches of the banks within Nairobi. Some of the questions in the questionnaire required the bank to retrieve information from its database; hence it requires people with authority within the bank to be respondents.

#### **3.5 Data Analysis**

Data analysis was carried out using quantitative method through descriptive statistics and qualitative methods. Quantitative analysis involves numerical calculations on the observed data so as to decipher what phenomenon or relationship the observed values are indicating. Qualitative is based on reasoning with minimal numerical calculation, and the ultimate objective is to get insight into the underlying reasons of an issue.

#### **CHAPTER FOUR**

#### DATA ANALYSIS, RESULTS AND DISCUSSIONS

#### **4.1 Introduction**

This chapter presents analysis and findings of the study as set out in the research methodology. The data was gathered exclusively from questionnaire as the research instrument. The questionnaire was designed in line with the objectives of the study. To enhance quality of data obtained, Pie charts, graphs and frequency tables were included.

#### 4.2 Demographic Information

In order to capture the general information of the respondents' issues such as the name of the bank, Year of incorporation, ownership structure and areas of operations of the bank were captured in the first section of the questionnaire.

#### 4.2.1 Response Rate

The sample population for the study comprised of 44 Commercial banks operating in Kenya. The respondents comprised of 44 branch managers in headquarter branches of the banks within Nairobi. The questionnaires that were handed out for filling in were 44. Those who returned the questionnaires were 38 respondents bringing the response rate at 86%. The study findings indicated that the response rate for the study was 86% which was sufficient and representative of the entire population. According to Mugenda and Mugenda (1999), a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. The table 4.1 shows how the response rate and non-response rate of the study was distributed.

#### **Table 4.1: Response Rate of respondents**

| Respondents        | Sample<br>population | Percentage | Non-respondents<br>rate | Percentage | Response rate | Percentage |
|--------------------|----------------------|------------|-------------------------|------------|---------------|------------|
| Category           | F                    | %          | F                       | %          | F             | %          |
| Branch<br>Managers | 44                   | 100%       | 6                       | 14%        | 38            | 86%        |
| Total              | 44                   | 100%       | 6                       | 14%        | 38            | 86%        |

Source: Author, 2013

#### 4.2.2 Name of Bank

The respondents were asked to indicate the name of the bank in which they work for. According to the study, the respondents indicated the name of the commercial banks operating in Kenya with their headquarters based in Nairobi. The Commercial banks that participated are listed (See Appendix II).

#### 4.2.3 Year of incorporation

The respondents were asked to indicate the year of incorporation of the bank in Kenya Barclays Bank of Kenya was incorporated in Kenya in 1978, Equitorial Commercial Bank was incorporated in Kenya in 1985, Equity bank was incorporated in Kenya in 1984, Co-Operative Bank of Kenya in 1965, Diamond Trust Bank was incorporated in Kenya in 1945, Middle East Bank was incorporated in Kenya in 1980, National Bank of Kenya was incorporated in Kenya in 1968, Oriental Commercial Bank was incorporated in Kenya in 2002, Standard Chartered Bank was incorporated in Kenya in 1911, Trans-National Bank was incorporated in Kenya in 1985, UBA Kenya Bank was incorporated in Kenya in 1961, Development Bank of Kenya was incorporated in Kenya in 1996, Paramount Bank was incorporated in Kenya in 1993, Kenya Commercial Bank was incorporated in Kenya in 1896, K-REP Bank was incorporated in Kenya in 1987, I & M Bank was incorporated in Kenya in 2008, CHASE Bank was incorporated in Kenya in 1996, CFC-Stanbic Bank was incorporated in Kenya in 2008, Bank of BARODA was incorporated in Kenya in 1992, Commercial Bank of Africa was incorporated in Kenya in 1967, Consolidated Bank was incorporated in Kenya in 1989, CITI bank was incorporated in Kenya in 1974, Dubai Bank Kenya was incorporated in Kenya in 1982, Family Finance Bank was incorporated in Kenya in 1984, Gurdian Bank was incorporated in Kenya in 1996, Giro Commercial Bank was incorporated in Kenya in 1996, Housing Finance of Kenya was incorporated in Kenya in 1965, Imperial Bank was incorporated in Kenya in 1996, Prime Bank was incorporated in Kenya in 1992 and the other banks they did not indicate the year of incorporation.

#### **4.3 Ownership Structure**

The respondents were asked to indicate the ownership structure of the individual banks whether they are locally owned, foreign owned, both locally and foreign owned, privately owned, government owned and both government and privately owned.

The study found out that majority of the banks that are locally owned were Victoria Commercial Bank, Prime Bank, Commercial Bank of Africa, Trans-National Bank, I & M Bank, City Finance Bank, Family Finance Bank, Chase Bank, Paramount Bank, Equitorial Commercial Bank, African Banking Corporation, Oriental Commercial Bank, Dubai Bank Kenya, Eqiuty Bank, Kenya Commercial Bank, National Industrial Credit Bank, Diamond Trust Bank, CFC-Stanbic Bank, Co-Operative Bank of Kenya, Consolidated Bank, National Bank of Kenya and Development Bank of Kenya.

The study found out that the banks that are foreign owned were: Barclays Bank of Kenya, Standard Chartered Bank, Bank of Baroda, Fina Bank, Fidelity Commercial Bank, Giro Commercial Bank, Bank of Africa, Citibank, ECO-Bank, K-Rep Bank, Habib Bank , Habib A.G. Zurich and Gulf African Bank.

The study found out the banks that were owned by the Kenyan government were: Consolidated Bank of Kenya Ltd, Development Bank of Kenya Ltd and National Bank of Kenya Ltd.

#### 4.4 Area of Operations

The study sought to find out the area of operations of the banks whether they were Local (Within Kenya), Regional (Within East Africa), Continental (Within Africa) and Worldwide (Beyond Africa). According to the study findings, the results were obtained as follows shown in Table 4.2.

#### Table 4.2: Area of Operations

| Area of operations | Frequency | Percentage |
|--------------------|-----------|------------|
| Local              | 13        | 34%        |
| Regional           | 12        | 14%        |

| Continental | 18 | 47%  |
|-------------|----|------|
| Worldwide   | 2  | 5%   |
| Total       | 38 | 100% |

Source: Author, 2013

The Table 4.2 illustrates the results obtained from the study findings. The areas of operations of the banks were: 18 banks (47%) that operated continentally within Africa, 13 banks (34%) that operated locally within the country, Kenya, 12 (14%) of the banks operated regionally within East Africa and 2 banks (5%) that operated worldwide.

# 4.4.1 Number of Branches in East Africa

The respondents were asked to indicate the number of branches of the banks in East Africa in each country, as shown in Table 4.3

| Country  | Number of Branches | Percentage |
|----------|--------------------|------------|
| Kenya    | 844                | 40%        |
| Tanzania | 543                | 26%        |
| Uganda   | 381                | 18%        |
| Rwanda   | 219                | 10%        |
| Burundi  | 112                | 6%         |
| Total    | 2099               | 100%       |

Source: Author, 2013

From table 4.3 the study found out the number of branches in East Africa according to the respondents. The total number of branches were 2099 as per 2012 and the distribution included: Kenya had 844 (40%) of the total bank branches in East Africa; Tanzania had

543 (26%); Uganda had 381 (18%); Rwanda had 219 (10%) and the least number of registered bank branches was at 112 (6%) of the total bank branches in East Africa.

#### 4.4.2 Number of Employees

The respondents were asked to indicate that number of employees and according to the study findings the employees majority of the respondents indicated that the number of employees were between 501-2500 in their bank. The results were shown on the Table 4.4 representing the mean and standard deviation of the respondents.

#### **Table 4.4: Number of Employees**

| Number of employees | Mean   | Std. Deviation |
|---------------------|--------|----------------|
| Below 500           | 2.1087 | .75962         |
| Between 501-2500    | 3.4348 | .92939         |
| Between 2501-4500   | 1.6957 | .87072         |
| Over 4500           | 1.0870 | .50657         |

Source: Author, 2013

The respondents who indicated between 501-2500 employees recorded a mean of 3.4 which was the highest mean that indicated the majority of the respondents were between that ranges. In this case, the mean that recorded the highest was an indication of what the majority respondents represented.

#### 4.4.3 How Many Customers does your Bank have?

The respondents were asked to indicate the number of customers their bank have and according to the study the majority of the respondents as indicated by the mean showed that the respondent were between 5001-10,000. Table 4.5 shows the distribution of the respondents with the mean and standard deviation.

#### **Table 4.5: Number of Customers**

| No. of customers      | Mean   | Std. Deviation |  |
|-----------------------|--------|----------------|--|
| Below 1000            | 2.6304 | .67355         |  |
| Between 1001-5000     | 2.8913 | .73181         |  |
| Between 5001-10,000   | 3.7174 | .78335         |  |
| Between 10,001-15,000 | 2.5682 | .74471         |  |
| Above 15,000          | 2.4783 | .97575         |  |

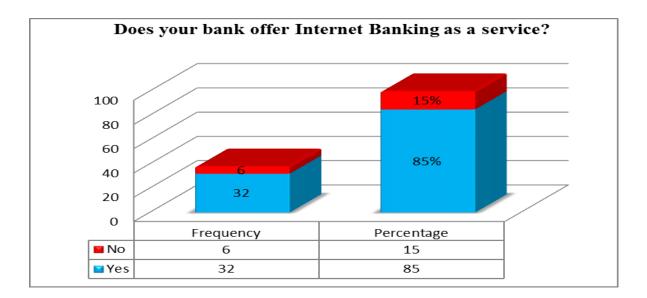
#### Source: Author, 2013

The respondents who indicated between 5001-10,000 customers recorded a mean of 3.7 which was the highest mean that indicated the majority of the respondents were between that ranges. In this case, the mean that recorded the highest was an indication of what the majority respondents represented.

# 4.5 Internet Banking

The study sought to find out whether the bank offers Internet Banking as a service. According to the study findings, the banks that indicated that they offer internet banking as a service were 32 (85%) commercial banks operating in Kenya while 6 (15%) commercial banks operating in Kenya.

**Figure 4.1: Internet Banking** 

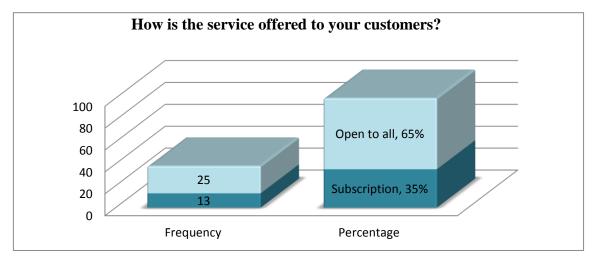


Source: Author, 2013

#### 4.5.1 How is the service offered to your customers?

The respondents were asked how internet banking is offered to their customers. According to the study findings, there are two ways of offering the services to their customers', one through subscription the other one open to all customers. The results obtained by the study indicated that subscription of the clients was preferred by the minority 13 (35%) of the respondents and the majority 25 (65%) indicated that open to all service was offered to the customers.





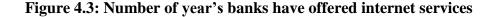
Source: Author, 2013

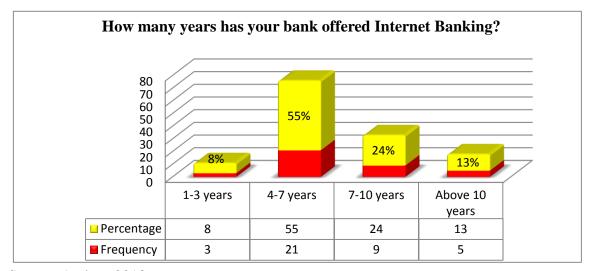
#### 4.5.2 How much does your bank charge for Internet Banking?

The respondents were asked to indicate how much do the bank charge for internet banking. According to the study findings, the respondents indicated that the banks charge from a range of Ksh. 5 to Ksh. 100. Most banks will normally charge the customer a monthly fee to use their internet and telephone banking service. The bank also offers charges for all transactions done using the internet charges. The charges are not standard they vary according to the needs of the different banks.

#### 4.5.3 How many years has your bank offered Internet Banking?

The respondents were asked to indicate the number of years the bank had offered internet banking services.





Source: Author, 2013

According to the study findings, the results showed that the majority 21 (55%) of the banks indicated that they had offered internet banking for 4-7 years, 24% of the respondents from banks indicated that they had offered internet banking for 7-10 years, 13% of the respondents from banks indicated that they had offered internet banking for above 10 years while 8% of the respondents from banks indicated that are mainly in the cities are able to offer internet banking and the customers are more knowledgeable on the use of internet services.

#### 4.5.4 How has awareness of internet banking to your customers been created?

The respondents were asked how awareness of internet banking was created to their customers. According to the study findings, awareness of internet banking is created through TV/Radio means (X = 2.315, S.D = .5713) and a majority indicating use of

newspapers (X = 3.546, S.D = .5344) because they felt it was the most widely used means of communication that reaches a large population. Others included flyers (X = 1.650, S.D = .5863) while some never created awareness (X = 1.327, S.D = .6121). The results were illustrated by table 4.4 below.

| Means      | Mean  | Standard Deviation |
|------------|-------|--------------------|
| TV/ Radio  | 2.315 | .5713              |
| Newspapers | 3.546 | .5344              |
| Roadshows  | 1.425 | .6429              |
| Flyers     | 1.650 | .5863              |
| Never      | 1.327 | .6121              |

#### **Table 4.6: Awareness of Internet Banking**

Source: Author, 2013

#### **4.5.5** Uptake of internet banking in various banks

The respondents were asked to comment on the uptake of Internet Banking in their Bank. The respondents indicated that the bank has high uptake of internet banking and it has gradually increased during the years. Internet banking is one of the innovations that have been adopted by many banks. It is a delivery of banks' information and services to its clients using a variety of platforms that can be implemented with different terminal or remote devices such as computer, a mobile phone, personal digital assistants, and other hand-held devices having internet access. With an enhanced business environment and competition, there has been increase in size of local banks brought about by pressure on banks to expand their products and services to people who do not have bank accounts as well as those who are under banked.

#### 4.5.6 Devices used to access internet banking

The respondents were asked to indicate the devices that the customers use to access internet banking. According to the study finding, the respondents indicated the devices that are mainly used by the customers to access internet banking.

| Devices            | Mean   | Std.Dev |
|--------------------|--------|---------|
| Desk Top Computers | 1.2644 | .68741  |
| Laptops            | 2.5087 | .75962  |
| Tablets            | 1.5348 | .92939  |
| Phablets           | 2.0870 | .87072  |
| Mobile Phones      | 3.6957 | .50657  |

Table 4.7: Devices used to access internet banking

Source: Author, 2013

The respondents who indicated that the use of mobile phone was more common and accessible to the majority of the customers and it recorded a mean of 3.67 which was the highest mean that indicated the majority of the respondents use the mobile phone more in comparison to other devices such as laptops (mean of 2.5), phablets (mean of 2.08) and tablets (mean of 1.53). In this case, the mean that recorded the highest was an indication of what the majority respondents represented.

#### 4.5.7 Numbers of customers regionally

Respondents were further asked to indicate the number of customers transacting through internet banking across East Africa. This would serve to indicate the degree of adoption of internet banking services. Results are as shown in table 4.8 below.

| Numbers of customers  | Mean  | Std. Dev |
|-----------------------|-------|----------|
| regionally            |       |          |
| Below 1000            | 1.324 | .5671    |
| Between 1001-5000     | 2.571 | .6350    |
| Between 5001-10,000   | 3.246 | .4786    |
| Between 10,001-15,000 | 2.048 | .5732    |
| Above 15,000          | 1.219 | .5283    |

#### Table 4.8: Numbers of customers regionally

Source: Author, 2013

From the findings above, it is observed that for most banks, the number of customers transacting businesses via internet banking lies between 5001 and 10,000, going by the highest mean, 3.246 and a standard deviation of .4786 as recorded by most of the respondents. A close number of respondents indicated the number as between 1001-5000 (X = 2.571, S.D = .6350) and 10,001-15,000 (X = 2.048, S.D = .5732). It can therefore be concluded that across the East Africa, most banks have between 5001 and 10,000 of their customers transacting online through internet banking.

#### 4.5.8 Volumes of transaction using Internet banking

Respondents were further asked to indicate the volumes of these transactions in Kshs. This would serve to indicate the intensity of operations and the degree adoption of the internet banking services. Results are as shown in table 4.9 below.

Table 4.9: Volumes of transaction using Internet banking

| Volumes of transaction   | Mean  | Std. Dev |
|--------------------------|-------|----------|
| Between 1-50 million     | 2.703 | .5013    |
| Between 50-150 million   | 3.752 | .4739    |
| Between 150- 250 million | 2.014 | .5348    |
| Between 250-500 million  | 1.002 | .6329    |
| Above 500 million        | 0.768 | .5174    |

#### Source: Author, 2013

From the findings in table 4.9 above, it is observed that for most banks, the volumes of transaction in Kshs lies between 50-150 million, going by the highest mean, 3.752 and a standard deviation of .4739 as recorded by most of the respondents. A close number of respondents indicated the volume as between 1-50 million (X = 2.703, S.D = .5013) and 150- 250 million (X = 2.014, S.D = .5348). It can therefore be concluded that across the East Africa, most banks have between Kshs 50-150 million in transaction volume.

# 4.5.9 Terms in which the level of customer satisfaction improved due to internet banking

The study further sought to find out the extent to which various terms employed lead to the improvement in the level of customer satisfaction due to internet banking. Respondents were thus required to indicate the extent against the terms, on a five-point likert scale where 1 = Not at all, 2 = To a less extent, 3 = To a moderate extent, 4 = To a large extent and 5 = To a very large extent. Results are presented in 4.10 below.

 Table 4.10: Terms in the level of customer satisfaction improvement

| Terms                    | Mean  | Std. Dev |
|--------------------------|-------|----------|
| Convenience              | 5.324 | .4931    |
| Efficiency               | 5.149 | .5102    |
| Resolution of complaints | 4.973 | .5737    |
| Personalized service     | 5.253 | .5003    |
| Cost-benefit analysis    | 4.912 | .5621    |

Source: Author, 2013

From the findings in table 4.10 above, it is observed that all the terms had led to an improvement in customer satisfaction and to a very large extent as indicated by the means. From the findings, convenience scored highest (X = 5.324, S.D = .4931), followed by the aspect of Personalized service (X = 5.149, S.D = .5102); Efficiency (X = 4.973, S.D = .5737); Resolution of complaints (X = 5.324, S.D = .5003) and lastly costbenefit analysis (X = 5.324, S.D = .5621). It can therefore be concluded that internet banking has contributed to a very extent to improved customer satisfaction though improvement in convenience, efficiency and personalized service and to a large extent through the ability to resolve complaints and cost-benefit analysis.

#### 4.5.10 Risk exposure in provision of internet banking

Respondents were further asked to indicate the risk exposure the banks faced in providing internet banking. Table 4.11 presents the findings.

#### Table 4.11: Risk exposure

| Volumes of transaction | Mean  | Std. Dev |
|------------------------|-------|----------|
| Transactional risk     | 2.018 | .5360    |
| Legal risk             | 1.319 | .5137    |
| Security risk          | 3.096 | .4976    |
| Reputational risk      | 1.354 | .5587    |

### Source: Author, 2013

As presented in table 4.11 above, among the risks banks expose themselves to, security risks ranks the highest among most banks as indicated by a mean of 3.096 and a standard deviation of .4976. This is closely followed by transactional risk (X = 2.018, S.D = .5360); Reputational risk (X = 1.354, S.D = .5587) and Legal risk (X = 1.319, S.D = .5137). It can therefore be concluded that most banks face security risks in conducting cross-border online transactions such as viruses and cyber-crimes.

#### 4.5.11 Measures taken to mitigate the risks

The study further sought to establish the measures taken by the various banks to mitigate the above risks. From the responses, it was established that most banks have put in place various security software and firewalls to counter the various security threats. Tracking systems are also installed to follow up transactions.

#### 4.6 Discussions of Findings

This study sought to determine the extent in which internet banking has played to enhance cross border business. Various findings were established from the study on various dimensions of internet banking toward enhancement of cross border business. On seeking to establish the area of operations of most commercial banks, the study find out the area of operations of the banks whether they were Local (Within Kenya), Regional (Within East Africa), Continental (Within Africa) and Worldwide (Beyond Africa). Moreover, the study findings established that areas of operations of the banks were: 18 banks (47%) that operated continentally within Africa, 13 banks (34%) that operated locally within the country, Kenya, 12 (14%) of the banks operated regionally within East Africa and 2 banks (5%) that operated worldwide. This results are in line with, Maitha,(2010) contention that the influx in internet connectivity has provided banks operation in the East African Region a tool for doing business and a means of providing new services through internet banking.

On seeking to establish the area of operations of most commercial banks, the study found out the number of employees in commercial banks ranges between 501-2500 employees. According to the Business Daily newspaper, Monday 14<sup>th</sup> October, the number of new commercial bank employees grew more than four times last year to stand at 2,714 pushing total employment in the sector to 28,846, despite recent technological advancements in the sector. Kenyan banks significantly expanded their staff numbers between 2006 and 2008 but deeply cut the numbers in 2009 as the economy bore the full impact of the global recession and most lenders automated their back office operations.

Analysts said aggressive hiring of managerial staff was informed by a desire to drive the growth of new business-lines and products as the business landscape shifts away from the traditional drivers of growth. The study also found out the number of customers their bank have and found out that the customers lies between 5001 and 10,000. The growth of the number of customers indicates positive growth in the banking sector in Kenya. The study also found that majority of the commercial banks operating in Kenya offer internet banking as a service. According to the African article July 2008, In Kenya, majority of banks have introduced internet banking, mobile banking and other e-banking facilities, to enhance delivery channels to their customers. The study also found out how internet banking is offered to their customers. Various authors such as Kolodinsky, Hogarth, & Hilgert, (2004), also identified similar factors as these ones and others. Some of these factors include Service quality, compatibility, trialability, complexity, demographics factors, consumer attitudes and beliefs, security, privacy and risk issues, lack of awareness, adaptability, computer and technology, confidence and knowledge.

The study found out that the majority of the banks recorded a range of between 5001 and 10,000 customers. The volumes of transaction using internet banking were found out by the study and according to the results the transactions were between 50 million and 150 million according to the financial statement obtained from the Central Bank of Kenya. The study found out that the level of customer satisfaction improved due to internet banking. The customers indicated that internet banking was more convenient to them and efficient in delivering service to its customers. The study found out that the risk exposure in provision of internet banking was more risking security. According to James Mwangi, the chief executive of Equity Bank, risk management is a major area of focus where new

managers are being deployed to help reduce vulnerabilities. Technology-based services such as online banking have exposed banks to massive insider fraud. The study findings found out the measures taken to mitigate risks in the banking sectors by putting in place various security software and firewalls to counter the various security threats. Tracking systems are also installed to follow up transactions. Mitigating fraud reduces the risks of exposure. Banks manage and mitigate risks triggered by the use of agents through various policies and procedures, internal audits, and review processes. Regulations may specify the required policies and procedures and corporate governance arrangements or the supervisor may impose them. Even in the absence of regulatory or supervisory requirements, a bank would typically have such policies and procedures in place to manage the risks of its agent business (Williams, 2005).

#### **CHAPTER FIVE**

#### SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

#### **5.1 Introduction**

This chapter summarizes the study and makes conclusion based on the results. The implications from the findings and areas for further research are also presented. This section presents the findings from the study in comparison to what other scholars have done as noted under literature review.

#### 5.2 Summary

The study provided descriptive analysis which helped the study describe the relevant aspects of internet banking and provided detailed information by generation of means and standard deviation.

Majority of the banks were found to be locally owned, including: Victoria Commercial Bank, Prime Bank, Commercial Bank of Africa, Trans-National Bank, I & M Bank, City Finance Bank, Family Finance Bank, Chase Bank, Paramount Bank, Equitorial Commercial Bank, African Banking Corporation, Oriental Commercial Bank, Dubai Bank Kenya, Equity Bank, Kenya Commercial Bank, National Industrial Credit Bank, Diamond Trust Bank, CFC-Stanbic Bank, Co-Operative Bank of Kenya, Consolidated Bank, National Bank of Kenya and Development Bank of Kenya.

The foreign owned include: Barclays Bank of Kenya, Standard Chartered Bank, Bank of Baroda, Fina Bank, Fidelity Commercial Bank, Giro Commercial Bank, Bank of Africa, Citibank, ECO-Bank, K-Rep Bank, Habib Bank , Habib A.G. Zurich and Gulf African

Bank. Few banks were found to prefer subscription of their clients 13 (35%) while the majority 25 (65%) the open to all service to the customers. Majority were further found to have offered internet banking for 7-10 years, followed by those above 10 years. Awareness of internet banking was found to be created mostly through newspapers (X = 3.546, S.D = .5344) then TV/Radio means (X = 2.315, S.D = .5713).

Majority of the banks were found to operate within Africa, (18 banks (47%)), followed by those operating within the country (13 banks (34%)) then those operating within East Africa 12 (14%) and finally 2 banks (5%) that operate worldwide. The total number of branches were 2099 as per 2012 and the distribution included: Kenya had 844 (40%) of the total bank branches in East Africa; Tanzania had 543 (26%); Uganda had 381 (18%); Rwanda had 219 (10%) and the least number of registered bank branches was at 112 (6%) of the total bank branches in East Africa. Majority were further found to employ between 5001-10,000 employees recording a mean of 3.7.

Majority of the respondents further indicated that the banks had high uptake of internet banking and gradually increasing over the years. On the devices mostly used, mobile phones were found to be the most used at the highest mean of 3.67 in comparison to other devices such as laptops (X = 2.5), phablets (X = 2.08) and tablets (X = 1.53). Further, for most banks, the number of customers transacting businesses via internet banking lies between 5001 and 10,000, going by the highest mean, 3.246. A close number of respondents indicated the number as between 1001-5000 (X = 2.571, S.D = .6350) and 10,001-15,000 (X = 2.048, S.D = .5732).

For most banks, the volumes of transaction was found to lie between in Kshs 50-150 million, going by the highest mean, 3.752 and a standard deviation of .4739. It is observed that all the terms had led to an improvement in customer satisfaction and to a very large extent as indicated by the means. From the findings, convenience scored highest (X = 5.324, S.D = .4931), followed by the aspect of Personalized service (X = 5.149, S.D = .5102); Efficiency (X = 4.973, S.D = .5737); Resolution of complaints (X = 5.324, S.D = .5003) and lastly cost-benefit analysis (X = 5.324, S.D = .5621). Further, among the risks banks expose themselves to, security risks ranks the highest among most banks as indicated by a mean of 3.096 and a standard deviation of .4976. This is closely followed by transactional risk (X = 2.018, S.D = .5360). To avert this, it was established that most banks have put in place various security software and firewalls to counter the various security threats. Tracking systems are also installed to follow up transactions.

#### **5.3** Conclusion

The study has determined the extent in which internet banking has played to enhance cross border business in East Africa. Data has thus been analyzed by applying descriptive statistics. Results from descriptive statistics lead to conclusive assertions as informed by the responses recorded in frequencies, percentages, means and standard deviations generated. A wide customer base can be said to be established among the banks in terms of internet banking. The uptake of internet banking is high and gradually increasing over the years. Aside from the wide customer base, internet banking has further enhanced customer satisfaction through improvement in a variety of aspects including convenience, personalized service, and efficiency, resolution of complaints and cost-benefit analysis to a very large extent. With an enhanced business environment and competition, there has been increase in size of local banks brought about by pressure on banks to expand their products and services to people who do not have bank accounts as well as those who are under banked. Internet banking can thus be said to enhance cross border business in East Africa

#### 5.4 Limitations of the Study

Limitations are an aspect of a research that may influence the results negatively but over which the researcher has no control Mugenda and Mugenda (2003). The study was limited by financial constrain, this due to the fact that the student financed this study from his own finances due to lack of sponsor. Time factor also was a major limitation.

#### **5.5 Recommendations**

There is need for commercial banks to improve their internet banking services in order to retain customers and boost sales. Features such as online customer support and financial calculators are the best ways to increase the interaction between customers and the bank. Banks also need to embrace new ways of communicating with customers. Incorporating highly usable and interactive features, community-based applications, video, and integration with mobile services, will be a key differentiator for online banks. Commercial banks into internet banking also need to invest in digital security to avert compromised operations. Finally, studies ought to be conducted on the determinants of successful internet banking for an overview of the measures poorly performing commercial banks need to take into consideration.

# **5.6 Suggestions for Further Research**

In view of the important role of internet banking in enhancing cross border business in East Africa, the banks should embrace fully the use of internet banking well across the region to develop and create large positive impacts of growth in the banking services in Kenya and within East Africa in general. The study therefore recommended that other studies should be carried out on the role of mobile money in enhancing cross border business in East Africa.

#### REFERENCES

- Acharya, V. V., & Schnabl, P. (2010). Do Global Banks Spread Global Imbalances and quest;
   Asset-Backed Commercial Paper during the Financial Crisis of 2007--09. *IMF Economic Review*, 58 (1), 37-73.
- Akinci, S., Aksoy, S., & Atilgan, E. (2004). Adoption of internet banking among sophisticated consumer segments in an advanced developing country. *International Journal of Bank Marketing*, 22 (3), 212-232.
- AlAbdullah, F. S., Alshammari, F. H., Alnaqeib, R., Jalab, H. A., Zaidan, A., & Zaidan, B.
  (2010). Analytical Study on Internet Banking System. *Journal of Computing*, 2 (6), 140-146.
- Aldas-Manzano, J., Lassala-Navarre, C., Ruiz-Mafe, C., & Sanz-Blas, S. (2009). The role of consumer innovativeness and perceived risk in online banking usage. *International Journal of Bank Marketing*, 27 (1), 53-75.
- Alsajjan, B., & Dennis, C. (2006). The impact of trust on acceptance of online banking. Brunel University.
- Baraghani, S. N. (2008). Factors influencing the adoption of internet banking. Master's thesis, Lulea University of Technology.
- Bergano, N. (2010). The capabilities of the undersea telecommunications industry. *IEEE*, (pp. 1-3).
- Bitner, M. J., Brown, S. W., & Meuter, M. L. (2000). Technology infusion in service encounters. Journal of the Academy of marketing Science , 28 (1), 138-149.

- Black, N. J., Lockett, A., Ennew, C., Winklhofer, H., & McKechnie, S. (2002). Modelling consumer choice of distribution channels: an illustration from financial services. *International Journal of Bank Marketing*, 20 (4), 161-173.
- Blandon, J. G. (2000). *Cross-border banking in Europe: an empirical investigation*. Tech. rep., Universitat Pompeu Fabra.
- Boyd, J. H., & Nicolo, G. D. (2005). The theory of bank risk taking and competition revisited. *The Journal of finance*, *60* (3), 1329-1343.
- Brown, I., & Molla, I. A. (2005). Determinants of Internet and cell phone banking adoption in South Africa. *Age*, *20*, 20-29.
- Carpenter, M., & Dunung, S. P. (2011). International Business: Opportunities and Challenges in a Flattening World. Tech. rep.
- Cetorelli, N., & Goldberg, L. (2011). Global Banks and Their Internal Capital Markets during the Crisis. *Liberty Street Economics*.
- Daniels, J., Radebaugh, L., Sullivan, D (2013), International Business: environments and operations, 14<sup>th</sup> edition. Prentice Hall.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management science*, *35* (8), 982-1003.
- Davis, F. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, *13*, 319-340.

De, R. T., & Lelyveld, I. V. (2004). Foreign bank penetration and private sector credit in Central and Eastern Europe. *Journal of Emerging Market Finance*, *3* (2), 125-151.

Dobson, A. J. (2002). An introduction to generalized linear models. Chapman \& Hall.

- Emanuel, Y. (2012). CHallenges of adoption and usage of e-banking among students of polytechnics in Northwest Geo-political zone of Nigeria. Ph.D. dissertation, Ahmadu Bello University,.
- Eriksson, K., Kerem, K., & Nilsson, D. (2005). Customer acceptance of internet banking in Estonia. *International Journal of Bank Marketing*, 23 (2), 200-216.
- Floros, C. (2008). Internet banking websites performance in Greece. *Journal of Internet Banking* and Commerce, 13 (3), 1-8.
- Gikandi, J. W., & Bloor, C. (2010). Adoption and effectiveness of electronic banking in Kenya. *Electronic Commerce Research and Applications*, 9 (4), 277-282.
- Grabner-Krauter, S., & Faullant, R. (2008). Consumer acceptance of internet banking: the influence of internet trust. *International Journal of Bank Marketing*, *26* (7), 483-504.
- Green, S., & Belle, J.-P. V. (2003). Customer expectations of Internet banking in South Africa., (pp. 283-285).
- Hadden, R., & Whalley, A. (2002). The Branch is dead, long live the Internet!(or so you'd have thought if we hadn't listened to the customer). *International Journal of Market Research*, 44 (3), 283-298.

- Heinkel, R. L., & Levi, M. (1992). The structure of international banking. *Journal of International Money and Finance*, 11, 251-272.
- Hiltunen, M., Heng, L., & Helgesen, L. (2004). Personalized electronic banking services. Designing personalized user experiences in eCommerce, 5, 119-140.
- Hill, C (2011), International Business: Competing in the Global Market Place, 8th edition. Hall
- Kalemli-Ozcan, S., Papaioannou, E., & Perri, F. (2012). Global banks and crisis transmission. Journal of International Economics , 49, 495-510.
- Kassim, N. M., & Mohammed, A. K. (2006). The influence of attraction on internet banking: an extension to the trust-relationship commitment model. *International Journal of Bank Marketing*, 24 (6), 424-442.
- Kefalas, A. G. (2008). Global Business Strategy: A Systems Approach. South-Western Pub.
- Kolodinsky, J. M., Hogarth, J. M., & Hilgert, M. A. (2004). The adoption of electronic banking technologies by US consumers. *International Journal of Bank Marketing*, 22 (4), 238-259.
- Lee, M.-C. (2009). Factors influencing the adoption of internet banking: An integration of TAM and TPB with perceived risk and perceived benefit. *Electronic Commerce Research and Applications*, 8 (3), 130-141.
- Lichtenstein, S., & Williamson, K. (2006). Understanding consumer adoption of internet banking: an interpretive study in the Australian banking context. *Journal of Electronic Commerce Research*, 7 (2), 50-66.

- Maitha M.W (2010). The effects of E-Banking in commercial banks in Kenya in promoting international business.
- Markowitz, H. (1952). Portfolio selection\*. The journal of finance, 7 (1), 77-91.
- McCauley, R., McGuire, P., & Peter, G. V. (2010). The architecture of global banking: from international to multinational? *BIS Quarterly Review, March*, *March*, 25-37.

Murugami A.K (2008). A survey of SMS Banking applications on Commercial banks in Kenya.

- Onyia, O. P., & Tagg, S. K. (2011). Effects of demographic factors on bank customers' attitudes and intention toward Internet banking adoption in a major developing African country. *Journal of Financial Services Marketing*, 16 (3), 294-315.
- Peek, J., & Rosengren, E. S. (2000). Implications of the globalization of the banking sector: the Latin American experience. *Federal Reserve Bank of Boston; 1998, 44*, pp. 145-170.
- Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., & Pahnila, S. (2004). Consumer acceptance of online banking: an extension of the technology acceptance model. *Internet research*, *14* (3), 224-235.
- Popov, A., & Udell, G. F. (2012). Cross-border banking, credit access, and the financial crisis. *Journal of International Economics*, 87 (1), 147-161.
- Ramsay, J., & Smith, M. (1999). Managing customer channel usage in the Australian banking sector. *Managerial Auditing Journal*, *14* (7), 329-338.
- Rotchanakitumnuai, S., & Speece, M. (2004). Corporate customer perspectives on business value of Thai internet banking. *Journal of Electronic Commerce Research*, 5 (4), 270-286.

- Sathye, M. (1999). Adoption of internet banking by Australian consumers: an empirical investigation. *International Journal of bank marketing*, *17* (7), 324-334.
- Sathye, M. (1999). Adoption of internet banking by Australian consumers: an empirical investigation. *International Journal of bank marketing*, *17* (7), 324-334.
- Saunders, M. N., Saunders, M., Lewis, P., & Thornhill, A. (2011). Research Methods For Business Students, 5/e. Pearson Education India.
- Shergill, G. S., & Li, B. (2004). Internet Banking: An Empirical Investigation of Customers' Behaviour for Online Banking in New Zealand. Department of Commerce, Massey University at Albany.
- Shih, Y.-Y., & Fang, K. (2004). The use of a decomposed theory of planned behavior to study Internet banking in Taiwan. *Internet Research*, *14* (3), 213-223.
- Suh, B., & Han, I. (2003). Effect of trust on customer acceptance of Internet banking. *Electronic Commerce research and applications*, 1 (3), 247-263.
- Tan, M., & Teo, T. S. (2000). Factors influencing the adoption of Internet banking. *Journal of the AIS*, 1 (1es), 5.
- Williams, Julie L. 2005. *Remarks before the Conference on Bank Structure and Competition*, FRB Chicago, 6 May
- Wu, J. (2005). Factors that influence the adoption of internet banking by South Africans in the Ethekweni metropolitan region. Master's thesis, Durban Institute of Technology.

Yee, B. Y., & Faziharudean, T. (2010). Factors affecting customer loyalty of using Internet banking in Malaysia. *Journal of Electronic Banking Systems*, 2010, 1-21.

# **APPENDICES**

# **APPENDIX I: RESEARCH QUESTIONNAIRE**

Kindly answer the following questions as accurately as possible. Your answer will be treated in confidence and used strictly for academic purpose only. In no instance will your name or that of your company be divulged.

# Part A: Organizational Bio data

| 1. | Name       | of                                  | your |
|----|------------|-------------------------------------|------|
|    | Bank       |                                     |      |
| 2. | Year       |                                     | of   |
|    | incorporat | ion                                 |      |
| 3. | Ownership  | o structure (tick as appropriate)   |      |
|    | a)         | Locally owned                       |      |
|    |            | { }                                 |      |
|    | b)         | Foreign owned                       |      |
|    |            | { }                                 |      |
|    | c)         | Both locally and foreign owned      |      |
|    |            | { }                                 |      |
|    | d)         | Privately owned                     |      |
|    |            | { }                                 |      |
|    | e)         | Government owned                    |      |
|    |            | { }                                 |      |
|    | f)         | Both government and privately owned |      |
|    |            | { }                                 |      |
| 4. | Area of op | perations                           |      |
|    | a)         | Local (Within Kenya)                |      |
|    |            | { }                                 |      |
|    | b)         | Regional (Within East Africa)       |      |
|    |            | { }                                 |      |
|    |            |                                     |      |

| c) (               | Continental (Within Africa)           |
|--------------------|---------------------------------------|
|                    | { }                                   |
| d) '               | Worldwide (Beyond Africa)             |
|                    | { }                                   |
| 5. Size of the     | bank (No. of Branches in East Africa) |
| a) ]               | Kenya                                 |
|                    |                                       |
| b)                 | Tanzania                              |
|                    |                                       |
| c)                 | Uganda                                |
|                    |                                       |
| d) ]               | Rwanda                                |
|                    |                                       |
| e) ]               | Burundi                               |
| 6. No. of employee | 28                                    |
| a.) Below 500      |                                       |
| b.) Between 501-25 | 500                                   |
| c.) Between 2501-4 | 4500                                  |
| d.) Over 4500      |                                       |
|                    |                                       |

7. How many customers does your bank have?

a.) Below 1000

b.) Between 1001-5000

c.) Between 5,001-10,000

d.) Between 10,001-15,000

e.) Above 15,000

# **Part B: Internet Banking**

8. Does your bank offer Internet Banking as a service?

a) Yes { }

b) No { } 9. If yes above, how is the service offered to your customers? a) Subscription { } b) Open to all { } 10. If subscription applies above, how much does your bank charge for Internet Banking? (Comment) ..... . . . . . . . . . . . ..... 11. How many years has your bank offered Internet Banking? a) 1-3 Years { } b) 4-7 Years { } c) 7-10 Years { } d) Above 10 Years { } 12. How has awareness of Internet Banking to your customers been created? a) TV/ Radio { } b) Newspapers { } c) Roadshows { } d) Flyers { }

e) Never

{ }

13. Briefly comment on the uptake of Internet Banking in your Bank?.....
14. What devices do your customers use the most to access Internet Banking?

a) Desk Top Computers

{ }

- b) Laptops
  - { }
- c) Tablets
  - { }
- d) Phablets
  - { }
- e) Mobile Phones

{ }

15. What are the numbers of customers regionally (East Africa) transact using Internet Banking?

a) Below 1000

{ }

b) Between 1001-5000

{ }

c) Between 5001-10,000

{ }

d) Between 10,001-15,000

{ }

e) Above 15,000

{ }

16. What are the volumes of these transactions in Kshs using Internet banking?

```
a) Between 1-50 million

{ }

b) Between 50-150 million

{ }

c) Between 150- 250 million

{ }

d) Between 250-500 million

{ }

e) Above 500 million

{ }
```

17. Has the introduction of Internet banking increased the number of transactions occurring within East Africa in your bank and what are the figures in Kshs for the following years?

a) Year 2000.....
b) Yeah 2005.....
c) Yeah 2010.....
d) Yeah 2012....

18. In what terms has the level of customer satisfaction improved due to use of Internet banking in the following categories? Use the key below to tick as appropriate.

- 1. Not at all; 2. To a less extent; 3. To a moderate extent;
  - 4. To a large extent. 5. To a very large extent.
    - a) Convenience
      - {}
    - b) Efficiency
      - { }
    - c) Resolution of complaints
      - { }
    - d) Personalized Service
      - { }

e) Cost – benefit analyses{ }

19. Which risk exposure has the bank faced in providing Internet Banking? (Tick as appropriate)

a) Transactional risk { } b) Legal risk { } c) Security risk { } d) Reputational risk { } 20. What measures has the bank taken to mitigate the risks above? (Comment) ..... ..... 21. Of the companies operating within the East African region what measures has the bank taken to mitigate risks that they face while using Internet Banking? ..... ..... 22. What other challenges has the bank faced while providing Internet banking as a service? ..... .....

# **APPENDIX II:WORK PLAN**

Schedule of activities: The researcher hopes to begin the study in December and complete by May 2013.

| Activity          | JAN | FEB | MAR | APR | MAY |
|-------------------|-----|-----|-----|-----|-----|
| Literature review |     |     |     |     |     |
| Pilot Study       |     |     |     |     |     |
|                   |     |     |     |     |     |
| Field Data        |     |     |     |     |     |
| Collection        |     |     |     |     |     |
|                   |     |     |     |     |     |
|                   |     |     |     |     |     |
| Data Analysis     |     |     |     |     |     |
|                   |     |     |     |     |     |
| Report Writing    |     |     |     |     |     |
| Report Writing    |     |     |     |     |     |
|                   |     |     |     |     |     |
| Submission        |     |     |     |     |     |
|                   |     |     |     |     |     |
|                   |     |     |     |     |     |

# **APPENDIX III: RESEARCH BUDGET**

| No. | Item Description   | Sub-Total                        | Total     |
|-----|--|----------------------------------|-----------|
| 1.  | Proposal writingDesk Research-from various librariesStationary, Computer, photocopy, printing and                    | 7,800.00                         |           |
|     | binding.   | 3,200.00                         | 11,000.00 |
| 2.  | Data Collection  |                                  |           |
|     | Hiring of 4 research assistants @ 3,000.00   | 12,000.00                        | 12,000.00 |
| 3.  | Data Analysis (SPSS)<br>Data analysis  | 5,000.00                         | 5,000.00  |
| 4.  | Final Draft Printing and Binding         Typing, Photocopy, Binding  | 6,000.00                         | 6,000.00  |
| 5.  | Transport/Miscellaneous         Transport         Telephone         Stationary, Computer services, internet services | 2,000.00<br>2,000.00<br>8,000.00 | 14,000.00 |
|     | <b>GRAND-TOTAL</b>   |                                  | 48,000.00 |

# APPENDIX IV: LIST OF COMMERCIAL BANKS IN KENYA AS AT FEBRUARY 2012

- 1. AFRICAN BANKING CORPORATION
- 2. BANK OF AFRICA
- 3. BANK OF BARODA
- 4. BANK OF INDIA
- 5. BARCLAYS BANK OF KENYA
- 6. CFC-STANBIC BANK
- 7. CHARTERHOUSE BANK
- 8. CHASE BANK
- 9. CITIBANK N.A.
- 10. CITY FINANCE BANK
- 11. COMMERCIAL BANK OF AFRICA
- 12. CONSOLIDATED BANK
- 13. CO-OPERATIVE BANK OF KENYA
- 14. CREDIT BANK
- 15. DEVELOPMENT BANK OF KENYA
- 16. DIAMOND TRUST BANK
- 17. DUBAI BANK KENYA
- 18. EQUITORIAL COMMERCIAL BANK
- 19. EQIUTY BANK
- 20. FAMILY FINANCE BANK
- 21. FIDELITY COMMERCIAL BANK

- 22. FINA BANK
- 23. FIRST COMMUNITY BANK
- 24. GIRO COMMERCIAL BANK
- 25. GURDIAN BANK
- 26. GULF AFRICAN BANK
- 27. HABIB A.G. ZURICH
- 28. HABIB BANK
- 29. HOUSING FINANCE OF KENYA
- **30. IMPERIAL BANK**
- 31. I & M BANK
- 32. KENYA COMMERCIAL BANK
- 33. K-REP BANK
- 34. MIDDLE EAST BANK
- 35. NATIONAL BANK OF KENYA
- 36. NATIONAL INDUSTRIAL CREDIT BANK
- 37. ORIENTAL COMMERCIAL BANK
- 38. PARAMOUNT BANK
- 39. PRIME BANK
- 40. STANDARD CHARTERED BANK
- 41. SOUTHERN CREDIT BANK
- 42. TRANS-NATIONAL BANK
- 43. UBA KENYA BANK
- 44. VICTORIA COMMERCIAL BANK