E-COMMERCE STRATEGY AND PERFORMANCE OF COMMERCIAL BANKS IN KENYA

BY:

ASIABUGWA MARY AYUMA

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DECLARATION

This Management Research Project is my original work and has not been presented for a degree in any other university.

Signed………………………………….Date…………………..

ASIABUGWA MARY AYUMA

Reg No: D61/73305/2009

This Management Research Project has been submitted with my approval as University Supervisor.

Signed…………………………………..Date…………………….

DR MUNYOKI JUSTUS MULWA
Department of Business Administration,

School of Business,

University of Nairobi

DEDICATION

To my Dzingavi

Catch the vision and continue from where mum has stopped.

And

A special dedication to my husband, Joseck Luminzu Mudiri for being the pace setter for me.

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I thank the almighty God for seeing me through the MBA program. It was not easy but it was worth it.

My sincere gratitude is attributed to all those who contributed immensely in one way or another to the completion of this project. Special gratitude goes to my supervisor, Dr. Munyoki who rescued the boat while it was about to sink, sincerely thank you.

I am greatly indebted to my employer Postbank for giving me resources both time and finances, The BSD team you are indeed great. My dear husband Luminzu Mudiri what could I have done without you? Your encouragement and financial support was tremendous. Carole God bless you for keeping the baby while I was in school most evenings. The NPC women's ministry group (Phoebe group) thanks for prayers and support.

My very special thanks go to all my respondents.

ABSTRACT

This study was aimed at establishing the relationship between e-commerce strategy and performance of commercial banks in Kenya. The study also sought to establish the factors influencing the adoption of e-commerce strategy in commercial banks in Kenya. The results of the research have been conducted and interpreted with a view of developing a better understanding of the relationship of ecommerce strategy on performance of commercial banks in Kenya.

The study adopted a cross sectional design, and targeted commercial banks in Kenya under the umbrella of Kenya Institute of Bankers Association (KIB). Data analysis was through percentage frequency, mean, standard deviation, and correlation analysis.

The results indicated that there was a strong relationship between the e-commerce strategy and performance of commercial banks in Kenya. The banks that have adopted e-commerce strategy were more efficient and more relevant to meeting the needs of the modern customers. The findings also indicated that the main factors which influenced the adoption of the e-commerce strategy in banks to a larger extent are customer support service and the payment systems.

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LIST OF ACRONYMS

EDI: Electronic Data Interchange

CBK: Central Bank of Kenya

KIB: Kenya institute of Bankers

B2B: Business to business

B2C: Business to Consumer

C2C: Consumer to consumer

A2A: Account to Account

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The internet has created a new climate for business in which sound principles of strategic management are more, not less important, (Dess, Lumpkin and Eisner 2006). According to George and Shoemaker, (2002) e-commerce is amongst the emerging technologies, which has the potential to remake entire industries and obsolete established strategies. The advent of e-commerce is therefore changing the game of business, threatening the very existence not only of firms but also of industries (Muganda, 2001).

Being an alternative channel for marketing or selling products online, the Internet has contributed to bringing about irreversible changes in the way business is conducted, (Jiang, 2003). E-commerce transactions are performed electronically by using computer and communication networks. Some companies have moved their business entirely to the web, others are strategically investing in or merging with already existing online organizations. Digital business success requires a new strategic perspective by firms. Dess et.al, (2006) argue that the internet presents a new strategic challenge which is how to make the best use of the new technology without losing sight of important business fundamentals.

According to Barkley, Markley and Lamie (2007), the spread of high-speed Internet among communities and the proliferation of electronic commerce (e-commerce) among businesses create both opportunities and challenges for businesses. On one hand, e-commerce may reduce many of the disadvantages associated with an isolated location by decreasing marketing, communication, and information costs and increasing access to lower cost suppliers and services.

1.1.1 E-commerce Strategy

Electronic commerce is the paperless exchange of business information using electronic platforms like electronic data interchange (EDI), e-mail, electronic bulletin boards, fax transmissions, and electronic funds transfer. It refers to Internet shopping, online stock and bond transactions, the downloading and selling of "soft merchandise" (software, documents, graphics, music, etc.), and business-to-business transactions, (Everything online business Book, 2003).

Electronic commerce (e-commerce) has become a vital strategic-management tool. An increasing number of companies are gaining competitive advantage by using the Internet for direct selling and for communication with suppliers, customers, creditors, partners, shareholders, clients, and competitors who may be dispersed globally. E-commerce allows firms to sell products, advertise, purchase supplies, bypass intermediaries, track inventory, eliminate paperwork, and share information. In total, electronic commerce is minimizing the expense and cumbersomeness of time, distance and space in doing business, which yields better customer service, greater efficiency, improved products and higher profitability.

Afua and Tucci (2001), argue that most firms are in business to win or to outperform their competitors. They also adopt new technologies to fend off new competitors, reinforce an existing competitive advantage or leapfrog competitor. Change is the key element that is transforming organizations in the 21st century. In order to survive this has led to firms changing their business models to confirm to the rapidly changing environment. According to Afua et.al, (2001), to take advantage of change or to avoid competitors, firms may want to undergo a strategic management process to answer the question of where the firm is now concerning the internet.

Effective Strategy formulation is a complex undertaking, involving a thorough analysis of an organizations environment both internal and external. An organization's internal environment refers to those environmental factors which a firm has direct control over. These include employees, operational procedures, and organizational culture amongst other factors. The internal environment provides a firm with strengths that it can utilize in order to capitalize on the opportunities that may arise in the external environment.

Likewise, an organizations external environment refers to the conditions external to the organization, which an organization has little control over. The external environment is inherently complex and includes aspects such as legal and political, prevailing economic conditions, technological factors, demographic factors, cultural and social factors and international events factors. Ansoff, (1998) argues that the aggressiveness of the firm's strategic behaviour needs to match the turbulence of its environment. In this case if e-commerce is a technology that is transforming organizations to be strategic then the organizations would need to match the environment in order to survive.

1.1.2 Organizational Performance

Organizational performance assesses how firms are able to meet their stated objectives over time. The management of an organization should be in a position to evaluate the performance level of the organization in order to ensure the organization is both effective and efficient in order to be successful. According to Daft, (2009) Organizational effectiveness is a measure of the extent to which an organization realizes its goals. Organizational efficiency refers to the amount of resources an organization uses in order to produce a unit of output. Efficiency and effectiveness are highly dependent on the ability of the organization to adjust itself to rapid changes in its environment, resources or technology. Many organizations are using new technology to improve efficiency and effectiveness.

There are many ways of measuring performance, which include profitability ratios such as earnings per share, return on investment or return on equity. However, in many cases performance is not just about profits, and indeed a successful firm may not necessarily be making profits at a particular point in time, depending on the purpose for which performance is measured. According to Lusthaus (2000), as cited in (Munyoki, 2007), performance can be split into four main indicators which include efficiency, effectiveness, Relevance, and Financial viability.

According to Daft (2007) efficiency is a limited concept that pertains to the internal workings of the organization. It's the amount of resources used to produce a unit of output. If an organization can achieve a given production level with fewer resources than other organizations then it would be described as more efficient. Lusthaus further argues that it measures the ability of a firm to provide the best services within the most cost effective structure. It is therefore important to assess indicators like the unit cost of providing service and time taken to provide the service. A firm that fails to adapt to the changing environment risks becoming irrelevant in the eyes of its stakeholders, and may eventually, collapse.

To survive, a firm must continuously monitor and adapt to the changing environmental factors, such economic, social-cultural, political, and technological factors. Focusing on financial measures is obviously an important part of running or managing an organisation. According to Andersen (1998) financial measures of performance include both basic and derived measures of financial character and/or using monetary values as measurement unit. Nonfinancial measures is an important factor for performance measures that have measurement units other than monetary value and they include set up time, delivery time, number of complaints, customer satisfaction and defect rates. The financial value measures include profit margins, value added, and turnover of capital. According Lasthaus,(2000) as cited in (Munyoki, 2007) Indicators of financial viability include consistently obtaining new funding sources, consistently having more revenue than expenses, and having assets greater than liabilities. Financial viability also requires the organization to monitor its finances on a regular basis. The ratio of current assets to current liabilities and ratio of total assets to total liabilities are also important indicators.

1.1.3 Commercial Banks in Kenya

Banks are like any other entity are environmental savvy and are faced with continuous stream of ever changing events in the environment that present opportunities as well as pose threats such as changes in regulation and competition from other banks and financial institutions. In a rapid changing environment business environment, managers are faced with the challenge of meeting growing strategic needs. Both threats and opportunities exist in such environment.

The Banking industry in Kenya is governed by the Companies Act, the Banking Act, the Central Bank of Kenya 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 falls under the Minister for Finance docket, is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system. Commercial banks in Kenya are registered, regulated and supervised by different legislations. According to the (CBK Annual Report, 2010), it was estimated that commercial banks, together with other financial institutions had over ten million accounts, which a majority are from the commercial banks. The commercial banks form the largest body of all financial institutions comprising of a total of 45 licensed commercial banks in Kenya.

Since early 1990s, commercial banks in Kenya have been operating in an environment characterized by many dynamic changes. The changes include privatization and commercialization of public sector, rapid technological changes, increase in competition, economic conditions, introduction of multi-party politics and clamour for new constitution which was enacted in August 2010. The financial sector has undergone significant reforms since 1990. The 1990s saw emergence of indigenous banks and non-bank financial. However these banks were plagued with various problems including weak capitalization, poorly performing portfolio and weak management structures.

Performance of commercial banks in Kenya has been revolutionized by the adoption of e-commerce. As banks become more of a convenient one-stop shopping environment, consumers will more than likely convert to transacting all personal finances online. For instance, once a customer has gone through all of the trouble of setting up electronic bill payments, he or she is likely to switch Higgins (2002) (as cited in Ojunga, 2005). By offering a wide array of products and services through integrating e-commerce with bank operations, banks are benefitting whereby banks are retaining customers by offering services that are important and add value to leading to tremendous cost savings, efficiency and effectiveness in bank operations leading to increased profitability of the banks. E-commerce strategy has led to substantial cost savings due to properly integrating e-commerce into existing banking operations such as funds transfers, bill payments and account balance enquiries, mobile banking and enabling of banking facilities anywhere other than the traditional banking hall.

In advertising their products banks use pop up messages banners and search engines in websites hence reducing costs related to advertising and reaching more target market. Promotions are being done online by offering variety of services online whereby funds transfers, balance enquiry, bill payments, opening accounts and applying for loans can be promoted online hence saving on promotional costs. Commercial Banks have adopted e-commerce by adopting mobile banking to facilitate easy access of banking services for their customers hence tremendously reducing queues in banking halls. Some banks have adopted e-commerce services that would enable merchants to sell their goods online in Kenya and beyond. Prior to this Kemibaro, (2010) argues that merchants in Kenya who wanted to sell online needed to set-up subsidiary companies outside Kenya where they could then register for merchant bank accounts and payment processing services in other countries. This meant that payments would need to be processed via international services before being remitted to Kenya, leading to higher costs and lower margins. According to Ochieng, (1998) and Otieno, (2006) as cited in (Magutu, Ongeri, Mwangi, 2009), the new information technology is becoming an important factor in the future development and performance of Kenyan financial services industry, and especially Kenyan commercial banks.

Banks are faced with a number of important questions, for examples how to take full advantage of new technology opportunities, how e-developments change the ways customers interact with the financial services provider. Commercial banks in Kenya have achieved significant success in the implementation of electronic banking. It is on the top of the emerging markets in this area and even outpaces the achievements of some developed countries.

1.2 Statement of the Research Problem

The emergence of e-commerce has resulted into widespread thought that developing countries are going to improve their economic performance and financial viability by adopting e-commerce (Muganda, 2001). E-commerce is a fairly new area for organizations and many firms are incorporating e-commerce in their organization as a positioning strategy, to be competitive or to strategically lure more customers. E-commerce is being adopted in many different sectors as a way of positioning or creating competitive advantage for the firms or adapting to the rapid changing environment.

Commercial banks in Kenya have managed to be more effective, efficient and relevant due to adopting e-commerce strategy in their operations. Efficiency is attained when the banks discard manual operations and processes and replace them with electronic operations leading to reduction of costs by eliminating paper work, reducing queues in the banking halls, reducing the turnaround service time to a shorter time and enabling customer satisfaction and making banking easier for customers in general.

The banks have become relevant whereby they are moving with the current times of technology hence becoming relevant to the current type of customer. Relevance is important for the banks because if they do not meet the needs of their customers then they become irrelevant and of no value to the customer. The commercial banks are more effective whereby they are able to meet or move towards attaining their goals and objectives as an organization. Most commercial banks have been posting huge profits and most of the profits are a contribution of adopting e-commerce strategy. Some banks who to a larger extent use e-commerce to serve and reach their customers are increasing their profits tremendously due to use of e-banking services.

While various studies have been done in reference to e-commerce, none has been done in regards to the effect of e-commerce Strategy in commercial banks in Kenya depicting the existence of a knowledge gap. The various studies that have previously been done surrounding the aspects of E-commerce include a survey of potential for adoption of e-commerce by tour operators in Nairobi (Mbuvi, 2000), An investigation of the business value of e-commerce (Muganda, 2001), A survey of the impact and challenges of Business e-commerce in Kenya (Kiyeng, 2003), An evaluation of e-commerce application by microfinance institutions in Kenya (Kipkech, 2009). The effect of e-commerce strategy in commercial banks has not been an area of emphasis in these studies and as such the reason for this study.

Therefore this study sought to establish the influence of e-commerce strategy on the performance of commercial banks in Kenya. The study also sought to determine the factors influencing the adoption of e-commerce strategy in commercial banks in Kenya.

1.3 Research Objectives

The Objectives of the study were;

i. To determine the factors influencing the adoption of E-commerce strategy in commercial banks in Kenya.

ii. To establish the influence of e-commerce strategy on performance of commercial banks in Kenya.

1.4 Value of the Study

The findings of this study would benefit a wide spectrum of stakeholders which includes providing vital information that would be beneficial to banks in Kenya who had not yet adopted e-commerce strategy and would like to adopt hence leading to opportunities for institutional innovations in the banking industry. It would also assist policy makers in developing policies which would evaluate the impact of ecommerce strategy in the banking sector hence developing policies which regulate and support the development of e-commerce strategy in banks. Further, the study would be useful to academicians as it would generate more areas of further research in the discipline of e-commerce strategy in the banking industry.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The literature from commercial banks and e-commerce can form a useful study of the effect of e-commerce in commercial banks. This section covered the critical issues relating to the commercial banks and e-commerce strategy.

2.2 E-commerce Strategy

Johnson and Scholes, (2002) gives an overall definition of strategy as the long-term direction of an organization. According to Mintzberg,(1994) strategy can be viewed in various forms, as a plan, pattern, position, ploy and perspective. As a plan, it is a means of getting from here to there. In other words, it is a "how”. As a pattern, it is a pattern in actions over time. Thus, a company that regularly markets cheap, mass produced products is using a “Low end” strategy. Mintzberg, (1994) argues that strategy is a ploy whereby it is designed to deceive or to manipulate for gain.

As a position, Mintzberg, (1994) argues that strategy reflects decisions to offer particular products or services in particular markets. Lastly, he also argues that Strategy is a perspective, that is, vision and direction. Essentially strategy captures all these perspectives. It is a plan, pattern, position, ploy and perspective. In essence, Strategy is the bridge between policy or high-order goals on the one hand and tactics or concrete actions on the other.

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According to Laudon et al (2009) electronic commerce is the use of the internet and the web to transact business or the use of digitally enabled commercial transactions between and amongst organizations. E-Business is the term used to describe the information systems and applications that support and drive business processes, most often using web technologies, e-Business allows companies to link their internal and external processes more efficiently and effectively, and work more closely with suppliers and partners to better satisfy the needs and expectations of their customers, leading to improvements in overall business performance, **(**National B2B centre, p.16). This concludes that when e-commerce is combined with information systems of the firm it results to the firm doing e-business. The common element is the effective implementation of business activities using Internet technologies.

2.3 E-commerce Technologies

The technologies behind e-commerce are the internet and the worldwide web. According to Laudon and Treavor, (2009) the internet is a worldwide network of computers networks built on common standards. Created in the late 1960's to connect a small number of mainframe computers and their users, the internet has since grown into worlds' largest network connecting over 1.2 billion computers worldwide. The internet links businesses, educational institutions, government agencies, and individuals together, and provides users with services such as e-mail, document transfers, newsgroups, shopping, research, instant messaging, music, videos and news.

The Internet is changing the way customers, suppliers and companies interact, creating huge opportunities as well as unforeseen competitive threats. In much the same way as it is redefining external relationships with suppliers, customers and alliance partners, the Internet is also changing the way companies work internally, collapsing boundaries and redefining relationships among different functions, departments and divisions. In just a few years, the Internet has profoundly affected the basis of competition in many industries. Instead of the traditional focus on product features and costs, the Internet is shifting the basis of competition to a more strategic level changing the business models that companies use to organize themselves, engage in relationships and conduct their most basic transactions with customers and suppliers (Callahan and Pasternack, 1999).

Rapid changes in technology, products, processes, employee and customer needs, severe competition, and trends towards globalization force organizations to do business in new ways in order to survive and be successful. One of these new trends is e-commerce, a form of entrepreneurial activity, which transforms the manner in which firms operate using the Internet. This introduction of technology has been used mostly as a tool to deliver value to the customer as a way to increase the core competencies, Starr (2003) as cited in Towards Theory Building in E-Commerce (2004).

The adoption of e-commerce is tending to automate rather than re-design existing business processes. High levels of internal information systems integration appear to be associated with low levels of business process integration. Business process management is a systematic approach to improving an organization's business processes. Business Process Management activities seek to make business processes more effective, more efficient, and more capable of adapting to an ever-changing environment David et al, as (Magutu, Ongeri, Mwangi, 2009).

2.4 Business Models of E-commerce

A business models is a unique configuration of elements comprising the organization’s goals, strategies, processes, technologies and structure, conceived to create value for the customers, compete successfully in a particular market. It describes how a business positions itself within the value chain of its industry and how it plans to sustain itself. Ojunga,(2005). The e-commerce models include business-to-business (B2B) in which businesses focus on selling to other businesses and it is the largest form of commerce. B2B e-commerce is simply defined as e-commerce between companies. According to Andam, (2000) this is the type of e-commerce that deals with relationships between and among businesses. About 80% of e-commerce is of this type, and most experts predict that B2B e-commerce will continue to grow faster than the business to consumer (B2C) segment. The B2B market has two primary components: e-frastructure and e-markets. Types of business-to-business electronic commerce applications include electronic data interchange, electronic funds transfer, electronic forms, integrated messaging, and shared databases. Business-to-business processes provide sharing of data and increased information access through corporate extranets.

Business-to-consumer (B2C) in which online businesses attempt to reach individual consumer, Andam, (2000) argues that its commerce between companies and consumers which involves customers gathering information, purchasing physical goods which include tangibles such as books or consumer products or information goods or goods of electronic material or digitized content, such as software, or e-books . When most people think of B2C e-commerce they think of amazon.com the online book seller that launched its site in 1995 and quickly took up major retailers in America. Business to consumer has grown to include services such as online banking, travel services and real estate.

Customer to customer (C2C) is online transactions in which transactions occur between two consumers in banking this is referred to as Account to account (A2A) transfers also called interbank funds transfer. This allows bank customers to move their funds from their bank accounts at other banks to other individual or business bank accounts. This model has the advantage of reducing the volumes of cheques in the banking system and better leverage investment in online banking platforms.

Advances in wireless technology has increased the number of mobile device users and given pace to the rapid development of e-commerce conducted with these devices. The new type of e-commerce transactions, conducted through mobile devices using wireless telecommunications networks and other wired e-commerce technologies, is called mobile commerce (increasingly known as mobile e-commerce or m-commerce).

2.5 Drivers of E-commerce

According to Tasabehji, (2003) the key drivers of e-commerce are technological factor, political factor, social factor and economic factor. Technological factor is the degree of advancement of the telecommunications infrastructure which provides access to the new technology for business and consumers. This also involves speed of development and implementation of new technology by industry sector. Technology is what drives the phenomena of globalization and provides competitive advantage to firms. Technological factor reduces costs, improves quality and leads to innovation. It can benefit consumers as well as the organizations providing the products. Political factor refers to the degree of intervention of government in the economy.

There are certain formal and informal rules laid down by the government which every organization has to abide by in order to sustain its operations in a particular country. Important political factors in relation to e-commerce include the role of government in creating government legislations, initiatives and funding to support the use and development of e-commerce and information technology, government incentives to develop and support the use of new technology. Legislation includes number and type of supportive or restrictive laws and number of policies that govern electronic data, contacts and financial transactions. According to Tasabehji, (2003) Public policies would include whether government supports growth of electronic transactions and processes. Political decisions have a strong influence on many vital areas for business such as the education of the workforce, health of the nation and quality of the infrastructure of the economy such as the road and rail system. Tasabehji,(2003) further argues that social factors are cultural aspects and demographic variables which are closely linked to the market potential and customers' needs. These include age distribution, attitude towards health and environment, education, leisure activities, attitude towards career, hanging lifestyle, gender role. As a Key driver to E-commerce, incorporating the level of advancement in IT education and training which will enable both potential buyers and the workforce to understand and use the new technology.

This also includes skills of workforce, number of workforce online, penetration of computers, level of education, computer literacy. Economic factors are those which have a direct impact on the capital loss of organizations and purchasing power of customers. These include: the general wealth and commercial health of the nation is also an important driver. Economic factors are influenced by organizational culture, Commercial benefits, Skilled and committed workforce. Economic factor as key drivers of e-commerce are defined by average income, economic growth GDP, cost of technology (hardware and software) cost of access to telecommunication infrastructure pricing structures and rates and innovative business models.

2.6 Integration of E-commerce with Organization's Strategies

Wheelen and Hunger (2009), argue that due to increased competition in the business environments, innovation and the management of technology are becoming crucial to the corporate success. In common with any other business activity, e-commerce needs to be guided by corporation strategy. Organizations' have a range of strategic options, which support the achievement of its objectives, such as reducing costs, increasing prices, streamlining operations, increasing profitability and customer satisfaction. The key feature of corporation strategy is that it offers a clear statement of the basis for differentiation from competitors in order to gain competitive advantage. Walker,(2004) argues that without a successful market position there is no competitive advantage, successful position is based on the firms resources and capabilities. He concludes that a superior position is achieved when higher value is given to the customer through better quality or stronger technology.

According to Strickland, (2000) if the recipe for success in the adoption of e-commerce technologies or applications is having clear and sound objectives, then firms need to set clear objectives as prerequisite for crafting business strategy. While developing e-commerce strategy firms may neglect the fundamentals, and overlook fundamental business principles and forget the integration with the whole organization's strategy. E-commerce implementation must be aligned with whole strategy of the corporation. According to Whitley, (2001) the inputs into the strategy formulation process are the results of evaluating e-commerce technology, the business environment the capabilities of the organization plus the existing business strategy. The greater the impact of e-business on the overall business, the more significant is e-commerce strategy implementation, and the more important it is for the organization to understand and articulate clearly the relationships between e-commerce and other strategies. Jiang, (2003) argues that regardless of the level of integration between strategies, the strategy formulation process, issues such as the environmental context, the value chain, differentiation market and channel structure must be considered. Therefore companies that incorporate e-commerce with strategy will implement firm strategy effectively.

2.7 Optimizing Value Chain using E-commerce Strategy

Johnson and Scholes, (2002) argue that core competence activities of an organization create and sustain the ability of an organization to meet critical success factors of particular customer groups better than competitors . A firm should analyze its industry forces and value-chain activities in order to identify opportunities for business innovation. The firm should examine assets, resources, and competency of the staff and identify those mechanisms that confer a distinctive advantage over their rivals. They further argue that superior performance will be determined by the way in which resources are deployed to create competencies in the organizations activities.

According to Jellassi et al, (2008) the value chain framework helps to address the question of how value is created within a company. It does so by disaggregating a company into strategically relevant and interrelated activities. In essence the internal value chain of a company revolves around value creation, where value is created through individual activities of the value chain. Most organizations today use Internet technology to redesign their processes in ways that provide new competitive advantage. For example through the infrastructure of existing Business to Business exchanges in the e-marketplaces, many organizations will eventually be able to integrate activities of their value chain encompassing suppliers, customers, and distribution channels within an industry or across industries.

According to Porter (1985) as cited in (e-commerce strategy, technologies and applications), the basic activities of a product as concerns value chain are inbound logistics, operations and outbound logistics, marketing and sales and service. To support these primary functions there are support activities that include procurement firm infrastructure, technology development and human resource management. The efficiency and the linkages may be enhanced by the use of information and communications technologies. Internal linkages can be coordinated using e-commerce technologies. The use of ecommerce alters the time frame and cost structure of the administration of the value chain. E-commerce can be used to re-engineer the linkages in terms of, just in time manufacture or quick response supply, techniques that reduce materials handling, investment in stocks and the need for warehousing facilities. Efficient document processing, removing the need for paper documents and facilitating the efficient machine matching of the exchanges from each stage of the trade cycle. This concludes that optimizing value chains by e-commerce will bring positive impact on implementation of firm strategy.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter sets out various stages and phases that were followed in completing the study. It involved a blue print for the collection, measurement and analysis of the data. This chapter therefore, identified the procedures and techniques that were used in the collection, processing and analysis of the data. Specifically the following subsections included research design, data collection instruments, data collection procedures and finally data analysis.

3.2 Research Design

The research design used was a cross-sectional survey. The survey was carried out to represent a snapshot of one point in time. A descriptive research design was also used which called for a combination of quantitative and qualitative methods of doing research. One of the criteria which were used was banks who have website for their firms. This enabled to obtain accuracy and indeed to establish the impact of e-commerce strategy on the operations of the commercial banks.

3.3 The Population

The population of the study was all commercial banks in Kenya, given the fact that their head offices are based in Nairobi, according to the CBK Annual Report, (2010) the research conducted a census of 30 banks operating in Kenya.

3.4 Data Collection

The study used both secondary and primary data. The secondary data was collected from journals and websites. A structured questionnaire was used to collect primary data. The questionnaire targeted the managers of e-commerce services or information technology managers in the banks. The questionnaire consisted of 4 parts, part A was to collect the data on the profile of the banks. Part B was to collect data on the extent of use of various e-commerce services in the banks. Part C was to collect data on the factors influencing the adoption of e-commerce strategy in the banks and effect on performance. Part D was to collect information on the benefits of e-commerce strategy. The research method was to drop and pick the questionnaires method. Follow-up was done via personal visits and telephone calls which facilitated a higher response rate.

3.5 Data Analysis

Before analysis, the data collected was checked for completeness and consistency by editing, coding, classification and tabulation. Analysis was carried out with the help of SPSS (Statistical Package for Social Scientists) Version 17.0. Descriptive statistics such as frequency, percentages, mean and standard deviation were used to analyze the data.

Regression analysis was also be used to come up with the model expressing the relationship between the dependent variable (performance of commercial banks) and independent variables (electronic marketing strategy, electronic advertising display company information and products strategy, customer support service strategy, order and delivery strategy and payment system strategy). A multiple regression model was developed to describe the relationship between the dependent and independent variable. The regression equation assumed the following form:

$Y=\beta o+\beta ixi$

Specifically:

$Y= \beta o+\beta_1X_1 +\beta_2X_2 +\beta_3X_3+\beta_4X_4+\beta_5X_5$

Where Y= Performance of commercial banks

X_1= Electronic marketing strategy

X_2= Electronic advertising display company information and products strategy

X_3= Customer support service strategy

X_4= Order and delivery strategy

X_5= Payment system strategy

Correlation analysis was used to check on the overall strength of the established regression model and also the individual significance of the predictor variables. The results were presented in form of tables.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter presented the results of the analysis of the data. It provides information about a summary of the general information as well as on the objective of the study which was to establish the effect of ecommerce strategy on performance of commercial banks in Kenya. The findings are presented in correlations and frequency distributions, mean and standard deviations. Out of the 30 questionnaires distributed for this research, 26 useable questionnaires were returned giving a response rate of 86.7 percent, which was considered satisfactory for the analysis.

4.2 General Information

General information in the study included; response rate, number of years since incorporation, categories of the banks, number of employees and number of branches for various banks across the country.

The respondents were asked to state number of years since the incorporation of their respective banks. The findings are given in table 4.1

Table 4.1: Number of years since incorporation

Years	Frequency	Percent	Cumulative Percent
<5 years	1	3.8	3.8
6 - 10 years	3	11.5	15.4
11-15 years	7	26.9	42.3
16 - 20 years	8	30.8	73.1
>20 years	7	26.9	100.0
Total	26	100.0	

Source: Author 2011

As shown in table 4.1, majority (30.8%) of the banks were have been in existence for 15 to 20 years, followed by 10 to 15 years/more than 20 years at 26.9%, 5 to 10 years at 11.5% and less than 5 years at 3.8% respectively. This is an indication that most banks have been in existence for many years and thus have been able to stabilize and capture the market needs in Kenya. There is an indication of also a steady rise in new commercial banks being established in Kenya.

The respondents were asked to state the nature of ownership of their respective banks. The results are as shown in table 4.2

Table 4.2: Nature of ownership of the banks

Category	Frequency	Percent
Foreign owned and not locally incorporated	2	7.7
Foreign owned but locally incorporated	13	50.0
Partially government owned	5	19.2
Wholly locally owned	6	23.1
Total	26	100.0

Source: Author 2011

The result in table 4.2.2 shows that, 50% of the banks were foreign owned but locally incorporated, 23.1% were wholly locally owned, 19.2% were partially government owned and 7.7% were Foreign owned and not locally incorporated. This is an indication that most of the prevailing economic conditions in Kenya are conducive for business hence more foreign owned banks being established in Kenya.

The respondents were asked to state the number of employees currently working in their respective banks. The findings are given in table 4.3

Table 4.3: Distribution of banks by number of employees

Number of employees	Frequency	Percent	Cumulative Percent
Less than 100	9	34.6	34.6
100-200	3	11.5	46.2
200-300	4	15.4	61.5
More than 400	10	38.5	100.0
Total	26	100.0	

Source: Author 2011

Most of the respondent's banks (38.5%) had more than 400 employees, followed by less than 100 employees at 34.6%, 200 to 300 employees at 15.4% and 100 to 200 employees at 11.5%. This is an indication that most banks have many employees due to increase in the number of customers, having a wide branch network and most of the bank processes still not fully automated hence leading to more employees.

The respondents were asked to state the number of branches operated by the respective banks across the country. The results are as shown in table 4.4

Table 4.4 Number of branches in Kenya

Branches	Frequency	Percent	Cumulative Percent
<5	5	19.2	19.2
5-10	9	34.6	53.8
>10	12	46.2	100.0
Total	26	100.0	

Source: Author 2011

The findings indicated that majority of the banks had more than 10 branches, 34.6% had 5 to 10 branches and only 19.2% had less than 5 branches spread across the country. This shows that most of the banks had physical presence across the country and are able to service various categories of customers.

4.3: Factors influencing the adoption of E-commerce strategy in commercial banks in Kenya

This section covered the questions posed to the respondents on Electronic commerce applications, Extent of use of the predetermined electronic commerce application in the bank, rating of the effect of e-commerce adoption in the bank, rating of the effect of e-commerce adoption in the bank and Effect of electronic commerce performance in a five point Likert scale. The range was ‘very high’ (5) to ‘very low’ (1). The scores of very low and low have been taken to present a variable which had an impact to a small extent of usage (S.E) (equivalent to mean score of 0 to 2.5 on the continuous Likert scale ;(0≤ S.E <2.4). The scores of ‘average’ have been taken to represent a variable that had an impact to a moderate extent of usage (M.E.) (equivalent to a mean score of 2.5 to 3.4 pm the continuous Likert scale: 2.5≤M.E. <3.4). The score of both ‘high’ and ‘very high’ have been taken to represent a variable which had an impact to a large extent of usage (L.E.) (equivalent to a mean score of 3.5 to 5.0 on a continuous Likert scale; 3.5≤ L.E. <5.0). A standard deviation of >1.5 implies a significant difference on the impact of the variable among respondents. Tables, mean and standard deviation were used to present the findings.

The respondents were asked the level of usage of some predetermined electronic devices in the bank. The results were given in table 4.5

Table 4.5: Rating of level of usage of Electronic devices in the bank

Electronic Devices	Mean	Std. Deviation
Website	3.5769	.90213
Fixed lines	3.9231	.79614
Internet	4.0385	.66216
Computers	4.4615	.50839
Mobile phone	4.5000	.50990

Source: Author 2011

The respondents rated the usage as follows; to a large extent: mobile phone (mean of 4.5000), computers (mean of 4.4615), internet (mean of 4.0385), fixed lines (mean of 3.9231) and website (mean of 3.5769). There was no variation in the respondents rating as indicated by low values of the standard deviations.

The respondents were asked the extent of usage of electronic commerce applications in the bank. The results were given in table 4.6

Table 4.6: Extent of use of electronic commerce

	Mean	Std. Dev
Orders and delivery	1.9615	.91568
Electronic advertising display company information and products	3.0385	.77360
Electronic marketing	3.0769	.79614
Customer support service	3.4231	.80861
Payment system	4.5769	.80861

Source: Author 2011

The findings show that to a large extent payment system (mean of 4.5769) is applicable across all the banks. To a moderate extent; Customer support service (mean of 3.4231), electronic marketing (mean of 3.0769) and Electronic advertising display company information and products (mean of 3.0385) were applicable across all the banks. On the other hand only Orders and delivery (mean of 1.9615) was used to a small extent across all the banks.

The respondents were asked the factors that influence the adoption of e-commerce in the bank. The results were given in table 4.7

Table 4.7: Factors influencing electronic commerce adoption

	Mean	Std. Dev
Orders and delivery	2.6154	1.29852
Electronic marketing	3.3462	.89184
Electronic advertising display company information and products	3.4231	.90213
Payment system	3.6154	.75243
Customer support service	4.4615	.85934

Source: Author 2011

To a large extent, the following Factors influenced electronic commerce adoption across the banks; customer support service (mean of 4.4615) and payment system (mean of 3.6154). To a moderate extent; Electronic advertising display company information and products (mean of 3.4231), Electronic marketing (mean of 3.3462) and Orders and delivery (mean of 2.6154) influenced electronic commerce adoption amongst the banks.

The respondents were asked the effect of e-commerce adoption as regards to various factors which include perceived benefits, IT experience, IT infrastructure, customer pressure for IT adoption, competition in the industry and compatibility with current operations. The results were given in table 4.8.

Table 4.8: Rating of the effect of e-commerce adoption in the bank

	Mean	Std. Dev
IT experience	3.8077	.56704
Perceived benefits	3.8077	.56704
Compatibility with current operations	4.0000	.00000
IT infrastructure	4.2692	.77757
Customer pressure for IT adoption	4.2692	.77757
Competition in the industry	4.6154	.80384

Source: Author 2011

The respondents unanimously rated effects of e-commerce adoption in the bank to a large extent. More specific; Competition in the industry(mean of 4.6154), Customer pressure for IT adoption (mean of 4.2692), IT infrastructure(mean of 4.2692), Compatibility with current operations(mean of 4.0000), Perceived benefits (mean of 3.8077), and IT experience (mean of 3.8077).

The respondents were asked to rate the extent to which e-commerce has influenced performance of the banks in terms of effectiveness, efficiency and relevance. The results were given in table 4.9

Table 4.9: Effect of electronic commerce on performance

		Mean	Std. Dev
Effectiveness	Marketing	3.4231	1.1375
	Advertising, display company information and products	3.4231	.9021
	Customer support service	3.7308	.7776
	Orders and delivery	3.8077	1.0206
	Payment system	3.7692	1.3056

Efficiency	Marketing	4.4615	1.1889
	Advertising, display company information and products	3.7692	.7646
	Customer support service	3.1538	1.0077
	Orders and delivery	3.6154	1.2026
	Payment system	3.8846	.8162
Relevance	Meeting organization Objectives and goals	4.0769	.8449
	Product development	4.0769	.8449
	Market environment	4.0000	.8000
	Orders and delivery	3.8846	.9931
	Payment system	4.1538	.8806

Source: Author 2011

In terms of effectiveness; Customer support service (mean of 4.2692), Payment system (mean of 4.2692), Orders and delivery (mean of 4.2692) had influenced performance of the banks to a large extent. In terms of efficiency; Marketing (mean of 4.4615), Payment system (mean of 3.8846), Advertising, display company information and products (mean of 3.7692) and Orders and delivery (mean of 3.6154) had influenced performance of the banks to a large extent. In terms of relevance; Payment system (mean of 4.1538), Meeting organization Objectives and goals (mean of 4.0769), Product development (mean of 4.0769) Market environment (mean of 4.0000), and Orders and delivery (mean of 3.8846) had influenced performance of the banks to a large extent.

4.4: Correlation analysis of various e-commerce factors and performance

In order to establish the nature and strength of the relationship between various factors and performance, Pearson correlation coefficient was used to determine as shown in table 4.10

Table 4.10: Pearson Correlation Coefficients

	Performance of commercial banks	Electronic marketing strategy	Electronic advertising display company information and products strategy	Customer support service strategy	Order and delivery strategy	Payment system strategy
Performance of commercial banks	1.000					
Electronic marketing strategy	.722	1.000				
Electronic advertising display company information and products strategy	.828	.263	1.000			
Customer support service strategy	.502	.331	.231	1.000		
Order and delivery strategy	.598	.378	.421	.143	1.000	
Payment system strategy	.467	.284	.265	.258	.268	1.000

Source: Author 2011

None of the predictor variables had coefficient of correlation between themselves more than 0.5 hence all of them were included in the model. The matrix also indicated high correlation between the response and predictor variables.

Table 4.11: Model Summary

				Change Statistics				
R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
.961[a]	.924	.914	.39656	.924	90.201	5	25	.000

Source: Author 2011

The coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R^2 equals 0.924, that is, electronic marketing strategy, electronic advertising display company information and products strategy, customer support service strategy, order and delivery strategy and payment system strategy explain 92.4 percent of performance of commercial banks leaving only 7.6 percent unexplained. The P- value of 0.000 (Less than 0.05) implies that the model of performance of commercial banks is significant at the 5 percent significance as indicated in the model summary in 4.11

Table 4.12: Coefficients of regression equation

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
(Constant)		.365	.207		1.761	.087
Electronic marketing strategy	X_1	.627	.073	.562	8.623	.000
Electronic advertising display company information and products strategy	X_2	.395	.075	.415	5.282	.000
Customer support service strategy	X_3	.628	.090	.661	7.020	.000
Order and delivery strategy	X_4	.254	.086	.238	2.942	.006
Payment system strategy	X_5	.975	.099	.884	9.833	.000

Source: Author 2011

Dependent Variable: Performance of commercial banks

The established multiple linear regression equation becomes:

$Y = 0.365 + 0.562X_1 + 0.415X_2 + 0.661X_3 + 0.238X_4 + 0.884X_5$

Where

Y= Performance of the banks

Constant = 0.365, shows that if electronic marketing strategy, electronic advertising display company information and products strategy, customer support service strategy, order and delivery strategy and payment system strategy were all rated as zero, performance of commercial banks rating would be 0.365

X_1= Electronic marketing strategy which shows that one unit change in electronic marketing strategy results in .562 units increase in performance of commercial banks other variables held constant.

X_2= Electronic advertising display company information and products strategy shows that one unit change in electronic advertising display company information and products strategy results in 0.415 units increase in performance of commercial banks other variables held constant.

X_3= Customer support service strategy, shows that one unit change in customer support service strategy results in 0.661 units increase in performance of commercial banks other variables held constant.

X_4= Order and delivery strategy, shows that one unit change in order and delivery strategy results in 0.238 units increase in performance of commercial banks other variables held constant.

X_5= Payment system strategy, shows that one unit change in payment system strategy results in 0.884 units increase in performance of commercial banks other variables held constant.

4.5 Correlation of age of the bank with the e-commerce application tool factors

This was to determine whether there is any relationship between the age of the bank since incorporation and e-commerce application tools. For all the correlations factors the following conditions were considered:-

Not assuming the null hypothesis.

Using the asymptotic standard error assuming the null hypothesis.

Based on normal approximation.

The P- value of 0.000 (Less than 0.05) implies that there is a relationship

Table 4.13: Number of years since incorporation and Electronic marketing

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Interval by Interval	Pearson's R	.141	.218	.700	.491[c]
Ordinal by Ordinal	Spearman Correlation	.106	.224	.525	.605[c]
N of Valid Cases		26			

Source: Author 2011

The results indicated that there was slight relationship between electronic marketing and age of the bank.

Table 4.14: Number of years since incorporation and electronic advertising display company information and products

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Interval by Interval	Pearson's R	.533	.181	3.083	.005[c]
Ordinal by Ordinal	Spearman Correlation	.514	.211	2.934	.007[c]
N of Valid Cases		26			

Source: Author 2011

The results indicate a positive relationship between electronic advertising and the age of the bank.

Table 4.15: Number of years since incorporation and Customer support service

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Interval by Interval	Pearson's R	.499	.187	2.818	.010[c]
Ordinal by Ordinal	Spearman Correlation	.459	.213	2.529	.018[c]
N of Valid Cases		26			

Source: Author 2011

The results indicate that there is a positive relationship between customer support service and age of the bank.

Table 4.16: Number of years since incorporation and Orders and delivery

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Interval by Interval	Pearson's R	.535	.143	3.101	.005[c]
Ordinal by Ordinal	Spearman Correlation	.533	.148	3.086	.005[c]
N of Valid Cases		26			

Source: Author 2011

The results indicate that there is a moderately positive relationship between the age of the bank and orders and delivery.

Table 4.17: Number of years since incorporation and Payment system

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Interval by Interval	Pearson's R	.480	.183	2.683	.013[c]
Ordinal by Ordinal	Spearman Correlation	.425	.223	2.298	.031[c]
N of Valid Cases		26			

Source: Author 2011

The results indicated that there is a moderate relationship between payment system and number of years since incorporation.

4.6 Correlation of size of the bank with the e-commerce application tool factors

This was to determine whether there is any relationship between size of the bank and e-commerce application tools. For all the correlations factors the following conditions were considered:-

Not assuming the null hypothesis.

Using the asymptotic standard error assuming the null hypothesis.

Based on normal approximation.

The P- value of 0.000 (Less than 0.05) implies that there is a relationship

Table 4.18: Number of employees and Electronic marketing

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Interval by Interval	Pearson's R	.168	.177	.836	.411[c]
Ordinal by Ordinal	Spearman Correlation	.046	.222	.227	.822[c]
N of Valid Cases		26			

Source: Author 2011

The results indicated that there is no relationship between number of employees and electronic marketing.

Table 4.19: Number of employees and electronic advertising

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Interval by Interval	Pearson's R	.027	.200	.130	.898[c]
Ordinal by Ordinal	Spearman Correlation	-.048	.222	-.237	.814[c]
N of Valid Cases		26			

Source: Author 2011

The results indicated that there is no relationship between number of employees and electronic advertising.

Table 4.20: Number of employees and customer support service

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Interval by Interval	Pearson's R	.000	.191	.000	1.000[c]
Ordinal by Ordinal	Spearman Correlation	-.093	.211	-.457	.652[c]
N of Valid Cases		26			

Source: Author 2011

The results indicated that there is no relationship between number of employees and customer support service.

Table 4.21: Number of employees and orders and delivery

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Interval by Interval	Pearson's R	.229	.184	1.155	.259[c]
Ordinal by Ordinal	Spearman Correlation	.179	.198	.892	.381[c]
N of Valid Cases		26			

Source: Author 2011

The results indicated that there is a slight relationship between number of employees and orders and delivery.

Table 4.22: Number of employees and Payment system

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Interval by Interval	Pearson's R	.007	.209	.035	.972[c]
Ordinal by Ordinal	Spearman Correlation	-.072	.231	-.352	.728[c]
N of Valid Cases		26			

Source: Author 2011

The results indicated that there is very little relationship between number of employees and orders and delivery.

CHAPTER FIVE: SUMMARY CONCLUSION AND RECOMMENDATIONS

5.0: Introduction

This section discussed the main findings, conclusions drawn and make recommendations made

5.1: Summary

The objectives of this study were to determine the factors influencing the adoption of E-commerce strategy in commercial banks in Kenya and to establish the influence of e-commerce strategy on performance of commercial banks in Kenya.

From the findings, 30.8% of the banks were have been in existence for 15 to 20 years, followed by 10 to 15 years/more than 20 years at 26.9%, 5 to 10 years at 11.5% and less than 5 years at 3.8%.. At the same time majority of the banks had more than 10 branches, 34.6% had 5 to 10 branches. The study indentified mobile phone, computers, internet, fixed lines and website as the most used electronic devices in the bank. To a large extent payment system was applicable across all the banks. The study further indicated that in terms of effectiveness; Customer support service, Payment system, Orders and delivery had influenced performance of the banks to a large extent. In terms of efficiency; Marketing, Payment system, Advertising, display company information and products and Orders and delivery had influenced performance of the banks to a large extent. In terms of relevance; Payment system, Meeting organization Objectives and goals, Product development, Market environment, and Orders and delivery had influenced performance of the banks to a large extent.

The study used regression analysis to find the association between electronic marketing strategy, electronic advertising display company information and products strategy, customer support service strategy, order and delivery strategy and payment system strategy and performance of commercial banks. The finding of the study indicated that the model was significant. This is demonstrated in the part of the analysis where R^2 for the association between electronic marketing strategy, electronic advertising display company information and products strategy, customer support service strategy, order and delivery strategy and payment system strategy and performance of commercial banks was 84.3%.

All the independent variables were also linearly related with the dependent variable thus a model of five predictor variables could be used to rate performance of commercial banks.

5.2 Conclusion

From the research findings and the answers to the research questions, some conclusions can be, made about the study. Performance is very vital for the functioning of any organization. The study established that the performance of any bank is affected by the different strategies that the banks adopt. Due to many factors like stiff competition, pressure from customers for adoption of new technologies, stiff competition, adopting e-commerce strategy will ensure that competitive edge over its competitors, hence enhancement of the bank's performance. For the banks to be effective, efficient and relevant and be financially viable, then strategies like e-commerce are inevitable in adopting in the banking industry.

The use of e-commerce has played a major role in many strategic initiatives. But, banks are still unsure how e-commerce system would be developed to support the bank strategy. From the study it is clear that the application of e-commerce tools in the various functions or processes of the bank has a great impact on the way the bank performs. While banks face many challenges in crafting strategies, it is critical to think of the role of e-commerce in the banking sector. The greater the impact of e-commerce on the performance of the bank's, the more significant is the application of e-commerce strategy in the banks.

From the findings, it was established that the performance is affected by the strategies selected by the bank. There is a rapid development in technology and hence banks are not being left behind in the adoption of new technology, due to either pressure from customers, stiff competition or change in technology. The banks performance is affected by the strategies selected. The banks which have adopted the e-commerce strategy, the performance is improved, banks which have not yet adopted the e-commerce strategies are struggling in the performance. The banking sector should embrace e-commerce strategy in order to survive in the rapidly changing markets.

5.3: Recommendations

The following recommendations are given to both the policy makers and researchers;

5.3.1. Recommendations on policy makers

Policy makers should regulate should provide or develop policies that will facilitate easy adoption of e-commerce in the banking sector. The policy makers should implement policies that will protect and attract more banks to adopt e-commerce strategy in order to improve economic performance not only of banks but of the country as a whole.

5.3.2. Recommendations for Further Research

The study confined itself to commercial banks in Kenya. This research therefore should be replicated in all other financial institutions especially microfinance institutions, savings banks and the results be compared so as to establish whether there is consistency in the performance of all financial institutions as a result of ecommerce.

5.4 Limitations of the study

This study was based on a sample limited to commercial banks in Kenya. The study did not cover other financial institutions operating in the country and therefore it would not be prudent to say that their exist correlation of performance and ecommerce strategy within financial institutions and thus the findings may not be a thorough reflection of the sector as a whole.

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APPENDIX 1

LETTER OF INTRODUCTION

Respondent

Dear Sir/Madam

RE: REQUEST FOR RESEARCH DATA

I am a Postgraduate student in the University of Nairobi pursuing a Master of Business administration (MBA) program. I am undertaking a Management Research project as part of the postgraduate requirement. The project that has been approved is ‘Effect of e-commerce strategy in the performance of commercial banks in Kenya’.

The Survey will explore the effect of ecommerce strategy in the performance of commercial banks. Due to the fact that commercial banks customer demands are changing rapidly due to the changing technology leading to commercial banks requirement to adapt to the changing environment and customer needs.

My reason for writing to you is to request you to complete the questionnaire attached in a bid to obtain information for the above study. The information obtained will be used purely for academic purposes.
Thanking you for your co-operation.

Yours Faithfully
Asiabugwa Mary Ayuma
MBA STUDENT UON

APPENDIX II

Research Questionnaire

Questionnaire No____

Section A: Company profile

1. Designation of

   respondent____

2. Name of the

   bank____

3. Number of years since incorporation (Please tick one of the following)

   a. Less than 5 years
   b. Less than 10 years
   c. Less than 15 years
   d. Less than 20 years
   e. Over 20 years

4. Please tick the category that best describes your bank

   a. Foreign owned and not locally incorporated [ ]
   b. Foreign owned but locally incorporated [ ]
   c. Partially government owned [ ]
   d. Wholly locally owned [ ]

5. How many employees does your bank currently have?

a. Less than 100 [ ]

b. 100 - 200 [ ]

c. 200 - 300 [ ]

d. 300 – 400 [ ]

e. Greater than 400 [ ]

6. How many branches does your bank have in Kenya?

a. Less than 5 [ ]

b. 5- 10 [ ]

c. More than 10 [ ]

Section B

Electronic commerce Applications:

Please rate the level of usage of the following electronic commerce applications in your organization, on a scale of 1-5. 1-Very low, 2-Low, 3-Average, 4-High, 5-Very high

7. What is the level of usage of the following electronic devices in the bank?

a. Mobile phone	1	2	3	4	5
b. Fixed lines	1	2	3	4	5
c. Computers	1	2	3	4	5

d. Internet 1 2 3 4 5

e. Website 1 2 3 4 5

8. To what extent do you use the following electronic commerce application tools in your bank?

Application tool	1- very low	2- low	3- average	4- high	5- very high
Electronic marketing					
Electronic advertising display company information and products					
Customer support service					
Orders and delivery					
Payment system					

Section C

Factors influencing electronic commerce adoption:

9. To what extent do the following e-commerce application tools influence performance of your bank?

Application tool	**1- very low**	**2- low**	**3- average**	**4- high**	**5- very high**
Electronic marketing					
Electronic advertising display company information and products					
Customer support service					
Orders and delivery					
Payment system					

10. How do you rate the effect of e-commerce adoption in your bank as far as the following are concerned?

1 – Very low; 2 - Low; 3 – Average; 4 – High; 5 – Very high

a. perceived benefits	1	2	3	4	5
b. IT experience	1	2	3	4	5
c. IT infrastructure	1	2	3	4	5
d. customer pressure for IT adoption	1	2	3	4	5
e. competition in the industry	1	2	3	4	5
f. compatibility with current operations	1	2	3	4	5

Section D

Effect of E-commerce on Performance

11. To what extent has E-commerce influenced performance of your bank as relates to the following indicators?

	Effectiveness				
	1- very low	**2- low**	**3- average**	**4- high**	**5- very high**
Marketing					
Advertising, display company information and products					
Customer support service					
Orders and delivery					
Payment system					

	Efficiency				
	1- very low	2- low	3- average	4- high	5- very high
Marketing					
Advertising					
Customer support service					
Orders and delivery					
Payment system					
	Relevance				
	1- very low	2- low	3- average	4- high	5- very high
Meeting organization Objectives and goals					
Product development					
Market environment					
Orders and delivery					
Payment system					