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**EFFECT OF E-BUSINESS STRATEGY ON THE PERFORMANCE OF COMMERCIAL  
BANKS IN ELDORET, KENYA**

17 JAN 2017



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**A Research Project Submitted to Graduate School in Partial Fulfillment of the  
Requirements for the Award of the Degree of Masters in Business Administration of  
Egerton University**



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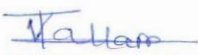
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## DECLARATION AND RECOMMENDATION

### Declaration

This research project is my original work and has not been presented for examination in this or any other institution.

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### Recommendation

This Project has been submitted with my approval as a University supervisor.

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**DEDICATION**

This Project is dedicated to God Almighty for His infinite mercy towards my academics and my entire life, to my parents, siblings, and friends for their support and encouragement throughout my studies at Egerton University



## ACKNOWLEDGEMENT

First of all, I am most grateful to the Almighty God for giving me good health, strength, wisdom and knowledge to complete this research. Secondly, my gratitude goes to Egerton University for having given me a conducive environment for learning. A special thank you to all members of staff I interacted with in Nakuru town campus and graduate school during the course of my study. Thirdly, I wish to express my profound and sincere appreciation to my supervisor, Dr. Simon K. Kipchumba, for his immense contribution to my work. He gave valuable comments, guidance, encouragement, imparted knowledge, inspired and mentored me. I am also thankful to my family and friends who provided moral support throughout this research. I am indebted to the respective banking staff of commercial banks in Eldoret for making available to me vital information for this research. To my MBA colleagues, I appreciate you for taking the time to read through my work and providing the objective critique. Finally, my heartfelt gratitude goes to everyone who in one way or the other contributed to the successful completion of this research project. I ask for God's abundant favor and blessing to you all, as I give all the Glory and Honor to the Almighty God

## ABSTRACT

The advent of networked economy calls for new understanding of business, and it is evidenced by the visible trend of traditional businesses migrating to E-business. Constant change in the environment means continually evolving strategies, new products, new processes and new technologies to adopt. Many commercial banks globally and in Kenya have opted to adopt E-business strategy to improve their performance. This study examined the effect of E-business strategy on the performance of commercial banks in Eldoret, Kenya. The objectives of the study were to determine the effect of business to business, business to customer and Intra-business E-Business strategy on performance of Commercial Banks. The performance indicators studied were market share, customer relationship management, business process efficiency and productivity and cost reduction. The study used correlational research design. The target population was top management and middle management staff of the 30 commercial banks operating in Eldoret, Kenya. Simple random sampling technique was used to select a sample of thirty-six (36) employees used in the study. A questionnaire was administered to respondents to collect data. Reliability test of the instruments was done using Cronbach alpha coefficient. Data collected was edited and processed using Statistical Package for the Social Sciences (SPSS). Descriptive statistics such as mean, frequencies, and standard deviation were used to describe the research variables. Correlation analysis was used to examine the strength of relationships between E-business strategy and performance of commercial banks. Regression analysis was used to determine the effect E-business strategy on the performance of commercial banks. The results indicated that there was a positive relationship between E-Business strategy and performance of commercial banks as it increased market share, business process efficiency and productivity, customer relationship management, and cost reduction. Moreover, multiple regression analysis indicates that the business to business, business to customer, and intra-business E-business strategy collectively explains 49.5% of the variation in the performance of commercial banks. Therefore, the study recommends that commercial banks should implement E-business strategy to improve performance.



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## LIST OF ABBREVIATIONS AND ACRONYMS

<b>ATM</b>	Automated Teller Machines
<b>B2B</b>	Business to Business
<b>B2C</b>	Business to customer
<b>BI</b>	Banking Industry
<b>CBK</b>	Central Bank of Kenya
<b>CIS</b>	Credit Information Sharing
<b>CRB</b>	Credit Reference Bureau
<b>CRM</b>	Customer Relationship Management
<b>EDI</b>	Electronic Data Interchange
<b>EFT</b>	Electronic Funds Transfer
<b>EPS</b>	Earnings per Share
<b>ERP</b>	Enterprise Resource Planning
<b>HR</b>	Human Resource
<b>IBM</b>	International Business Machines
<b>ICT</b>	Information and Communication Technology
<b>JIT</b>	Just In Time
<b>KCB</b>	Kenya Commercial Bank
<b>KPLC</b>	Kenya Power and Lighting Company
<b>KRA</b>	Kenya Revenue Authority
<b>NCPB</b>	National Cereals and Produce Board
<b>PIN</b>	Personal Identification Number
<b>RBV</b>	Resource Based View
<b>ROA</b>	Return on assets
<b>ROE</b>	Return on equity
<b>RTGS</b>	Real Time Gross Settlement
<b>SCM</b>	Supply Chain Management
<b>SIM</b>	Subscriber Identity Module
<b>SME</b>	Small and medium enterprise
<b>SMS</b>	Short Message Service
<b>SPSS</b>	Statistical Package for the Social Sciences



## CHAPTER ONE: INTRODUCTION

### 1.1 Background of the Study

Advances in E-business applications and technologies present many opportunities for contemporary businesses to redefine their strategic objectives and enhance or transform products, services, markets, work processes, and business communication. The uptake of E-business is influenced by its potential to create business value (El-Sawy, 2001). A major reason for most companies irrespective of size to participate in E-business is to extract some benefit from it (Magutu, Richard & Haron, 2009).

#### 1.1.1 E-Business

E-business focuses on digitally enabled commercial transactions between and among organizations and individuals involving information systems. Poon and Swatman (1999) define E-business as the use of internet-based technologies to conduct business including sharing information, maintaining relationships and conducting transactions within and between organizations

According to Jelassi (2008), electronic business is the use of electronic means to conduct an organization's business internally and or externally. This practice is often adopted by commercial banks so as to create a sustainable competitive advantage. Internal E-business activities include the linking of employee communication to meet business objectives while external E-business will engage other business partners and customers in an organization's operations. Turban (2008) indicates that electronic business does not simply involve using technology to automate existing processes but should also achieve process transformation by applying technology to help change the processes. Turban (2008) adds that innovation in E-business is relentless with the continuous introduction of new technologies, new business models, and new communication approaches. So all organizations have to review new electronic and internet based communications approaches for their potential to make their business more competitive and also manage ongoing risks such as security.

Rust and Kannan (2003) posit that E-business is synonymous with doing business in an electronic environment or online through existing or alternative business models. Turban et al. (2006) put forward that E-Business may be an umbrella term that refers to any kind of business transaction over the internet, not just the buying and selling of goods and services, but also



servicing customers, collaborating with business partners and conducting electronic transactions within an organisation.

E-business has become a vital strategic-management tool. According to Rust and Kannan (2003), an increasing number of commercial banks are gaining competitive advantage by using the Internet for direct selling and for communication with suppliers, customers, creditors, partners, shareholders, employees, and competitors who may be dispersed globally it yields better customer service, greater efficiency, improved products, and higher profitability.

### 1.1.2 Commercial Banks in Kenya

According to a report (Cytonn Investments, 2015), there are a total of 43 commercial banks, 10 microfinance banks, and 1 mortgage finance institution in Kenya. 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 and regulations issued by the Central Bank of Kenya (CBK) (Central Bank of Kenya, 2014). The Capital Markets Authority has additional oversight over the listed banks. All banks are required to adhere to certain prudential regulations such as minimum liquidity ratios and cash reserve ratios with the Central Bank. Notably, Central bank has continued to monitor the effects of E-Business and plays a central role in regulating the operations together with the risks involved.

Kenya has a high relative ratio of banks to the total population, with the 43 commercial banks serving a country of 44 million people, compared with Nigeria's 22 for 180 million inhabitants and South Africa's 19 for 55 million (Central Bank of Kenya, 2014). The share of non-regulated financial institutions reduced from 39% to 25% in 2013, indicating a rise in financial knowledge among the general population and also a reduction of fraudulent institutions

Credit Information Sharing systems (CIS), agency banking, revised prudential guidelines, and mobile banking are some of the new developments in banking that have spurred increased efficiency in the sector, as well as enhanced competition (Cytonn Investments, 2015). Over the last few years, the Banking sector in Kenya has continued to grow in assets, deposits, profitability, and products offering. The banking sector's aggregate balance sheet grew by 3.4% from KSh.3.26 trillion in December 2014 to KShs3.37 trillion in March 2015 (Central Bank of Kenya, 2014). The growth has mainly been underpinned by: Banks responding to the needs of the



Kenyan market for convenience and efficiency through alternative banking channels such as mobile, internet and agency banking, Industry wide branch network expansion strategy both in Kenya and in the East African community region and a resilience by banks to reduce their lending rates.

In a bid to improve the financial soundness of financial sector, the minimum core capital requirement for banks is set to increase from KSh1 billion to KSh5 billion by 2018. The changes were proposed in a bid to ensure that banks and insurance companies are well capitalized and can absorb financial shocks. Concentration is fairly high in Kenyan banks, with the country's top eight banks holding about 60% of the market. Roughly half of Kenyan banks have less than KSh5 billion of equity and will need to increase their core capital (Cytonn Investments, 2015).

There are a number of factors which will drive growth in Kenya's banking sector; cost containment initiatives-banks will have to undertake comprehensive cost cutting measures, which ensure operational efficiency, increased use of alternative service delivery channels with the growth of mobile and agency banking, penetration in the market has increased and this will lead to a greater number of transactions as well as offer loan products to the mass market like M-Kesho, which was launched by KCB and Safaricom. Growth of the retail segment, as the middle-class grows rapidly in Kenya, faster than majority of the countries in the region, there is an inherent increase in consumption expenditure and an increase in the numbers in the population which will require banking services, expansion both regionally and domestically with devolution in Kenya, we will see banks become more aggressive in trying to capture the opportunities that exist at county levels, which will increase their customer base. In addition, banks looking to expand in the less penetrated markets of Tanzania, Uganda, Rwanda, and South Sudan are opening themselves up to new revenue channels (Cytonn Investments, 2015).

Since 1990, significant reforms initiatives have been undertaken by the regulating bodies which are hinged on three key pillars of the Kenyan financial sector as espoused in the Vision 2030 (the Government Economic Blue Print) - efficiency, stability and access (Central Bank of Kenya, 2014). Thus, for Kenya to realize Vision 2030, the banking sector's efficiency is a critical element that remains the cornerstone of the targeted economic growth trajectory. Furthermore,



the stiff competition has forced banks to set up and put into effect all necessary E-business innovations.

### **1.1.3 E-Business Strategy and Performance of Commercial Banks**

E-business applications in commercial banks were first developed in the early 1970s with innovations such as Electronic funds transfer which was adopted by commercial banks (Curry & Kolou, 2004). In Kenya, commercial banks began using electronic funds transfer in the late 1990s. This facilitated payments from one bank to other thereby enabling customers to reduce risks in carrying cash and increase efficiency in transaction costs. Dibb (2001) adds that an organization's E-business activity facilitate and expedite exchange relationships through creation, distribution, promotion and pricing of goods, services and ideas.

Performance of commercial banks in Kenya has been revolutionized by the adoption of E-business. By offering a wide array of products and services through integrating E-business with bank operations, banks are benefiting whereby banks are retaining customers and reaching to a wider customer base by offering services that are important and add value leading to tremendous cost savings, efficiency and effectiveness in bank operations (Akinuli, 1999).

There are three major forms of E-business that commercial banks can capitalize on business to business, business to customer, and Intra Business. Business to customer offers a link between businesses and its customer, that link lies at the end of an internal value chain and integration across the value chain is the essence of intra business E-business, An enterprise internal value chain depends upon the products and services provided by its supply chain, and the focus of Business to business E-business is integration across the supply chain (Melao, 2008).

Business to business E-business is concerned with intercorporate communication, relying on innovative applications of Information technology to exchange business information electronically across the supply chain and between numerous trading partners. They involve interorganizational systems (IOS) shared by two or more enterprises. Software such as E-procurement, Electronic Invoice Presentment and Payment (EIPP), Logistics integrators are used (Subramania & Shaw, 2002).

In the Kenyan banking industry, most of the banks have adopted this strategy whereby they link with their suppliers and partners electronically. Recently, some banks have joined hands with



mobile network providers to provide loans in the case of CBA bank and Safaricom on M-shwari loans, KCB and Safaricom as Equity bank and Airtel have partnered whereby Equity has launched a SIM card to be used by its customers to access financial services whereas using Airtel network infrastructure. Banks have also linked with firms that generate CRB reports for banks to view credit ratings of their customers, agency banking, linked to other banks as well for transfer of funds. Commercial banks transact with the various government levels - including state and county governments over the Internet as well. They file tax returns online and make payments online, renew their business permit online and settle government securities online. National and County government as well as Government agencies, ministries and parastatals have collaborated with banks for their customers to pay at the banks like KRA and KPLC or for the organizations to pay through banks like NCPB engage banks to pay farmers after cereal delivery to their stores.

Business to customer E-business strategy enables commercial banks to have a brand name as a competitive advantage, find new potential customers, retain existing customers, and customize their products and services. The application involved enables businesses to sell products and services online, do advertisements online and payment services that is to collect and process customer payment, E-cash services and general information to customers (Davis & Benamati, 2003). In the Kenyan banking industry (BI), mobile banking, ATMs, Credit cards, Internet banking, online loan application, online account opening, are some of the innovations adopted by banks

Intra business E-business entails Business to employee systems which provide employee information online, Human Resource applications such as internal job postings, benefit selection and expense account management, E-learning, performance measurement, payroll system and productivity tools such as e-mail, electronic calendars, and contact management. Intra business E-business is as well increasingly used to integrate processes across the value chain, enabling Enterprise Resource planning (ERP), just in time (JIT) inventory systems, real time order tracking, improved processes time many of which involve little or no human intervention. Intra-business applications links different departments and branch networks and headquarters which represent internally efficient but isolated domains with its own policies and operating procedures by sharing information for proper coordination (Davis & Benamati, 2003).



Garau (2002) put forward that the promise of E-business in the banking sector has been seen in terms of its potential to increase customer base, reduce transaction costs, improve the quality and timeliness of response, enhance opportunities for advertising and branding, facilitate self-service and service customization, and improve customer communication and relationship.

E-business creates new business opportunities for banks. Electronic outlets and breakthrough digital products promise to totally change the market and or provide new markets. With emphasis on quick innovation, reduced cycle time, shortened time to market, E-business has the effect of enhancing value thus maintaining its market share and further an increase. E-business infrastructure effectively eliminates geography as a factor in many business activities. It not only allows a company to market worldwide but also exposes the company to global competition (Bakos, 1998).

E-business applications reduce internal operating costs through efficiency gains both within the individual processes and across the value chain. Efficiency gains are realized by automating business functions. Competitive advantage derived from improved efficiency is relatively easy to sustain because a company exerts primary control over its own processes and procedures. It is factual that E-business has improved productivity for almost all the organizations that are using it (Beynon & Davies, 2004).

Much of the organizational value created by E-business is due to more effective use of information. Through value addition that is better quality products and services, reduce costs by making business processes more efficient, manage risks, and create new reality that is new products, new services, and new business ideas (Chaffey, 2002).

E-business significantly increases the value of good customer relationships. Customer relationship management relies on data analysis and supply chain integration software to increase customer satisfaction and loyalty. E-business software are designed to gather information about past, current and potential customers and to concentrate that information in a central repository such as a data warehouse (Muganda, 2001). Decision support systems and tools such as data mining are employed to analyze the data to identify customer preferences, track demographic trends, evaluate effectiveness of an advertising campaign, to extract ideas, and similar information that proves useful to the commercial banks (Frohlich, 2002).



## 1.2 Statement of the Problem

Only financial institutions that are able to adapt to the changing environment and adopt new ideas and business methods have guaranteed survival thus banks globally and in Kenya are investing greatly on E-business software to improve on their performance. Most banks are fundamentally dependent upon E-business and consequently have assumed that advances in E-business systems will not only provide economic returns, but are an important element of business definition and competitive strategy (Johnston & Vitale, 1988; Bharadwaj, 2000; Santhanam & Hartono, 2003).

Brynjolfsson and Hitt (1996) conclude that E-business strategy is valuable, even though its extent and dimension varies across organizations. Barua et al. (2004) report that online informational capabilities lead to better financial performance while Santhanam and Hartono (2003) report that E-business capability is associated with improved performance. When E-business is applied in the right way, it results in improved business performance, conditional upon appropriate complementary investments in workplace practices and organizational structures and shaped by the competitive environment (Melville et al., 2004).

Mbuvi (2000) surveyed the potentials for the adoption of E-business by tour operators in Nairobi. The findings indicate that the potentials of adoption of E-business by tour operators in Nairobi include reduced expenses and hence increased profitability. Muganda (2001) investigated the business value of E-business in selected firms in Kenya. Muganda established that the business value included increased profitability due to reduced operational costs emanating from online transactions and efficiency in service delivery among others. Muyoyo (2004) studied the factors influencing the adoption and implementation of E-business technologies in companies quoted at the Nairobi Stock Exchange. The findings indicated that the companies quoted on the Stock Exchange reduced the turn-around times for their transactions, reduce operational costs, and eventually increase their profitability.

Much research has focused on financial performance of commercial banks as the dependent variable, this may not be sufficient enough, so the study examines the relationship between E-business resources, and capabilities through non-financial performance approach. Traditional systems of performance evaluation of banks mostly use the factors like ROA and ROI for measuring the financial performance of the banks. However, nowadays intellectuals and

managers of organizations find that traditional systems of performance evaluation have been typically based on financial views which are incomplete in evaluating overall performance of an organization.

Further, most of the existing studies have not taken into account a holistic approach to the effects of E-business in regards to all key players in the banking industry environment, which could influence its relationship with commercial banks performance. Earlier research have focused on some handful of E-business innovations mostly in relation to interactions between banks and its customers over the internet (Business to customer E-business) that is E-payments, online banking, mobile phone banking and E-banking. This study intends to look into the effect of E-business strategy in relation to all key players in the banking industry that is suppliers, government, employees of a bank, and other business entities that partner with banks to provide services to customers. Thus this study aims to determine the effect of E-business strategy on the performance of commercial banks in Eldoret, Kenya

### **1.3 Objectives of the Study**

The broad objective of the study was to determine the effect of E-business strategy on the performance of commercial banks in Eldoret, Kenya.

The specific objectives are to;

- (i) Determine the effect of business to business E-business strategy on the performance of commercial banks.
- (ii) Determine the effect of business to customer E-business strategy on the performance of commercial banks.
- (iii) Determine the effect of intra-business E-business strategy on the performance of commercial banks.
- (iv) Determine the joint effect of business to business, business to customer, and intra business E-business strategy on performance of commercial banks.

### **1.4 Research Hypotheses**

This study sought to test the following hypotheses:

**H<sub>0</sub><sub>1</sub>:** Business to business E-business strategy has no significant effect on the performance of commercial banks.



H<sub>1c</sub>: Business to customer E-business strategy has no significant effect on the performance of commercial banks.

H<sub>1d</sub>: Intra-business E-business strategy has no significant effect on the performance of commercial banks.

H<sub>1e</sub>: The joint effect of business to business, business to customer, and intra-business E-business strategy has no significant effect on the performance of commercial banks.

### **1.5 Significance of the study**

The study was undertaken to determine the effect of E-business strategy on performance of commercial banks. For practitioners in banks the findings and recommendations will be useful since they would know how E-business affects their performance and how best to implement it. The study will also be useful to policy makers who could use the information to identify the shortcomings of the E-business systems and improve on the same as appropriate. Scholars will benefit from this study as the research findings will enrich literature as it will add up to already known facts in the field of electronic business.

### **1.6 Scope and Limitations of the Study**

The study focused on the effect of E-business strategy on the performance of commercial banks in Eldoret, Kenya.

The study was based on a sample limited to commercial banks operating in Eldoret town thus the findings are generalized to all commercial banks.

The study did not cover other financial institutions other than banks operating in Eldoret town and therefore it would not be prudent to say that there exists a correlation of performance and E-business strategy within financial institutions

The study used cross sectional data thus relies on data collected at one point in time rather than over a much longer period which may hinder the use of the research findings for forecasting.

The study is limited to banking sector but it can also be conducted in other sectors like Telecommunication, state owned corporations, SMEs, capital markets, microfinance, tourism automobile and Insurance.

Finally, this study was limited to the non-financial aspects of organization performance, financial aspect like return on asset, return on equity, EPS, and dividend payout are not included.

### **1.7 Operational Definition of Terms**

The following concepts are defined to convey the sense in which they will be used in this study:

**Adoption of E-Business** –Readiness of an enterprise to accept technology innovation and performs transformation in its current business operations as well as business direction electronically.

**Bank performance** - Bank performance will be measured by market share, customer relationship management, business process efficiency, and productivity and cost reduction.

**Customer relationship management** - all forms of managing relationships with customers making use of information technology.

**Digital cash** - Mobile banking, Internet banking, ATMS, credit, and visa cards

**E-business**–interconnected fusion of IT infrastructure, business processes, and organizational structure necessary to create business value

**E-business strategy** - use of internet and communication technologies capabilities to improve and transform a bank's key business processes.

**Innovation** - is defined as a new idea service that has been commercialized or any substantially new improved process for the commercial production of goods and services



## CHAPTER TWO: LITERATURE REVIEW

### 2.1 Introduction

This chapter presents the literature review, which was used to contextualize this study. The chapter reviews literature on E-business strategy and its effect on performance of commercial banks. This chapter also outlines the conceptual framework of the study.

### 2.2 Theoretical Background

The study is guided by the resource based view theory. In the resource based view, a firm's performance is affected by firm-specific resources and capabilities. Organizations, therefore, should be aware of their strengths and weaknesses, as they have to develop strategies on how to outperform competitors with the given resources bundles and capabilities.

Resources in RBV refer to a firm's assets, capabilities, organizational processes, firm attributes, information, and knowledge controlled by a firm which enables conception of and implementation of strategies that improve its efficiency and effectiveness. Valuable resources and their strategic utilization help to seize opportunities or neutralize threats in an organization's environment. In the RBV there is a distinction between several different categories of resources in the strict sense, such as physical capital, human capital, organizational capital resources, financial resources, a firm's technologies, its reputation, informational resources, firm's corporate culture, as well as its management team.

RBV has been reflected in the information systems (IS) literature since the mid-1990s and is increasingly being used by researchers to identify the characteristics of E-Business. In particular the RBV provides guidance on identifying the contribution of these various technologies which may impact upon organizational performance (Santhanam & Hartono, 2003). The RBV has its origins in the management strategy literature and has been used to answer one of the most extensively researched questions in the field, related to understanding the sources of sustained competitive advantages (Porter, 1985; Rumelt et al., 1991). The RBV is based on two underlying arguments: resource heterogeneity and resource immobility. Resources and capabilities possessed by competing firms are heterogeneously distributed and may be a source of competitive advantage when they are valuable, rare, difficult to imitate, and not substitutable by other resources (Barney, 1991; Wernerfelt, 1984). At the same time, resources and capabilities are a source of sustained competitive advantage, that is, differences may be long lasting



(resource immobility) when protected by barriers to imitation (Mahoney & Pandian, 1992) or isolating mechanisms such as time-compression diseconomies, historical uniqueness, embeddedness and causal ambiguity (Barney, 1991; Dierickx & Cool, 1989; Peteraf, 1993).

Consequently, the RBV suggests that the effects of individual, firm-specific resources and capabilities on performance can be significant (Mahoney & Pandian, 1992). The RVB provides a solid foundation to differentiate between E-Business characteristics and its separate influence on performance (Santhanam & Hartono, 2003). In this respect Internet resources are not difficult to imitate as multiple firms can purchase these systems and thereby implement multiple strategies (Barney, 1991). However, firms may obtain competitive advantages from exploiting their physical technology in a better and or different way than other firms, even though competing firms do not vary in terms of their Internet resources (Zhu, 2004). A differentiating factor for improved organizational performance is strategic intent rather than simple technological deployment.

While resources serve as the basic units of analysis, firms create competitive advantage by assembling resource capability. Grant (1991) suggests that these capabilities are a result of teams of resources working together. Teece et al. (1997) argued that capabilities cannot easily be bought they should be built. Building capabilities is not only a matter of combining resources; capabilities are rooted in processes and business routines. Consequently, capabilities involve complex patterns of coordination between people and organizations. In this respect, Day (1994) describes capabilities as complex bundles of accumulated knowledge, exercised through organizational processes, which enable firms to coordinate activities and make use of their assets. Day argues that these are closely entwined. Makadok (2001) considers capability as a special type of resource defined as an organizationally embedded non-transferable firm-specific resource whose purpose is to improve the productivity of the other resources possessed by the firm.

Internet resources are asset-based, while E-Business capabilities comprise strategic intent formed around the productive use of Information Technology (IT). As a result, a firm's E-Business capability can be defined as its ability to mobilize and deploy Internet-based resources, in combination with or in the presence of other valued resources (Beynon-Davies, 2004). E-Business capabilities are firm-specific (or interfirm-specific) and rooted in processes and



business routines. In this sense, a distinction may be drawn between external and internal E-Business capabilities. The former refers to the ability to mobilize Internet-based resources and other corporate resources with external business agents like supplier and customers, while the latter represents the ability to mobilize Internet-based resources and other corporate resources within a firm's boundaries.

When used appropriately Internet resources are expected to create intermediary effects, such as Internet technology being embedded in products and services, streamlined business processes, and improved decisions, which can be expected to have an influence on the performance of the firm (Ravichandran & Lertwongsatien, 2005). Grant (1991) and Makadok (2001) emphasize that while resources by themselves can serve as basic units of analysis, firms create competitive advantage by assembling these resources to create organizational capabilities. Makadok states that these firm-specific capabilities, embedded in organizational processes, provide economic returns because a firm is more effective than its rivals in deploying resources. E-Business researchers have adopted this capability logic of resources by arguing that competitors may easily duplicate investments in Internet resources by purchasing the same hardware and software and, hence, Internet resources per se do not provide competitive advantages. Rather, it is the manner in which firms leverage their Internet resources to create unique capabilities that impact firm performance (Clemons & Row, 1991; Mata et al., 1995). Thus, it is expected that external and internal E-Business capabilities have the potential to create business value.

IT resources are likely to affect firm performance only when they are deployed to create unique complementarities with other firm resources (Clemons & Row, 1991; Powell & Dent, 1997). Firm resources are considered complementary when the presence of one resource enhances the value or effect of another resource (Ravichandran & Lertwongsatien, 2005; Zhu, 2004). Hence the RBV highlights the role of complementarity as a source of value creation in E-Business, though is not the only source as suggested by Amit and Zott (2001).

### **2.3 E-Business**

IBM (2000) posits that E-business is the use of Internet technologies to improve and transform key business processes. Kalakota and Robinson (2001) posit that E-business is the complex fusion of business processes, enterprise applications, and organizational structure necessary to create a high performance business model. In addition, Laudon and Laudon (2001) put forward



that E-business is the use of the internet and other digital technology for organizational communication and coordination and the management of the firm. E-business focuses on the use of ICT to enable the external activities and relationships of the business with individuals, partners and other businesses (Beynon-Davies, 2004). According to El-Sawy (2001), E-business involves changing the way a traditional enterprise operates, the way business processes are handled and the way people work.

According to Pettit (2012), in 1997, IBM, with its agency Ogilvy & Mather, began to use its foundation in IT solutions and expertise to market itself as a leader of conducting business on the internet through the term "E-business". Then CEO Louis V. Gerstner, Jr. was prepared to invest \$1 billion to market this new brand. IBM decided not to trademark the term "E-business" in the hopes that other companies would use the term and create an entire new industry. Nevertheless, this proved to be too successful and by 2000, to differentiate it, IBM launched a \$300 million campaign about its "E-business infrastructure" capabilities (Meyer, 2007).

Findings derived from (Jun & Quaddus, 2000) research proved that there are different ways of categorizing E-business. One of the approaches, preferred by authors, focuses on the type of transaction taking place (Turban et al., 2006). With this approach, transactions may be conducted among businesses (business to business), between an organization and its customers (business to customer) and within an organization (intra-business).

The business-to business model involves electronic transactions for ordering, purchasing, as well as other administrative tasks between businesses. Some organizations specialize in business to business activities by providing E-business services across the supply chain or in parts of the supply chain such as E-procurement, logistics, stock control, ordering, payments, and distribution (Baht & Grover, 2005). E-business also includes the organization of collaboration platforms that allows different organizations to share information and knowledge for mutual benefit that is the organization of E-marketplaces that bring organizations together for buying and selling products and services or providing an online business support service (Subramaniam & Shaw, 2002).



**Business to business** E-business can efficiently maintain the movement of the supply chain, the manufacturing and procuring processes. It can automate corporate processes to deliver the right products and services quickly and cost-effectively (Chopra & Meindl, 2001).

Banks opting to use business to business E-business observe cost savings by increasing the speed, reducing errors, and eliminating many manual activities, all the paperwork is handled electronically (Grigorian & Vladmanole, 2002). Suppliers can access online the inventory status in each store and refill needed products in a timely manner. In a business to business environment, purchase orders, invoices, inventory status, shipping logistics, and business contracts handled directly through the network result in increased speed, reduced errors, and cost savings. It enables business partners to share relevant, accurate, and timely information. The end result is improved supply-chain management among business partners (Tallon, Kreamer, & Gurbaxani, 2000).

One popular application of this business to business strategy is E-procurement, which significantly streamlines the traditional procurement process by using the internet and web technologies. E-procurement is radically changing the buying process by allowing employees throughout the organization to order and receive supplies/services from their desktop with just a few mouse clicks. This results in major cost savings and improves the timeliness of procurement processes and the strategic alliances between suppliers and participating organizations (Melao, 2008). E-procurement may qualify customers for volume discounts or special offers. E-procurement software may make it possible to automate buying and selling, resulting in reduced costs and improved processing speeds. The participating companies expect to be able to control inventories more effectively, reduce purchasing-agent overhead costs and improve manufacturing cycles. E-procurement is expected to be integrated into standard business systems with the trend toward computerized supply-chain management (Kaplan & Sawhney, 2000).

**Business to customer** E-business strategy involves transactions between business organizations and customers. It applies to any business organization that sells its products or services to consumers over the Internet (Davis & Benati, 2003). It attracts the highest number of entrants as well as some of the most successful E-business ventures. Most organizations now have a website that is used for promoting the activities of the business or marketing their products and services.



More and more traditional firms are creating their own E-business websites to offer an additional product channel for their customers (Batiz-Lazo & Woldesenbet, 2006).

Major activities for business to customer E-business are, Info sharing - A business may use some or all of the following applications and technologies to share information with customers: online advertisements, e-mail, newsgroups/discussion groups, company web site, online catalogs, message board systems, bulletin board systems and multiparty conferencing. Ordering - a customer may use electronic e-mail or forms available on the company's web site to order a product. Payment - credit cards, electronic cheques, ATMs, online banking and digital cash are among the popular options that the customer has as options for paying for the goods or services. Fulfillment - In case of digital products, the E-business uses digital documentations to assure security, integrity, and privacy of the product. It may also include delivery address verification and digital warehousing that stores digital products on a computer until they are delivered. The E-business can handle its own fulfillment operations or out- source this function to third parties with moderate costs. Service and support - E-businesses should do whatever they can in order to provide timely, high-quality service and support to their customers. As E-business companies lack a traditional physical presence and need other ways to maintain current customers, service and support are even more important in E-business than traditional businesses (Afua & Tucci, 2001).

Intra Business Strategy is E-business adopted within an organization to provide products and/or services to their employees as well as manage the general business processes within the organization. Examples of intra-business applications include online insurance policy management, corporate announcement dissemination, online supply requests, special employee offers, employee benefits reporting and payroll systems, web-based collaboration, business process management and document management solutions (Boyett & Boyett, 1995). Intra-business E-business involves all activities that take place within the organization which include exchange of information, goods or services among the employees of an organization, offering human resources services and conducting training programs using internet technologies. The organization intranets provide the right platform for this (Afua & Tucci, 2001).



## **E-Business Strategy and Performance of Commercial Banks**

E-business is used by commercial banks as formidable strategic variables to outstrip competition and has become an essential means for banks to improve its performance and to maintain its effectiveness on the market (Batiz-Lazo & Woldesenbet, 2006). In a highly turbulent environment, successful E-business implementation can give a bank a competitive advantage and lead to superior performance (Roberts & Amit, 2003). This can only be maintained by ceaseless innovation and improvement of the product and the process (Porter, 2004). E-business contributes to increase in both the volume and value of deposit accounts, reduces banking transaction costs, reduces the number of staff and the number of branches, and consequently improves banks' profitability (Abdullah, 1985; Katagiri, 1989; Shawkey, 1995).

The commercial banking industry in Kenya has in the last two decades involved itself in E-business innovations moving from the traditional ways of doing business to better meet the growing and complex needs of their customer, partners and globalization challenges. A diverse range of studies have been conducted by the researchers for measuring the performance of the banks, which present different perspective with regards to the performance of the banks in different countries. Kozak (2005) investigated the influence of E-business on the profit and cost effectiveness of the banking industry within the stipulate period of 1992-2003. For this period, the study declares a significant relationship between the executed E-business, productivity, and cost savings. Bitler (2001) investigated the relationship between E-business investments and small firms' performance his study revealed that there was a significant performance difference between firms that adopt E-business and those that don't.

Mahmood and Soon (1991) developed a comprehensive model for measuring the potential impact of E-business in banks. They suggest that E-business can help firms to improve performance along the value chain, on downstream dimensions, internal dimensions within the organization, and upstream dimensions. Tallon et al. (2000) decomposed E-business value into downstream dimensions (sales support, customer services, and market expansions), internal dimensions (internal process, internal operation, and staff productivity), and upstream dimensions (coordination with suppliers and business partners). Zhu and Kraemer (2005) measured E-Business value from upstream dimensions (impact on sales and procurement) and internal dimensions (impact on internal operations).



#### **2.4.1 Business to Business Strategy and Performance of Commercial Banks**

E-Business is focused on improving business performance through connectivity by deploying new technologies in the value chain to achieve transparency and also by connecting the value chains between and across external businesses and between business partners in order to obtain competitive advantage (Tallon et al., 2000).

Conversely, Ongori and Migiro (2010) maintain that the impact of globalization has obliged many organizations to adopt E-business in order to survive in the present competitive era especially in the area of competing with large organizations. Bresnahan et al. (2002) argue that durable productivity gains have been achieved in enterprises that use E-business. This is traceable to the fact that it helps in the effective flow of data in organizations thereby assisting organizations to obtain information at any given time, which in turns helps these organizations to reach their desired target.

With regard to strategic links and SCM, E-business technologies can enhance SCM decision making by enabling the collection of real-time information, and access to and analysis of this data in order to facilitate collaboration between trading partners in a supply chain (Davis & Benamati, 2003). Frohlich and Westbrook (2002) showed the importance of linking customers and suppliers together in tightly integrated networks. As a result of E-Procurement, the collection of real-time information on demand is possible and, more importantly, products and services are delivered quickly and reliably when and where they are needed (Frohlich, 2002). E-Procurement, or buying online, can potentially provide distinct value propositions to the firm. These come from the reduction of procurement and inventory costs, as well as strategic networks with suppliers that allow effective and efficient supply chain management (Kalakota & Whinston, 1997). With regard to procurement costs, Kaplan and Sawhney (2000) indicated that buying in E-Marketplaces considerably reduces transaction costs.

#### **2.4.2 Business to Customer Strategy and Performance of Commercial Banks**

Selling online potentially provide distinct value propositions to the firm. These come from its impact on the volume of sales, the number of customers and the quality of customer service. The internet present high reach and richness of information (Evans & Wurster, 1999), it connects firms to consumers in geographic areas that were costly to reach before the Internet (Steinfeld et al., 1999). All this can help in increasing sales and number of customers. For instance, virtual



communities enable frequent interactions on a wide range of topics and thereby create a loyalty and enhance transaction frequency (Amit & Zott, 2001). E-Business allows innovation in the way firms do business (new business models), which may influence sales and number of customers (Davis & Benati, 2003).

E-business enhances the well-being and education of customers. By providing information to customers online, they are enabled to learn more about the organization and also how to carry out their transaction effectively and efficiently at reduced time and cost (Kalakota & Whinston, 1997; Lee, 2001). Customers are enabled by E-business to carry out their transaction at any place in the world and at any time of the day that is convenient to their unique lifestyle.

E-business greatly impacts on customer relationship management of a firm. It integrates people, business and technology to understand the needs of customers, target profitable customers, integrate assistance across channels, enhance sales force efficiency and effectiveness, improve pricing, customize products and services, improve customer service efficiency and effectiveness and individualize marketing messages (Ballou, 2007).

E-business has continued to permeate virtually every organization and is being applied in a wide range of areas. It has provided new ways to store, process, distribute, and exchange information within companies and with customers (Kollberg & Dreyer, 2006). The recent E-business developments have enormous implications for the operations, structure and strategy of organizations (Buhalis, 2003). Application of E-business to enhance the performance of organizations of all types around the world do not only help to cut costs and improve efficiency but also for providing better customer services (Ashrafi & Murtaza, 2008).

Abaenewe et al. (2013) analyzed the effect of E-business on bank performance in Nigeria. They found that E-business has positively and significantly impacted on the market share of the bank. Similarly, Ibukunle, and James (2012) claimed that E-business has led to increased customer satisfaction, improved operational efficiency, reduced transaction time, better competitive edge, reduced running cost, and ushered in swift response in service delivery.

#### **2.4.3 Intra-Business Strategy and Performance of Commercial Banks**

It is evident that E-business plays a significant role in the further development of efficient processes in a bank. It facilitates cross-functional work teams, which has a significant impact on



employees' workloads and the company culture. Employees have more tools at their disposal to help complete daily tasks and are offered additional training to better equip them to take on more responsibilities (Boomer, 2000).

In their study conducted to examine technological progress and its effects in the banking industry using relevant data, Berger (2003) found out that an investment in E-business leads to cost reduction hinged on productivity increase in form of improved back-office technologies which is in form of organization- related benefits such as reduced costs of operation as well as improved front-office technologies which is in form of benefits to customers such as improved quality and variety of banking services. Spanos et al. (2002) posit that E-business has the ability to enhance, coordinate, and control the operations of commercial banks and can also increase the use of management systems

One of the improvements arising from the use of E-business applications is the enhancement of operations and activities of commercial banks hinged on the reduction of overhead expenses. Specifically, the costs related to the maintenance of physical branches, marketing and labor can be cut appreciably (Hernado & Nieto, 2007). In their study of Turkish online banking, Polatoglu and Ekin (2001) reported that the average cost of online transactions was \$0.10 compared to \$2.10 for a teller. Similarly, based on a sample of Polish banks, Polasik (2008) estimated that the cost of Internet and in-branch bank transfers was €0.

Studies by Ibukunle and James (2012), and Olorunsegun (2010) identified that performance of commercial banks in terms of productivity, increase in sales, cost reduction, competitiveness, efficiency and effectiveness was positively influenced by E-business.

E-business applications in human resources are rapidly progressing to redesign processes, empower employees at all levels and develop HR strategies that favorably impact the bottom line of the organization. E-business applications replace or integrate formerly disparate systems and applications to improve decision-making capabilities and minimize redundant data entry and maintenance (Singh, 2007).

E-business may be utilized as a means to facilitate process efficiency and thereby streamline work-processes and reduce staff costs. Automation of credit application facilities speeds up process and reduces spending in terms of processing costs. Online transaction is about twenty



(20) times less costly than the equivalent transaction conducted in a branch due to automation (Zhu & Kramer, 2005). According to Dalton (1999), businesses using E-business can achieve significant improvements and cost reductions since business digitalization can reduce internal coordination costs. E-business enabled developments impact on savings in personnel and time from automated processes, reduced costs from streamlined and automated process flows, reduced costs from fewer errors, and identification and utilization of economies of scale from lower unit processing costs (Cecchetti, 2008).

## 2.5 Conceptual Framework

In this study, the dependent variable is commercial bank performance while the independent variable is E-business strategy. The variables and their relationships is shown in Figure 2.1

### Moderating Variables

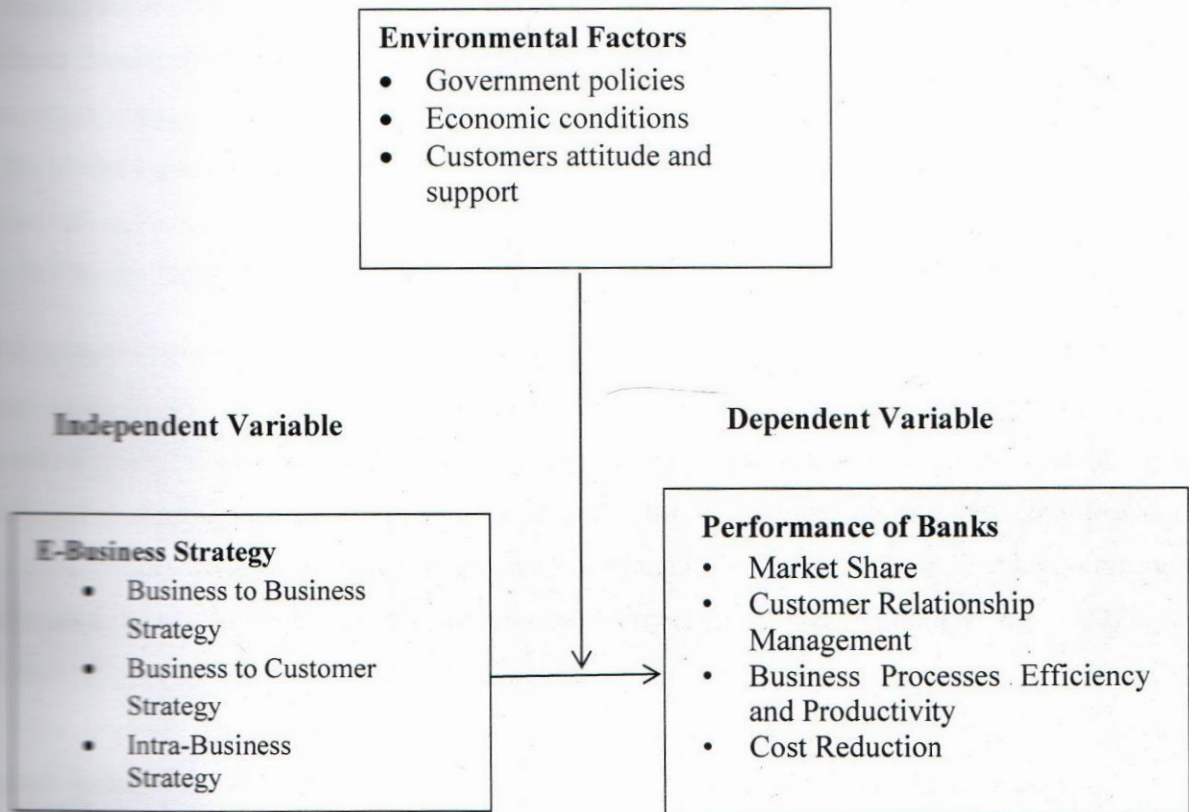


Figure 1: Conceptual Framework: Relationship between E-business Strategy and Performance of Commercial Banks

E-business strategy creates new business opportunities for banks promising to totally change the market and or provide new markets. E-business strategy if well implemented has the effect of enhancing value thus maintaining its market share and further an increase. It eliminates geography as a factor in many businesses. E-business applications reduce internal operating costs through efficiency gains both within the individual processes and across the value chain. Organizational value created by E-business is due to more effective use of business processes for efficiency, management of risks and create new products, services and business ideas. E-business



significantly increases the value of good customer relationships, to increase customer satisfaction and loyalty.

Widespread adoption of E-business technology affects firm performance by redefining the way firms compete. It has changed the way firms do business, including their product offerings, organizational boundaries and structures, value chains, and marketing channels. E-business also affects firm performance by intensifying the competition. Towards the last few decades of the twentieth century, the competition among businesses is going global and becoming more severe. This global marketplace is characterized by intense social, economic, and technological changes. Innovation plays an important role in enhancing and sustaining the performance of firms to adapt to the change (Melville et al., 2004).

E-business influences firm performance by enabling organizational learning and knowledge management. E-business innovation has provided new capabilities that produce values by creating more efficient markets, enabling easier access, making value and supply chains more efficient, disrupting current pricing power, enabling mass customization, and extending reach.

E-business also influences firm performance by changing business process. It changes business communications, order taking, and procurement processes. Better communications within and across corporate boundary enhances collaborative commerce and create values (Singh, 2007). Online ordering and payment make transaction more accurate, timeliness, less expensive, and result in happier customers and more revenues for the firm. Automatic procurement allows a firm to search and locate potential suppliers in a larger pool and thus can find high quality suppliers (Melao, 2008)

## CHAPTER THREE: RESEARCH METHODOLOGY

### 3.1 Introduction

This chapter addresses the research design adopted for the study, population targeted and the sample. Methods of data collection, analysis, and presentation are also discussed here.

### 3.2 Research Design

Correlational research design was adopted in the study to establish the relationship between E-business strategy and performance of commercial banks.

### 3.3 Target Population

In this study the target population was commercial banks operating in Eldoret. According to a 2004 Central Bank of Kenya bank survey, there are 30 commercial banks within Eldoret municipality. Fundamentally, the study targeted the top and middle management staff in the commercial banks in Eldoret. The total target population was 270 staff members. This is shown in Table 3.1 below.

Table 3.1: Target Population

Staff	Target population
Top management staff	75
Middle management staff	195
<b>TOTAL</b>	<b>270</b>

Source: Kenya Bankers Association, Eldoret branch

### 3.4 Sample and Sample Design

Simple random sampling was used to select the sample to be used in the study.

The model,  $n_a = (n \times 100)/re\%$ , advocated by Stanton (2005), was used to estimate the actual sample size for the study, where:

$n_a$ - the actual sample size

$n$ - The minimum estimated sample size

$re\%$ - the estimated response rate expressed as a percentage.

Bell (2005) advises that a minimum number equivalent to a tenth of entire population for statistical analyzes provide a useful rule of thumb for each study category. Based on this and with an estimated 75% response rate the actual sample size was obtained. A sample size of thirty-six (36) respondents will be used as sample for the study. This is shown in Table 3.2.



**Table 3.2: Sample Size of Respondents**

	Target Population	Sample size
Top management staff	75	10
Middle management staff	195	26
<b>TOTAL</b>	<b>270</b>	<b>36</b>

### **3.5 Data Collection**

The study data was obtained through administration of questionnaires (Appendix 1). Closed Likert-type scale questionnaires were used to gain a general picture of the effect of E-business strategy on the performance of commercial banks in Eldoret, Kenya. The questionnaire was preferred because of its ability to reach a large number of respondents within a short time, less costly to administer and supervision or follow up of respondents was not required.

### **3.6 Validity and Reliability**

#### **3.6.1 Validity of Research Instrument**

Validity is the degree to which results obtained from the analysis of the data actually represents the phenomenon under study, Kothari (2009) pointed out that validity measures the accuracy of the instruments in obtaining the anticipated data which can meet the objectives of the study and, according to Gay (1982), is established by experts' judgment. The researcher consulted and sought the opinion of other experts in assessing or validating the contents of the research instruments.

#### **3.6.2 Reliability of Research Instruments**

Reliability was checked using Cronbach's alpha coefficient to measure internal consistency and reliability of the variables. This is a method of estimating reliability of test scores by the use of a single administration of a test. Consequently, it provides good measures of reliability because holding other factors constant, the more similar the test content and conditions of administration are, the greater the internal consistency reliability (Mugenda & Mugenda, 1999). The result was used to improve the reliability of the questionnaire before it was administered to the chosen sample respondents. According to Nunnally (1978), a reliability Alpha coefficient of 0.7 and above is acceptable.

**Table 3.3: Reliability Test**

Variable	No of Items	Cronbach's Reliability Coefficient
Business to Business Strategy	6	0.758
Business to Customer Strategy	5	0.735
Intra-Business Strategy	5	0.723
Performance of Commercial Banks	26	0.747

The results of reliability analysis show that all the items met the threshold of 0.7 and above as shown in Table 3.3.

### 3.7 Data Analysis

The data from the questionnaires was adopted and coded for completeness and accuracy and analyzed using Statistical Package for Social Science (SPSS). Pearson's product moment coefficient was used to determine the relationship between E-business strategy and commercial banks performance. Descriptive statistics such as frequencies mean and standard deviation was used to describe the research variables. The hypothesis of the study was tested using correlation analysis. Multiple regressions analysis was used to determine the relationship between the E-business strategy and performance of commercial banks. The following multiple regression model was used to analyze the data.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Y- Dependent variable (Performance of Commercial Banks)

$\beta_0$ , the constant

$\beta_1, \beta_2, \beta_3$ , - are regression coefficients or change induced in Y by each X

$X_1$  - business to business E-business strategy

$X_2$  - Business to customer E-business strategy

$X_3$  - Intra-business E-business strategy

$\epsilon$ - Error term



## CHAPTER FOUR: RESULTS AND DISCUSSION

### 4.1 Introduction

This chapter presents the research findings and discussions of the results. The chapter presents results of descriptive statistics analysis and tests of hypothesis.

### 4.2 Descriptive Statistics

#### 4.2.1 Characteristics of Study Respondents

The main objective of the study was to determine the effect of E-business strategy on performance of commercial banks in Eldoret, Kenya. A sample of thirty-six (36) bank top and middle management employees were used in the study.

Regarding gender, Table 4.1 below shows that the majority (66.7%) of the respondents are male while the female employees form the minority (33.3%).

**Table 4.1: Gender of Respondents**

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	24	66.7	66.7	66.7
Valid Female	12	33.3	33.3	100.0
Total	36	100.0	100.0	

Concerning the job positions, the findings in Table 4.2 below indicate that 27.8% (10) are in top management whereas 72.2% (26) are in the middle management.

**Table 4.2: Position of Respondents**

	Frequency	Percent	Valid Percent	Cumulative Percent
Top management	10	27.8	27.8	27.8
Valid Middle management	26	72.2	72.2	100.0
Total	36	100.0	100.0	

In the aspect of age, the frequency Table (Table 4.3) indicates that 2.8% of the respondents were aged between 0-25 years, 19.4% of the respondents were aged between 26-35 years, 38.9% of the respondents were aged between 36-45 years, 30.6% of the respondents were aged between 46-55 years, and 8.3% of the respondents were aged 56 years and above. The distribution of the respondents indicates that most of them (38.9%) fall within the age group of 36-45 years.

Overall, the frequency also shows that most employees (88.9%) fall within the age bracket of 26-55 years.

**Table 4.3: Age Group of Respondents**

	Frequency	Percent	Valid Percent	Cumulative Percent
0-25	1	2.8	2.8	2.8
26-35	7	19.4	19.4	22.2
36-45	14	38.9	38.9	61.1
46-55	11	30.6	30.6	91.7
56 and above	3	8.3	8.3	100.0
Total	36	100.0	100.0	

Table 4.4 depicts the frequency distribution of the respondents based on their banking experience. The findings show that 5.6% of the respondents had banking experience of less than two years, 19.4% of the respondents had banking experience of between three to seven years, 30.6% of the respondents had banking experience of between eight and eleven years and 44.4% of the respondents had banking experience of eleven years and above.

**Table 4.4: Level of Experience**

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 2	2	5.6	5.6	5.6
3-7 years	7	19.4	19.4	25.0
8-11 years	11	30.6	30.6	55.6
11 and above	16	44.4	44.4	100.0
Total	36	100.0	100.0	

The results of the respondents' description of the bank they worked for were as shown in Table 4.5. The findings show that 25% of the respondents worked in foreign owned banks locally incorporated, 55.6% of the respondents worked in local private banks and 19.4% worked in local banks with government participation. In Kenya there are four foreign owned banks that are not locally incorporated namely; Bank of India, Citibank N.A. Kenya, Habib Bank A.G. Zurich and Habib Bank Ltd none of which operates in Eldoret Kenya.



**Table 4.5: Bank Description**

	Frequency	Percent	Valid Percent	Cumulative Percent
Foreign owned bank but not locally incorporated	0	0	0	0
Foreign owned, locally incorporated bank	9	25.0	25.0	25.0
Local private bank	20	55.6	55.6	80.6
Local bank with government participation	7	19.4	19.4	100.0
Total	36	100.0	100.0	

**4.2.2 E-business Strategy**

To determine E-business strategy adopted in commercial banks, response was sought on the strategies by use of a questionnaire. The responses were structured in a five-point Likert scale from no extent of adoption (1) to very great extent of adoption(5) giving an ordinal scale. The descriptive statistics in Table 4.6 indicates the mean and standard deviation of each Likert item in the questionnaire that examine business to business E-business strategy. Partnerships with other business entities and credit information sharing have means of 4.14 and 4.03 respectively. These means imply that respondents hold that these are business to business E-business strategy that the banks have adopted to a great extent. Moreover, E-procurement and E-invoicing, agency banking, online complaints and feedback mechanism, and filling returns online to relevant bodies have means of 3.72, 3.81, 3.44, and 3.68 respectively. This implies that the respondents perceive them as business to business E-business strategy that their respective banks have adopted to a moderate extent.

**Table 4.6: Business to Business E-business Strategy**

	Valid N	Mean	Std. Deviation
E-Procurement and E-Invoicing	36	3.72	1.175
Online complaints and feedback mechanism	36	3.44	1.107
Agency banking	36	3.81	.710
Credit information sharing	36	4.03	.770
Partnership with other business entities	36	4.14	.860
Filing returns online to relevant bodies	36	3.68	1.298

The descriptive statistics in Table 4.7 indicates the mean and standard deviation of each Likert item in the questions that examine business to customer E-business Strategy. The respondents rated the use of digital cash having a mean of 4.39 and online information services a mean of 4.36. These means imply that the respondents hold that these are business to customer E-business strategy that the banks have adopted to a great extent. Moreover, respondents rated online loan applications, repayments, and recovery with a mean of 3.64, online feedback and complain mechanism a mean of 3.42, and E-marketing a mean of 3.69. This implies that the respondents perceive them as business to customer E-business strategy that their respective banks have adopted to a moderate extent.

**Table 4.7: Business to customer E-business Strategy**

	Valid N	Mean	Std. Deviation
Digital cash	36	4.39	.645
Online loan applications, repayments and recovery	36	3.64	.683
Online feedback and complaints mechanisms	36	3.42	.937
E-marketing	36	3.69	.920
Online information services	36	4.36	.723

The descriptive statistics in Table 4.8 indicates the mean and standard deviation of each Likert item in the questions that examine intra-business E-business Strategy. Administrative software programs had a mean of 4.28 and HR systems had a mean of 4.17. These means imply that the respondents hold that these are intra-business E-business strategy that the banks have adopted to



to a great extent. Moreover, online feedback and complaints mechanism had a mean of 3.50, automation of business processes has a mean of 3.88 and the performance management system has a mean of 3.56. This implies that the respondents perceive them as intra-business E-business strategy that their respective banks have adopted to a moderate extent.

**Table 4.8: Intra-Business E-business Strategy**

	Valid N	Mean	Std. Deviation
HR systems	36	4.17	1.384
Performance management systems	36	3.56	.998
Automation of business processes	36	3.88	.882
Administrative software programs	36	4.28	.659
Online feedback and complaints mechanisms	36	3.50	.697

#### **4.2.3 Performance of Commercial Banks**

To determine the effect of E-business strategy on performance of commercial banks in terms of the market share, customer relationship management, business process efficiency and productivity, and the cost reduction, responses were sought from top and middle management staff of commercial banks. The responses were rated in a five-point Likert scale from no extent (1) to very great extent (5).

The respondents were asked to rate the extent to which E-business strategy has influenced performance of the banks in terms of market share. The results are as given in Table 4.9. The respondents rated the use of E-business strategy to improve performance based on market share as follows, increase in customer outreach a mean of 4.03, improvement of marketing strategies a mean of 4.28, enhanced public image and customer loyalty a mean of 4.03, keeping up with competition a mean of 4.31 and expanded geographical reach a mean of 3.89. This shows that most respondents rated the effect of E-business strategy on market share to a great extent and moderate extent.

**Table 4.9: Descriptive Statistics of Market Share**

	Valid N	Mean	Std. Deviation
Increase in customer outreach	36	4.03	1.276
Expanded geographical reach	36	3.89	.785
Improvement of marketing strategies	36	4.28	.815
Enhanced public image and customer loyalty	36	4.03	.654
Keeping up with competition	36	4.31	.980

The respondents were asked to rate the extent to which E-Business strategy has influenced performance of the banks in terms of customer relationship management the results were as given in Table 4.10. The respondents rated availability of services 24/7/365 to their customers with a mean of 4.39, faster services, and ease of access of information with a mean of 4.36, and streamlining customer interactions with a mean of 4.28, which means that the effect of E-business on customer relationship management is to a great extent. Moreover, the respondents rated advanced satisfaction ratings with a mean of 3.89, reduction of turnaround time with a mean of 3.78, customization of products and personalized services with a mean of 3.39, and proper service management with a mean of 3.15, which means that E-business strategy has moderate effect on customer relationship management.

**Table 4.10: Descriptive Statistics of CRM**

	Valid N	Mean	Std. Deviation
Provide availability of services 24/7/365	36	4.39	.838
Customization of products and personalized service	36	3.39	.871
Faster services and ease of access of information	36	4.36	.593
Streamlining customer interactions	36	4.28	.513
Proper service management	36	3.15	.874
Advanced satisfaction ratings	36	3.89	.708
Reduction of Turn Around Time	36	3.78	1.333

The respondents were asked to rate the extent to which E-Business strategy has influenced performance of the banks in terms of business process efficiency and productivity the results were as given in Table 4.11. Respondents rated speed, accuracy, and efficiency of processes and



proper implementation of internal controls having a mean of 4.28 and 4.17 respectively as having great effect on business process efficiency and productivity. Moreover, the respondents rated the improvement in the internal and external communication with a mean of 3.36, facilitation of new products and business models development with a mean of 3.42, management of information, assets, and infrastructure with a mean of 3.75, and enhanced accessibility to and relationships with suppliers, government and other partners with a mean of 3.69, improvement in the employee management a mean of 3.02 implying moderate effect of the E-business strategy on business process efficiency and productivity

**Table 4.11: Statistics of Business Efficiency and Productivity**

	Valid N	Mean	Std. Deviation
Improvement in internal and external communication	36	3.36	1.018
Speed, accuracy and efficiency of processes	36	4.28	.566
Facilitates development of new products and new business models	36	3.42	.937
Improvement in employee management	36	3.02	1.031
Proper implementation of internal controls	36	4.17	.811
Managing information, assets and infrastructure	36	3.75	.906
Enhanced accessibility to and relationships with suppliers, government and other partners	36	3.69	.889

The respondents were asked to rate the extent to which E-Business strategy has influenced performance of the banks in terms of cost reduction the results were as given in Table 4.12. Respondents rated reduction in marketing and customer support costs with a mean of 4.22 meaning the E-business strategy had effect on cost reduction to a great extent. Reduction in stationary, postage and courier cost, reduction in employees training costs, lower costs in loan follow up and recovery, reduction in logistics costs, reduction of staff costs and sharing of resources and costs with business partners had means of 3.89, 3.19, 3.79, 3.94, 3.47 and 3.72 respectively, which means they have moderate effect on cost reduction.

**Table 4.12: Descriptive Statistics of Cost Reduction**

	Valid N	Mean	Std. Deviation
Reduced marketing and customer support costs	36	4.22	1.072
Reduction in staff cost	36	3.47	.609
Reduction on stationary, postage and courier costs	36	3.89	.708
Reduction in employee training costs	36	3.19	.822
Lower costs in loan follow up and recovery	36	3.79	.874
Lower logistics costs in procuring for goods	36	3.94	.955
Sharing of resources and costs with business partners	36	3.72	1.059

**4.2.4 Correlation Analysis**

Correlation analysis was done to analyze the strength of relationship between the study variables.

**Table 4.13: Correlation Matrix**

		Performance	Business to business	Business to customer	Intra-Business
Performance	Pearson Correlation	1	.554**	.539**	.506**
	Sig. (2-tailed)		.000	.000	.001
	N	36	36	36	36
Business to business	Pearson Correlation	.554**	1	.478**	.272**
	Sig. (2-tailed)	.000		.002	.054
	N	36	36	36	36
Business to customer	Pearson Correlation	.539**	.478**	1	.341**
	Sig. (2-tailed)	.000	.002		.021
	N	36	36	36	36
Intra-Business	Pearson Correlation	.506**	.272**	.341**	1
	Sig. (2-tailed)	.001	.054	.021	
	N	36	36	36	36

\*\* . Correlation is significant at the 0.05 level (2-tailed).



From Table 4.13, it is evident that E-business strategy and the performance of commercial banks have statistically significant positive correlation ( $p < 0.05$ ). The business to business strategy and the performance of commercial banks have moderate positive correlation that is statistically significant ( $r = 0.554, p < 0.05$ ). The business to customer E-business strategy and the performance of commercial banks have moderate correlation that is statistical significant ( $r = 0.539, p < 0.05$ ). The intra-business strategy and the performance of commercial banks have a moderate correlation that is statistically significant ( $r = 0.506, p < 0.05$ ).

**4.2 Hypothesis Testing**

**4.2.1 Effect of Business to Business Strategy on Performance of Banks**

The first objective of the study was to determine the effect of business to business E-Business Strategy on Performance of Banks. The study hypothesized that business to business E-business strategy has no significant effect on the performance of commercial banks. In testing this hypothesis, the study used regression analysis, which shows the strength and degree of effect. The relationship between the two variables was determined and the results are presented in Table 4.14 and 4.15 and 4.16.

**Table 4.14: Model Summary of Business to Business Strategy**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.554 <sup>a</sup>	.307	.287	1.50771

a. Predictors: (Constant), business to business

**Table 4.15: ANOVA of Business to Business Strategy**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	34.247	1	34.247	15.066	.000 <sup>b</sup>
Residual	77.288	34	2.273		
Total	111.535	35			

a. Dependent Variable: Performance b. Predictors: (Constant), business to business

Table 4.16: Coefficients of Business to Business Strategy

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	11.784	3.389		3.477	.001
Business to business	.549	.141	.554	3.881	.000

Dependent Variable: Performance

Regression analysis Table 4.14 show that business to business E-business strategy and the performance of banks have a moderate correlation coefficient ( $r = 0.554$ ). Moreover, the R-square ( $R^2 = 0.307$ ) indicates that the business to business E-business strategy explains only 30.7% of the variation in the performance of commercial banks leaving 69.3% unexplained. This shows that business to business E-business strategy predict a considerable proportion of the variation in the performance of commercial banks. The findings are in line with the findings of Lee (2001) who noted that business to business E-business strategy primary determines the performance and competitive advantage of organizations.

In hypothesis testing, the ANOVA Table 4.15 indicates that the regression model is statistically significant in predicting the relationships between business to business strategy and performance of commercial banks,  $F = 15.066$ ,  $p = 0.000$  which is  $< 0.05$ . Additionally, the coefficients Table 4.16 reveals that the business to business E-business strategy is a significant predictor the performance of commercial banks ( $p = 0.002$  which is  $< 0.05$ ). Fundamentally, the regression equation can predict that the performance of commercial banks is equal to  $11.784 + 0.549$  (business to business E-business strategy). The regression equation means that performance increases by 0.549 for each unit increase in business to business E-business strategy. Therefore, the hypothesis testing rejects the null hypothesis that business to business E-business strategy has no significant effect on the performance of commercial banks,  $r = 0.554$ ,  $\beta_0 = 11.784$ , and  $p = 0.000$  which is  $< 0.05$ . In this view, business to business E-business strategy has a significant effect on the performance of commercial banks. Mbuvi (2000) found out that the adoption of E-business boosts the performance of diverse organizations irrespective of their nature.



**4.17 Effect of Business to Customer E-business Strategy on Performance of Banks**

The second objective is to determine the effect of business to customer E-business strategy on the performance of commercial banks. The study hypothesized that business to customer E-business strategy has no significant effect on the performance of commercial banks. In testing the hypothesis, the study employed regression analysis. The relationship between the two variables was determined and the results are presented in Table 4.17 and 4.18 and 4.19.

**Table 4.17: Model Summary of Business to Customer Strategy**

Model	R	R Square	Adjusted R Square	Std. Error Estimate
1	.539 <sup>a</sup>	.291	.270	1.52553

a. Predictors: (Constant), Business to customer

**Table 4.18: ANOVA of Business to Customer Strategy**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	32.408	1	32.408	13.926	.001 <sup>b</sup>
Residual	79.127	34	2.327		
Total	111.535	35			

a. Dependent Variable: Performance

b. Predictors: (Constant), Business to customer

**Table 4.19: Coefficients of Business to Customer Strategy**

Model	Unstandardized Coefficients		Standardized	t	Sig.
	B	Std. Error	Coefficients Beta		
(Constant)	13.793	2.988		4.616	.000
Business to customer	.454	.122	.539	3.732	.001

a. Dependent Variable: Performance

Regression analysis Table 4.17 show that business to customer E-business strategy and the performance of commercial banks have a moderate positive correlation ( $r = 0.539$ ). The R-square coefficient ( $R^2 = 0.291$ ) shows that business to customer E-business strategy explains 29.1% of

the variation in the performance of commercial banks leaving 70.9% unexplained. Hence, regression analysis indicates that business to customer E-business strategy has significant effect on the performance of the commercial banks.

In hypothesis testing, the ANOVA Table 4.18 reveals that the regression model is statistically significant in predicting the relationship between business to customer E-business strategy and performance of banks,  $F= 13.926$ ,  $p = 0.001$  which is  $< 0.05$ . The coefficients Table 4.19 indicate that the business to customer E-business strategy is a significant predictor of performance of commercial banks ( $p=0.001$  which is  $< 0.05$ ). Essentially, the regression equation shows that the performance of commercial banks is equal to  $13.793 + 0.454$  (business to customer E-business strategy). In this view, the regression equation means that a unit increase in the business to customer E-business strategy results in 0.454 in the performance of commercial banks. Therefore, the hypothesis testing rejects the null hypothesis that the business to customer E-business strategy has no significant effect on the performance of commercial banks,  $r = 0.539$ ,  $F_0 = 13.793$ ,  $p = 0.001$  which is  $< 0.05$ . In this view, business to customer E-business strategy has a significant effect on the performance of commercial banks. Muganda (2001) noted that the improvement of customer-business relationships as one of the benefits of business to customer strategy.

#### 4.3.3 The Effect Intra-Business E-business Strategy on the Performance of Banks

The third objective of the study was to determine the effect of intra-business E-business strategy on the performance of commercial banks. The study had hypothesized that intra-business E-business strategy has no significant effect on the performance of commercial banks. In testing this hypothesis, the study used regression analysis, which shows the strength and degree of effect. The relationship between the two variables was determined and the results are presented in Table 4.20 and 4.21 and 4.22.

**Table 4.20: Model Summary of Intra-business Strategy**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.506 <sup>a</sup>	.256	.234	1.56216

a. Predictors: (Constant), Intra-Business



**Table 4.21: ANOVA of Intra-business Strategy**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.563	1	28.563	11.705	.002 <sup>b</sup>
	Residual	82.972	34	2.440		
	Total	111.535	35			

a. Dependent Variable: Performance

b. Predictors: (Constant), Intra-Business

**Table 4.22: Coefficients of Intra-business Strategy**

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	12.842	3.535		3.633	.001
	Intra-Business	.520	.152	.506	3.421	.002

a. Dependent Variable: Performance

The regression analysis Table 4.20 indicate that the intra-business E-business strategy and the performance of commercial banks have a strong positive correlation ( $r = 0.506$ ). Furthermore, the R-square ( $R^2 = 0.256$ ) indicates that intra-business E-business strategy explains 25.6% of the variation in the performance of commercial banks leaving 74.4% unexplained. Hence, the regression analysis shows that the strong positive correlation and the proportion of explanation show that intra-business strategy has considerable effect on the performance of commercial banks.

In the hypothesis testing, the ANOVA Table 4.21 reveals that the regression model is statistically significant in predicting the relationship between the intra-business E-business strategy and the performance of commercial banks,  $F = 11.705$ ,  $p = 0.002$  which is  $< 0.05$ . The coefficients Table 4.22 indicates that intra-business E-business strategy is a significant predictor of the performance of commercial banks ( $p = 0.002$  which is  $< 0.05$ ), and thus, a regression equation derived from the Table shows that the performance of commercial banks is equal to  $12.842 + 0.520$  (intra-business E-business strategy). The equation implies that a unit increase in intra-business E-

business strategy causes an increase in the performance of commercial banks by 0.520. The regression analysis, therefore, rejects the null hypothesis that the effect of the intra-business E-business strategy has no significant effect on the performance of commercial banks,  $r = 0.506$ ,  $\beta_0 = 12.842$ ,  $p = < 0.05$ . In this view, intra-business E-business strategy has a significant effect on the performance of commercial banks. Meyer (2007) recommends modern businesses and organizations to adopt E-business strategy because it has considerable impact on their operations and consequently their performance.

#### 4.3.4 The Joint Effect of E-business Strategy on Performance of Commercial Banks

The fourth objective of the study was to determine the joint effect of business to business, business to customer, and intra-business E-business strategy on the performance of commercial banks. The study tested the hypothesis that the joint effect of business to business, business to customer, and intra-business E-business strategy has no significant effect on the performance of commercial banks using the multiple regression analysis.

**Table 4.23: Model Summary of Joint Effect – Multiple Regression**

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.704 <sup>a</sup>	.495	.448	1.32661

a. Predictors: (Constant), business to business, Business to customer, Intra-Business

**Table 4.24: ANOVA of the Joint Effect**

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	55.218	3	18.406	10.459	.000 <sup>b</sup>
1	Residual	56.317	32	1.760		
	Total	111.535	35			

a. Dependent Variable: Performance

b. Predictors: (Constant, business to business, Business to customer, Intra-Business



**Table 4.25: Coefficients of B2B, B2C, and Intra-Business E-business Strategy**

Model	Unstandardized Coefficients		Standardized	t	Sig.
	B	Std. Error	Coefficients		
	3.683	3.830		.962	.043
1					
	.336	.143	.339	2.348	.025
	.225	.125	.267	1.809	.015
	.332	.139	.323	2.395	.023

a. Dependent Variable: Performance

The multiple regression analysis Table 4.23 indicate that the business to business, business to customer and intra-business E-business strategy are significant predictors of the performance of commercial banks because they have a strong positive correlation coefficient ( $r = 0.704$ ). Furthermore, the R-square ( $R^2 = 0.495$ ) indicates that the business to business, business to customer, and intra-business E-business strategy explains 49.5% of the variation in the performance of commercial banks. Therefore, the moderate positive correlation and the considerable proportion of explanation of the performance show that E-business strategy has marked effect on the performance of commercial banks.

In the hypothesis testing, the ANOVA Table 4.24 indicates that the multiple regression model statistically significant in predicting the influence of the business to business, business to customer and intra-business E-business strategy on the performance of commercial banks,  $F = 10.459$ ,  $p = 0.000$  which is  $< 0.05$ . The coefficient Table 4.25 reveals that the business to business, business to customer, and intra-business E-business strategy are significant predictors of the performance of commercial banks ( $p < 0.05$ ). Thus, the multiple regression equation is that the performance of commercial banks is equal to  $3.683 + 0.336 (B2B) + 0.225 (B2C) + 0.332$  (Intra-business). Therefore, the multiple regression test rejects the null hypothesis that the joint effect of business to business, business to customer, and intra-business E-business strategy has no significant effect on the performance of commercial banks,  $r = 0.704$ ,  $\beta_0 = 3.683$ ,  $p < 0.05$ . In this view, business to business, business to customer and intra-business E-business strategy has a significant effect on the performance of commercial banks. These findings are consistent with

the findings of Koo, Song, Kim, and Nam (2007), which recommend the use of E-business strategy in improving the performance of banks in competitive markets. Hence, the following is the regression equation of the multiple regression model of the study.

$$Y = 3.683 + 0.336 X_1 + 0.225 X_2 + 0.332 X_3 + \epsilon$$

The multiple regression equation indicates that a unit increase in the business to business strategy, the business to customer strategy, and the intra-business strategy causes an increase the performance of commercial banks by 0.336, 0.225, and 0.332 respectively.



## CHAPTER FIVE: SUMMARY, CONCLUSION, AND RECOMMENDATION

### 5.1 Introduction

This chapter discusses and interprets the findings obtained with a view of drawing conclusion and providing recommendation to commercial banks to improve their performance.

### 5.2 Summary of Findings

This study intended determine the effect of E-Business Strategy on the performance of commercial banks in Eldoret, Kenya. The measuring instrument was constructed based on the objectives;

The first objective was to determine the effect of business to business E-business strategy on performance of commercial banks, the study found that there is a moderate positively significant relationship between business to business E-business strategy and performance of commercial banks, since the  $p$ -value is less than 0.05, we therefore accept the alternative hypothesis, that business to business E-business strategy has a significant effect on the performance of commercial banks.

The second objective was to determine the effect of business to customer E-business strategy on performance of commercial banks, the study found that there is a moderate positively significant relationship between business to customer E-business strategy and commercial banks performance, since the  $p$ -value is less than 0.05, we therefore accept the alternative hypothesis, that business to customer E-business strategy has a significant effect on the performance of commercial banks.

The third objective was to determine the effect of intra business E-business strategy on performance of commercial banks, the study found that there is a moderate positively significant relationship between intra business E-business strategy and performance of commercial banks, since the  $p$ -value is less than 0.05, we therefore accept the alternative hypothesis, that intra business E-business strategy has a significant effect on the performance of commercial banks.

The fourth objective was to determine the joint effect of business to business, business to customer, and intra-business E-business strategy on the performance of commercial banks. This

study found that there is a high positively significant relationship between the joint effect of business to business, business to customer, intra-business E-business strategy and commercial banks performance, since the *p*-value is less than 0.05; we therefore accept the alternative hypothesis, that the joint effect of business to business, business to customer, and intra-business E-business strategy has a significant effect on the performance of commercial banks

### 5.3 Conclusion

The study tested the hypotheses of four different variables against the dependent variable in order to establish their relationship and the following conclusions were drawn from the results of the study.

The first hypothesis tested was between business to business E-business strategy and its effect on performance of commercial banks. From the findings it was concluded that business to business E-business strategy has a significant effect on the performance of commercial banks.

The second hypothesis tested was between business to customer E-business strategy and its effect on performance of commercial banks. From the findings it was concluded that business to business E-business strategy has a significant effect on the performance of commercial banks.

The third hypothesis tested was between Intra-Business E-business strategy and its effect on performance of commercial banks. From the findings it was concluded that business to business E-business strategy has a significant effect on the performance of commercial banks.

The fourth hypothesis tested was the joint effect of business to business, business to customer and Intra-business E-business strategy and its effect on performance of commercial banks. From the findings it was concluded that business to business, business to customer and Intra-business E-business strategy E-business strategy has a significant effect on the performance of commercial banks.

Correlation coefficients show that the E-business strategy has positive effect with the performance of commercial banks. Regression analysis shows that the business to business, business to customer, and intra-business E-business strategy individually explain 30.7%, 25.6%, and 29.1% of the variation in the performance of commercial banks respectively. Moreover, multiple regression analysis indicates that the business to business, business to customer, and



intra-business E-business strategy collectively explains 49.5% of the variation in the performance of commercial banks. Therefore, the study concludes that E-business strategy contributes to positive performance of banks based on the data collected from commercial banks in Eldoret.

## **5.4 Recommendations**

### **5.4.1 Recommendation to Practitioners**

From the study it is evident that the application of E-business strategy in the various functions or processes of the bank has a great effect on performance of commercial banks. The research revealed that E-business strategy adopted by the banks greatly improve their performance therefore, banks seeking to improve performance should adopt and implement E-business.

In business to business strategy, banks should consider adopting and implementing E-procurement, E-invoicing, online customer care, agency banking, credit information sharing, mobile-banking, and submitting returns and financial documents online.

To adopt and implement business to customer strategy, banks should consider having mobile banking, internet banking, online loan applications, online customer care, e-marketing, and online information services.

In intra-business strategy, banks should adopt and implement HR systems-payroll, E-recruitment, E-learning, performance management systems, automation of business processes and administrative software.

### **5.4.2 Recommendation for Further Research**

As this study was done only on the commercial banks in Eldoret Kenya, other studies should extended to other financial markets such as the capital market, microfinance, and insurance companies in order to understand the implication of E-business on the overall financial markets in Kenya. The study also recommends studies to be carried out on other factors that influence commercial banks performance. The study also recommends an in-depth study to be carried to find out other factors that influence commercial banks performance.

## REFERENCES

- Abaenewe, Z. C., Ogbulu, O. Maxwell., & Ndugbu, M. O. (2013). Electronic banking and bank performance in Nigeria. *West African Journal of Industrial and Academic Research*, 6(1), 171-187.
- Abdullah, Z. (1985). A critical review of the impact of ATMs in Malaysia. *Banker's Journal Malaysia*, 28(3), 13-16.
- Akinuli, M. (1999). Information technology in Nigeria's banking industry: Operational applications, problems, and future challenges. *CBN Bullion*, 23(3), 71-75.
- Afua, A., & Tucci, L. (2001). *Internet business models strategies*. New York: McGraw-Hill.
- Amit, R., & Zott, C. (2001). Value creation in e-business. *Strategic Management Journal*, 22(6-7), 493-520.
- Ashrafi, R., & Murtaza, M. (2008). Use and impact of ICT on SMEs in Oman. *Electronic Journal Information Systems*, 11(3), 125-138.
- Bakos, Y. (1998). The emerging role of electronic marketplaces on the internet. *Communications of the ACM*, 41(8), 35-42.
- Ballou, H. (2007). The evolution and future of logistics and supply chain management *European Business Review*, 19(4), 332-348.
- Barney, B. (1997). Firm resources and sustained competitive advantage. *Journal of Management*, 7(1), 99-120.
- Barua, A., Konana, B., Whinston, M., & Yin, F. (2004). An empirical investigation of net-enabled business value. *MIS Quarterly*, 28(4), 585-620.
- Batiz-Lazo, B., & Woldesenbet, K. (2006). The dynamics of product and process innovation in UK banking. *International Journal of Financial Services Management*, 1(1), 400-421.
- Bell, J. (2005). *Doing your research project: A guide for first time researchers in education, health and social science* (4th ed.). Maidenhead: Wiley Publisher.



- Berger, A. N. (2003). The economic effects of technological progress: Evidence from the banking industry. *Journal of Money, Credit, Banking*, 35(2), 141-176.
- Beynon-Davies, P. (2004). *E-Business*. Basingstoke: Palgrave.
- Bharadwaj, S. (2000). A resource-based perspective on information technology capability and firm performance: An empirical investigation. *MIS Quarterly*, 24(1), 169-196.
- Bhatt, D., & Grover, V. (2005). Types of information technology capabilities and their role in competitive advantage: An empirical study. *Journal of Management Information Systems*, 22(2), 253-277.
- Bitler, M. P. (2001). *Small Businesses and Computers: Adoption and Performance*. (Working papers – Series 2001-15). San Francisco: Federal Reserve Bank of San Francisco. Retrieved 15 Nov 2015 from <http://www.frbsf.org/publications/economics/papers/2001/>.
- Boomer, L. (2000). Significant e-business change is brewing. *Information Week*, 2(817), 160-161.
- Boyett, H., & Boyett, T. (1995). *Beyond Workplace 2000: Essential Strategies for the New American Corporation*. New York: Dutton.
- Bresnahan, T., Brynjolfsson, E., & Hitt, L. (2002). Information technology, workplace organization, and the demand for skilled labor: Firm-level evidence. *Quarterly Journal of Economics*, 117(1), 339-376.
- Brynjolfsson, E., & Hitt, L. (1996). Paradox lost? Firm-level evidence on the returns to information systems spending. *Management Science*, 42(4), 541-558.
- Buhalis, D. (2003). E-Airlines: Strategic and tactical use of ICTs in the airline industry. *Information and Management*, 41(3), 805-825.
- Buttle, F. (2004). *Customer relationship management*. London: Elsevier.
- Cecchetti, S. (2008). *Money, banking and financial markets*. New York: McGraw-Hill.
- Central Bank of Kenya (2014). *Bank supervision annual report, Kenya*. Retrieved 11 Nov 2015 from <https://www.centralbank.go.ke/.../bank>

- Chaffey, D. (2002). *E-business and E-commerce Management*. New York: Pearson Education Limited.
- Chang, H. (2007). Critical factors and benefits in the implementation of customer relationship management. *Journal of Total Quality Management and Business Excellence*, 18(5), 483-508.
- Chopra, S., & Meindl, P. (2001). *Supply chain management*. Upper Saddle River, NJ: Prentice-Hall.
- Ciszewski, S., (2001). *A common view of the customer: ERP, best-of-breed or E-CRM*. New York: Cengage Learning.
- Clemons, K., & Row, C. (1991). Sustaining IT advantage: The role of structural differences. *MIS Quarterly*, 15(3), 275-292.
- Cooper, G., & Schindler, F. (2004). *Business research methods*. New Delhi: McGraw-Hill Publishing Company.
- Curry, A., & Kolou, E. (2004). Evaluating to contribute to TQM improvement: Across-case comparison. *TQM Magazine*, 16(5), 12-45.
- Cytonn Investments (2015). *Kenya Listed Commercial Banks*. Retrieved 2 February 2016 from [https://www.cytonn.com/download/Cytonn\\_banking\\_report.pdf](https://www.cytonn.com/download/Cytonn_banking_report.pdf)
- Dalton, G. (1999). E-business revolution. *Information week online*. Retrieved 20 Feb 2016 from <http://www.informationweek.com/737>.
- Davis, W., & Benamati, J. (2003). *E-Commerce basics: Technology Foundations and E-business Applications*. New York: McGraw-Hill Publishing Company.
- Day, S. (1994). The capabilities of market-driven organizations. *Journal of Marketing*, 58(4), 37-52.
- Dibb, S. (2001). *Marketing Concepts and Strategies*. New York: Cengage Learning.



- Dierickx, I., & Cool, K. (1989). Asset Stock Accumulation and Sustainability of Competitive Advantage. *Management Science*, 35(12), 1504-1511.
- El-Sawy, O. (2001). *Redesigning enterprise processes for e-business*. Boston: McGraw-Hill.
- Evans, B., & Wurster, S. (1999). *Blown to bits: How the new economics of information transforms strategy*. Boston, MA: Harvard Business School Press.
- Fraser, J., Fraser, N., & McDonald, F. (2000). The strategic challenge of electronic commerce. *Supply Chain Management* 5(1) 7-14.
- Frohlich, T. (2002). E-Integration in the supply chain: Barriers and performance. *Decision Sciences*, 33(4), 537-555.
- Frohlich, T., & Westbrook, R. (2002). Demand chain management in manufacturing and services: Web-based integration, drivers, and performance. *Journal of Operations Management*, 20(6), 729-745.
- Garau, C. (2002) Online banking in transition economies: The implementation and development of online banking systems in Romania. *International Journal of Bank Marketing*, 20(6), 285-296.
- Gay, L.R. (1982). *Educational Research Competencies for analysis and application*. Toronto: Merrill Publisher.
- Grant, R.M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review*, 33(1), 114-135.
- Grover, V., & Ramanlal, P. (2000). Playing the E-commerce Game. *Business and Economics Review*, 3(1), 1-12.
- Grigorian, D. A., & Vladmanole, D. (2002). Determinants of commercial bank performance in transition: An application of data envelopment analysis. *International Monetary Fund Working Paper*, 2(146), 1-23.
- Hernando, I., & Nieto, J. (2007). Is the internet delivery channel changing banks' performance? The case of Spanish banks. *Journal of Banking and Finance*, 31(4), 1083-1099.

- Hitt, L. (1999). Information technology and firm boundaries: Evidence from panel data, *Information Systems Research*, 10(2), 134-149.
- Hoffman, L. & Novak, P. (1997). A new marketing paradigm for electronic commerce. *The Information Society*, 13(1), 43-54.
- IBM (2000). *IBM e-business*. Retrieved 20 September 2016 from <http://www-3.ibm.com/e-business/doc/content/overview/>
- Ibikunle, F., & James, O. (2012). Impact of information technology on Nigeria banking industry: A case study of Skye bank. *International Journal of Computing Academic Research*, 1(1), 25-33
- Jelassi, T., & Enders, A. (2008). *Strategies for e-business*. New York: Pearson Education Limited.
- Johnston, H. R., & Vitale, M. R. (1988). Creating competitive advantage with interorganization information systems. *MIS Quarterly*, 12(2), 153-165.
- Jun, X., & Quaddus, M. (2000). *E-business in the 21st Century: Realities, challenges and Outlook*. Singapore: World Scientific Publishing Company.
- Kalakota, R., & Robinson, M. (2001). *E-business 2.0: Roadmap for success* (2<sup>nd</sup>ed.). Addison-Isley, Boston.
- Kalakota, R., & Whinston, A. (1997). *Electronic commerce, a manager's guide*. Addison-Wesley: Reading
- Kaplan, S., & Sawhney, M. (2000). E-hubs: The new B2B marketplaces. *Harvard Business Review*, 70(1), 71-79.
- Kare-Silver, M. (1998). *E-shock, the Electronic Shopping Revolution: Strategies for Retailers and Manufacturers*. London, UK: McMillan Press.
- Katagiri, T. (1989). ATMs in Japan. *Bank Administration*, 65(2), 16-19.



- Kollberg, M., & Dreyer, H. (2006). Exploring the impact of ICT on integration in supply chain control: A research model. *Norwegian University of Science and Technology, 12*(3), 285-294.
- Kothari, R. (2009). *Research Methodology, Methods, and Techniques*. New Delhi: New Age International Publishers.
- Koo, C., Song, J., Kim, Y., & Nam, K. (2007). Do e-business strategies matter? The antecedents and relationship with firm performance. *Information System Frontiers, 9*(2), 283-295
- Koul, L. (2003). *Methodology of Educational Research*. New Delhi: Vika Publishing House PVT Ltd.
- Kozak, S. (2005). The role of information technology in the profit and cost efficiency improvements of the banking sector. *Journal of Academy of Business and Economics, 5*(2), 1-13.
- Leach, B. (2003). Success of CRM systems hinges on establishment of measureable benefits. *Pulp & Paper, 77*(6), 48-52.
- Lee, S. (2001). An analytical framework for evaluating e-commerce business models and strategies. *Internet Research: Electronic Networking Applications and Policy, 11*(4), 349-359.
- Laudon, C., & Laudon, J. P. (2001). *Essentials of management information system organization and technology in the networked enterprise* (4<sup>th</sup> ed.). Upper Saddle River, NY: Prentice-Hall,
- Lowry, P., Cherrington, J., & Watson, J. (2001). *E-Business Handbook*. Boca Raton, FL: CRC Press.
- Mahmood, M., & Soon, S. K. (1991). A comprehensive model for measuring the potential impact of information technology on organizational strategic variables. *Decision Sciences, 22*(4), 869-897.

- Magutu, O. P., Richard O. N., & Haron, M. (2009). Modeling the Effects of E-Commerce Adoption on Business Process Management: Case Study of Commercial Banks in Kenya. *Communications of the IBIMA*, 8(1), 175-190.
- Mahoney, T., & Pandian, R. (1992). The resource-based view of the firm within the conversation of strategic management. *Strategic Management Journal*, 13(5), 363-380.
- Makadok, R. (2001). Toward a synthesis of the resource-based and dynamic-capability views of rent creation. *Strategic Management Journal*, 22(5), 387-402.
- Mata, F. J., Fuerst, W. L., & Barney, J.B. (1995). Information technology and sustained competitive advantage: A resource-based analysis. *MIS Quarterly*, 19(4), 487-505.
- Mbuvi, M., (2000). *A survey of potential for adoption of e-commerce by tour operators in Nairobi: The case of Kenya Association of Tour Operators (KATO) Members* (MBA Thesis, University of Nairobi. Retrieved from <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/40182>
- Melao, N. (2008). *E-business, e-business processes & e-business progression*. New York: Cengage Learning.
- Melville, M., Kraemer, K., & Gurbaxani, M. (2004). Information technology and organizational performance: An integrative model of IT business value. *MIS Quarterly*, 28(2), 283-322
- Meyer, M. H. (2007). *The fast path to corporate growth: Leveraging knowledge and technologies to new market applications*. Oxford: Oxford University Press.
- Muganda, N., (2001). *An investigation of the business value of e-commerce: The case of selected firms in Kenya*. (MBA Thesis, University of Nairobi). Retrieved 2 Nov 2015 from <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/22473>
- Mugenda, M., & Mugenda, G. (1999). *Research Methods: Quantitative & Qualitative Approaches*. Nairobi, Kenya: Acts Press.



- Muyoyo, L. (2004). *Factors influencing the adoption and implementation of e-business technologies in companies quoted at the Nairobi Stocks exchange* (MBA Thesis, University of Nairobi). Retrieved 7 Mar 2016 from <http://erepository.uonbi.ac.ke:8080/>
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.
- Olorunsegun, S. (2010). The impact of Electronic Banking in Nigeria Banking System. *Social Science Research Network*, 23(1), 1-17.
- Ongori, H., & Migiro, O. (2010). Information and communication technology adoption: A literature review, *Journal of Chinese Entrepreneurship*, 2(1), 93-104.
- Orodho, J. (2003). *The world of research and informatics* (7<sup>th</sup> Ed.). Nairobi, Kenya: Macmillan Publishers.
- Peteraf, A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14(4), 179-191.
- Pettit, R. (2012). *Learning From Winners: How the ARF Ogilvy Award Winners Use Market Research to Create Advertising Success*. New York: Psychology Press.
- Polasik, M., & Wisniewski, P. (2008). Empirical analysis of internet banking adoption in Poland. *International Journal of Business and Management*, 27(1), 32-52.
- Polatoglu, N., & Ekin, S. (2001). An empirical investigation of Turkish consumers' acceptance of internet banking services. *International Journal of Bank Marketing*, 19(4), 156-165.
- Poon, S., & Swatman, C. (1999). Small business use of the Internet: Findings from Australian case studies. *International Marketing Review*, 14(4-5), 385-203.
- Porter, E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: The Free Press.
- Porter, E. (2004). *Competitive strategy*. New York: The Free Press.

- Powell, C., & Dent-micallef, A. (1997). Information technology as competitive advantage: The role of human, business, and technology resources. *Strategic Management Journal* 18(5), 375-405.
- Ravichandran, T., & Lertwongsatien, C. (2005). Effect of Information Systems Resources and Capabilities on Firm Performance: A Resource-Based Perspective. *Journal of Management Information Systems*, 21(4), 237-276.
- Roberts, W. & Amit, R. (2003). The dynamics of innovative activity and competitive advantage: The case of Australian retail banking, 1981 to 1995. *Organization Science*, 14(2), 107-122.
- Rumelt, P., Schendel, D., & Teece, J. (1991). Strategic management and economics. *Strategic Management Journal*, 12(2), 5-29.
- Rust, R. T., & Kannan, K. (2003). E-service: A New Paradigm for Business in the Electronic Environment. *Communications of the ACM*, 46(6), 37-42.
- Santhanam, R., & Hartono, E. (2003). Issues in linking information technology capability to firm performance. *MIS Quarterly*, 27(1), 125-153.
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research Methods for Business Students* (5th ed.). Harlow, England: Prentice Hall
- Shawkey, B. (1995). Update products ATMs: The right time to buy? *Credit Union Magazine*, 61(2), 29-32.
- Singh, M. (2007). A primer on developing an e-business strategy. *Business Information*, 6(2), 1-12.
- Spanos, E., Prastacos, G., & Poulymenakou, A. (2002). The relationship between information and communication technologies adoption and management. *Information and management* 39(8), 659-675.



- Stanton, B. (2005). *Management Skills*. Cambridge: Select Knowledge Ltd.
- Steinfeld, C., Mahler, A., & Bauer, J. (1999). Electronic commerce and the local merchant: opportunities for synergy between physical and Web presence. *Electronic Markets*, 9(2), 51-57.
- Subramaniam, C., & Shaw, J. (2002). A study of the value and impact of B2B e-commerce: The case of web-based procurement. *International Journal of Electronic Commerce*, 6(4), 19-40.
- Tallon, P., Kraemer, K., & Gurbaxani, V. (2000). Executives' perceptions of the business value of information technology: A process-oriented approach. *Journal of Management Information Systems*, 16(4), 137-165.
- Teece, J, Pisano G., & Shuen A. (1997).Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.
- Turban, E., King, D., Viehland, D., & Lee, J. (2006). Electronic Commerce 2006: Commerce be an engine for global growth? *International Trade*, 3(2), 19-23.
- Turban, E. (2008). *Electronic Commerce: A Managerial Perspective*. Upper Saddle River: Prentice Hall.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(3), 171-180.
- Zhu, K., & Kraemer, K. (2005). Post-adoption variations in usage and value of e-business by organizations: Cross-country evidence from the retail industry. *Information Systems Research*, 16(1), 61-84

## APPENDICES

### APPENDIX 1: QUESTIONNAIRE

#### Section I: General Information

a) Name of the Bank: \_\_\_\_\_

b) Position of the respondent: \_\_\_\_\_

c) Gender: Female \_\_\_\_\_ Male \_\_\_\_\_

d) Age group: *(Please indicate by ticking only once).*

- 0-25 years ( )
- 26-35 years ( )
- 36-45 years ( )
- Over 55 years ( )

g) Level of experience in banking industry *(Please indicate by ticking only once).*

- Less than 2 years ( )
- 3-7 years ( )
- 8-11 years ( )
- Above 11 years ( )

i) In the Kenyan banking sector, which of the following description best suits your organization

*(Please indicate by ticking only once).*

- Foreign owned bank ( )
- Foreign owned, locally incorporated bank ( )
- Local private bank ( )
- Local bank with government participation ( )



## Section II: E-business strategy adopted

In a scale from 1 to 5; No Extent (1), Little extent (2), Moderate extent (3) Great Extent (4) , Very great Extent (5) Indicate by using tick (√) the E-business strategy adopted.

S/NO	E-Business strategy	1	2	3	4	5
<b>A</b>	<b>Business to Business E-Business strategy</b>					
1	E-Procurement and E-Invoicing					
2	Online feedback and complaints mechanisms					
3	Agency banking					
4	Credit Information Sharing					
5	Partnering with other business entities like mobile network providers like Safaricom and Airtel, Insurance Companies and KRA to offer services to customers					
6	Filing returns online to relevant bodies like CBK, national government and county governments					
<b>B</b>	<b>Business to Customer E-Business Strategy</b>					
1	Digital cash-Mobile banking, Internet banking, ATMS, credit and visa cards					
2	Online loan applications, repayments and recovery					
3	Online feedback and complaints mechanisms					
4	E-marketing					
5	Online information services/Call or contact centers					
<b>C</b>	<b>Intra-Business E-Business Strategy</b>					
1	HR systems-payroll, E-recruitment,E-learning					
2	Performance Management systems					
3	Automation of business processes					
4	Administrative software programs					
5	Online feedback and complaints mechanisms					

### Section III: Effect of E-business Strategy on Performance of Commercial Banks

In a scale from 1 to 5; No Extent (1), Little extent (2), Moderate extent (3) Great Extent (4) , Very great Extent (5) Indicate by using tick (✓) the effect of E-business on performance.

S/NO	Effect of E-business Strategy on Performance	1	2	3	4	5
<b>A</b>	<b>Market share</b>					
1	Increase in customer outreach (numbers)					
2	Expanded geographical reach and greater market access					
3	Improvement of marketing strategies					
4	Enhanced public image and customer loyalty					
5	Keeping up with competition					
<b>B</b>	<b>Business Process Efficiency and Productivity</b>					
1	Improvement in internal and external communication					
2	Speed , accuracy and efficiency of processes					
3	Facilitation of new products and new business models development					
4	Improvement in employee management					
5	Proper implementation of internal controls					
6	Managing information, assets and infrastructure					
7	Enhanced accessibility to and relationships with suppliers, government and other partners					
<b>C</b>	<b>Customer Relationship Management</b>					
1	Provide availability of services 24/7/365					
2	Customization of products and personalized service					
3	Faster services and ease of access of information					
4	Streamlining customer interactions					
5	Proper service management					
6	Advanced satisfaction ratings					
7	Reduction of Turn Around Time (TAT)					
S/NO	Effect of E-business Strategy on Performance	5	4	3	2	1
<b>D</b>	<b>Operational Cost Reduction</b>					
1	Reduced marketing and customer support costs					
2	Reduction in staff cost through lower overtime pay and fewer number of staff performing a task					
3	Reduction on stationary, postage and courier costs					
4	Reduction in employee training costs					
5	Lower costs in loan follow up and recovery					
6	Lower logistics costs in procuring for goods					
7	Sharing of resources and costs with business partners					



**APPENDIX 2: LIST OF COMMERCIAL BANKS IN ELDORET**

- 1 African Banking Corporation Ltd
- 2 Bank of Africa Kenya Ltd
- 3 Bank of Baroda Kenya
- 4 Barclays Bank of K Ltd
- 5 Chase Bank Kenya Ltd
- 6 CFC Stanbic Bank Ltd
- 7 Commercial Bank of Africa Ltd
- 8 Consolidated bank
- 9 Co-operative Bank of Kenya
- 10 Credit Bank Ltd
- 11 Diamond Trust Bank
- 12 Ecobank Kenya Ltd
- 13 Equatorial Commercial Bank Ltd
- 14 Equity Bank
- 15 Family Finance Bank
- 16 FINA Bank Ltd
- 17 Guardian Bank Ltd
- 18 Housing Finance Ltd
- 19 Imperial Bank Ltd
- 20 I&M Bank
- 21 Jamii Bora Bank Ltd
- 22 KCB Ltd
- 23 K-Rep Bank Ltd
- 24 National Bank of Kenya
- 25 NIC Bank
- 26 Oriental Commercial Bank Ltd
- 27 Post Bank Ltd
- 28 Prime Bank Ltd
- 29 Standard Chartered Bank of Kenya
- 30 Trans-National Bank

Source: CBK Report, 2014

