INFLUENCE OF INFORMATION AND COMMUNICATION TECHNOLOGY ON CHOICE OF COMPETITIVE STRATEGIES IN COMMERCIAL BANKS IN KENYA

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DECLARATION

This project is my original work and has not been presented for a degree in any other University

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LIST OF ABBREVIATIONS

ATM:	Automated Teller Machine
CBK:	Central Bank of Kenya
ICT:	Information and Communication Technology
KBA:	Kenya Bankers Association
POS:	Point of Sale
SMS:	Short Messaging Services
EDI:	Electronic Data Interchange

DEFINITION OF TERMS

Information and Telecommunication Technology: It represents the hardware, software, systems, automation tools, databases and information content necessary to store and transmit information (Edvinsson and Malone, 2007). ICT has been used in the banking industry to mean core banking system which includes telephony banking, Automatic teller service provision, networking of branches, internet banking and point of sale banking services (Laudon and Laudon, 2001)

Competition: The rivalry among sellers trying to achieve such goals as increasing profits, market share, and sales volume by varying the elements of the marketing mix: price, product, distribution, and promotion (Blaug, 2008).

Strategy: The direction and scope of an organization over the long-term which achieves advantage for the organization through its configuration of resources within a changing environment to fulfill stakeholder expectations (Johnson and Scholes, 2005).

Competitive strategy: This is that part of business strategy that deals with management's plan for competing successfully- how to build sustainable competitive advantage, how to out maneuver your rivals, how to defend oneself against competitive pressure or how to strengthen the firm's market positioning (Thompson and Strikeland, 1996)

Competitive strategy is the distinctive approach which a firm uses or intends to use in order to succeed in the market place and it involves positioning the business to maximize the value of capabilities that distinguish it from its competitors (Porter, 1980)

Thompson and Strikeland (1998) define company strategy as the game plan that management has for positioning the company in its chosen arena, competing successfully, pleasing customers and achieving good business performance.

OPERATIONAL DEFINITION OF TERMS

For the purpose of this study,

Networked branches: These are interconnections between bank branches through wide area network, in which case the transactions done are real time and customers can operate their accounts in other branches as if in the domicile branch through electronic data interchange.

Telephony banking: Telephone banking is a service provided by a bank or other financial institution,that enables customers to perform financial transactions over the telephone, without the need to visit a bank branch or automated teller machine. Telephone banking times can be longer than branch opening times, and some financial institutions offer the service on a 24-hour basis. From the bank's point of view, telephone banking reduces the cost of handling transactions by reducing the need for customers to visit a bank branch for non-cash withdrawal and deposit transactions.

Electronic banking: Any banking activity accessed by electronic means. It includes Automated Teller Machines (ATMs), automated call centers, digital cash, internet banking and mobile banking.

Internet banking: A system allowing individuals to perform banking activities at home or in office, via the internet. Some online banks are traditional banks which also offer online banking, while others are online only and have no physical presence. Online banking through traditional banks enable customers to perform all routine transactions, such fund transfers, balance inquiries, bill payments, and stop-payment requests, and some even offer online loan and credit card applications. Account information can be accessed anytime, day or night, and can be done from anywhere. In this case, the traditional banks are offering online banking services.

Point of sale banking: Point of sale (also called POS or checkout, during computerization later becoming electronic point of sale or EPOS) is the place where a retail transaction is completed. It is the point at which a customer makes a payment to the merchant in exchange for goods or services. Recently, agency banking is being used to imply the same with exemption that with agency, one does not need to buy but can make deposit, do balance request and make cash withdrawals amongst other transactions

Agency banking: A model of banking where an individual running a business in authorized and licensed to do transactions like cash deposits, bill payments, cash withdrawals, checking balances, loan origination on behalf of the bank and paid a commission. The agent usually operates with aid of POS machine and/or mobile phone which are configured to access core banking system and transactions done are real time.

Competitive strategies: action plan that is devised to help a company gain a competitive advantage over its rivals. Competitive strategies are essential to companies competing in markets that are heavily Long-term with alternatives for consumers. Porter states that firms persue either of two main types of strategies; product differentiation or cost leadership.

For instance, if a firm targets customers in most or all segments of an industry based on offering the lowest price, it is following a cost leadership strategy. If it targets most or all segments based on unique attributes rather than the price (e.g via higher product quality or service) it is persuing a differentiation strategy.

Trend Analysis: This is a form of comparative analysis that is often employed to identify current and future movements of an investment or group investments. The process may involve comparing past and current variable ratios as related to various institutions in order to project how long the current trend will continue. This type of information is extremely helpful to investors who wish to make most from their investments.

ABSTRACT

This study sought to determine the influence of information and communication technology on choice of competitive strategies in commercial banks in Kenya. The target population was the 43 licenced commercial banks by Central bank of Kenya of which 77% responded. Census study method was used to collect the data required for the study. Questionaires were administered to the Operations managers in the banks. Data from the questionaires was analysed and frequency tables, means and percentages were used to present the information. Asimple trend analysis was done to ascertain how competetive strategies have been changing with advent of ICT innovations. Findings indicated that majority of the banks had embraced product differentiation and cost leadership strategies together and not in exclusion. ICT innovations were highly integrated in the competitive strategies in the banking sector. The study found that networked branches had positive influence on choice of competitive strategies in the banks. They had led to more product differentiation in the banking industry. Networked branches had not led to lower pricing but better service delivery by taking the services near to the customers and enhancing brand visibility. The study also found that electronic banking had influenced choice of competitive strategies by leading to product differentiation and cost leadership strategies. The study also found that before the advent of ICT innovations, the banks were competing on bases of market share since the banking industry was not facing stiff competition as at the moment. The agency and banking was being applied by only eight banks and these were amongst the main players in the industry controlling large customer base which necessitated application of agency banking as part of alternate business service delivery channels. The findings also indicate that with the current trend of ICT innovations, the banking industry will have higher efficiency in operations, more customer relationship management focus, lesser and smaller branches and finally more online banking and strategic partnerships in globalization of financial service delivery. The study recommends a study be done on how ICT has influenced strategic partnerships in the financial partnerships leading to relational rents. It also recommends policy be put in place to ensure product testing before product launch to protect consumers.

CHAPTER ONE

INTRODUCTION

Competition is a pervasive challenge facing organizations, including commercial banks, in Kenya and all over the world. Currently, there are two real areas in which commercial banks can compete: Price or interest rate and credit quality. However, as the banking business becomes stronger and more lucrative, commercial banks have become more aggressive and are now offering more and more attractive rates to clients and pursuing clients more aggressively. They have also differentiated themselves in technological innovations, training and development of employees and the quality of staff hired to drive their competitive strategies (Ruckes, 2004)

1.1 Background of the Study

The information and communication technology (ICT) has brought a complete paradigm shift on banks performance and customer service delivery in the banking industry. To go global and improve customer service delivery and reduce transactional cost, banks have invested heavily in ICT and have widely adopted ICT networks for delivering a wide range of value added products and services (Kozak, 2012)

The current market is very dynamic and business organizations, especially the banking industry of the 21st century operate in complex and competitive environment characterized by these changing conditions and highly unpredictable economic climate. ICT is at the Centre of this change and managers cannot ignore its role in remaining relevant in the market (Laudon and Laudon, 1991)

Today, information and communication technology has become the heart of banking sector, while the banking industry is the heart of every robust economy. If it collapses, so will the economy. ICT has created a new infrastructure for the world economy to become truly global and also provided the users of new technology a competitive advantage over their rivals. Electronic banking has become the main technology driven revolution in conducting financial transactions, however, banks have made huge investments in ICT to meet the ever changing satisfaction levels of consumers, (Kozak, 2012)

Woherem (2000) concluded that only banks that overhaul the whole of their payment and delivery systems and apply ICT to their operations are likely to survive and prosper in the new millennium. He advises banks to re-examine their service and delivery systems in order to properly position themselves within the framework of the dictates of the dynamism of information and communication technology.

Commercial banks in Kenya have realized tremendous growth in the last six years and some of them have expanded to the east African region. Automation has seen the banks move from the traditional banking to better meet the growing complex needs of their customers and globalization challenges. The banking industry is changing rapidly such that even when satisfied today, competitive pressures can create problems for us tomorrow. This calls for strategic decision making to mediate between the force between the organization and its environment. Ansof and McDonnell (1990) defines strategic management as a process through which a firm managers its relationship with the environment in which it operates.

A firm would be said to possess a competitive advantage in ICT when it has value-creating processes and products that cannot be duplicated or imitated by other firms through technology and innovations. Porter (2010) holds that the basic steps of establishing competitive advantage entail identifying unsatisfied need in the market, determining the specific success requirements of the market in meeting the unsatisfied needs, identifying the firm’s core competencies and determining how well they match with the success requirements of the market then ultimately establishing distinctive competencies which in this case would refer to things that the firm can do better than its competitors.

1.1.1 Integration of Information and Communication Technology with Strategy

Porter (1980) explains that competetive advantage exists when a firm is able to deliver the same benefits as competetitors but at a lower cost(cost advantage), or deliver benefits that exceed those of competing products (diffrentiation advantage), thus a competetive advantage enables the firm to create superior value for its customers and superior profits for itself. The ICT strategy defines the technical direction and framework for company's technology based developments , services and risk management.The ICT strategy embodies the principles and prioroties set within an organization's strategic plan and any other subsidiary strategies.(Wendy,2004).

The integration of technology with strategy is not enough, and technology management should involve the strategic guidance of technology as a source of sustainable competitive advantage (Garcia, 2007). Failure may indeed begin when the very early stages of a project converge too quickly on an ICT strategy. It may begin when not enough attention has been given to the market leader's use of ICT and attention has been prematurely focused on requirements planning, systems design, project management, schedules and budgets.

While it is important to align corporate and ICT strategy (Johnson and Scholes, 2005) it is not unreasonable to suggest that, at the same time, effective integration strategies depend upon an understanding of how competitors use this technology in support of their own company's strategic objectives. Learning how competitors use ICT, however, is very challenging because a competitor's strategy may be difficult to observe, measure, and interpret. As a result, some organizations may be inclined to avoid an extensive analysis of their competitor's ICT strategy and thereby limit their understanding by focusing inward on their own firm, their own supply chain, and their own customers (Garcia, 2007). The challenge, then, is to avoid the temptation to move too quickly at the early stages and to take the time necessary to understand the competitive environment in order to develop and align the ICT with the competitive strategy of the organization.

1.1.2 Banking Industry in Kenya

The Central Bank of Kenya has licensed a total of 43 institutions as players in the Kenyan banking industry. They include 26 local commercial banks, 1 Mortgage financial institution, 13 foreign commercial banks and 3 public financial institutions. The 43 financial institutions have formed the Kenya Bankers Association (KBA), which serves as a lobby group to push for the interests of the members and address any issues of common interest to the members.

The commercial banks and mortgage finance institutions are licensed and regulated pursuant to the provisions of the Banking Act (Cap 488) and the Regulations and Prudential Guidelines issued by the Central Bank of Kenya. They are the dominant players in the Kenyan banking system and their main business is dealing in money in the sense that they accept deposits of money from the public to keep them in their custody for safety.

In Kenya, commercial banks also deal in credit, whereby they create credit by making advances out of the funds received as deposits to willing borrowers hence mobilizing savings in the economy. Other functions of commercial banks include agency services like insurance services and general utility services like custodian of precious items (CBK, 2014). The banking sector was liberalized in 1995 and exchange controls lifted. The CBK which falls under the minister of finance docket is responsible for fomulating and implimenting monetary policy and fostering the liquidity and proper functioning of the financial system.

Banking being a highly information intensity industry implies that customers demand accurate information regarding their accounts and this information need to be easily accessible and retrievable.as a result, ICT system for core banking activities are used in the collection, processing and output of information to uses and customers (Nag et al.2007)

1.2 Statement of the Problem

Organizations have come to the realization that in the current competitive market every investment, including investments in Information and Communication Technology (ICT), ought to deliver returns either in the short run or in the long run. Keen (2008) holds that ICT can confer springboard competitive advantage on an organization. Alternatively, it can add value to a firm's existing capabilities and enable it to completely redefine the rules of the competitive game. Indeed, Ciborra and Jelassi (2004) argue that the iron law of market competition prescribes that those who do not implement superior ICT solutions are driven out of business. In Kenya, commercial banks are characterized by huge ICT investments which are aimed at enabling enhancement of competitive strategies like sophisticated product development, better markets infrastructure, implementation of reliable techniques for control of risks and ability to reach geographically distant and diversified markets (Blaug, 2008).

An audit of the applications of ICT in the Kenyan banking sector depict that all commercial banks in Kenya are currently undertaking similar ICT investments like networked branches, Automated Teller Machines (ATMs), internet banking, Short Message Services (SMS) updates, Telephone Banking, Electronic Bill Payment, and Point of Sale (POS) Banking services (KBA, 2014). Nonetheless, the competitive ranking of commercial banks in Kenya depicts that some commercial banks are highly ranked than others with ICT being one of the distinguishing factors (PWC, 2014).

Banks face a myriad of risks ranging from reputational, operational, legal, credit, market, liquidity IT and Strategic risk. Strategic risk is about the long term decisions which the banks take and if not thoroughly informed may pludge the institution to great loses (Bessis, 2012). Some work has been done on how ICT affects banks performance. Aduda and Kingoo (2012) found that there is positive relationship between electronic banking and banks performance. Otieno (2010) Concluded that ICT use has led to enhanced competitive advantages in Kenya by improved and unique product and service quality, lower operational costs and reaching wider markets, however research on how ICT informs the choice of competitive strategy is still in its infancy. The need to ascertain the influence of ICT innovations on choice of the competitive strategies of commercial banks still persists. This study sought to fill the identified knowledge gap by investigating influence of Information and Communication Technology on choice of competitive strategies of commercial banks in Kenya.

1.3 Objectives of the Study

The main objective of the study was to investigate influence of Information and Communication Technology innovations on choice of competetive strategies of commercial banks in Kenya. The specific objectives of the study were as follows:

i) To determine the influence of networked branches on choice of competetive strategies of commercial banks in Kenya.

ii) To ascertain the influence of electronic banking on choice of competetive strategies of commercial banks in Kenya.

iii) To establish the influence of Point of Sale banking services on choice of competetive strategies of commercial banks in Kenya

iv) To deduce the moderating effect of asset base of a bank on choice of competetive strategies of commercial banks in Kenya.

v) To discern the influence of consumer acceptance of ICT innovations on choice of competetive strategies of commercial banks in Kenya

1.4 Research Questions

i. What is the influence of networked branches on choice of competetive strategies of commercial banks in Kenya?

ii. What is the influence of electronic banking on choice of competetive strategies of commercial banks in Kenya?

iii. What is the influence of Point of Sale banking services on choice of competetive strategies of commercial banks in Kenya?

iv. What is the moderating effect of asset base of a bank on choice of competetive strategies of commercial banks in Kenya?

v. What is the influence of Consumer acceptance of ICT innovations on choice of competetive strategies of commercial banks in Kenya?

1.5 Significance of the Study

The findings of this study is of benefit various stakeholders of commercial banks including the management, regulators, scholars and business researchers, employees and other stakeholders.

The significance to specific stakeholders are as folows:

The study provide information to management of commercial banks which have adopted or are adopting or are expanding their ICT strategy framework by providing recommendations on the improvement of ICT investments which can assist to fastrack the attainment of efficient cost managemnt and production of unique products for the target market niche of commercial banks in Kenya.

The Policy makers in the government have been furnished with crucial information that can lead to formulation of policies, rules, regulations and goals to be pursued in order to efficiently and effectively regulate the implementation of ICT solutions in commercial banks to ensure that consumers get value for their money in terms of cost and products which are carefully tailored to meet their needs.

The scholars and business researchers are able to borrow from the findings of this research to support literary citations as well as develop themes for further research. Specifically, the study makes theoretical, practical and methodological contributions necessary in the professional extension of existing knowledge in strategic management.

The findings of this study also shed light to the employees and other stakeholders of organizations as to why to accept change and take part as it comes in the organizations in the process of integration of ICT with strategic objectives

1.6 Scope of the Study

The study focused on the investigation of the influence of networked branches, electronic banking and Point of Sale banking services on competetive strategies of commercial banks in Kenya. The study collected primary data from the operation managers in charge of implementation of ICT projects in the 43 commercial banks since they are perceived to have the relevant information required in the study while secondary data will be collected from the publications and websites of the commercial banks, CBK and Nairobi Securities Exchange (NSE).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter shall discuss the concept of competitive advantage. It shall also discuss the role of information technology and innovations in facilitating an organization's attainment of a competitive advantage. The theoretical contentions and empirical evidence on competitive advantage resulting from improved products and service quality. Empirical studies on the subject will be reviewed and research gap identified to justify the study.

2.2 Theoretical review

There are various theories that explain the competitive advantage in business of which have with time evolved to reach levels of integration in use for optimum results in business performance and also some models have been advanced to explain the role and application of ICT innovations in business operations and strategies.

2.2.1 Theories of Competitive strategies

When a firm sustains good profits that exceed the average for its industry , the firm is said to posess a competitive advantage over its rivals.The goal of much of business strategy is achieve sustainable competitive advantage.There are two basic types of competitive advantage a firm can possess: low cost or differentiation. (Porter 1980).

The sources of cost advantage are varied and depend on the structure of the industry. They may include the pursuit of economies of scale, proprietary technology, preferential access to raw materials and other factors. A low cost producer must find and exploit all sources of cost advantage. If a firm can achieve and sustain overall cost leadership, then it will be an above average performer in its industry, provided it can command prices at or near the industry average. In a differentiation strategy a firm seeks to be unique in its industry along some dimensions that are widely valued by buyers. It selects one or more attributes that many buyers in an industry perceive as important, and uniquely positions itself to meet those needs. It is rewarded for its uniqueness with a premium price (Porter, 1985)

A Resource Based View (RBV) as coined by Birger Wernefelt , (1984) advanced the idea that strategy to a firm is a function of compliments of the resources held. The essence of the RBV model is that competetive advantage is created when resources that are owned exclusively by the firm are applied to developing unique competencies thus resulting advantage can be sustained due to lack of substitution and substitution bu the firms competitors.Competetive advantage ultimately can be attributed to ownweship of valuable resources that enable the company perform its activities better than competitors. Organizational capabilities are defined by the complex combination of assets, people and processes that companies use to transform inputs into outputs.The nature of RBV ensures: inimitability, durability,appropriability and competetive superiority.

The Capability Based view (CBV) argues that capabilities are the source of competetive advantage while resources are the source of capabilities .Grant(1991) suggetsed that resources do not contribute to sustainable competetive advantages for a firm, but its capabilities do.He defines the capabilities as the firm's capacity to deploy resources, usually in combination using organizational processes and effect a desired end.Teece et al.(1997) define dynamic capabilities as, 'The firm's ability to intergrate, build and reconfigure internal and external and external competencies to adress the rapidly changing environments'. Dynamic capabilities approach endeavors to analyse the sources of wealth creation and capture by firms. Dynamic capabilities thus reflect an organization's ability to achieve new and innovative forms of competetive advantage given path dependencies and market positions (Leonard B, 1993).

Market based View (MBV) of strategy argues that industry factors and external market orientation are primary determinants of firms performance(Bain, 1968; Porter 1980,1985,1996) . This view includes the positioning school of theories of strategy and theories developed in the industrial organization economic phase of Hoskisson's account of strategic thinking(of which Porter's in one example) (Hoskisson et al .1999). Bain (1968) studied a firm with monopolistic structures and found that barriers to entry, product differentiation, number of competitors and the level of demand affect firm's behavior.

The Knowlwdge Based View suggest that knowledge has a special characteristics that make it the most important and valuable resource. Hamel (1994) argue that know-how, intellectual assets and competencies are the main drivers of superior performance in the information age.Evans (2003) pointed out that material resources decrease when used in the firm, while knowledge assets increase with use. Technology, capital , market share or product sources are easy to copy by other firms while knowledge is the only resource that is difficult to immitate, hence leading to the increased poaching of key managers from the competition to transfer the experience and knowledge to the new company.

Relational View (RV) critiques the RBV assumption that resources are owned by one firm by arguing that a firm's critical resources may extend beyond the firm bounderies. Dyer and Singh (1998) suggest that inter- firm linkages may be a source of relational rents and competetive advantage. A relational rent is a supernormal profit jointly generated in an exchange relationship that can not be generated by either firm in isolation and can only be created through joint idiosyncratic contributions of the specific alliance partners.

Recent views indicate that unlike traditional strategies which would take years to review, with the current business environment being so dynamic, opportunities for leveraging competetive advantage are transient. The strategy life cycle is shorter and hence they are formulated , executed, monitored, assesed and revised within a short period, virtual enterprises are being formed and disbanding with great rapidity.

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

The resource based view (RBV) is used as a framework to guide this study. The RBV is an appropriate lens to guide this research due to its focus on resources and capabilities as sources of advantage. The research finds support from propositions of the RBV, in that the model demonstrates sources of advantage are based on organisational capabilities which are valuable, firm specific, and socially complex. As such, the integration of capabilities evident in the integrated model of advantage is a likely source of sustained competitive advantage. This means advantages gained from the integration of capabilities are not easily imitated or competed away.

2.2.2 Models of Resource based view applied in Information technology.

Businesses that rely on information, exposure and international trade stand to gain from innovative technology through increased customer engagement, clients receiving better product knowledge, increased sales, better customer service, reduced costs, and increased productivity (Parthasarthy and Seth ,1992) The currently dominant view of corporate strategy resource-based theory or resource-based view (RBV) of firms is based on the concept of economic rent and the view of the company as a collection of capabilities. This view of strategy has a coherence and integrative role that places it well ahead of other mechanisms of strategic decision making.

Traditional strategy models such as Michael Porter\'s five forces model focus on the company's external competitive environment. Most of them do not attempt to look inside the company. In contrast, the resource-based perspective highlights the need for a fit between the external market context in which a company operates and its internal capabilities.

In contrast to the Input / Output Model (I/O model), the resource-based view is grounded in the perspective that a firm's internal environment, in terms of its resources and capabilities, is more critical to the determination of strategic action than is the external environment. "Instead of focusing on the accumulation of resources necessary to implement the strategy dictated by conditions and constraints in the external environment (I/O model), the resource-based view suggests that a firm's unique resources and capabilities provide the basis for a strategy.

The resource based view of strategy emphasizes economic rent creation through distinctive capabilities. Economic rent, or

Economic Value Added (EVA), is what companies earn over and above the cost of the capital employed in their business. It is the measure of the competitive advantage, and competitive advantage is the only means by which companies in competitive markets can earn economic rent. Resources (including ICT resources) have then to be invested wisely in the value chain process to realize these benefits.

The concept of supply chain management (SCM) enjoys growing popularity mainly because it promises nothing less than a sustainable competitive advantage to those organizations implementing it (Handfield, 1999). Successful supply chain management strategies enable organizations to reduce costs while simultaneously improving service and product quality (Keen, 2008). The realization of these benefits can provide a significant competitive advantage over other organizations. However, in order to gain this advantage, it is important to Implement a comprehensive supply chain management initiative that includes technological, Organizational and attitudinal changes (Burgess, 1998). The value chain model argue that the use of ICT enables value chains to become networked ,there are more value web constellations and the role of customer increases in service based information society. The drivers of value chain interaction are enabled by ICT which leads to faster communication, seamless flow of production process, lesser wastage and cost effective production. Porter's Value chain model depicts that competitive strategies can be achieved by enhancing firms ability to deal with customers, suppliers, substitute products and services. Large investments in Complex ICT that increases efficiency can create barrier to entry in the market. ICT can be used to lower costs of production by reducing costs of business processes and reduce cost to customers and suppliers. It also plays major role in differentiation by creating new features that improve firms existing products, coming up with new products thereby resulting in unique products.

In the banking sector, ICT has created applications that has brought by new products, faster service delivery and unique modification of current products. Electronic Data Interchange (EDI) is used to communicate electronically within all branches. Like email, EDI enables the sending and receiving of messages between computers connected by local or wide area network. Automated Teller machines (ATMs) have been playing pivotal role in the advancement of this technological transformational change of the banking scene. Leornard and Spencer (1991) found that great number of customers perceived banks with ATMs as being either very successful or somewhat successful. Lewis (1993) Found that the ATMs improves quality of service, reduces cost, presents no risks to customers and it is easy to use. The use of ATMs has enabled data interchange between the banks that enable customers to get services of cash withdrawals from other banks ATMs and through central clearing the transactions are settled. ATMs services have been enhanced to produce account statements, loan requests, credit card payments, funds transfers among other services.

Internet banking has allowed banks to practice new generation banking activities without having to invest in expensive physical branches. The findings of a comprehensive study by Daniel (1999) indicated that the market share or the strength of the bank is positively related to its decision to provide internet banking.

In developing countries, SME industries are experiencing challenges created by the globalization of production and shift in competitiveness. While ICT is linked to a firm's ability to be innovative with the way it introduces new products, services or even its business processes, it is important for organizations to support and provide the appropriate training to its employees so they have the ability to produce, be more efficient, reduce cost and assist the organization in gaining a competitive edge. Additionally, the opportunity is in helping traditionally analog industries to migrate to the technological world (Nag, 2007)

2.2.3 Competitive strategy in Information and Communication Technology

Porter (1985) States that there are two main types of competetive advantage a firm can possess: Low cost or differentiation.The two basic types of competitive advantage compbined with scope of activities for which a firm seeks to achieve them, lead to three generic strategies for achieving above average performance in an industry, which now include market focus (Figure 2. 1) Although Porter had initially claimed that a firm could only persue either of the strategies, eleven years later, he revised his thinking and accepted the fact that hybrid business strategy could exist in a pragmatic approach to unstable business environment. Depending on the market and competetive conditions hybrid strategy should be adjusted regarding the extent which each generic strategy(cost leadership and differentiation) should be given priority in

practice, see Figure 2. 1

Figure 2. 1 The Porters' matrix of competetive strategies (Porter, 2010)

Product quality

Over the past two decades, product quality has been heralded as the source of competitive advantage. Quality has gone through an evolution process, from an operational level to a strategic level, and some scholars have given strong support for the view that quality must be adopted as a strategic goal in organizations (Adam, 1992). Porter (1980) categorized quality as a primary basis for differentiation strategy. He contends that firms adopting this strategy will uniquely position their products based on several attributes leading to a premium price. He specifically suggests that quality creates a differentiation point which separates, even insulates, a firm from competitive rivalry by creating customer loyalty as well as lowering price sensitivity. In this way, the firm will be protected from competitive forces that reduce profitability.

A second line of argument supports the link between quality and low cost. Deming (1982), with his quality improvement chain concept, argued that organizations can enhance their competitiveness by improving quality. This will result in cost reduction through eliminating scrap and rework. The concept of quality costs developed by Crosby (1979), provides explanations on the link between quality performance and cost reduction. The idea of quality cost suggests that any defective products (i.e. poor quality) will incur costs, commonly labeled as failure costs, which include the costs of rework and scrap. In the light of the link between quality performance and quality costs, firms need to devote their efforts on controlling processes to minimise defects in their outputs, which will also reduce the failure costs. In turn, this reduction will result in lower production costs and overall operation costs (Millar 1999). This is because the improvement of quality performance will not only impact on one particular functional area (i.e. production) but also inter-functional areas within organizations (Mandal, 2000).

Similarly, Philips et al. (1983) noted that among the many sources of differentiation, quality was the approach that most often characterizes a differentiation strategy. They also noted the conventional wisdom which suggests an incompatibility between high quality products and low cost for the reason that quality usually requires more expensive materials and processes, which is not supported under a cost leadership regime. This school of thought, however, does not totally negate the link between high quality and low cost. Rather, it suggests that high quality products will eventually result in lower costs after the firm attains benefits on economies of scale via higher market share (Philips et al., 1983).

Product Differentiation

Hayes and Pisano (1988) contend that from a managerial point of view, firms can develop successful strategies through focusing not only on the product building block but extending their strategies for conveying their meanings also through other building blocks like by partner network, distribution channels, suppliers and customers relationships. This can reinforce the meaning itself by conveying it through different means. Second is by conveying the meaning, addressing the language not only to customers, but also to other different stakeholders (suppliers, politicians, other companies of the same ecosystem, citizens, etc.). This calls for a differentiation of strategies and languages, customized for different users.

Third, is by sensing the environment and understanding the signs, weak signals in order to imagine scenarios in advance. The managers need to imagine the future meanings and to study a strategy to assist in conveying them through building blocks. Fourth is by drawing the current meaning or rather building a block matrix. This helps the manager to understand the structure of its company in terms of design and languages shown to the stakeholders. Fifth is by deciding the action to be taken as regards these relationships. This assists the strategy manager to focus on the uncovered building blocks and the less-represented meanings which assures the organization of a competitive advantage in the industry.

Cost Focus

Several other studies have exemplified the link between quality performance and cost reduction. For example, Maani et al. (1994) showed that quality performance (in terms of scrap, rework, and customer complaints) not only has a favorable impact on the operational variables but that its impact will also be apparent at the business performance level.The arguments for quality costs have been extended to the point where firms can achieve better financial performance by reducing failure costs rather than by improving sales (Harrington, 1987). This was evidenced in the 1980s when the lower price and higher quality of the Japanese products flooded global markets which had previously been dominated by Western companies (Raisinghani et al., 2005) This causal link between quality and cost, therefore, is different from that held in a classical economics theory, as was noted earlier. Here, quality is considered as directly inverse to cost. This seems to be compatible with a cost leadership strategy that seeks the lowest possible unit cost in production.

The chain of reactions starts with quality improvement which results in cost reduction, which results in firms having the opportunity to offer high quality with low prices. In this way, firms will be rewarded with higher market share and a better competitive position in the market (Deming, 1982). In essence, this school of thought holds that there is no conflict between quality and cost as opposed the traditional view which suggests that higher quality means higher costs.

Market Focus

Porter (1980) advocates for the open innovation strategy which among other requirements provides that challenge of innovation should be clear and important, have meaningful rewards, be competitive, and protect the core system while providing opportunities for collaboration and renovation of the innovation approach. He also holds that market orientation and technology leadership can give competitive advantage. He contends that the pursuit of successful strategies, particularly strategy-technology integration, is associated with certain organizational conditions including a relatively long period for implementation and a need for careful planning with clear mission and objectives.

Congden (2005) also holds that the investment should be linked to the implementation of the firm’s business strategy, and the role of technology should be defined in the strategy and that the top management should develop their knowledge about computer-based technologies. Lastly, measures should be taken to improve engineers’ skills in computer-based technologies, provide on-going training to technical staff, and build a culture of innovation.

2.3 Empirical literature

This refers to the literature or studies that relate to or argue positively with the study. Several studies have been done to this effect.

2.3.1 Studies on Information and Communication Technology application in banking Industry.

A study on the effect of ICT in banking operations in Nigeria by Akinlolu (2010) found that the adoption of ICT in banks had improved customer services, facilitated accurate records, provided for home and office banking services, ensured convenient business hour, prompt and fair attention and enhanced speed of service. The study also concluded that ICT improves banks image and lead to a wider faster and more efficient market and it was a key competitive edge factor for banks sampled.

Matthew and Ibikunle (2012) investigating the impact of ICT on banks, a case study of The Nigerian banking industry found that ICT investment does not lead to productivity growth at firm level by itself. It depended on how the technology was actually used in the business processes. The ICT investments had to be combined with complementary investment in working practices, human capital and firm restructuring to have impact on performance. They however noted that basic ICT infrastructures like Computer and its peripherals, local area networks and ATMs are crucial to the operations of the banks and that to meet the ever increasing sophistication of customers, new government policies and to stay competitive in a fast changing economy a scalable, flexible and robust ICT solution was essential.

The study on the relationship between electronic banking and financial performance among commercial banks in Kenya by Josiah and Nancy (2012) found that banking industry in the last five years have been in process of significant transformation begat of innovations in ICT. Their study concluded that there is significant ICT has positive impact on the banks performance, by making it easy to offer services in terms of cost and speed.

Okiro and Ndungu (2013) researching on the impact of mobile and internet banking on performance of financial institutions in Kenya concluded that commercial banks had the highest rate of usage of internet banking among the financial institutions sampled within Nairobi. SACCOs wee slowly adopting internet banking while microfinance institutions had not yet adopted internet banking. The main service in internet banking was in seeking product rate information. Mobile banking uptake was high in all the banks sampled compared to internet banking. The study concluded that electronic banking had enhanced performance of the banking industry due to increased efficiency, effectiveness and productivity. The study also led to conclusion that mobile banking was facing various challenges among them being system delays by mobile money transfer service providers, slow processing of transactions especially during weekends, high transaction costs, limit to daily transactions and frauds.

A study by Nefa (2013) on Agency banking operations as a competitive strategy of commercial banks in Kisumu City found that the control policies and procedures, technological advancement and regulations put in place by both the agents and commercial banks had made the agency banking operations viable but was facing challenges such as reputational risk, consumer protection and legal risk. The study also concluded that service delivery though the point of sale service offered by the agents had made it cheap to offer banking services like cash deposits and withdraws which was the most common type of transaction noted. The study recommended that the banks the banks pursuing agency banking as a competitive strategy should also put in place mechanisms to mitigate the risks brought about by agency banking operations.

User acceptance is often pivotal factor and a central focus of information system implementation research in determining the success or failure of an information technology product (Davis, 2003). When studying user acceptance of microcomputer technology , Igbaria (2006) found that availability of information technology does not necessarily lead to its acceptance. Actually, Angulo (2008) said that most information system failures result from lack of user acceptance rather that poor quality of the system.

Boyd (1993) Studying ‘Size and Perfomance of banking Firms’ concluded that the assets that the banks owned were key determinant of the quality of the innovations the bank invested in.Indeed Goddard (2004) says that ICT being an expensive venture, any investment into it requires prudent allocation of resources which in this case the asset base determines the choice of ICT strategy to be employed.

From these studies it is evident that banks are applying ICT to offer better services to consumers, reach more markets, offer unique products and also as the trend in competition. Hull (2011) in Risk management in financial institutions observes that banks have to search for the best IT solutions that can remain relevant for the next ten years as strategies get revised, the ICT investment should remain relevant because of the attached cost of acquisition and application in the business environment. In this study the researcher investigated the influence of ICT innovations in choice of competitive strategies in the commercial banks in Kenya in the recent years.

2.3.2 Integration of Information and Communication Technology with Strategic Management

A good strategy focuses less and less on the product or the service itself and more and more on the rendering of services, reputation and so forth. Information technology can lead to a network form of economic activity that will lead to improved technical performance at reduced cost, communications and media convergence, the decentralization of intelligence throughout communications systems, the ability to separate out and purchase individual elements of communication technologies, increased mobility leading to profitability and interoperability using pre-set standards and increased networking capacity of the technology. Integrated organization deliver many advantages including accountability due to the direct knowledge of specific or localized concerns, combined with on the spot assistance and expertise, adaptability to deal with each type of project, ability to use multidisciplinary teams and task forces and promotion of common understanding that facilitates trust and mutual sharing of ideas (Garcia, 2007).

Several scholars have suggested the unification of differentiation and cost leadership brought by quality. Belohlav (1993), for example, argued that attaining high quality performance allow firms to pursue not only a differentiation strategy, but also a cost leadership strategy. He further suggested that quality bridges the two different perspectives of strategy into one dimension called the value dimension. From a theoretical point of view, this argument allows the compatibility between cost leadership and differentiation strategies which has been extensively debated in strategic management literature (Hill, 1988). Moreover, it is consistent with the demand for pursuing cumulative dimensions of performance (Noble, 1995). Specifically, Reed et al. (1996) show how quality simultaneously encompasses both differentiation and cost leadership. They argue that by focusing on customer needs, quality is concerned with providing better products that satisfy customers' needs. This is associated with differentiation strategy. At the same time, by focusing on internal processes, quality also leads organizations to reduce cost as a result of the elimination of defects and waste. This makes it compatible to cost leadership strategy. The implication of this notion is that competing on quality will provide firms with double advantages by providing customers with both differentiated products and lower costs (Ho et al., 2005).

However, even in situations where IT may promise overall organizational benefits, the strategic coalition in the organization may not employ it if key groups threaten sanctions such as the withdrawal of labor to prevent their redundancy consequent on the introduction of integrated IT systems. Other hindrances include divergence of individual and group aims, organizational culture (the not invented here syndrome) and the politics of the organization (Garcia 1997)

2.3. 3 Summary and Research Gap

The main issue being addressed in this study is the lack of clear information on how to align the information technology investments with the generic competitive strategies of organizations. Porter stated that achieving sustainable competitive advantage requires a firm to make choice about the type of competetive advantage it seeks to attain and tha scope within which to attain it.Investing in ICT in itself is a strategic decision since it is expensive and is meant to serve the organization for long time, hence the need to well thought out plan as to where the investment is bound to take the business in terms of strategy. The empirical studies have depicted that there are several advantages that accrue from various types of investments in information technology and innovations. However, there is still need to establish how ICT informs the choice of competitive strategy for an organization. As many commercial banks in Kenya continue to dedicate more resources in trendy information technologies and innovations; it is prudent to ensure that relevant and sustainable competitive advantages are accrued to assist in attaining the strategic objectives of the firms within the commercial banking industry and other industries at large.

2.4 Conceptual Framework of the Study

The study conceptualizes that the independent variables (networked branches, telephone banking, internet banking and Point of Sale banking services) affects the dependent variable (choice of competitive strategies of commercial banks in Kenya).Although there are moderating variables, directly or indirectly affecting competetetive strategies in the banks, The competitive strategies of the commercial banks will be operationalized through the cost reduction and product differentiation strategies (see Figure 2.2)

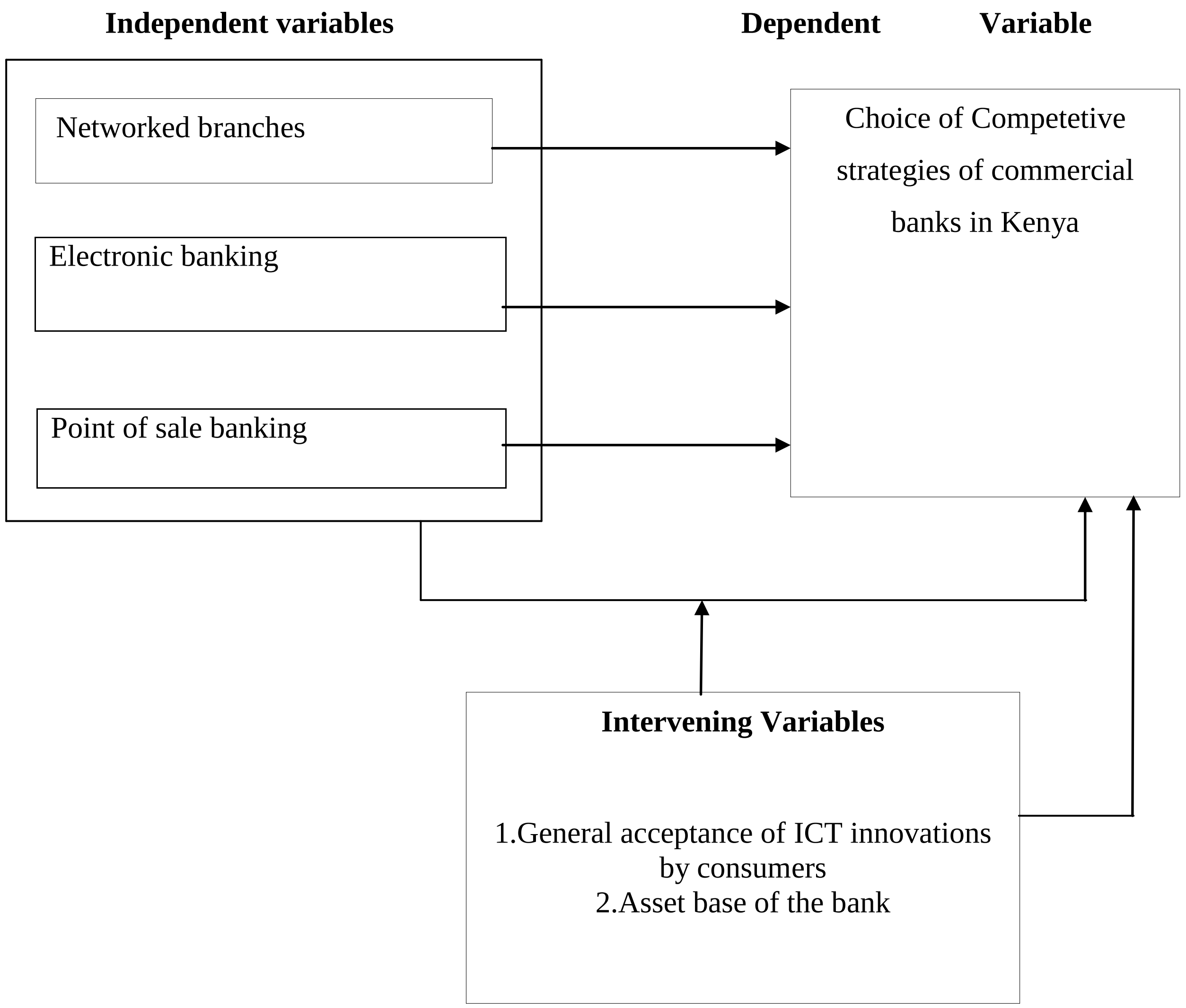

Figure 2.2 Conceptual Framework of the Study. **Source (Author, 2015)**

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology of the study. It comprises of the research design, population, sampling frame and technique, data collection procedure, data processing, data analysis and presentation techniques.

3.2 Research Design

This study used the descriptive survey design. According to Kothari (2008) descriptive research includes surveys and fact-finding enquiries and describes the state of affairs as it exists at present. A descriptive research design helps to ascertain and be able to describe the characteristics of the variables of interest in a situation (Sekaram, 2006). It portrays the characteristics of a particular situation and it has the advantages of accuracy and flexibility (Mathooko, 2004). The descriptive research design enabled the researcher to summarize the findings in a way that provide information on the influence of ICT on choice of competitive strategies of commercial banks in Kenya.

3.3 Population and scope of study.

A population is a group of individuals, objects or items from which samples are taken for measurement. The target population for this study was the 43 commercial banks in Kenya licensed by the Central Bank of Kenya as at 31st December 2014.These included 6 large commercial banks, 14 medium sized banks and 23 small banks (Appendix I).

A *census study* will be conducted. The target respondents were the Operations managers in charge of strategy at the various banks.

3.5 Data Collection

Data was collected using a structured questionaire (Appendix III). The questionnaire was availed to the respondents by the researcher and collected within 24 hours after administration but some were picked three days later due to busy schedules of the managers. Before collection of the filled questionnaires, the researcher made use of telephone calls to remind the respective respondents through their personal assistants to fill the questionnaires. This did assist the researcher to attain a high response rate. The data collection tool enabled a trade-off between cost, speed, accuracy, detail, comprehensiveness, response rate, clarity and anonymity which are useful for validity and reliability. Permission to disseminate questionnaires was sought through an introduction letter (Appendix II).

3.6 Data Analysis and Presentation

The data was analysed to establish whether ICT innovations had effect on choice of competetive strategies in the commercial banks in kenya in the last ten years. A five point likert scale was used to measure the psychological attitudes, preferences and subjective reactions on managers to decision variables. The responses were coded with figures 1 to 5 representing various levels and direction of decisions and preferences.

Descriptive statistics, mainly percentages were used to describe the effect of ICT on choice of competetive strategies in commercial banks. Means and standard deviations were used to present the findings of the study. This was due to their ability to bring relative form of the otherwise abstract nature of the effects under investigation.

CHAPTER FOUR
RESEARCH FINDINGS AND DISCUSSION

4. 1 Introduction

This chapter presents the analysis of the study. Both quantitative and qualitative techniques were to analyse the data. The purpose of the study was to establish the effect of ICT innovations on choice of competetive strategies in commercial banks in kenya. The study managed to have 33 questionaires filled, giving a response of 76.74% . Babbie, (2008) says that data collection return of above 50% is adequate representative for analysis and drawing conclusions. Descriptive statistics such as frequencies and percentages were used to present the findings of the study.

4.2. Sample characteristics

The data was collected from the operation managers in various banks, who were believed to be endowed with information on strategy history and implimentation.

The managers experience in the banking industry was also established through enquiry of the period they have been in the banking industry. The following were the findings,

Table 4.1 The period managers have been in the bank:

PERIOD	FREQUENCY	PERCENTAGE
Below 3 years	1	3
4 to 6 years	8	24
7 to 10 years	17	52
Over 10 years	7	23
TOTALS	**33**	**100**

The managers had adequate experience in banking with only 3% being 3 years and below in the period they had been in the bank.

52% had over 7 years experience and 21% over 10years in the banking industry hence their responses were demed to be true and reliable.

The reseacher also sought to know to what extent were strategies in consideration adopted and Table 4.2 shows the findings

Table 4.2 Extent of adoption of competitive strategies

	Very low	Low	Moderate	High	Very High
Product Differentiation	0	0	8 (24%)	10 (30%)	15 (45%)
Cost Leadership	0	21 (67%)	3 (6%)	9 (27%)	0

The results show that the banks have adopted two main strategies , product differentiation in all banks and cost leadership in lower adoption at 67% . These findings agree with Porter (2010) who stated that when products are highly differentiated, the cost is likely to be high and can only get the best cost. He said that it was difficult to work the two strategies together due to the potential conflict between cost minimization and the additional cost of value added differentiation.

The researcher also sought to find out to what extent was ICT innovations integrated in the strategies in study. The finding are in Table 4.3

Table 4.3. Extent of ICT integration in competitive strategies.

Product differentiation

	x	*f*	*fx*		*μ*	**σ**
%						
Very High	5	17	85			52
High	4	15	60			45
Moderate	3	1	3	4.48	0.74	3
Low	2	0	0			0
Very Low	1	0	0			0

From the table it is evident that ICT innovations are highly integrated in the competetive strategies with a mean of 4.48 which is very highly integrated in product differentiation. This agrees with the findings of Otieno (2010) who found that ICT strategy was being applied in banking to come up with unique and superior products and introducing new features in current products and services. Akinlolu (2010) also says that ICT innovations directly affect how managers decide, how they plan and what products and services are offered in the banking industry.

Table 4.4.Extent of ICT integration in competitive strategies.

Cost Leadership strategy

	X	*f*	*fx*	*μ*	**σ**	**%**
Very High	5	23	115			74
High	4	8	32			24
Moderate	3	2	6	4.64	0.68	6
Low	2	0	0			0
Very Low	1	0	0			0

From the table it is also very clear that ICT is also very highly intergrated in cost leadership strategy with a mean of 4.64 which is near 5 in the likert scale.This is consistent with Aliyu (2012) who found that usage of ICT can lead to lower costs of production, higher operational efficiencies and better financial performance. Aduda (2012) also says that ICT investments are expensive in the short term but in the longrun lead to better priced products, mass production and wider market reach leading to economies of scale.

Table 4.5.Period of integration of ICT innovations

	2004 and before	2005-2006	2007-2008	2009-2010	2011-2012	2013-2014
Networked branches	15(46%)	4 (12%)	14(42%)	0	0	0
ATMs	10 (30%)	16 (48%)	7 (22%)	0	0	0
Mobile banking	0	0	0	5 (15%)	11 (33%)	12(37%)
Internet banking	0	0	2 (6%)	8 (24%)	11 (33%)	5 (15%)
Agency banking	0	0	0	2 (6%)	3 (9%)	3 (9%)

The findings indicate that ATMs and Networked branches were the earliest ICT applications in the banking industry with mobile banking, Internet banking coming in later from 2009. This is in agreement with Aliyu (2012) who concluded that in a bid to catch up with the global development, improve the quality of customer service delivery and reduce transactional cost, banks have heavily invested in ICT and have widely adopted ICT networks for delivering a wide range of value added products and services.

To find out the trend in strategies in the banks, the respondents were required to state when their current strategy was put in place .The results are as stipulated in Table 4.6

Table 4.6 Period of adoption of current strategy

	2004 and before	2005-2006	2007-2008	2009-2010	2011-2012	2013-2014
Product diff	5 (15%)	0	1 (3%)	11 (33%)	13 (49%)	0
Cost Leadership	2 (6%)	1 (3%)	3 (9%)	1 (3%)	11 (33%	3 (9%)

From these findings, 15 % of the banks have not changed their strategies.There was higher change in strategies from 2009 with 33% adopting the current Product differentiation strategy between 2009 and 2010 and 49% adopting the current strategy between 2011 and 2012.The reason behind greater interval before changing products in the need for consistency and the banks have to dwell with their products till it is identified with them. The results also indicate that only 64% of the banks were persuing cost leadership strategy compared to all (100%) that were differentiated in one one product or another .This agrees with banking survey results of April 2014 which showed that all the banks had their unique product or service that was identified with. The ealier strategies were revised as stated in managers comments and where ICT has not advised a change the strategy, it has strengthened the existing strategies.Porter (2010) says that companies persuing both differentiation and best cost strategies may be more successful than companies persuing only one strategy.

4.3 Summary of findings according to the research objectives

The research had five objectives whose findings are which are discussed here in detail and likert scale has been used with means and standard deviations to aid in understanding the responses. The scale is coded between 1 and 5 and weight of each code is stated in the table ranging from those that strongly disagree to those that strongly agree to the question posed.

4.3. 1 Objective 1: To find out whether networked branches have effect on choice of competetive strategies.

The researcher sought to find out whether networked branches had effect on choice of competetive strategies and the table below shows the findings.

Table 4.7: Networked branches have led to the choice of product differentiation strategy

	X	f	fx	μ	σ	%
Strongly agree	5	15	115			46
Agree	4	11	44			33
Not sure	3	5	15	4.2	0.80	15
Disagree	2	0	0			0
Strongly disagree	1	2	2			6

The findings indicate that Networked branches affect choice of competetive strategy in that it leads to high number of banks choosing product differentiation with a mean of (4.2) which in the likert scale mean that they agree, by having many networked branches where its customers can get similar services even when far from their domicile branches. According to Tarkka (2002) Networked branches enhance brand visibility and provide a marketting base for existing and new products. Banking survey (2014) found that Networked branches enhance standardization of products and services and the banks using this as a differentiation strategy encourage consumers to visit any of their branches and get the high quality service they promise in promotions.

Table 4.8:Networked branches have led to the choice of cost leadership strategy

	X	*f*	*fx*	*µ*	**σ**	**%**
Strongly agree	5	0	0			0
Agree	4	3	12			9
Not sure	3	6	18	2.18	1.89	18
Disagree	2	18	36			55
Strongly disagree	1	6	6			18

The researcher also found that the respondents disagreed that networked branches led to choice of cost leadership strategy with a mean of 2.18 in the likert scale .There was significant difference between the responses with a standard deviation of 1.89 and this led to 55% disagreeing, however 9% agreed that networked branches did lead to cost leadership strategy especially the large banks who, because of economies of scale and huge customer base, the high cost of putting up new branches could be recovered in the shortterm and lead to profitability. Sarira (2012) said that bank networking was expensive when compounded with many branches establishment and led to reaching more markets and easy access by already existing customers but not lower pricing.

4.2.2 Objective 2: To find out whether electronic banking had effect on choice of competetive strategies

The respondents were required to also state whether they agree on electronic banking leading to choice of competitive strategies and Table 4.9 shows the results.

Table 4.9:Electronic banking has led to the choice of product differentiation strategy

	X	*f*	*fx*	*µ*	**σ**	**%**
Strongly agree	5	13	65			40
Agree	4	17	68			51
Not sure	3	0	0	4.18	0.81	0
Disagree	2	2	4			6

Strongly disagree	1	1	1			3

The findings here indicate that majority of the respondents agreed with a mean of 4.8 in the likert scale, which means that electronic banking had led to choice of product differentiation strategy where the standard deviation of 0.81 indicates that there was insignificant difference between the responses. These findings agree with Nzau (2013) who found that electronic banking had led to some banks coming up with unique products and services like getting loans and money withdrawal using mobile phones.

Nzau (2013) also found that Elecronic banking was a preserve of Tier II banks and above with over 50 billion in asset base. This was because robust electronic banking flatform was an expensive venture. The findings also concur with Birger (1984) who stated that strategy of a firm is a function of the compliment of the resources held, which meant that competitive advantage is created when resources are owned by a firm are applied to developing a unique competencies.

Table 4. 10: Effect of electronic banking on choice of cost leadership strategy

Electronic banking has led to the choice of cost leadership strategy

	X	*f*	*fx*	*μ*	**σ**	**%**
Strongly agree	5	8	40			24
Agree	4	21	84			64
Not sure	3	0	0	3.91	0.96	0
Disagree	2	1	2			6
Strongly disagree	1	3	3			6

The results indicate that majority of the respondents agreed that electronic banking led to choice of cost leadership strategy with a mean of 3.91 in the likert scale and the difference between the responses was not very significant with a standard deviation of 0.96. These results were in agreement with Otieno (2010) who stated that as an integral part of E-business, the banking industry was growing at a rapid pace to help banks cut costs, increase revenue and become more convenient to customers. The results differ with Okiro (2013) who found that rapid development of information technology in Kenya had made banking tasks more efficient but the transactional costs were still high and facing challenge of frequent system delays. He also found that to offer more convenient and cheaper services to customers, banks had partnered with mobile phone network providers to to offer mobile banking services to their clients. Mobile banking was widely available in remote areas at a comparatively low cost which made the service delivery even more appropriate.

4.3.3 Objective 3: To find out whether POS/Agency banking did affect choice of competitive strategies by banks

The researcher also asked the respondents whether Point of sale and agency banking had affected choice of their competitive strategies and only 8 banks were in practice of agency banking and their responses were as in Table 4. 11

Table 4. 11: Agency/POS banking and choice of product differentiation Strategy.

Agency/POS banking has led to the choice of product differentiation strategy

	X	*f*	*fx*	*μ*	**σ**	**%**
Strongly agree	5	5	25			63
Agree	4	3	12			37
Not sure	3	0	0	4.6	0.46	0
Disagree	2	0	0			0
Strongly disagree	1	0	0			0

The results indicate that majority strongly agreed that agency banking had led to product differentiation with a mean of 4.6 in the likert scale, with no significant difference between the responses, with a mean of 0.46. These results agree with Nefa (2013) who found that specific banks serving high number of clients had resulted to agency banking to reduce queues in their banking halls by allowing low value transactions to be done by acrediteed agents of the banks. Aduda (2010) also found that banks were now getting into business of standardized debit and credit cards which can swiped in any approved POS machine hence giving them more acceptability locally and internationally. The banks were in frequent promotion on how unique and more acceptable their cards were.

Table 4. 12: Agency/POS banking has led to the choice of cost Leadership strategy

	X	*f*	*fx*	*μ*	**σ**	**%**
Strongly agree	5	8	40			100
Agree	4	0	0			0
Not sure	3	0	0	5	0	0
Disagree	2	0	0			0
Strongly disagree	1	0	0			0

All the respondents strongly agreed that agency and POS banking led to cost leadership strategy as this enabled them to offer banking services without necessarily opening a new branch, which ultimately led to offering of unique service delivery not embraced by other banks due to their unique clients. These results agree with Chiteli (2013) when studying agency banking operations as a competetive strategy of commercial banks in Kisumu city who concluded that Agency banking had led to cheaper, convenient and affordable banking service delivery and had greatly reduced congestion in banks. The results also concur with Kozak (2012) who found that agency banking had demystified and simplified banking by enabling account opening, making deposits and withdrawals services readily available reducing time and money earlier spent in travelling to bank and queuing to get these services. Lewis (2013) says that the future of banking is in agency and mobile banking due to low cost and convenience.

4. 3.4: Intervening variables affecting choice of competitive strategies

The managers were asked to state the extent to which they agreed with the following statements.

Table 4. 13 General acceptance of ICT innovations and choice of competitive strategies

General acceptances of ICT inovations affect choice of competitive strategies

	X	*f*	*fx*	*µ*	**σ**	**%**
Strongly agree	5	7	35			21
Agree	4	0	0			0
Not sure	3	4	12	2.21	1.04	12
Disagree	2	6	4			18
Strongly disagree	1	16	1			49

Majority of the respondents disagreed to the quest that general acceptance of ICT innovations affected choice of competitive strategies with a mean of 2.21 in the likert scale, however there was significant difference in responses with a standard deviation of 1.04 where some 21% of the respondents strongly agreed that the general acceptance actually did affect the choice of competitive strategies.According to Bhat (2005) industry decisions have moved from boardrooms to the market and any industry that is to thrive well must consider what the customer wants and perceives as important before offering the product or service in the market.

Table 4. 14 : Asset base of the bank affect choice of competitive strategies

	X	*f*	*fx*	*µ*	**σ**	**%**
Strongly agree	5	12	60			36
Agree	4	13	42			40
Not sure	3	1	3	3.64	1.04	3
Disagree	2	7	14			21
Strongly disagree	1	0	1			0

The managers did agree that the asset base of the bank determined the choice of competitive strategy with majority with a mean of 3.64 in the likert scale agreeing to the statement. The results agree with Otieno (2010) who concluded that the level of ICT investments by various banks had to be thought before to ensure that they bring forth compensatory results since they were very expensive. The Central Bank of Kenya report of 2014 also ranked banks and one of the differentiating factors was level of ICT investment and asset base.

The future of banking with ICT innovations

To get the view of the managers on the bank of the future with the current trend of innovation, the managers did state that banking is going online, there is bound to be more operational excellence, customer centric services, more strategic business partnerships and big data applications and ultimately there is bound to be fewer and smaller bank branches.This is in agreement with Friedman (1999) who indicated that internet and mobile banking presents the possibility that entire alternative payment system not under control of Central Bank may arise. Direct bilateral clearing and settlement system using computers is rapidly making this possible.

CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of areas of the study, a summary of research findings, conclusions, recommendations and recommendations for further study.

5.2 Summary

The purpose of this study was to establish the influence of ICT innovations on choice of competitive strategies in Commercial Banks in Kenya. The study targeted the operations managers in the 43 commercial banks. Questionnaires were used as instruments for data collection.

The study found that majority of the banks had embraced product differentiation and cost leadership strategies together and not in exclusion. A few banks had employed focus strategy in endeavor to serve their unique clientele and their branches are mainly in the major towns in Kenya. ICT innovations were highly integrated in the competitive strategies in the banking sector. Networked branches had not led to lower pricing but better service delivery by taking the services near to the customers and enhancing brand visibility. The study also found that electronic banking had influenced choice of competitive strategies by leading to product differentiation and cost leadership strategies. The study also found that before the advent of ICT innovations, the banks were competing on bases of market share since the banking industry was not facing stiff competition as at the moment. The agency and banking was being applied by only eight banks and these were amongst the main players in the industry controlling large customer base which necessitated application of agency banking as part of alternate business service delivery channels.

Regarding the influence of ICT innovations on choice of competitive strategies, the study found that ICT innovations had positive effect on choice of competitive strategies in the banks. For instance, they had led to more product differentiation in the banking industry. Some banks had used ICT to lower production and service delivery costs leading to cost leadership strategy. In the cases where it did not affect the choice, they enhanced the efficiency of the existing strategies.

In establishing the trend in strategy adoption, the studies found that majority of the current strategies were adopted between 2008 and 2014, a period in which also more ICT innovations were fully integrated into the banking industry. The study also found that before the advent of ICT innovations, the banks were competing on bases of market share since the banking industry was not facing stiff competition as at the moment. The agency banking was being applied by only eight banks and these were amongst the main players in the industry controlling large customer base which necessitated application of agency banking as part of alternate business service delivery channels.

The choice of competitive strategy was highly affected by the asset base of the bank in question. This can be attributed to the high cost element attached to ICT infrastructure investments as realized in the research findings; however customers' acceptance of the ICT innovations did not affect choice of competitive strategy but affected the degree of success of strategy execution.

Finally, the findings also indicate that with the current trend of ICT innovations, the banking industry will have higher efficiency in operations, more customer relationship management focus, lesser and smaller branches and finally more online banking and strategic partnerships in globalization of financial service delivery.

5.3 Conclusion

From the findings of the study, it can be concluded that ICT innovations have greatly influenced the choices of competitive strategies in commercial banks in Kenya in the recent years. The ICT innovations are highly integrated in the competitive strategies making them key considerations whenever making or revising business strategies. They have led to some banks resulting to cost leadership strategy while majority using ICT innovations to come up with differentiated products. Networked branches and ATMs are the earliest ICT applications in the banking industry which led to the competition then being on market share and asset base. Majority of the banks have adopted a hybrid strategy with both product differentiation and cost leadership with some degree of focus in some banks. Bank's strategies are highly influenced by asset base since ICT investments are an expensive venture. More local and international partnerships have been made possible through ICT innovations and developments enhancing efficiency in service delivery and earning relational rents.

5.4 Limitations of the Study

The research targeted operation managers of the banks to answer the questionnaires. However, during data collection process, it became difficult to meet some of them due to restrictions and busy schedule. In that connection, some of the questionnaires could only be left with the receptionists to handover to the managers which were later collected from the same receptionists filled in. Under such circumstance, it is the researcher's assumption that the questionnaires were answered by the targeted operation managers and therefore relevant to the research objectives. Another challenge was that some banks declined to divulge information requested terming them sensitive and hence resulting on a response rate of 77%.

5.5 Recommendations

The study recommends that banks should do product testing of their newly introduced ICT Related products so that the products can be properly tailored for to customers to use the products and enjoy the benefits associated with their introduction.

5.6 Implication on Policy and Practice

The researcher finally recommends a study be done to investigate the level of success of adopted competitive strategies in terms of profitability of the banks. A policy is a guiding principle designed to influence decisions or actions. Typically, a policy designates a required process or procedure within an organization. It is a plan of action to guide decisions and actions. The policy process includes the identification of different alternatives, such as programs or spending priorities, and choosing among them on the basis of the impact they will have. Policies in short can be understood as political, management, financial, and administrative mechanisms arranged to reach explicit goals. On the basis of the results of this study, policy guidelines can be developed by the government through the initiative of banking sector. The research findings indicate that banks strategies are affected by ICT innovations by a very large extend. If technology and industry are coming together around ICT in general, then the government, that decides on policy and regulates the industry, must recognize this fact and adapt its policy-making accordingly. Since banking sector is a major stakeholder in ICT development, these findings can be used in formulating policy guidelines and forward to the government for implementation especially in providing for product testing before launch to mitigate risks associated with ICT implementation projects. The findings reveal that most banks do not consider acceptance of ICT innovations by customers in making choice of strategies. This fact is very important in policy planning for the government should make it a requirement that products be tested before heavy investments are done to safeguard shareholders wealth and improve the products.

5.7 Area for further Research

This study was carried out in commercial banks in Kenya to find out the effect of ICT innovations on choice of competitive strategy in enhancing competitive advantage. The researcher therefore recommends that another study be done on effect of ICT on strategic business partnerships in commercial banks in Kenya.

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APPENDICES

Appendix I: List of Commercial Banks & Their Market Share in Gross Assets

Rank	BANK	% Gross Assets
	6 LARGE BANKS>5%	
1	Kenya Commercial Bank Ltd	14.2%
2	Equity Bank Ltd	8.6%
3	Co-operative Bank of Kenya Ltd	8.5%
4	Barclays Bank of Kenya Ltd	8.4%
5	Standard Chartered Bank Kenya Ltd	7.9%
6	CFC Stanbic Bank Kenya Ltd	6.7%
	14 MEDIUM BANKS (1-5)%	
7	Commercial Bank of Africa Ltd	4.1%
8	I & M Bank Ltd	3.8%
9	Diamond Trust Bank Kenya Ltd	3.7%
10	NIC Bank Ltd	3.6%
11	Citibank.N.A. Kenya	3.5%
12	National Bank of Kenya Ltd	3.5%
13	Chase Bank Ltd	1.9%
14	Bank of Africa Kenya Ltd	1.8%
15	Bank of Baroda Kenya Ltd	1.8%

16	**Prime Bank Ltd**	**1.7%**
17	**Ecobank Kenya Ltd**	**1.4%**
18	**Family Bank Ltd**	**1.3%**
19	**Imperial Bank Ltd**	**1.3%**
20	**Bank of India Ltd**	**1.1%**
	23 SMALL BANKS <1%	
21	**Consolidated Bank of Kenya**	**0.8%**
22	**Fina Bank Ltd**	**0.7%**
23	**Gulf African Bank Ltd**	**0.6%**
24	**African Banking Corporation Ltd**	**0.6%**
25	**Equatorial Commercial Bank Ltd**	**0.6%**
26	**Giro Commercial Bank Ltd**	**0.6%**
27	**Development Bank of Kenya Ltd**	**0.6%**
28	**Fidelity Commercial Bank Ltd**	**0.5%**
29	**K-Rep Bank Ltd**	**0.5%**
30	**Guardian Bank Ltd**	**0.5%**
31	**First Community Bank Ltd**	**0.4%**
32	**Habib Bank A.G. Zurich**	**0.4%**
33	**Transnational Bank Ltd**	**0.4%**
34	**Victoria Commercial Bank Ltd**	**0.4%**
35	**Habib Bank Ltd**	**0.3%**
36	**Credit Bank Ltd**	**0.3%**

37	**Paramount Universal Bank**	**0.3%**
38	**Oriental Commercial Bank**	**0.2%**
39	**Middle East Bank Kenya Ltd**	**0.2%**
40	**PostBank**	**0.1%**
41	**UBA Kenya Ltd**	**0.1%**
42	**Dubai Bank Ltd**	**0.1%**
43	**Jamii Bora Bank Ltd**	**0.10%**

Source: CBK (2014)

Appendix II: Letter of Introduction

Josphat Kiema

P.O. Box 280-90400

Mwingi.

Tel: 0723 309 519

Dear Sir/Madam,

RE: LETTER OF INTRODUCTION

I am a student undertaking a degree of Master of Business Administration at the South Eastern Kenya University. As a requirement to complete the program; I will need to submit a project report on a management problem. I would like to do a research project on effects of Information and Communication Technology Innovations on choice of Competitive strategies of Commercial Banks in Kenya.

I do hereby request for your permission to fill the attached questionnaire towards the research.

The results will be used solely for academic purposes and a copy of the same will be availed to you on request.

Thank you

Yours faithfully,

Josphat Kiema

Researcher.

Josphat Kiema,

P.O Box 280-90400,

Mwingi

16 January 2015.

The Office of the Director,

Board of Post Graduate Studies,

South Eastern Kenya University.

Dear Sir/Madam,

RE: REQUEST FOR APPROVAL TO PROCEED FOR DATA COLLECTION

I am a student at South Eastern Kenya University – Mwingi Campus, Reg. No.D61/MWI/20234/2012. I have completed my course work in Masters of Business Administration – Strategic Management and I have successfully presented my research proposal. I therefore request for approval to proceed for data collection.

Yours faithfully,

JOSPHAT KIEMA

Appendix III: Questionnaire

Instructions

Dear Sir/Madam,

You are kindly requested to answer all questions in this research study questionnaire. The information that you will provide shall be treated with utmost level of confidentiality and strictly used for the academic purpose of this research study. This study aims at investigating the effects of Information and Communication Technology (ICT) on the competitive advantage of commercial banks in Kenya.

NB: Please do not write your name anywhere on this questionnaire.

PART A: GENERAL INFORMATION

Please tick appropriately where applicable in the spaces provided

1. What is your total working experience in the banking industry?

   a. Less than 3 years ( )
   b. 4-5 years ( )
   c. 6-10 years ( )
   d. 11and above ( )

PART B: TYPES OF COMPETITIVE STRATEGIES.

2. Describe the extent to which your commercial banks adopts the following competitive strategies:

1. Very Low 2. Low 3. Moderate 4. High 5. Very High

	1	2	3	4	5
Product Differentiation					
Cost Leadership					

Other strategy ?

Comment…………………………………………………………………

3..Describe the extent to which ICT is integrated with the following competitive strategies at your commercial bank:

1. Very Low   2. Low   3. Moderate   4. High   5. Very High

	1	2	3	4	5
Product Differentiation					
Cost Leadership					

Comment……………………………………………………………………………….

4. Please indicate when the following ICT innovations were intergrated in the banking system

		2004 and before	2005 - 2006	2007-2008	2009-2010	2011-2012	2013-2014
Networked branches							
Electronic banking (ATMs, mobile banking)	ATMs						
	Mobile banking						
	Internet banking						
Point of sale/agency banking services							

Comment…………………………………………………………………………...................
......

5.Please indicate when the current bank strategy was adopted

	2004 and before	2005-2006	2007-2008	2009-2010	2011-2012	2013-2014
Product Differentiation						
Cost Leadership						
Other						

PART C: COMPETITIVE ADVANTAGES GENERATED BY ICT

6. Networked branches have led to the choice of the following competitive strategies:

1. Strongly Disagree 2. Disagree 3. Not sure 4. Agree 5. Strongly agree

	1	2	3	4	5
Product Differentiation					
Cost Leadership					

Comment……………………………………………………………………………….. ....

7. Electronic banking has led to the choice of the following competitive strategies:

1. Strongly Disagree 2. Disagree 3. Not sure 4. Agree 5. Strongly agree

	1	2	3	4	5
Product Differentiation					
Cost Leadership					

Comment………………………………………………………………………………..
......

8. Point of sale / agency banking has led to the choice of the following competitive strategies:

1. Strongly Disagree 2. Disagree 3. Not sure 4. Agree 5. Strongly agree

	1	2	3	4	5
Product Differentiation					
Cost Leadership					

Comment………………………………………………………………………………..
....

9. Please indicate the extend to which you agree with the following statements

1. Strongly Disagree 2. Disagree 3. Not sure 4. Agree 5. Strongly agree

	1	2	3	4	5
Asset base of a bank affects the choice of competetive strategy chosen.					
General acceptance of ICT Innovations affect choice of competetive strategy					

Comment……………………………………………………………………………

PART D: COMMENTARY

10. Please comment on the key competetive strategies before advent of ICT innovations in the bank.

....
....
....

11. Comment on the current level of innovation in the Kenyan banking industry. Where do you see the future of banking?

………………………………………………………………………………………
……

END.

Thank you for the Response

Notes provided

If a firm targets customers in most or all segments of an industry based on offering the lowest price, it is following a **cost leadership strategy.**

If it targets most or all segments based on unique attributes rather than the price (e.g via higher product quality or service) it is persuing a **differentiation strategy.**

Focus strategy : This dimension is not a separate strategy for big companies due to small market conditions. Big companies which chose applying differentiation strategies may also choose to apply in conjunction with focus strategies (either cost or differentiation). On the other hand this is definitely appropriate strategies for small-sized companies especially for those who want to avoid competition with big ones.Companies that use Focus strategies **concentrate on particular niche markets** and by understanding the dynamics of that market and the unique needs of customers within it, **develop uniquely low-cost** or **well-specified products for the market**. Because they serve customers in their market uniquely well, they tend to **build strong brand loyalty** amongst their customers. This makes their particular market segment less attractive to competitors. As with broad market strategies, it is still essential to decide whether you will pursue Cost Leadership or Differentiation once you have selected a Focus strategy as your main approach: Focus is not normally enough on its own.