

**INNOVATION STRATEGIES AND COMPETITIVE ADVANTAGE AMONG  
COMMERCIAL BANKS IN KENYA**

**VIOLET KASEVU**

**D53/CTY/PT/23205/2011**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL  
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE  
OF MASTER OF BUSINESS ADMINISTRATION (STRATEGIC  
MANAGEMENT) OF KENYATTA UNIVERSITY**

**NOVEMBER, 2017**

## DECLARATION

This research project is my original work and has not been presented for a degree or other award in any other University. No part of this research project should be reproduced without authority of the author or / and Kenyatta University

Signed: ..... ..

**STUDENT NAME: VIOLET KASEVU**

**DATE**

Reg. No. : D53/CTY/PT/23205/2011

Department of Business Administration

This project has been submitted for presentation with my approval as the University supervisor.

Signed: ..... ..

**SUPERVISOR NAME: Dr Samuel Maina**

**DATE**

Department of Business Administration

Kenyatta University

## **ACKNOWLEDGEMENT**

My sincere gratitude goes to my supervisor Dr. Maina for his continuous encouragement and support especially in providing professional guidance to see to it that this project is complete. Your support is highly appreciated. I also wish to extend my gratitude to all lecturers in the school of business at the Kenyatta University for having given me a good learning environment while I undertook my course work studies. Your support can not go un appreciated.

I also do appreciate my children and friends, for all the support, emotional and physical, that they accorded me and the rest of my family members for their encouragement and support. I thank my colleagues at work who have always stood by me in standing in for me whenever I had an academic appointment. May all of you be richly blessed.

## **DEDICATION**

I dedicate this project to my spouse Boniface Kilaa and our children: Natasha and Sean

## TABLE OF CONTENTS

Declaration.....	ii
Acknowledgement .....	iii
Dedication.....	iv
List Of Tables .....	vii
List Of Figures .....	viii
Abbreviations And Acronyms .....	ix
Operational Definitions Of Terms .....	x
Abstract.....	xi
<b>Chapter One: Introduction.....</b>	<b>1</b>
1.1 Background of the Study .....	1
1.2 Statement of the Problem.....	8
1.3 Research Objectives.....	9
1.4 Hypotheses .....	10
1.5 Significance of the study.....	11
1.6 Scope of the study.....	10
1.7 Limitations of the Study .....	11
1.8 Organization of the Study .....	12
<b>Chapter Two: Literature Review.....</b>	<b>13</b>
2.1 Introduction.....	13
2.2 Theoretical Literature Review .....	13
2.3 Empirical Review .....	18
2.4 Summary of Knowledge Gaps.....	24
2.5 Conceptual Framework.....	25
<b>Chapter Three: Research Methodology .....</b>	<b>27</b>
3.1 Introduction.....	27
3.2 Research Design .....	27
3.3 Target Population.....	28
3.4 Data Sources and Collection Techniques .....	28
3.6 Data Analysis and Presentation .....	31
3.7 Ethical Considerations .....	34
<b>Chapter Four: Research Findings And Discussions .....</b>	<b>35</b>
4.1 Introduction.....	35

4.2 Demographic Information.....	36
4.3 Variable Descriptive Statistics.....	37
4.4 Regression Analysis.....	46
<b>Chapter Five: Summary, Conclusions And Recommendations.....</b>	<b>51</b>
5.1 Introduction.....	51
5.2 Summary.....	51
5.3 Conclusion.....	53
5.4 Recommendations.....	53
5.5 Suggestion for Further Research.....	54
<b>References.....</b>	<b>55</b>
<b>Appendices.....</b>	<b>60</b>
Appendix I: List of Commercial Banks in Kenya.....	60
Appendix II: Questionnaire.....	60

## LIST OF TABLES

Table 2.1: Summary of Knowledge Gaps.....	24
Table 3.1: Reliability Analysis Results.....	30
Table 3.2: Operationalization of Study Variables .....	31
Table 3.3: Study Hypotheses and Analytical Model .....	33
Table 4.1: Period Working in the Bank .....	37
Table 4.2: Process Innovation.....	38
Table 4.3: Effect of Process Innovation on Competitive Advantage .....	39
Table 4.4: Product Innovation .....	40
Table 4.5: Effect of Product Innovation on Competitive Advantage .....	41
Table 4.6: Market Innovation .....	42
Table 4.7: Effect of Market Innovation on the Competitive Advantage .....	43
Table 4.8: Technology Innovation.....	44
Table 4.9: Effect Technology Innovation on the Competitive Advantage .....	45
Table 4.10: Competitive Advantage .....	45
Table 4.11: Model Summary for Process Innovation .....	46
Table 4.12: Coefficient for Process Innovation .....	47
Table 4.13: Model Summary for Product Innovation.....	47
Table 4.14: Coefficient for Product Innovation.....	48
Table 4.15: Model Summary for Market Innovation.....	48
Table 4.16: Coefficient for Market Innovation.....	49
Table 4.17: Model Summary for Technology Innovation .....	49
Table 4.18: Coefficient for Technology Innovation .....	50

## LIST OF FIGURES

Figure 2.1: Conceptual Framework .....	26
Figure 4.1: Response Rate .....	35
Figure 4.2: Gender Distribution.....	36

## **ABBREVIATIONS AND ACRONYMS**

<b>ANOVA</b>	:	Analysis of Variance
<b>ATM</b>	:	Automated Teller Machine
<b>CBK</b>	:	Central Bank of Kenya
<b>GDP</b>	:	Gross Domestic Products
<b>NSE</b>	:	Nairobi Securities Exchange
<b>OECD</b>	:	Organization for Economic Cooperation and Development
<b>SPSS</b>	:	Statistical Package for Social Sciences

## OPERATIONAL DEFINITIONS OF TERMS

- Innovation:** Implementation of a new product or improvement of existing business practices such as the marketing method, organizational culture, workplace organization practices or external relations with customers.
- Process Innovation:** The ideas launched with the aim of developing new and improved ways of accomplishing tasks within an organization in a more efficient manner.
- Product Innovation:** The launching of goods or services that are updated in view of their specifications, users friendliness and component parts besides other functional features
- Market Innovation:** The launch of new markets for a company's products and services with the aim of gaining competitive advantage
- Technology Innovation:** New ways of doing thing developed within an organization based on technology.
- Competitive Advantage:** Unique features of resources of an organization that makes it defeat competitors in the market environment.
- Innovation Strategies:** A detailed plan to grow market share or profits through product, market, process, and technology innovation.

## ABSTRACT

The banking industry has been touted as being less competitive bearing in mind the number of commercial banks against the market size. The Central Bank of Kenya introduced new capital adequacy ratios that need to be observed by commercial banks for a healthy sector that saw a number of mergers and acquisitions. Interest rate capping has significantly reduced revenue sources hence the need for commercial banks to re-define their existing models of operations, processes and technology in both new and existing markets. In order to remain competitive, it is therefore important that commercial banks invest in research and development so as to come up with innovative ways of meeting the changing customer needs. The main objective of the current study was to examine how innovation strategies affected competitive advantage of Kenyan Commercial Banks. The study specifically examined how process innovation, product innovation, market innovation and technology innovation affected competitive advantage in Kenyan Commercial Banks. The theories that informed the study were the Diffusion of Innovation Theory, Porter Theory of Competitive Advantage, Schumpeter Innovation Theory, the Resource Based View Theory. This study adopted descriptive and explanatory research designs. A census study was used as the population of 42 was not huge and easily accessible from Nairobi. The study used primary data collected using semi-structured questionnaires. Questionnaires were dropped and picked latter during data collection process. Reliability was tested through a pilot study on 5 deposits taking micro finance using the test–retest method. The researcher relied on opinions of research experts in the assessment of validity and reliability. Data was analyzed descriptively and inferentially. Descriptive statistics including frequency, percentage, mean and standard deviation was used after which the data was presented using tables and charts. The study revealed that whereas process, product and market innovation have an effect on competitive advantage, technology innovation was the key driver in competitive advantage as it allowed real time transaction processing, overall customer experience and offered convenience to the customers. Furthermore adapting new technology had significant role in determining relative cost position or differentiation and is a key driver of uniqueness of value activities. The study concludes that process innovation, product innovation, market innovation and technology innovation significantly influences competitive advantage among commercial banks in Kenya. The study recommended that banks must take immediate steps to improve innovation by critically assessing current innovation capabilities and performance, and ensure they are aligned in creating value and convenience to customers while reducing the cost of doing business.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

Across the world, the banking sector has realized a lot of competition, adverse changes in the financial market, diversity in customer demands and shift and adjustments in the banking products and services. The start in usage of technological systems to ease the operations of the banking service has led banks to seek new ways of beating off competition in this industry. According to Obeidat (2016), considerable amount innovations in payment systems have taken place in the financial industry of United Kingdom. Communication and financial organizations have developed new systems for meeting consumers' needs while at the same time remitting payments to suppliers. Technology is being used to support developments for example continuous use of barcodes, use of countless cards and huge uptake of smart phones and these has encouraged innovations in payments.

The adoption of the innovation strategies has enabled the UK financial industry be able to sustain competitive advantage which heavily depends on the ability of organizations to internalize the benefits of innovative activities.

Ilo, Wilson and Chioke (2014) conducted a study in Nigeria. From the findings, technology innovation and performance of employees of the banks were positively and significantly related. This further enhanced customer retention and satisfaction and therefore bank's performance. Banks drive the Nigerian economy and contribute over 6.4% of the country's gross domestic products (GDP). While Tesfaye (2016) looking at the Ethiopian banking system notes that ICT has had a positive impact to

the returns in investment the banking sector makes. Any bank that uses ICT as an innovative strategy has been able to beat its competition in the market.

In Kenya, commercial banks have realized the current intense competition in the entire banking industry and this has forced them to come up with innovation strategies so as to remain competitive in business environment. Successful innovative strategies result into greater high performance besides competitiveness (Ukko & Saunila, 2013).

The extent which commercial banks gain competitive advantage relies on the degree which the competitive advantage commanded is sustainable. Innovation in the financial sector is seen as the ability to create and popularize new instruments, markets and institutions and this increases accessibility to relevant information and means of remitting payments (La Frame & White, 2014). Today, innovation has gained much relevance because of 3 main trends; rapidly changing technologies, market dynamics and globalization that has increased the level of competition (Aghion, Bloom, Blundell, Griffith & Howitt, 2012). Innovative ability leads to economic development and sustainability of competitiveness among commercial banks in Kenya (Johnston & Bate, 2013).

According to Drucker (2014), an integral part of strategy implementation is innovation. Drucker further states that innovation is a pre-condition for specified strategies. Innovation helps in creation of new businesses, addition of value and reduction in risks and this helps commercial banks stay competitive. Strategic innovation results into higher performance of an organization in terms of the growth in share of the market and greater productivity (Obeidat, 2016). Therefore, organizations with desire of gaining competitive advantage can attain this through sound strategic innovations.

Changes in consumer's tastes and preferences across the globe require organizations in any given industry to be innovative so that new products and ways of doing businesses are established for sustainable competitive advantage (Aghion, Bloom, Blundell, Griffith & Howitt, 2012). In summary therefore, an organization is said to be innovative when it can easily transform knowledge to commercial value by increased efficiencies and effectiveness which leads to competitive advantage.

### **1.1.1 Innovation Strategies**

Innovation as a strategy consists of implementation of a new product or improvement of existing business practices such as the marketing method, organizational culture, workplace organization practices or external relations with customers (Saebi & Foss, 2015). One major concern of innovation is to explore new technological capabilities. Fundamentally, innovation differs from incremental innovation whose main concern is exploring existing technological capabilities. Radical innovation on the other hand refers to the features of products with unprecedented performance. Radical innovation could also mean related features offering potential of significant improvement in costs and performance in general (Baker, Sinkula, Grinstein & Rosenzweig, 2014).

Laperche, Lefebvre and Langlet (2011) classified innovation as an invention, improvement of existing service and product or process improvement and better implementation of ideas developed elsewhere. Innovation by invention allows or enables differentiation of firm's products or services from rivals, therefore playing a critical role in the firm's superiority and gaining competitive advantage. Most firm's innovation strategies are in improving the existing product or process and better adoption of ideas developed elsewhere. Organizations need innovation management to develop the process of innovation, innovation strategy definition, and most importantly, creation of an innovation culture (Saunila & Ukko, 2013).

There are a number of steps during innovation in that ideas of organizations are converted into refined and modern services, procedures or outcomes. This helps an organization to advance challenge or differentiate itself in the market (Baker, Sinkula, Grinstein & Rosenzweig, 2014). According to Adriopoulos and Dawson (2013), there are several forms of innovation strategies but the main ones included market innovations, process innovations, organizational innovations and service or product innovations.

Product innovation is the launching of a critically updated or current services and goods. Such products are updated in terms of user friendliness, component parts, specifications, design, usage among other aspects (Baker *et al.*, 2014). Marketing innovation is the use of improved methods of marketing for example changes in promotion, pricing, packaging, design and placement of products. Marketing innovation geared towards meeting the expectations and needs of clients and establishment of new markets among others for competitive advantages. Process innovation involves use of updated methods of producing and delivering products to the market. Process innovation can be made deliberately for increased quality, decreased delivery prices, strengthening of quality or production of products that are generally upgraded.

The main focus of market innovation is to improve the mix of target markets and how to serve the market even better (Coras & Regneala, 2015). The market of an organization significantly influences innovation of an organization. Market innovation can be improved through SWOT analysis and emphasis on quality of products offered to the market.

Innovations need to be centered on meeting the evolving needs of customers if it is to improve the competitiveness of an organization. There should be a link between innovation strategies and the whole innovation goals of organization for competitive advantage. Innovation strategies need to give a description of how to convey significant innovations in an organization and the customers so as to enhance easy acceptance and diffusion (Drucker, 2014). Innovations help businesses gain competitive advantage while at the same time defending their competitive positions in an industry. Proactive methods of innovation can be taken by organizations in gaining strategic market positioning or reactive approaches of innovation in order to retain their market shares from innovative competitors (Frame & White, 2014).

Process innovation includes the deployment of business process reengineering and quality functions so as to change the process of production to optimally satisfy customers (Nzewi, Osisoma, Mgbemena & Onwuzuligbo, 2016). It involve equipping an organization by adopting new technological advancements, implementing new processes, market mix intelligences and developing new competitive products in which the enterprise has a competitive advantage (Noorani, (2014). The better process innovation strategy that can result leads to higher market value and performance.

Technology innovation is the key innovation where new technologies are discovered and incorporated in the management of internal affairs of an organization with the aim of improved organizational effectiveness (Kiragu, 2016). This involves discovering new technologies and ensuring that they are implemented for smooth operations.

Today, rapid change in information technologies has changed the manner which operations of most businesses are done. One of the rapid change in I&T is the

adoption of electronic commerce where consumers access real time information while buying products of an organization on the internet (Nzewi *et al.*, 2016).

### **1.1.2 Competitive Advantage**

According to Johnston and Bate (2013), an organization is said to have gained competitive advantage when it has unique resources and attributes that help in do better as compared to other firms in a given industry of establishment. According to Porter (1980), firms must make decisions on whether to gain competitive advantage through lowering of production costs or to leverage on institutional processes and other resources. According to Johnston and Bate (2013), competitive advantage of an organization requires refinement in operations for success either socially, monetary or environmentally. Organizations can only maintain or rather sustain their competitive advantages by coming up with strategies that makes an organization unique. This helps to move an organization even further.

Competitive advantage is well attained in service organizations by formulating innovation strategies that create value (Salunke & Weerawardena, 2014). According to Gaya, Struwig and Smith (2013), successfully implemented innovation strategies will increase organizational performance by beating competitors in the industry and this is competitive advantage.

Commercial banks in Kenya should formulate innovation strategies that promote optimal utilization of resources in order to gain competitive advantage. Indeed, most commercial banks have invested in development of new services and products for their customers which enhance competitive advantage. Commercial banks often consider adopting innovation strategies so as to solve the shortcomings of enhancing

quality of services while at the same time increasing productivity which results into competitive advantage (Mutai, 2012).

### **1.1.3 Commercial Banks in Kenya**

In Kenya, the licensing, supervision and regulation of commercial banks is done by the central bank of Kenya. The CBK relies on CBK Act and the Banking act in dispensation of these activities. The CBK formulates and implement monetary policies to enhance solvency, liquidity and efficient operations of the financial sector in Kenya.

In the year 2016, the banking industry faced interest rate capping which cut down on the productivity of banks as interest income made up a huge proportion of their revenues. This has forced the banks to rethink their competitive strategies including adoption of innovations to leverage on their operational costs (Central Bank of Kenya, 2015). Latest industry statistics have also shown that by the year 2014, some smaller banks had overtaken large well established multinational banks in terms of profitability. Equity registered Ksh. 17.2 Billion followed by KCB Bank at Ksh. 16.8 Billion (Central Bank of Kenya, 2016). This was majorly attributed to increase lending as a result of introduction of new lending products. Since then, commercial banks have invested in innovations to keep their operational costs low and improve overall performance. In acknowledging the level of innovations among commercial banks in Kenya, the Co-operative Bank of Kenya feted the best in innovation in retail banking (International Banker magazine, 2015). Other banks have now followed suit which has seen them integrate more banking services in ATM services as initially constituted.

## **1.2 Statement of the Problem**

The banking industry has been touted as being less competitive bearing in mind the number of commercial banks against the market size. The Central Bank of Kenya introduced new capital adequacy ratios that need to be observed by commercial banks for a healthy sector that saw a number of mergers and acquisitions (Cytonn, 2016). In addition, interest rate capping laws introduced in 2016 reduced the revenue sources for banks hence the need to manage operating costs. (Barclays Bank, 2017). In order to remain competitive, banks have invested in research and development so as to come up with innovative ways of meeting the changing customer needs. The performance of commercial banks in Kenya has been on a positive growth path although at a reducing rate. The sector has been selling very similar financial products largely differentiated by the packaging. This has reduced the competitiveness of banks as they cannot claim to offer highly distinguished financial services (CBK, 2016). Changes in the industry have called on commercial banks to be innovative if they are to remain competitive. Cherop (2016) indicated that innovation in the financial sector has been influenced by heavy competition, financial service markets, and technological facilities, size of financial institutions, macro economic conditions, legislation and increased financial supervision. Commercial banks offer almost similar products to their customers across the whole banking sector. It is therefore important for commercial banks to put in place innovation strategies in order to stay competitive in the working environment.

Maxine (2012) observes that Barclays bank though a major player in the Kenyan banking industry, its failure to adopt competitive strategies over the years has led to dwindling market share and loss of customers. The bank gained a poor reputation in terms of customer service, bureaucratic processes and turnaround time (Barclays

Bank of Kenya, 2015). Kiragu (2016) analyzed the innovation strategies adopted by the Standard Chartered Bank and noted that the bank faced stiff competition from other local banks but aims to gain competitive advantage through launching awareness campaigns to make the public know about its products. According to Karanja (2011), United Bank of Africa UBA adopted several innovation strategies that enhanced success and survival of the institution which transpired into competitive advantage. However, Karanja (2011) focused on a case study of one bank and not all commercial banks yet they compete in different segments. In addition, the study was undertaken more than six years ago when the level of innovations and developments in technology cannot be compared to the present times.

Previous studies such as (Awori, 2011; Maina, 2011; Mumo, 2012; Mutai, 2012) have shown that implementation of innovation strategies require resources if an organization is to achieve sustainable competitive advantages. They identified various key sources of competitive advantage as internal processes, unique resources at the disposal of an organization, market loyalty and the ability of an organization to adapt to state of the art technology. These inform the theoretical anchorage of the study besides directing the research objectives. This study sought to establish the effect of innovation strategies on competitive advantage among commercial banks in Kenya.

### **1.3 Research Objectives**

#### **1.3.1 General Objective**

The general objective of this study was to establish the effect of innovation strategies on competitive advantage among commercial Banks in Kenya.

#### **1.3.2 Specific Objective**

This study was guided by the following specific objectives:

- i. To establish the effect of process innovation on competitive advantage among commercial banks in Kenya
- ii. To assess the effect of product innovation on competitive advantage among commercial banks in Kenya
- iii. To determine the effect of market innovation on competitive advantage among commercial banks in Kenya
- iv. To establish the extent to which of technology innovation has affected competitive advantage among commercial banks in Kenya

#### **1.4 Hypotheses**

**H<sub>01</sub>:** There is no significant effect of process innovation on competitive advantage among commercial banks in Kenya

**H<sub>02</sub>:** There is no significant effect of product innovation on competitive advantage among commercial banks in Kenya

**H<sub>03</sub>:** There is no significant effect of market innovation on competitive advantage among commercial banks in Kenya

**H<sub>04</sub>:** There is no significant effect of technology innovation on competitive advantage among commercial banks in Kenya

#### **1.5 Significance of the Study**

This study is of importance to management of commercial banks in Kenya to understand how to optimize innovation strategies in creating sustainable competitive advantage. The findings of the study is of great importance to the banks' management and stakeholders in understanding the appropriate role played by the various innovation strategies and the manner in which diverse factors influence organizations

in working towards the attainment of their set mission and vision. The government and other policy makers are likely to find the information useful in improving the regulation and operations of commercial banks in Kenya. The findings of this study is of importance to future scholars and academicians. It will inform future studies by providing reference material and pointing out areas where future scholars can concentrate their studies on. This way, the study would help grow the amount of existing literature on innovation strategies and competitive advantage among commercial banks in Kenya.

### **1.6 Scope of the study**

The study focused on assessment of how innovation strategies affected competitive advantage adopted by commercial banks in Kenya. The study was conducted on 43 licensed Commercial Banks in Kenya. The study was limited to the bank's headquarters that are located in Nairobi. The study focused on process innovation, product innovation, market innovation and technology innovation and how they influence the competitive advantage of commercial banks. The study adopted descriptive research design to enable the study to clearly describe how innovation strategies affect competitive advantage adopted by commercial banks in Kenya. The study concentrated on primary data collected using questionnaires.

### **1.7 Limitations of the Study**

In the process of collecting data, the study faced a number of challenges which may have influenced the results. First, there was high reluctance of employees in making available the requested data fearing that the data could be used in a wrong way to prejudice their institutions, however, the study overcame this challenge by assuring

them of the high standards of confidentiality together with the anonymity of the data collection process which made it difficult for an individual to trace a given data collected to a particular institution. The study further assured the respondents that none of them was going to suffer adverse effects as due processes had been followed in having them participate in the study. The study was conducted in the headquarters and the respondents were not easily accessible, however, the study booked an appointment in advance. The study was delayed owing to protocol issues relating to seeking authorization from the banks, however, the study resolved to follow through with the requisite processes and expedited the acquisition of the introduction letter from Kenyatta University and the National Council for Science and Technology. The study ensured that all permissions had been obtained prior to starting data collection.

### **1.8 Organization of the Study**

Chapter one introduces the concept of innovation strategies and competitive advantage. The statement of problem is made clear with research objectives, the hypotheses tested, scope, and significance of the study and limitation of the study. Chapter two reviews the literature of the study by giving the theories, empirical reviews, summary of knowledge and the conceptual framework. Chapter three contains the methodologies used for the study. Chapter four presents the analysis and interpretation of the findings. Chapter five summarizes the analyzed findings, makes relevant conclusions from the summaries, gives recommendations and suggests areas for further studies by future scholars and academicians.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This section discusses existing theories upon which the study was anchored on. The study also looks at existing studies done by other authors on innovation strategies and their impact on competitive advantage. It also has a section on summary of the literature reviewed and the conceptual framework indicating the relationship between the independent and the dependent variable.

#### **2.2 Theoretical Literature Review**

Various theories that address innovation strategies and competitive advantage in organizations were reviewed. This section covers the strengths and weakness of each theory and how the study variables anchored on it.

##### **2.2.1 Resource-Based View Theory**

The basis of RBV theory indicates how a firm can use the available resources in gaining of competitive advantages (Barney & Clark, 2007). In view of this theory, a firm is seen to constitute several resources that either physical or intangible, that forester's competition. The theory assumes that these resources of an organization are not uniform, neither are they perfectly mobile (Mills, Platts & Bourne, 2003). Resources are heterogeneous because the resources possessed by firms and strategies formulated are idiosyncratic to an organization. Resources are immobile because an organization cannot dispose of resources to the market for creation of value.

Therefore, an organization gains competitive advantage by use of rare, valuable resources which further cannot be copied or imitated by competitors (Pettus, 2001).

However, issues of boundaries are not addressed by this theory directly. According to Barney and Clark (2007), this theory suggests that all valuable resources should be possessed by an organization within the boundaries of operations. This rules out the ability of a firm to outsource rather than expansion of organizational boundaries so as to again competitive advantage (Fahy, 2000). However, although no suggestions are explicitly made by the theory, a firm can easily leverage on outsourcing to gain competitive advantage.

In order for an organization to implement an outsourcing strategy, it needs to have internal resources to manage the outsourcing relationship to ensure that the service level agreements are well drafted to the benefit of the organization. It also needs to have adequate resource capacity among staff to manage the outsourcing relationship. This theory outlines the importance of organizational resources as a factor that aides any organization towards achieving its competitiveness over rivals in the same sector or industry, thus applicable in this study and in the banking industry. The adoption of technology, market innovation, product and process innovation is all possible with the human factor as the major player.

The relevance of this theory to the study is that it helps in informing the importance of resources of an organization and these resources include finance and personnel during the implementation of innovation strategies to gain competitive advantage. The study supports the processes innovations which are a product of experienced and well qualified human resources. It also informs the product innovation which is initiated by

well knowledgeable staff who have good understanding of the business to discover changing customer needs hence inform changes in products.

### **2.2.2 Porters Theory of Competitive Advantage**

Founded by Porters (1979) the competitive approach views the existence of competitive responses to a dynamic organization(s) business environment. The business environment generates the competitive pressures experienced by business firms. Rules of game that indicate the strategies to be used are influenced by industry structures. The Porter's Five Force Model is established on the following forces within an industry; barriers to new entrants in the industry, significant rivalry among firms in an industry, the bargaining powers of suppliers, threats from substitute products and bargaining power of buyers. This forces influence the extent which a firm is competitive in the industry (Porters, 1979).

This model can help an organization to gain competitive advantage in an industry and therefore survival the growth and survival of an organization despite the competitive forces in an industry. This model has different assumptions on strategy related processes and sources of competition within an industry. The model also systematically analyzes the operation of competitive forces and the best way to deal with the forces and therefore gain competitive advantage (Madsen & Walker, 2015).

This theory is important to the study as it showcases the value of each of the innovation strategy that the banking sector in Kenya can adopt in an effort of gaining competitive advantage at the market place. Innovations could mean modifications of products and this would result into competitive advantage among commercial banks in Kenya. This school of thought supports the dependent variable of the study which is competitive advantage. Competitive advantage enables organization gain headway

in a given industry such that its products and services are preferred by customers to those of the competitors.

### **2.2.3 Diffusion of Innovation Theory**

This theory brings on board 5 qualities shaping innovation which affect the diffusion of innovation in an organization. The six qualities of innovation proposed by this theory include complexity, trial ability, compatibility, relative advantage, Observability and complexity. Relative advantage establishes that technology would give tools currently available. Compatibility is the extent which norms and social practices of an organization are consistent between users of technology. Complexity relates to the degree which technology is easy to learn or use. Trial ability relates to a chance to test a given innovation prior to its commitment for use. Observability is the degree that the outputs and gains of the technology are clear and vivid for one to see (Rogers, 2003). Several studies have observed that potential trial ability, compatibility with existing practices and beliefs, low complexity and innovations affording advantages will extensively and rapidly diffuse in an organization as compared to innovations with clusters of opposite characteristics. The theory however makes a suggestion that factors at levels of individual users are also significant determinants of innovation adoption in an organization (Rogers, 2003). Adopters of technology are divided into five groups according to this theory based on the speed of adoption and uptake that is innovators, early adopters, early majority, late majority, and laggards.

Thus theory is important as it informs the independent variables and commercial banks can use it in reviewing processes in the value chain and create a unique mix of products while identifying new markets or existing markets.

#### **2.2.4 Schumpeter Theory of Innovation**

According to Schumpeter (1934), innovation is the structural refurbishments and modification of business operations which occurs progressively. The author identifies 5 types of innovations; applying current methods of selling or producing a product that has not been seen anywhere in the field, launch of new products or additions of features to an already existing product, introduction of current markets with no prior representation in an industry, seeking for updated sources of inventories and modern industry composition by creating or destroying the dominant position.

Any profit seeking organization should be innovative since innovation is a significant engine of economic growth and development. An organization that fail to innovate would soon realize its products are outdated in the market and therefore financial collapse (Schumpeter, 1912).

Schumpeter (1934) identifies 4 dimensions of innovation that is; diffusion, invention, imitation and innovation. According to the theory, possibilities of traders to draw up on the findings of originators and investors may result into investments and employment creation.

The phase of invention posses reduced level of significance wile diffusion and imitation activities greatly affect economic states. Therefore, innovative entrepreneurs establish new avenues of generating more profits. Soon, an innovation is rendered as a new product in the market place that followers and competitor copy as a result of supernormal profits the originator of the idea enjoys. The theory strives to differentiate between businesses with revolutions that establish profitable conditions for modern businesses and those business owners generating loans for financing establishment and growth of new business ventures (Schumpeter, 1939).

The theory is relevant to the study as it showcases the value an organization obtains by being technologically innovative. It showed how technological innovations of the banks' influence their product and processes for competitive advantage.

## **2.3 Empirical Review**

The study reviewed past literature from different scholars on the study variables (process innovation, product innovation, market innovation and technology innovation) and its impact on competitive advantage. The literature further showed the knowledge gap that this study filled.

### **2.3.1 Process Innovation and Competitive Advantage**

A study was done by Sharif, Lo, Baark and Antonio (2011) to assess sources of innovations, its capabilities and competitiveness. The study was done among firms in Hong Kong. The researcher surveyed two hundred firms that engage in manufacturing processes. The findings of the study indicated that acquisition of technologies that are disembodied technology has a bearing effect the ability of an organization to learn, allocate resources and organize its capabilities. From regression analysis results, the study established that sources of innovation like internal functions of an organization can directly result into competitive advantage to an organization. However, innovations sought through seminars, conferences and competitors result into competitive advantages through mediating effect of allocation of resources, and abilities to organize. In this study however, the study focused on firms in Hong Kong, that their industry of operations was not specified. The study did not incorporate aspects of process innovation and how they affect competitive advantage.

Sanders and Linderman (2014) examined how innovation, process management affected performance of an organization. Intensity of competitions was taken as a

moderating variable. From the findings, the effect of innovation efficiency and process design does not depend on intensity of competition in an industry. In this study, efficiency and performance was used as dependent variables where the current study examined how process innovation affected competitive advantage. Coras and Regneala (2015) study on reshaping innovation in the Romanian banking system established that the three variables positively associated with the development of a viable innovation risk management framework are: entrepreneurship, technology and resources. The study also noted that for the banks to gain competitiveness, then it is paramount that the business model these banks apply must adopt a formalized innovation strategy culture. Capacity planning and control is one of the way operations within an organization are placed in order to gain on value adding events which can be achieved in a normal business setting over a given period of time. This study was undertaken in the banking sector although in a different country. The study examined how resources, technology and entrepreneurship affected innovative risk management; and therefore competitive advantage was not studied.

Kamau and Oluoch (2016) investigated the interaction of financial outcome of commercial banks and the level of coming up with new ideas which aimed at leveraging on technology in Kenya. The study notes that the need for innovation is precipitated by transaction and operational costs; this can be attained through use of branchless banking system through technological adoption. The process of transacting as favored by customers is one that should be easy and fun. Thus for any organization seeking to gain competitive advantage, then they have to meet these customers' specifications. The study found out that ATM banking had the highest influence on commercial bank performance and more ATM and banking services should be availed through use of it. Other process innovations that have led to increase in performance

and competitiveness is the use of automation of processes using mobile banking, credit and debit cards, internet banking and agency banking to handle the bank process while serving the banks' customers. This study was limited to financial innovation. The study talks of financial innovation but focused more on technology innovation as ATM is part of current technology useful for competitive advantage among banks.

### **2.3.2 Product Innovation and Competitive Advantage**

A study was done by De-Loecker (2011) in product differentiation. The study established that company differentiates their products so as to expand the lifecycles of current products in the market or to leverage on benefits that accrue from the brand name of reputation. Product differentiation strategy entails modifying the current products or creating new but related and similar products for marketing to current customers by the help of already established channels. Product differentiation attracts satisfied clients to new products due to their direct experience with offering of the firm. This study did not indicate the context it was carried out where the current study was done in the banking sector in Kenya.

Bastos and Straume (2012) study on globalization, product differentiation and wage inequality established that product innovation encompasses aspects in product differentiation in terms improved product features, in connection with the use in which the products are to be put, some preferences, place, product mix, the manner in which the organization relates with other firms, and reputation. It also varies in terms of it being rare and low chances of the ability to copy or imitate it. For organizations to use product innovation as their source of competitive advantage, then they must ensure that customers get the product that they want since they really do have unique

needs and wants and that the existing competitor products do not meet this expectations.

Al-Muala, Abou-Moghli and Al-Abdallah (2012) sought to investigate a link between innovation and realization of competitive advantages in Jordan's banking sector. From the findings, the environment and conditions surrounding business are so dynamic and competitive and this has affected financial performance of organizations. The study indicated that innovation positively and directly affected competitiveness. Therefore, financial institutions need to be innovative in all their operations and businesses.

Akingbade (2014) sought to examine how competitive strategies resulted to better performance among firms in the Telecommunication sector of Nigeria. The researcher selected four from thirty main firms in the telecommunication sector in Nigeria. The findings of the study indicated that globalization has increased competition in the telecommunication sector of Nigeria. Therefore, in order to survive, telecommunication firms ought to be more competitive. Telecommunication firms should come up with new products and ways of doing things that are line with the needs and wants of customers. The study used survey design and the study established relationship between competition strategies, customer loyalty, retention and satisfaction.

### **2.3.3 Market Innovation and Competitive Advantage**

Marketing is the successful commercialization of inventions and ideas so as to achieve the sales target of revenue. Therefore, the importance of marketing function cannot be underscored in an organization. Marketing function helps an organization in achieving the required sales targets which enhances financial growth and therefore

sustained competitive advantages. In essence, cost efficiencies and effectiveness do not greatly result to competitiveness as compared to marketing in an organization.

Kirtiř and Karahan (2011) examined whether social media firms had strong cost efficiency as compared to other firms. The study found out that the operational functions of an organization to achieve performance i.e. productivity. A major concern of most businesses is future survival and prosperity. Coming up with innovative ways of marketing the products of the company helps an organization to gain competitive advantage over its competition. The study further revealed that social networking media and platform are now commonly applied.

Cheng and Krumwiede (2012) in the study on the role of service innovation in the market orientation new service performance linkage. The paper noted that market innovation pays special attention towards the improvement of the present markets mix. Potential markets are readily recognized in conjunction with the provision of new ways that are meant to serve target markets. The study findings reveal that firms employ market segmentation techniques whereby they divide their target markets into special segments while paying regards to their dissimilar characteristics. This serves to ensure optimal firm productivity since the needs of the diverse market segments are addressed in across the diverse markets.

However, innovations need more effort and thorough analysis during planning since high costs are involved and at times risk failure is simply too high. Nevertheless, successful implementation of innovation translates to greater rewards in terms of better organizational performance due to efficiencies and cost reduction synergies attained (Cheng & Krumwiede, 2012). Magunga (2010) examined how marketing

strategies affected performance of firms in the insurance sector in Kenya. The study established a direct and positive relationship between the variables.

Naidoo (2010) examined the interrelationship between innovations, marketing orientation, strategic competitive advantage in view of the performance of an organization. From the findings, marketing orientation had significant effect on marketing innovation and this affected competitiveness positively. The study concludes that had positive correlation with performance of the firm.

Witell, Gustafsson and Kristensson (2012) assessed how customer creation affected innovation. The study was done in communication sector. From the findings, customer orientation significantly affected innovation in the service sector and this resulted into positive effect to the market performance of the firm.

#### **2.3.4 Technology Innovation and Competitive Advantage**

Liu, Liston-Heyes and Ko (2010) established that any organization seeking competitive advantage over its rivals must have an efficient process and a well-thought out communication process. The organization must ensure that process is seamless; from the moment the customer orders to the moment the product or service is delivered and paid for. And again the customers mustn't wait to be informed about the services being provided. It must be fast, efficient and effective with all the information they require. Technology is one of the single most important ways to use in communicating to current customers.

Noorani (2014) investigated the service innovation and competitive advantage. The study found out that service innovation concept can be improved through diversifying strategies. An organization can improve its service concept through establishing proper channels of communication, distribution and large investment in technology.

An organization should invest in non physical and physical aspects of services and products and this enhances the prospects of businesses. Discrepancies in performance of organizations especially online companies could largely be explained by investment in ICT, Research and development, formation of mergers and acquisition among other things.

Waithaka, Bula and Kimencu (2016) assessed how performance of listed firms of NSE was affected by practices of technology competitive intelligences. From the findings, for effective competition of companies, technology should be largely embraced. Technology helps in making decisions since information is availed on a timely, reliable and convenient manner. The study established a sportive relationship between the independent and dependent variables. This relationship between the variables was also statistically significant.

## 2.4 Summary of Knowledge Gaps

The above studies in the empirical literature show that innovation strategies have concentrated on its impact on performance. This study aimed at assessing the impact of innovative strategies on competitive advantages. Table 2.1 outlines the summary in knowledge gaps of the above studies and how this study proposes to fill it.

**Table 2.1: Summary of Knowledge Gaps**

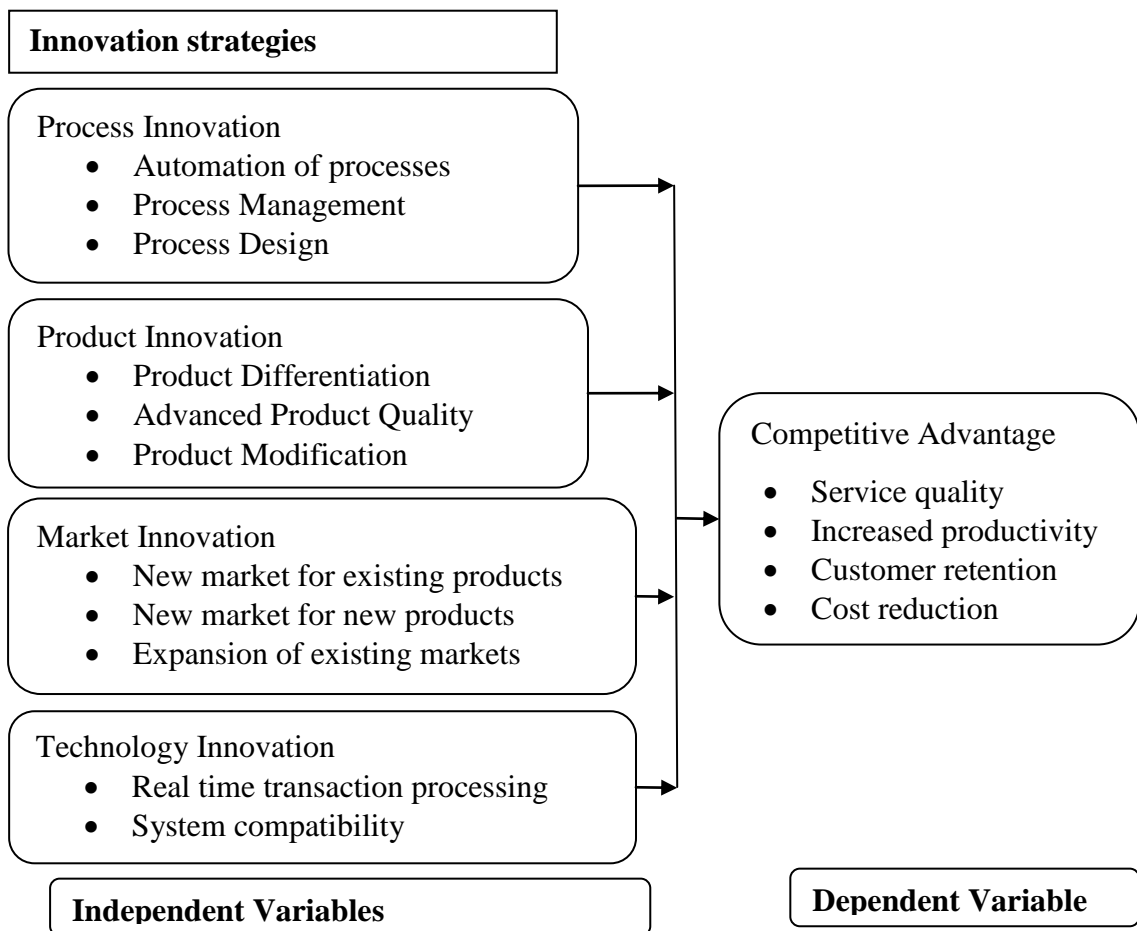
Author	Focus of the Study	Findings	Research Gaps	Focus of the Current Study
Abou-Moghli, Al- Abdallah and Al-Muala (2012)	Innovation and realization of competitiveness in the Jordan Banking sector	Innovation has a direct positive impact on competitive advantage through its dimensions (time, quality, cost, & flexibility)	The study examined innovation and competitiveness in Jordan's banking sector	The current study replicated this study but within the Kenyan banking sector.
Akingbade (2014)	Effect of competitive strategies on financial performance of firms in Telecommunication sector in Nigeria	There was a significant relationship between customer loyalty, satisfaction and retention in view of competitive strategies	The study covered Telecommunication Companies, Nigeria	The study focused on innovation strategies and how they lead to competitive advantage

Regneala and Coras (2015)	Reshaping Innovation in The Romanian Banking System	Entrepreneurship, technology and resources are some of the innovative banking models to be adopted to gain competitiveness.	The study was covered the Romanian Banking System and findings may not be applicable in the Kenya.	The study focused on other dimensions of innovations and competitive advantage
Kamau and Oluoch, (2016)	Effect of financial innovation and performance of Kenyan financial institutions	ATM banking, mobile banking, credit and debit cards, internet banking and agency banking are used in handling all the banking process	The study looks at financial innovation on performance; and doesn't mention other innovative strategies	Sought an understanding of other forms of innovation strategies in commercial banks
Waithaka, Bula and Kimencu (2016)	Effect of the practice of Technological competition intelligence on performance of NSE listed companies	Firms compete effectively by embracing advanced competences that support strategic decision making using accurate and timely information	The study looked at technology oriented competitive intelligence practice on the performance of NSE listed firms	This study assessed the impact of the four innovative strategies to competitive advantage

**Source: (Author, 2017)**

## 2.5 Conceptual Framework

The conceptual framework diagrammatically illustrates the relationship between the study variables which are process innovation, product innovation, market innovation and technology innovation. The variables of the study have been operationalized into measurable terms. Competitive advantage formed the dependent variable.



**Figure 2.1: Conceptual Framework**  
 Source: (Author, 2017)

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter outlines the research methodology which was applied in the study for collecting data. It highlights the research design, the population both the target and final sample size of the study. It also shows the data collection method that was applied and then incorporates the data analysis procedure and presentation of findings.

#### **3.2 Research Design**

The researcher used explanatory and descriptive designs to achieve the objectives. Descriptive because the respondents provided a description of the phenomenon while explanatory because the study sought to examine the cause effect relationship between innovation strategies and competitive advantage among commercial Banks in Kenya (Shields, Patricia and Rangarjan, 2013). The researcher used banks with operations in Kenya for the month of June, 2017.

The study required respondents to provide a description of the situation as it is on competitive advantage of their organizations in respect to various components of innovations (Product, process, market and technology). This helped build a profile on how different innovation strategies have affected the competitiveness of commercial banks in Kenya. Kothari (2004) argue that descriptive research is more concerned with the characteristics of a population being studied. Descriptive research design helped the study gain more insight into the general picture of situation regarding competitive advantage in various banks in Kenya.

### **3.3 Target Population**

Target population refers to elements of major interest to the researcher for drawing appropriate conclusions and inferences as it regards the features of the whole population (Mugenda, 2008). The target population was made up of the heads of strategy from 43 listed commercial banks in Kenya as listed by the Central Bank of Kenya. The heads of strategy were selected upon because of their key role in formulation and implementation of strategies in commercial banks. This puts them strategically fit to provide data required to complete this study. This population was small and easily accessible from the commercial banks' headquarters most of which are located within Nairobi. The study therefore included all the target population hence a census.

### **3.4 Data Sources and Collection Techniques**

In this study emphasis was given to primary data. The primary data was collected using a questionnaire with open ended questions. Questionnaires were used because they allowed the study to collect firsthand information. Questionnaires were easy to code and analyze in Statistical Package for Social Sciences SPSS. Questionnaires were structured into six sections. Section A handled Demographic Information, Section B presented information on Process Innovation, Section C contained information on Product Innovation, Section D gave information on Market Innovation, and Section E gave information on Technology Innovation while Section F gave information on Competitive Advantage.

Before data collection, permission was sought from all the 42 listed banks and Kenyatta University. Each questionnaire had an introduction letter from the University. A drop and pick latter method was adopted while distributing questionnaires. Use of drop and pick latter methodology gave respondents sufficient

time to answer questions at their free time. This did not interfere with their daily operations.

### **3.5 Validity and Reliability of Data Collection Instrument**

This section looks into the pilot test, how it was carried out, validity and reliability.

These are discussed in detail below:

#### **3.5.1 Pilot Study**

The study conducted a pilot study so as to establish the validity and reliability of the data collection research instruments. The pilot test is an activity in research that identifies imperfections, flaws and limitations of the questionnaire and makes provision for correcting the flaws. 10 respondents were used to test the questionnaire; the respondents were managers from deposit taking SACCOs that are based within Nairobi County. Deposits taking SACCOs were used for pilot testing since they engage in banking activities like accepting deposits which are similar to activities performed by commercial banks.

#### **3.5.2 Validity**

The degree which the inferences drawn by the researcher are meaningful and accurate defines validity (2003). The three types of validity include content validity, face validity, and construct validity. Face validity refers to the degree that a measuring tool seems to indicate what it is supposed to measure. Construct validity refers to the degree which an underlying construct is determined and measured by a research tool. Content validity refers to the degree that items are relevantly indicated to the degree which is supposed to be indicated. Content validity is the extent to which items are relevant to the content being measured.

Validity is the degree to which study results as obtained from data analysis actually portray the true intent under study. Validity is said to exist if the collected data actually measures what it was supposed to measure. The norm in establishing content validity of research instruments is to appoint an expert in the particular field where the study intends to study. In this particular study, the study readily sought the opinion of the research supervisors so to assess the validity of the research instruments.

### **3.5.3 Reliability**

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. The study used the test- retest method to establish the reliability of the instruments. A test-retest involves administering the same instruments twice to the same group of subjects, but with a time lapse in between. In this case, a two weeks' time difference was preferred. The study made a comparison between responses or results obtained in the test-retest questionnaires. Cronbach Alpha Coefficient was used to determine reliability of the research instruments. Mugenda and Mugenda (2003) established that when the coefficient of Cronbach Alpha is 0.7 or greater, then the research instruments used were reliable.

### **4.1.2 Reliability Analysis**

The researcher pre-tested the research instruments for testing reliability of the research instruments. Ten respondents were involved in this. The findings are indicated in Table3.1.

**Table 3.1: Reliability Analysis Results**

<b>Scale</b>	<b>Cronbach's Alpha</b>	<b>Number of Items</b>
Product Innovation	0.764	6
Process Innovation	0.761	8
Market Innovation	0.734	6
Technology Innovations	0.763	7

Table 3.1 below shows the effects of sustainability strategies. Product innovation had ( $\alpha=0.764$ ), process innovation had ( $\alpha=0.761$ ), market innovation had ( $\alpha=0.734$ ) and technology innovation ( $\alpha=0.763$ ). This illustrates that all the four scales were reliable as their reliability values exceeded the prescribed threshold of 0.7.

### 3.5 Operationalization of Variables

This section presents the parameters of each of the study variables in terms of how each has been measured. It specifically identifies the indicators, operationalization and scales.

**Table 3.2: Operationalization of Study Variables**

Variable	Indicators	Operationalization	Scales
Process Innovation (Independent Variable)	<ul style="list-style-type: none"> <li>• Automation of processes</li> <li>• Process Management</li> <li>• Process Design</li> </ul>	<ul style="list-style-type: none"> <li>• Waiting time</li> <li>• Turnaround time</li> <li>• Internal efficiency</li> </ul>	Likert (ordinal) scale
Product Innovation (Independent Variable)	<ul style="list-style-type: none"> <li>• Product Differentiation</li> <li>• Advanced Product Quality</li> <li>• Product Modification</li> </ul>	<ul style="list-style-type: none"> <li>• Variety of products offering</li> <li>• Unique Product Features</li> <li>• Extension of benefits for existing products</li> </ul>	Likert (ordinal) scale
Market Innovation (Independent Variable)	<ul style="list-style-type: none"> <li>• New market for existing products</li> <li>• New market for new products</li> <li>• Expansion of existing markets</li> </ul>	<ul style="list-style-type: none"> <li>• New Markets developed</li> <li>• New products introduced for the existing customer</li> <li>• Growth in market share</li> </ul>	Likert (ordinal) scale
Technology Innovation (Independent Variable)	<ul style="list-style-type: none"> <li>• Process automation</li> <li>• System inter-operability</li> <li>• Continuous system upgrade</li> </ul>	<ul style="list-style-type: none"> <li>• Technology adopted</li> <li>• Real time transaction processing</li> </ul>	Likert (ordinal) scale
<b>Competitive Advantage</b> (Dependent Variable)	<ul style="list-style-type: none"> <li>• Service quality</li> <li>• Increased productivity</li> <li>• Customer retention</li> <li>• Cost reduction</li> </ul>	<ul style="list-style-type: none"> <li>• Operational efficiency</li> <li>• Level of returns</li> <li>• Customer loyalty</li> </ul>	Likert (ordinal) scale

*Source: (Author, 2017)*

### 3.6 Data Analysis and Presentation

A mixture of both quantitative data and qualitative one was used in the study. Content analysis was used in analysis of qualitative data. When doing content analysis, the researcher systematically describes how materials and objects are established in the

data. The researcher observes and describes in detail the items and objects which the sample size is made of (Mugenda & Mugenda, 2003).

Descriptive and inferential statistics were used for analysis of quantitative data. The use of descriptive statistics entailed means, standard deviations, frequencies and percentages. Inferential statistics included use of regression analysis. Statistical Package for Social Sciences computer program was employed. Kothari (2004) indicates that relationship between dependent and independent variables can be well illustrated using correlation and regression techniques. The study used multiple regression analysis in order to establish the effect of innovation strategies on competitive advantage. To assess model fitness and significance, the study conducted an Analysis of Variance ANOVA at 5% level of significance. The rates of change in competitive advantage as a result of a unit change in each of the independent variables will be examined from the coefficient table.

**Table 3.3: Study Hypotheses and Analytical Model**

Study Objective	Study Hypotheses	Analytical Model
i) To establish the effect of process innovation on competitive advantage among commercial banks in Kenya	H <sub>01</sub> : There is no significant relationship between process innovation and competitive advantage among commercial banks in Kenya	Simple Linear Regression will be used: $y = \beta_0 + \beta x + \epsilon$ The level of competitive advantage is a function of process innovation: $CA = \beta_0 + \beta PI + \epsilon$ Where: CA = composite index of Competitive advantage $\beta_0$ = Intercept constant PI = Functional value of Process Innovation $\epsilon$ = Error term
ii) To assess the effect of product innovation on competitive advantage among commercial banks in Kenya	H <sub>02</sub> : There is no significant relationship between product innovation and competitive advantage among commercial banks in Kenya	Simple Linear Regression will be used: $y = \beta_0 + \beta x + \epsilon$ The level of competitive advantage is a function of product innovation: $CA = \beta_0 + \beta PP + \epsilon$ Where: CA = composite index of Competitive advantage $\beta_0$ = Intercept constant PP = Functional value of product Innovation $\epsilon$ = Error term
iii) To determine the effect of market innovation on competitive advantage among commercial banks in Kenya	H <sub>03</sub> : There is no significant relationship between market innovation and competitive advantage among commercial banks in Kenya	Simple Linear Regression will be used: $y = \beta_0 + \beta x + \epsilon$ The level of competitive advantage is a function of market innovation: $CA = \beta_0 + \beta MI + \epsilon$ Where: CA = composite index of Competitive advantage $\beta_0$ = Intercept constant MI = Functional value of Market Innovation $\epsilon$ = Error term
iv) To establish the extent to which of technology innovation has affected competitive advantage among commercial banks in Kenya	H <sub>04</sub> : There is no significant relationship between technology innovation and competitive advantage among commercial banks in Kenya	Simple Linear Regression will be used: $y = \beta_0 + \beta x + \epsilon$ The level of competitive advantage is a function of Technology innovation: $CA = \beta_0 + \beta T + \epsilon$ Where: CA = composite index of Competitive advantage $\beta_0$ = Intercept constant T = Functional value of Technology Innovation $\epsilon$ = Error term

Source: (Author 2017)

### Overall Multiple Regression Model

$$CA = \beta_0 + \beta_1PI + \beta_2PP + \beta_3MI + \beta_4T + \epsilon \text{ ----- (1)}$$

Where

CA = Competitive advantage Index

$\beta_0$  = Intercept constant

$\beta_1$ - $\beta_4$  = Regression Coefficients

PI = Functional value of Process Innovation

PP = Functional value of product Innovation

MI = Functional value of Market Innovation

T = Functional value of Technology Innovation

$\epsilon$  = Error term

### 3.7 Ethical Considerations

An introduction letter from Kenyatta University was obtained prior to commencing the research so as to ensure a proper and professional introduction with the respondents.

All the respondents were assured that the information they provided was for academic purposes only. The distributed questionnaires did not bear the name of any respondent who participated in the study thus ensuring confidentiality and anonymity.

The study also did not force anyone to participate; only willing respondents participated for quality purposes.

## CHAPTER FOUR

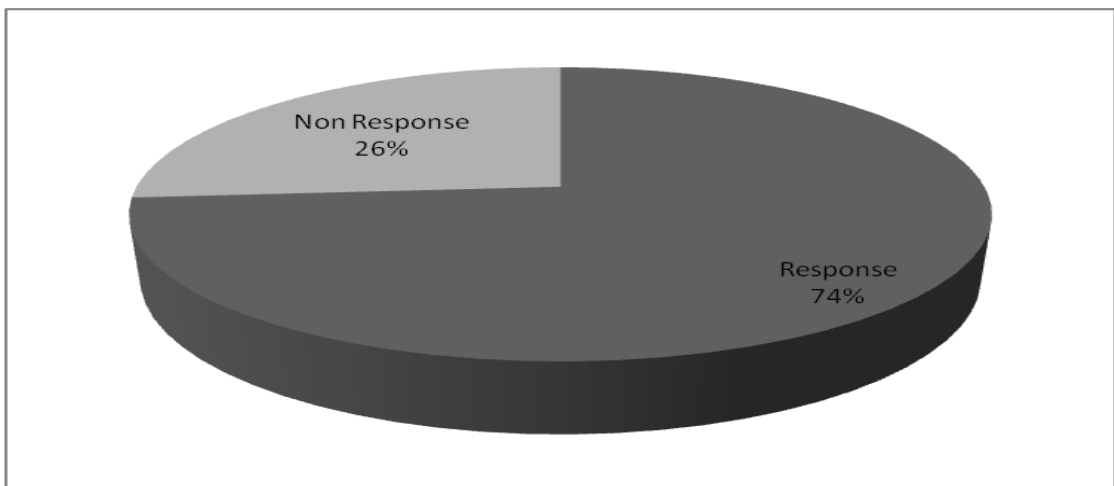
### RESEARCH FINDINGS AND DISCUSSIONS

#### 4.1 Introduction

This chapter presents the data analysis and presentation. The general objective of the study was to establish the effect innovation strategies on competitive advantage among commercial banks in Kenya. Questionnaires were used for collection of data and the finding was analyzed through application of measures of central tendency. The analyzed data is presented using tables and charts.

##### 4.1.1 Response Rate

A total of 43 questionnaires were distributed to heads of strategy of the 43 listed commercial banks in Kenya. From the total issued questionnaires, a total of 31 were fully executed and returned which translates to a response rate of 73%. This return rate conformed to recommendations of an excellent response for generalization of study findings to an entire population of interest (Mugenda and Mugenda, 2003). These results are further illustrated in Figure 4.1.



**Figure 4.1: Response Rate**

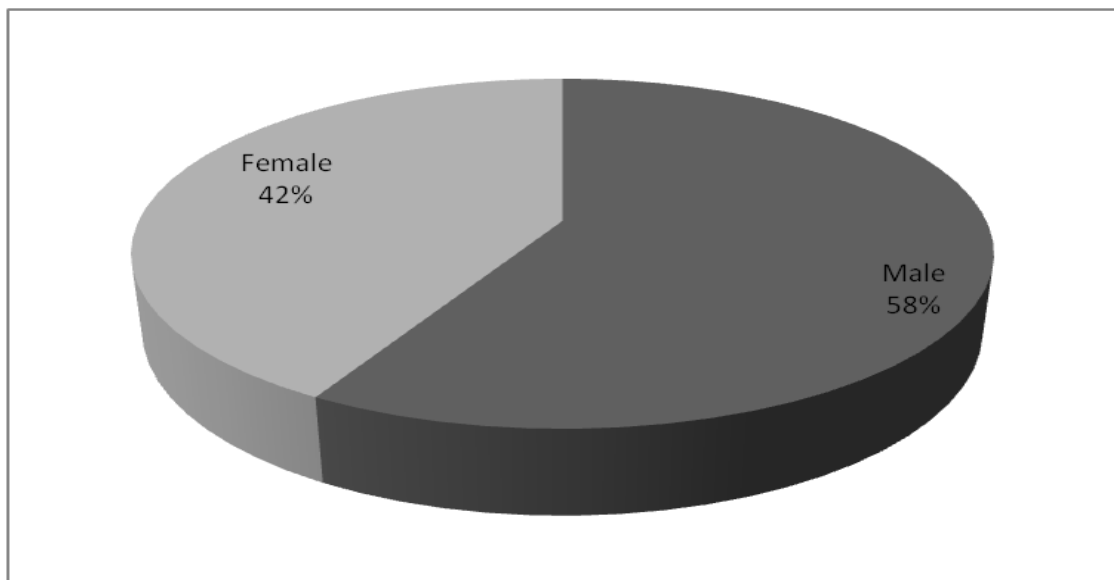
*Source: Survey data (2017)*

## 4.2 Demographic Information

Data on general information on the respondents together with their institutions was sought so as to help establish the reliability of the data collected. Through the general information, diverse aspects on the level of knowledge that the respondents possess on the subjects of the study are assessed. Collected data is explained in details below.

### 4.2.1 Gender Distribution

Information regarding the gender distribution of the respondents was as illustrated in the Figure 4.1.



*Source: Survey data (2017)*

### Figure 4.2: Gender Distribution

From the responses, 42% of the respondents were female while 58% were male. This shows that all gender were included thus provide a good representation for the study. The Kenyan Constitution stipulates one third percent gender rule and therefore the study was in line with these requirements. The findings of gender could also imply that a relatively higher portion of male as compared to female occupy top management positions in the banking industry in Kenya.

#### 4.2.2 Period Working in the Bank

The respondents were asked to indicate the period of time they had been working in their respective banks. The finding is shown in Table 4.1.

**Table 4.1: Period Working in the Bank**

	<b>Frequency</b>	<b>Percent</b>
0-5 years	4	12.9
5-10 years	15	48.4
10-15 years	11	35.5
Above 20 years	1	3.2
<b>Total</b>	<b>31</b>	<b>100.0</b>

*Source: Survey data (2017)*

From the responses, 12.9% of the respondents had been working for a period between 0-5 years, 48.4% for between 5-10 years, 35.5% for between 10-15 years and 3.2% for above 20 years. This shows that the respondents had worked long enough thus provided relevant information for the study. Length of time employees have worked in an organization signifies the level of experience and skills gained in that employees who have worked for a longer period of time are more experienced as compared to those with shorter working periods.

#### 4.3 Variable Descriptive Statistics

##### 4.3.1 Process Innovation

The respondents were asked to indicate the extent to which they agree with each of the statements on process innovation on competitive advantage among the commercial banks in Kenya. Mean and standard deviation were used for ease of interpretation and generalization of findings. The findings are shown in Table 4.2.

**Table 4.2: Process Innovation**

	<b>Mean</b>	<b>Std. Dev</b>
Processes innovation has reduced waiting time	4.67	.747
Process innovation have improved customer records management	4.74	.681
Process innovation has improved the time taken by staff to reply to customer issues	4.68	.652
Process innovation has improved internal efficiency	4.54	.809
Process innovation has improved employee output	4.51	.769
<b>Aggregate Mean Score</b>	<b>4.628</b>	<b>.731</b>

*Source: Survey data (2017)*

From the findings, the study established that majority of the respondents agreed to a very large extent that processes innovation has reduced waiting time as shown by a mean of 4.67 and a standard deviation of 0.747. Regarding the statement as to whether process innovation have improved customer records management; the study revealed that majority agreed to a very large extent as shown by a mean of 4.74 and standard deviation of 0.681. These findings show that process innovations introduced efficiencies and effectiveness in operations thereby leading to cost efficiencies. This finding concurs with that of Kamau and Oluoch (2016) that the need for innovation is precipitated by transaction and operational costs attained through use of branchless banking system through technological adoption.

The study found out that the respondents agreed to a large extent that process innovation has improved the time taken by staff to reply to customer issues having a mean of 4.68 and standard deviation of 0.652. Majority of the respondents agreed to a large extent that process innovation has improved internal efficiency as shown with a mean of 4.54 and standard deviation of 0.809. These findings show that the adoption of process innovations led to high efficiencies hence the reduction in time taken by staff to complete a task. These findings are consistent with the recommendations of

Baark et al. (2011) who indicated that process innovations introduced efficiencies which are key in attainment of competitive advantage.

On whether process innovation had improved employee output, the study established that majority of the respondents agreed to a large extent with a mean of 4.51 and standard deviation of 0.769. This shows that process innovation led to improved employee output because of their improved productivity. This finding is in line with that of Coras and Regneala (2015) that for the banks to gain competitiveness, then it is paramount that the business model these banks apply must adopt a formalized innovation strategy culture. The respondents were also asked to indicate the extent to which process innovation impact on competitive advantage in commercial banks in Kenya. The finding is presented in Table 4.3.

**Table 4.3: Effect of Process Innovation on Competitive Advantage**

	<b>Frequency</b>	<b>Percent</b>
Moderate Extent	3	9.7
Large Extent	8	25.8
Very Large Extent	20	64.5
<b>Total</b>	<b>31</b>	<b>100.0</b>

*Source: Survey data (2017).*

From the findings, majority of the respondents 20 (64.5%) agreed to a very large extent, 8 (25.8%) agreed to a large extent and 3 (9.7%) agreed to a moderate extent. This shows that the process innovation at the banks impacted to a very large extent on the competitive advantage. This is consistent with the recommendations of Sanders and Linderman (2014) that process innovations leads to efficiencies in operations, reduced errors and increased processing capacity for individual staff.

#### **4.3.2 Product Innovation**

The study sought to assess the effect of product innovation on competitive advantage among commercial banks in Kenya. The respondents were asked to indicate the extent

to which they agree with the statements on product innovation. From the responses mean and standard deviation were used for ease of interpretation and generalization of findings. The findings are shown in Table 4.4

**Table 4.4: Product Innovation**

	<b>Mean</b>	<b>Std. Dev</b>
Bank has a variety of financial services for our customers	4.45	.722
Financial services are differentiated from those of our competitors	3.41	.922
The features of our financial services are unique to us	3.16	1.067
Our Bank extends the features of financial services to suit the needs of diverse customer needs	4.32	.832
Bank has enhanced customer benefits on existing products	4.45	.888
The number of products offered by our bank to customers has grown over time	4.61	.558
<b>Aggregate Mean Score</b>	<b>4.067</b>	<b>0.832</b>

*Source: Survey data (2017)*

From the responses, the study established that majority of the respondents to a large extent agreed that their banks had a variety of financial services for their customers indicated by a mean of 4.45 and standard deviation of 0.722. On whether their financial services are differentiated from those of their competitors, the respondents agreed to a moderate extent with a mean of 4.41 and standard deviation of 0.922. The respondents agreed to a moderate extent that the features of the financial services are unique to them as shown by a mean of 3.16 and standard deviation of 1.067. These findings show that commercial banks used product innovations to come up with new product offerings for their customers, improve the quality offerings of their existing products to ensure customer satisfaction. This finding is consistent with De Loecker (2011) that this strategy is often adopted to prolong the life cycle of current products or to take advantage of a favorable reputation or brand name.

The study established that majority of the respondents agreed to a large extent that their banks extends the features of financial services to suit the needs of diverse

customer needs as shown with a mean of 4.32 and standard deviation of 0.832. On whether the bank had enhanced customer benefits on existing products from time to time the respondents agreed to a large extent with a mean of 4.45 and standard deviation of 0.888. The respondents indicated that financial services were improved with more benefits which were sought by customers as a result of product innovations. Abou-Moghli, Al Abdallah and Al Muala (2012) argue that product innovations are important in aligning product features to the changing customer needs.

The respondents indicated to a very great extent that number of products offered by their bank to customers has grown over time shown by a mean of 4.61 with a standard deviation of 0.558. This finding is contrary to that of Abou-Moghli, Al Abdallah and Al Muala (2012) that innovation has a direct positive impact on competitive advantage through its dimensions (time, quality, cost, and flexibility) and that banks should support innovation in all aspects of business and operations. The respondents were also required to indicate the extent to which product innovation impact on the competitive advantage of commercial banks in Kenya. The findings are shown in Table 4.5

**Table 4.5: Effect of Product Innovation on Competitive Advantage**

	<b>Frequency</b>	<b>Percent</b>
Moderate Extent	4	12.9
Large Extent	9	29.0
Very Large Extent	18	58.1
<b>Total</b>	<b>31</b>	<b>100.0</b>

*Source: Survey data (2017)*

The study established that majority of the respondents 18 (58.1%) agreed to a very large extent on the impact on the competitive advantage of commercial banks in

Kenya, 9 (29%) agreed to a large extent and 4 (12.9%) agreed to a moderate extent. This implies that product innovation influence competitive advantage in the commercial banks to a very large extent.

#### 4.3.4 Market Innovation

The study sought to determine the effect of market innovation on competitive advantage among commercial banks in Kenya. The respondents were required to indicate the extent to which they agree with each of the statement on market innovation and competitive advantage as it is applicable among the commercial banks in Kenya. The finding is presented in Table 4.6.

**Table 4.6: Market Innovation**

	<b>Mean</b>	<b>Std. Dev</b>
Our Bank has expanded existing markets with existing products	3.96	.752
Banks has developed new markets for existing products	3.61	.882
Bank has extended market among current customers	4.12	.846
The market share of our company has grown with time	3.90	.978
Our bank has developed several distinguished products for different markets	4.22	.920
<b>Aggregate Mean Score</b>	<b>3.962</b>	<b>.8756</b>

*Source: Survey data (2017)*

The study established that the respondents agreed to a large extent that their banks had expanded existing markets with existing products with the mean of 3.96 and standard deviation of 0.752, on whether banks had come up with new markets for its existing products the respondents were in agreement to a large extent as shown by a mean of 3.61 and standard deviation of 0.882. The study revealed that majority of the respondents agreed that their banks had extended the market of its products among current customers as shown by a mean of 4.12 and standard deviation of 0.846. These findings show that commercial banks applied market innovations to expand their market reach and discover new markets among the existing population. This finding is

consistent with Cheng and Krumwiede (2012) that market innovation pays special attention towards the improvement of the present markets mix.

On whether the market share of their company had grown with time the respondents agreed to a large extent as indicated by a mean of 3.90 and a standard deviation of 0.978 and agreed to large extent that the bank had developed several distinguished products for different markets had a mean of 4.22 and a standard deviation of 0.920. The respondents were in agreement with the statement which is in line with the finding of Naidoo (2010) that market orientation is an important accelerator for marketing innovation that in turn positively associates with strategic competitive advantage.

The study further sought to establish the extent to which market innovation impact on the competitive advantage of commercial banks in Kenya. The findings are shown in Table 4.7:

**Table 4.7: Effect of Market Innovation on the Competitive Advantage**

	Frequency	Percent
Little Extent	1	3.2
Moderate Extent	2	6.5
Large Extent	11	35.5
Very Large Extent	17	54.8
Total	31	100.0

*Source: Survey data (2017)*

From the finding, 1 (3.2%) of the respondents agreed to little extent that market innovation impact on the competitive advantage of commercial banks in Kenya, 2 (6.5%) of the respondents agreed to a moderate extent, 11 (35.5%) of the respondents agreed to a large extent and majority 17 (54.8%) agreed to a very large extent. This implies that market innovation had impacted on competitive advantage of the banks to a large extent.

#### 4.3.6: Technology Innovation

The study sought to establish the extent to which technology innovation has affected competitive advantage among commercial banks in Kenya. The respondents were asked to indicate extent to which they agree with each of the statement on technology innovation as it affects competitive advantage among the commercial banks in Kenya.

The finding is shown in Table 4.8.

**Table 4.8: Technology Innovation**

	<b>Mean</b>	<b>Std. Dev</b>
Our Bank has adopted technology in its operations	4.76	.497
Technology allowed real time transaction processing	4.80	.401
Different technologies adopted by the bank are compatible	4.64	.797
Technology adoption has improved overall customer experience	4.77	.560
Technology adoption has improved customer convenience in transacting	4.78	.616
<b>Aggregate Mean Score</b>	<b>4.75</b>	<b>0.5742</b>

*Source: Survey data (2017)*

From the findings, the respondents agreed to a very large extent that the banks had adopted technology in its operations as shown by a mean of 4.76 and standard deviation of 0.497. On whether the technology adopted has allowed real time transaction processing majority agreed to a very large extent with a mean of 4.80 and standard deviation of 0.401. The respondents agreed to a very large extent that different technologies adopted by the bank are compatible shown with a mean of 4.64 and a deviation of 0.797. This concurs with Waithaka, Bula and Kimencu (2016) that for business firms to compete effectively in the turbulent business environment, they have to embrace advanced technology.

The respondents agreed to a very large extent that the technology adoption has improved overall customer experience as shown by a mean of 4.77 and standard

deviation of 0.560. On whether Technology adoption has improved customer convenience in transacting the respondents were in agreement to a very large extent as shown by a mean of 4.78 with a standard deviation of 0.616. The respondents were asked to indicate the extent to which technology innovation affect the competitive advantage of commercial banks in Kenya. The finding is presented in Table 4.9

**Table 4.9: Effect Technology Innovation on the Competitive Advantage**

	<b>Frequency</b>	<b>Percent</b>
Large Extent	11	35.5
Very Large Extent	20	64.5
<b>Total</b>	<b>31</b>	<b>100.0</b>

*Source: Survey data (2017)*

From the responses, 11 (35.5%) of the respondents agreed to a large extent that technology innovation affect the competitive advantage while 20 (64.5%) agreed to a very large extent. This indicates that technology had impacted on the competitive advantage of the commercial banks.

#### **4.3.8:Competitive Advantage**

The respondents were asked to indicate the extent to which statements on competitive advantage in commercial banks were applicable in their respective commercial banks in Kenya. The finding is shown in Table 4.10

**Table 4.10: Competitive Advantage**

	<b>Mean</b>	<b>Std. Dev</b>
Innovation have improved our Banks' operational costs management	4.58	.885
Innovation have improved overall productivity of our Bank	4.41	.992
Innovation has improved our banks' market share	4.32	.908
Innovation has improved our Bank's customer loyalty	4.38	.843
Innovation has improved the level of customer retention in our Bank	4.51	.724
<b>Aggregate Mean Score</b>	<b>4.44</b>	<b>.8704</b>

*Source: Survey data (2017)*

From the findings, the study revealed that majority of the respondents agreed to a large extent that innovation had improved the banks' operational costs management as shown by a mean of 4.58 and a deviation of 0.885. On whether innovation had improved overall productivity of their banks, majority of the respondents strongly agreed to a large extent as shown with a mean of 4.41 with a standard deviation of 0.992. The respondents agreed to a large extent that innovation had improved their banks' market share as indicated by mean of 4.32 with a standard deviation of 0.902.

As to whether innovation had improved the Bank's customer loyalty the respondents were in agreement to a large extent with a mean of 4.38 and a standard deviation of 0.843. Regarding to whether innovation has improved the level of customer retention in the Banks, the respondents agreed to a large extent as shown by a mean of 4.51 with a standard deviation of 0.724.

#### 4.4 Regression Analysis

The study conducted regression analysis to establish the effect innovation strategies on competitive advantage among commercial banks in Kenya. The study results are shown in the subsequent sections.

**Table 4.11: Model Summary for Process Innovation**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.716 <sup>a</sup>	.512	.495	2.76204

*Source: Survey data (2017)*

The finding shows that R was 0.719 which shows a positive relationship between process innovation and competitive advantage.  $R^2$  was 0.512 implying that 51.2% variation in competitive advantage was explained by process innovation. 48.8% was explained by other factors not covered in the current study. Future scholars should examine these other factors that have an effect on competitive advantage of commercial banks.

**Table 4.12: Coefficient for Process Innovation**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.147	3.494		.901	.375
Process Innovation	.824	.149	.716	5.517	.000

Source: Survey data (2017)

The regression equation becomes;

$$Y = 3.147 + 0.824X_1 + \varepsilon$$

If the factor process innovation was held constant, competitive advantage would be at 3.147. A unit increase in process innovation would lead to a unit increase in competitive advantage by 0.824. This relationship is positive and significant at 5%. The relationship is significant since its p value  $p=0.0000$  which is less than 0.05 with t value  $t=5.517$  which is greater than 1.96. According to Baark, Antonio, Lo and Sharif (2011), some sources of innovation, such as internal departments, can lead directly to superior product competitiveness.

**Table 4.13: Model Summary for Product Innovation**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.774 <sup>a</sup>	.599	.585	2.50439

Source: Survey data (2017)

The finding shows that R was 0.774 which shows a positive relationship between product innovation and competitive advantage.  $R^2$  was 0.599 implying that 59.9% variation in competitive advantage was explained by product innovation. The other factors explain 40.1% change in competitive advantage among commercial banks in Kenya.

**Table 4.14: Coefficient for Product Innovation**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.890	3.123		.605	.550
Product Innovation	.833	.127	.774	6.580	.000

Source: Survey data (2017)

The regression equation becomes;

$$Y = 1.890 + 0.833X_2 + \varepsilon$$

If the factor product innovation was held constant, competitive advantage would be at 1.890. A unit increase in product innovation would lead to a unit increase in competitive advantage by 0.833. The p value  $p=0.000$  less than 0.05 with t value  $t=6.580$  which is greater than 1.96 and therefore product innovation significantly affected competitive advantage of commercial banks in Kenya. According to Magunga (2010), the relationship between product innovation adoption and firms' performance was positive. Naidoo (2010) concluded that competitive advantage consequently positively co-relates with firm performance.

**Table 4.15: Model Summary for Market Innovation**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.721 <sup>a</sup>	.520	.503	2.74070

Source: Survey data (2017)

The finding shows that R was 0.721 which shows a positive relationship between market innovation and competitive advantage.  $R^2$  was 0.520 implying that 52% variation in competitive advantage was explained by market innovation. This leaves 48% explained by other factors.

**Table 4.16: Coefficient for Market Innovation**

Model	Unstandardized Coefficients		Standardized	t	Sig.
	B	Std. Error	Coefficients		
(Constant)	7.300	2.710		2.693	.012
Market Innovation	.752	.134	.721	5.600	.000

Source: Survey data (2017)

The regression equation becomes;

$$Y = 7.3 + 0.752X_3 + \varepsilon$$

If the factor market innovation was held constant, competitive advantage would be at 7.3. A unit increase in market innovation would lead to a unit increase in competitive advantage by 0.752. The p value  $p=0.000 < 0.05$  with t value  $t=5.60 > 1.96$ . This shows that market innovation as a variable had significant effect on competitive advantage of commercial banks in Kenya. Abou-Moghli, Al-Abdallah and Al-Muala (2012) illustrated that innovation has a direct positive impact on competitive advantage through its dimensions (time, quality, cost, and flexibility) and that banks should support innovation in all aspects of business and operations.

**Table 4.17: Model Summary for Technology Innovation**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.799 <sup>a</sup>	.638	.626	2.37839

Source: Survey data (2017)

The finding shows that R was 0.799 which shows a positive relationship between technology innovation and competitive advantage.  $R^2$  was 0.638 implying that 63.8% of the variation in competitive advantage was explained by technology innovation. There were other factors apart from technology innovation that explained 37.2% change in competitive advantage of commercial banks in Kenya.

**Table 4.18: Coefficient for Technology Innovation**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-6.854	4.088		-1.676	.104
Technology Innovation	1.223	.171	.799	7.152	.000

*Source: Survey data (2017)*

The regression equation becomes;

$$Y = -6.854 + 1.223X_4 + \varepsilon$$

If the factor technology innovation was held constant, competitive advantage would be at -6.854. A unit increase in technology innovation would lead to a unit increase in competitive advantage by 1.223. The p value  $p=0.000$  less than 0.05 with t value  $t=7.152$  which is greater than 1.96. One aspect of technology innovation in the banking context is adoption of Automated Teller Machine ATM. According to Kamau and Oluoch (2016) ATM banking had the highest influence on commercial bank performance and more ATM and banking services should be availed through use of it.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

The chapter presents the summary of findings and the conclusion drawn from the data findings. It also presents the recommendations of the study based on the objectives of the study.

#### **5.2 Summary**

The purpose of the study was to examine the effect of innovation strategies on competitive advantage among commercial Banks in Kenya. More specifically, the study examine how process innovation, product innovation, market innovation and technology innovation affected competitive advantage among commercial banks in Kenya. The study adopted both descriptive and exploratory research designs. The target population consisted of 42 managing directors of all commercial banks in Kenya. A census approach was adopted on all these 42 banks giving a sample size of 42 manag9ng directors as respondents of the study. The study collected primary data using semi-structured questionnaires. The collected data was analyzed descriptively and inferentially. Analysis was done using SPSS software. The analyzed findings are summarized below.

The study found out that that processes innovation had reduced waiting time, improved customer records management, improved the time taken by staff to reply to customer issues, improved internal efficiency and improved employee output. The findings of the study further established that process innovation significantly influenced competitive advantage of commercial banks in Kenya.

The study established that the banks had a variety of financial services for their customers, financial services are differentiated from those of their competitors, the features of the financial services are unique, the banks extends the features of financial services to suit the needs of diverse customer needs, the bank had enhanced customer benefits on existing products from time to time and that the number of products offered by their bank to customers has grown over time. The study revealed that product innovation significantly influenced competitive advantage among commercial banks in Kenya.

The study revealed that banks had expanded existing markets with existing products, come up with new markets for its existing products, extended the market of its products among current customers and developed several distinguished products for different markets. Market innovation had significant influence on competitive advantage of commercial banks in Kenya.

The study also revealed that the banks had adopted technology in its operations; technology adopted had allowed real time transaction processing, different technologies adopted by the bank were compatible; technology adoption has improved overall customer experience and improved customer convenience in transacting. Use of technology innovation promotes a friendly and helpful staff hence customer satisfaction and that less time is required at the service point due to innovations in the banks. Technology innovation significantly affected competitive advantage of commercial banks in Kenya.

### **5.3 Conclusion**

The study concludes that whereas process, product and market innovation had an impact on competitive advantage, technology innovation was the key driver in competitive advantage among commercial banks in Kenya.

Banks that had embraced technology innovation enjoyed low costs, enhanced differentiation, and also first mover advantages.

Technology innovation plays a critical role in shaping the pattern of product differentiation and led to other absolute cost advantages such as low cost products

The study further concludes that the commercial banks which had innovated new technologies had competitive edge over those whose uptake was low. The innovations carried out by the banks have either been establishment of an entirely new technology, product, process or renewal or modifying of an existing technology, product or process and putting it in use in a new way.

The study concludes that use of technology innovation promoted customer satisfaction through friendly and helpful staff. Innovation ensured that the services given to customers are of high quality. Use of technological innovations such as ATMs, new technology development, electronic funds transfer, internet banking and telephone banking enhance productivity of the bank while creating customer convenience. Banks should ensure digital adoption in service delivery which will lead to reduced costs and the turnaround time in transaction processing

### **5.4 Recommendations**

The study recommends that commercial banks should ensure that they adapt to the new technology in order to survive with the swift changing technology. Technology

innovation encourages ease of flow of information and speedy delivery to the intended persons. For efficient adoption of technology innovation strategies, there should be reliable infrastructure, enough financial resources to develop an innovation roadmap and supporting capabilities and processes. For efficient adoption of technology innovation strategies, there should be reliable infrastructure and enough financial resources.

### **5.5 Suggestion for Further Research**

The objective of this study was to establish the effect innovation strategies on competitive advantage among commercial banks in Kenya. The study carried out a census of all the commercial banks' headquarters most of which are located within Nairobi. The study recommended that a similar study should be carried out in other financial organizations to find out whether the same results would be replicated.

## REFERENCES

- Abou-Moghli, A. A., Al Abdallah, G. M., & Al Muala, A. (2012). Impact of innovation on realizing competitive advantage in banking sector in Jordan. *American Academic & Scholarly Research Journal*, 4(5), 1.
- Madsen, T. L., & Walker, G. (2015). *Modern competitive strategy*. McGraw Hill.
- Adriopoulos, I., & Dawson, H. (2013). The knowledge-creating company: How Japanese companies create the dynamics of innovation.
- Magunga, A. K. (2010). *Effects of Marketing Strategies on the Performance of Insurance Companies in Kenya* (Doctoral dissertation, Doctoral dissertation, University of Nairobi).
- Shields, P. Rangarjan (2013) A Playbook for Research Methods: Integrating Conceptual Frameworks and Project Management. *Stillwater. OK: New Forums Press p, 24.*
- Aghion, P., Bloom, N., Blundell, R., Griffith, R., & Howitt, P. (2012). *Competition and innovation: An inverted U relationship* (No. w9269). National Bureau of Economic Research.
- Akingbade, W. A. (2014). Competitive strategies and improved performance of selected Nigeria telecommunication companies. *Journal of Entrepreneurship Management and Innovation (JEMI)*, 10(4),143-167.
- Awori, B. S. (2011). *Strategies adopted by Equity bank to develop sustainable competitive advantage* (Doctoral dissertation, University of Nairobi, Kenya).
- Baark, E., Antonio, K. W., Lo, W., & Sharif, N. (2011, April). Innovation sources, capabilities and competitiveness: evidence from Hong Kong firms. In *Paper presented at the DIME Final Conference* . 6, (8).
- Baker, W. E., Sinkula, J. M., Grinstein, A., & Rosenzweig, S. (2014). The effect of radical innovation in/congruence on new product performance. *Industrial Marketing Management*, 43(8), 1314-1323.
- Barney, J. B., & Clark, D. N. (2007). *Resource-based theory: Creating and sustaining competitive advantage*. Oxford University Press on Demand.

- Cheng, C. C., & Krumwiede, D. (2012). The role of service innovation in the market orientation—new service performance linkage. *Technovation*, 32(7), 487-497.
- Coras, E. L., & Regneala, H. (2015). Reshaping innovation in the Romanian banking system. *International Journal of Economic Practices and Theories*, 5(3), 166-172.
- De Loecker, J. (2011). Product differentiation, multiproduct firms, and estimating the impact of trade liberalization on productivity. *Econometrica*, 79(5), 1407-1451.
- Drucker, P. (2014). *Innovation and entrepreneurship*. Routledge.
- Fahy, J. (2000). The resource-based view of the firm: some stumbling-blocks on the road to understanding sustainable competitive advantage. *Journal of European industrial training*, 24(2/3/4), 94-104.
- Frame, W. S., & White, L. J. (2014). Technological change, financial innovation, and diffusion in banking. *Working Paper*, 10, 1-31.
- Gaya, H. J., Struwig, M., & Smith, E. E. (2013). Creating a sustainable competitive advantage at a high performing firm in Kenya. *African journal of business management*, 7(21), 2049.
- Grevesen, C. W., & Damanpour, F. (2007). Performance implications of organisational structure and knowledge sharing in multinational R&D networks. *International Journal of Technology Management*, 38(1-2), 113-136.
- Ilo, J. V., Wilson, A., & Chioke, N. S. (2014). Impact of technological innovation on delivery of banking services in Nigeria.
- Johnston, R. E., & Bate, J. D. (2013). The power of strategy innovation: a new way of linking creativity and strategic planning to discover great business opportunities. *International Journal of Strategy*, 40(3): 621- 36
- Karanja, F. G. (2011). Competitive advantage through innovation strategies in united bank of Africa limited, *International Journal of Business Studies*, 4(2) 125-131.
- Kiragu, R. W. (2016). Influence of Innovation on performance of Insurance companies in Kenya (Thesis). Strathmore University.

- Kirtiř, A. K., & Karahan, F. (2011). To be or not to be in social media arena as the most cost-efficient marketing strategy after the global recession. *Procedia-Social and Behavioral Sciences*, 24, 260-268.
- Kombo, D. K., & Tromp, D. L. (2006). Proposal and thesis writing: An introduction. *Nairobi: Paulines Publications Africa*, 10-45.
- Laperche, B., Lefebvre, G., & Langlet, D. (2011). Innovation strategies of industrial groups in the global crisis: Rationalization and new paths. *Technological forecasting and social change*, 78(8), 1319-1331.
- Liu, G., Liston-Heyes, C., & Ko, W. W. (2010). Employee participation in cause-related marketing strategies: A study of management perceptions from British consumer service industries. *Journal of Business Ethics*, 92(2), 195-210.
- Maina, C. W. (2011). *Growth strategies adopted by Eco bank Kenya Limited*, *International Journal of Business Administration*, 3(1), 235-243.
- Maxine, C.W. (2012). employee perception of the relationship between competitive strategies and performance in Barclays bank of Kenya limited, *International Journal of Business Administration*, 3(1), 344-348.
- Mills, J., Platts, K., & Bourne, M. (2003). Applying resource-based theory: methods, outcomes and utility for managers. *International Journal of Operations & Production Management*, 23(2), 148-166.
- Mugenda, M. O., & Mugenda, A. G. (2003). *Research methods in education: quantitative and qualitative approach*, Nairobi.
- Mumo, M. N. (2012). *Strategies used by standard chartered bank in building a sustainable competitive advantage in international markets*, *international journal of business administration*, 3(1), 411-418.
- Mutai, T. K. (2012). *Competitive Strategies Adopted By Microfinance Institutions In Kenya* (Doctoral Dissertation, School Of Business, University Of Nairobi).
- Naidoo, V. (2010). Firm survival through a crisis: The influence of market orientation, marketing innovation and business strategy. *Industrial marketing management*, 39(8), 1311-1320.

- Noorani, I. (2014). Service innovation and competitive advantage. *European Journal of Business and Innovation Research*, 2(1), 12-38.
- Nzewi, H. N., Osisioma, H. E., Mgbemena, I. C., & Onwuzuligbo, L. T. (2016). Management innovation and competitiveness of selected pharmaceutical firms in Anambra state, Nigeria, *African Journal of Management*, 4(2), 156-164.
- Obeidat, B. (2016) The effect of strategic orientation on organizational performance: the mediating role of innovation. *International Journal of Communications, Network and System Sciences*, 9, 478-505.
- Odhiambo, G. O. (2008). Innovation strategies at the standard chartered bank (Kenya) limited, *International Journal of Business Administration*, 3(2), 133-138.
- Orodho, A. J. (2003). Essentials of educational and social sciences research methods. *Nairobi: Masola Publishers*.
- Pettus, M. L. (2001). The resource-based view as a developmental growth process: Evidence from the deregulated trucking industry. *Academy of Management Journal*, 44(4), 878-896.
- Porter, A. L., & Cunningham, S. W. (2004). *Tech mining: exploiting new technologies for competitive advantage*. John Wiley & Sons.
- Porter, M. E. (1980). Competitive strategy: Techniques for analyzing industry and competitors. *Competitive strategy: techniques for analyzing industry and competitors*.
- Porter, M. E. (1985). Competitive advantage: creating and sustaining superior performance. 1985. *New York: Free Press*.
- Rogers, E. M. (2003). Elements of diffusion. *Diffusion of innovations*, 5, 1-38.
- Saebi, T., & Foss, N. J. (2015). Business models for open innovation: Matching heterogeneous open innovation strategies with business model dimensions. *European Management Journal*, 33(3), 201-213.
- Salunke, S., Weerawardena, J., & McColl-Kennedy, J. R. (2011). Towards a model of dynamic capabilities in innovation-based competitive strategy: Insights from

project-oriented service firms. *Industrial Marketing Management*, 40(8), 1251-1263.

Sanders Jones, J., & Linderman, K. (2014). Process management, innovation and efficiency performance: The moderating effect of competitive intensity. *Business Process Management Journal*, 20(2), 335-358.

Saunila, M., & Ukko, J. (2013). Facilitating innovation capability through performance measurement: A study of Finnish SMEs. *Management Research Review*, 36(10), 991-1010.

Schein, E. H. (2010). *Organizational culture and leadership*. John Wiley & Sons.

Schumpeter, J. A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. Transaction publishers.

Waithaka P., Bula, H. & Kimencu, L. (2016). Effect of technology oriented competitive intelligence practice on the performance of firms listed on the Nairobi securities exchange, Kenya. *International Journal of Education and Research*, 4(2).

## APPENDICES

### Appendix I: List of Commercial Banks in Kenya

## APPENDIX II: QUESTIONNAIRE

### INTRODUCTION

This questionnaire is on the study topic:

### INNOVATION STRATEGIES AND COMPETITIVE ADVANTAGE AMONG COMMERCIAL BANKS IN KENYA

Please tick in the box  the answer the best suits your responses. Kindly respond to all questions.

### PART A: DEMOGRAPHIC

1. What is your gender?

Male [ ] Female [ ]

2. Which commercial bank do you work in?

.....

3. How long have you worked in this bank?

0-5 years [ ] 5-10 years [ ]

10-15 years [ ] 15-20 years [ ]

Above 20 years [ ]

### PART B: PROCESS INNOVATION

4. The following are several statements on the impact of process innovation to organizations. Using the 5-point Likert scale where: 1= Not at all, 2= Little Extent 3 =Moderate Extent 4 =Large Extent 5=Very Large Extent, kindly indicate the extent to which you agree with each of the statement on process innovation on competitive advantage among the commercial banks in Kenya.

STATEMENT	1	2	3	4	5
Processes innovation has reduced waiting time					
Process innovation have improved customer records management					
Process innovation has improved the time taken by staff to reply to customer issues					
Process innovation has improved internal efficiency					
Process innovation has improved employee output					

5. In general terms, to what extent does process innovation impact competitive advantage in commercial banks in Kenya?

- Not at all [     ]
- Little Extent [     ]
- Moderate Extent [     ]
- Large Extent [     ]
- Very Large Extent [     ]

**PART C: PRODUCT INNOVATION**

6. Below are several statements on product innovation and its impact on the competitive advantage in organizations. Using the 5-point Likert scale where: 1= Not at all, 2= Little Extent 3 =Moderate Extent 4 =Large Extent 5=Very Large Extent. State the extent to which you agree with each of the statement on product innovation it applies in commercial banks in Kenya.

STATEMENT	1	2	3	4	5
Our Bank has a variety of financial services for our customers					
Our financial services are differentiated from those of our competitors					
The features of our financial services are unique to us					
Our Bank extends the features of financial services to suite the needs of diverse customer needs					
Our bank has enhanced customer benefits on existing products from time to time					
The number of products offered by our bank to customers has grown over time					

7. In general terms, to what extent does product innovation impact the competitive advantage of commercial banks in Kenya?

- Not at all [     ]
- Little Extent [     ]
- Moderate Extent [     ]
- Large Extent [     ]
- Very Large Extent [     ]

**PART D: MARKET INNOVATION**

8. The following are several statements on the impact of market innovation to competitiveness of organizations. Using the 5-point Likert scale where: 1= Not at all, 2= Little Extent 3 =Moderate Extent 4 =Large Extent 5=Very Large Extent. Kindly indicate the extent to which you agree with each of the statement on market innovation and competitive advantage as it is applicable among the commercial banks in Kenya.

STATEMENT	1	2	3	4	5
Our Bank has expanded existing markets with existing products					
Our banks has come up with new markets for its existing products					
Our Bank has extended the market of its products among current customers					
The market share of our company has grown with time					
Our bank has developed several distinguished products for different markets					

9. In general terms, to what extent does market innovation impact on the competitive advantage of commercial banks in Kenya?

Not at all [      ]

Little Extent [      ]

Moderate Extent [      ]

Large Extent [      ]

Very Large Extent [      ]

## **PART E: TECHNOLOGY INNOVATION**

10. The following are several statements on technology innovation as a factor of competitive advantage in organizations. Using the 5-point Likert scale where: 1= Not at all, 2= Little Extent 3 =Moderate Extent 4 =Large Extent 5=Very Large Extent. State the extent to which you agree with each of the statement on technology innovation as it affects competitive advantage among the commercial banks in Kenya.

STATEMENT	1	2	3	4	5
Our Bank has adopted technology in its operations					
The technology adopted has allowed real time transaction processing					
Different technologies adopted by the bank are compatible					
Technology adoption has improved overall customer experience					
Technology adoption has improved customer convenience in transacting					

11. To what extent does technology innovation affect the competitive advantage of commercial banks in Kenya?

- Not at all [     ]  
 Little Extent [     ]  
 Moderate Extent [     ]  
 Large Extent [     ]  
 Very Large Extent [     ]

**PART F: COMPETITIVE ADVANTAGE**

12. The following are statements on competitive advantage in commercial banks.

Using the 5-point Likert scale where: 1= Not at all, 2= Little Extent 3 =Moderate Extent 4 =Large Extent 5=Very Large Extent state the extent to which these statements are applicable in the commercial banks in Kenya.

STATEMENT	1	2	3	4	5
Innovation have improved our Banks' operational costs management					
Innovation have improved overall productivity of our Bank					
Innovation has improved our banks' market share					
Innovation has improved our Bank's customer loyalty					
Innovation has improved the level of customer retention in our Bank					

*THANK YOU.*

*THE END*