THE EFFECT OF STRATEGIC INNOVATION ON PERFORMANCE OF MOBILE TELECOMMUNICATION FIRMS IN KENYA

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2014

DECLARATION

I declare that this research project is my original work and has not been submitted for the award of a degree in any other university.

Sign: ______________________________ Date: __________________

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D61/60857/2013

This research project has been submitted for examinations with my approval as the supervisor.

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DEDICATION

This project is dedicated to my late parents Kariuki and Wanjiku, whose desire to see that I am educated to highest level and whose constant sacrifice continues to encourage me to press on despite the challenges life throws across my paths.

To my family, especially my brother Professor Ngotho Kariuki and his family without whose tireless love, support and encouragement, this dream would not have become a reality.

ABSTRACT

Strategic innovation is considered a critical requirement for the growth and profitability of organizations. It has a considerable impact on corporate performance by producing an improved market position that conveys competitive advantage and superior performance. The need for strategic innovation is more to private sector organizations operating in increasingly competitive market and in which case innovation is often a condition for survival. Organisations that have adopted strategic innovation strategies achieve their success by moving beyond industry norms or ‘sustaining’ innovations to achieve certain business model innovation, thereby disrupting established competitors and generating value for themselves, their customers and their shareholders. Firms in the mobile telecommunication industry in Kenya have been operating in increasingly competitive, highly regulated and dynamic market and therefore have to formulate strategies to ensure their survival. The telecommunication industry environment has of late been affected adversely by the changing operating environment that has seen three out of the four firms in the industry make huge losses. Interestingly, while Safaricom is making the highest profits in East and Central Africa, Airtel, Orange and Yu have been making huge losses that have led to the management of both Yu and Orange Telkom consider leaving the Kenyan market. This study sought to find out the effect of strategic innovation on the performance of mobile telecommunication firms in Kenya. The study used descriptive research design in data collection and analysis. SPSS version 21 was used to analyze the data. The study found out that strategic innovation has positive effect on organizational performance. Adoption of superior strategies relating to products, services, marketing processes and human resources led superior organization performance. The study recommends that mobile telecommunication firms should invest more in research and development so as to be able to innovate more and adopt more innovative strategies so as to improve their performance.

TABLE OF CONTENTS

DECLARATION ..... **ii**
ACKNOWLEDGEMENT ..... **iii**
DEDICATION ..... **iv**
ABSTRACT ..... **v**
LIST OF FIGURES ..... **viii**
LIST OF TABLES ..... **ix**
LIST OF ABBREVIATIONS ..... **x**

CHAPTER ONE: INTRODUCTION **1**
1.1 Background of the Study 1
1.1.1 Strategic Innovation 3
1.1.2 Organizational Performance 5
1.1.3 Telecommunication Industry in Kenya 6
1.1.4 Mobile Network Operators in Kenya 7
1.2 Research Problem 8
1.3 Research Objectives 10
1.4 Value of the Study 11

CHAPTER TWO: LITERATURE REVIEW **12**
2.1 Introduction 12
2.2 Theoretical Review 12
2.2.1 Stakeholder Theory 13
2.2.2 Agency Theory 14
2.2.3 Organizational Control Theory 15
2.3 Empirical Review 15

CHAPTER THREE: RESEARCH METHODOLOGY **21**
3.1 Introduction 21
3.2 Research Design 21
3.3 Population of the Study 22
3.4 Data Collection 22
3.5 Data Analysis 23

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSION 24
4.1 Introduction 24
4.2 Background Information 24
4.3 Strategic Innovation 27
4.4 Effect of Strategic Innovation on Organizational Performance 33
4.5 Interpretation and Discussion 35

CHAPTER FIVE: SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS...39
5.1 Introduction 39
5.2 Summary of the Findings 39
5.3 Conclusions 42
5.4 Policy Recommendations 43
5.5 Recommendations for Further Research 44
5.6 Limitation of Study 45

REFERENCES 46
Appendix: Questionnaire 51

LIST OF FIGURES

Figure 4.1: Position of the Respondents 25

Figure 4.2: Firm Size 25

Figure 4.3: Education Level 26

Figure 4.4: Strategic Committee Structure 28

Figure 4.5: Frequency of Strategic Committee Meetings 28

Figure 4.6: Innovations on Research and Development 31

Figure 4.7: Amount Spent on Research and Development 32

LIST OF TABLES

Table 4.1: Organization Structure Innovations Adopted 29

Table 4.2: Product Innovation Adoption 30

Table 4.3: Marketing Innovation 31

Table 4.4: Strategic Innovations and Organization performance 34

Table 4.5: Innovations on Human resource strategies and performance 35

LIST OF ABBREVIATIONS

CEO : Chief Executive Officer

OECD **:** Organization for Economic Co-operation and Development

SPSS **:** Statistical Package for Social Sciences

CCK : Communications Commission of Kenya

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Strategic innovation is an important factor for organization, sustainable competitive advantage and financial performance (Nybakk and Jenssen, 2012). Strategy innovation is seen as capable of creating organisational direction by charting the course of the firm's effort, by focusing the effort through promoting coordination, by providing people with an easy way to understand the organisation and by providing consistency and reducing ambiguity (Mintzberg, Ahlstrand and Lampel, 2009). It has been suggested that in service industries like mobile telecommunication, where competition can move very quickly and new players can enter easily, there is a constant need to think strategically about what is going on (Schmenner, 1995). This appears to be precisely what mobile service providers, in particular, have begun to do in recent years.

A strategy is a plan that provides an organization with the intended course of action and also serves as a guide when dealing with situations (Lusweti, 2009). A strategy is about creating a niche which will generate sufficient revenue to enable an organization outsmart its competitors. A good strategy is one that actually generates a competitive advantage that differentiates an organisation with its competitors by giving it sustainable edge that is valuable, rare and not easy to imitate (Jin, Hewitt, and Thompson, 2004). Strategy should be unique in order to create a competitive advantage (Porter, 1990).

Firms' performance refers to a firm's ability to generate new resources from day to day operations over a given period of time. Within corporate performance, the focus

has always been on the financial side; hence it is traditionally defined in financial terms (Venkatraman and Ramanujam, 1986). Profitability is the main financial measure used to determine organization performance since it is an indicator of both efficiency and effectiveness of organization operations (Bora and Bulut, 2008).

This study was guided by three theories in explaining the relationship between innovative strategies adopted by the firms and the relationship to the overall organization objectives and firms' performance. These theories are the Stakeholder Theory, the Agency Theory and the Organizational Control Theory. Innovation is the application of better solutions that meet new requirements or existing market needs. Innovation is accomplished through having more effective products, processes, services, technologies, or ideas that are readily available to markets, governments and society.

The theory on the relationship between strategic innovation and firms' performance has its history to the work of Schumpeter (1942) and a large body of research regarding this relationship exists which has found that innovation is a key component for long-term firm success. In addition, several scholars argue that innovative businesses are more successful than others. However, research has also shown that innovation can be risky and that failure is the most likely outcome of product innovations (Cooper, 2001). Furthermore, West and Farr (1989) argued that the benefits of innovation vary and may not accrue at all. Other scholars have argued that the relationship can be U-shaped, with high and low levels of innovation likely resulting in the highest performance (Cooper and Brentani, 1991).

Increasing intensity of competition in Kenya's mobile telecommunication industry has negatively affected financial performance of mobile companies with most of them

incurring huge losses in the recent past (CCK, 2013).This has created the need for firms to adopt innovative organization strategies. Pressure on Kenyan mobile companies has also increased due to the changing legal environment requiring the companies to offer more quality services at lowest costs and from customers who expect more and more from the products and services offered. In order to face the new conditions and situations, mobile telecommunication firms have been forced to continuously search for new ways of offering new products or enhancing existing ones. The best organization strategy that mobile telecommunication firms can adopt to make them profitable is one that is innovative, relates to radical changes and creating of a new vision for a new future where the firm will be a leader instead of being follower of the trends established by others (Dobson, Starkey and Richards, 2004).

The study used strategic innovation as the independent variable, firm performance as the dependent and size as the moderating variable. The variables were operationalized in line with the objectives of the study. Organizational Strategic innovation was measured by the number of new products and services, number of unique processes, technology adopted and expenditure on research and development. Size of the firm was determined by the number of employees while organization performance by profitability, number of customers and market size.

1.1.1 Strategic Innovation

Strategic innovation refers to implementation of new ideas, processes, products or services (Bitar, 2003). Jin, et al (2004) defines strategic innovation as a future-focused business development framework that identifies breakthrough growth opportunities, accelerates business decisions and creates near-term, measurable impact within the context of a longer-term vision for sustainable competitive advantage. Strategic innovation challenges an organization to look beyond its established business

boundaries and mental models and to participate in an open minded, creative exploration of the realm of possibilities. The significance of strategic innovation to an organization lies in its ability to supplant competition by generating more value in the long run (Jin, et. al, 2004).

Innovation refers to the process of translating an idea or invention into a good or service that creates value or for which customers will pay; it is finding a better way of doing something (Frame and White, 2004). Innovation can be viewed as the application of better solutions that meet new requirements, in-articulated needs, or existing market needs. Innovation is accomplished through having effective products, processes, services, technologies, or ideas that are readily available to markets, governments and society. The term innovation can be defined as something original and, as a consequence, new, that breaks into the market or society (Frankelius, 2009).

The measures of innovation at the organizational level include financial efficiency, process efficiency, employees' contribution and motivation, as well benefits for customers. Measured values will vary widely between businesses, covering for example new product revenue, spending in research and development, time to market, customer and employee perception & satisfaction, number of patents, additional sales resulting from past innovations (Frankelius, 2009).

Strategic innovation alone is the acceptance of any idea or conduct related to a product, service, system, device, policy or program that is new to the adopting organization. It is the inclusion of any policy, program, structure, process or any market or product that a manager perceives to be true. It is also viewed as the generation, acceptance and implementation of new ideas, products, processes or

services. It involves the successful implementation of creative ideas within an organization (Damanpour and Goplakrishnan, 2001).

Strategic innovation is one of the fundamental instruments of growth strategies to enter new markets, to increase the existing market share and to provide the company with a competitive edge (Nybakk and Jenssen, 2012). Motivated by the increasing competition in global markets, companies have started to grasp the importance of strategic innovation, since swiftly changing technologies and severe global competition rapidly erode the value added of existing products and services. Thus, strategic innovations constitute an indispensable component of the corporate strategies for several reasons such as to apply more productive processes, to perform better in the market, to seek positive reputation in customers' perception and as a result to gain sustainable competitive advantage. Innovations provide firms a strategic orientation to overcome the problems they encounter while striving to achieve sustainable competitive advantage (Hitt, Ireland, Camp and Sexton, 2001).

1.1.2 Organizational Performance

Organization performance is a multidimensional construct operationalized by a variety of financial measures (which include sales, value of net assets and profit) and non-financial measures which include number of workers, market share and overall customer satisfaction. In addition, factors such as overall satisfaction and non-financial goals of the firms are also very important in evaluating performance. Organization performance cannot be adequately determined without considering both financial and nonfinancial measures (Zahra, 1993).

Firms' performance relate to the efficiency and effectiveness of the firm. It is a contextual concept associated with the phenomenon being studied. Profitability is the

main financial measure used to determine organization performance since it is an indicator of both efficiency and effectiveness of organization operations(Bora and Bulut, 2008).Financial measures which have been historically used to measure organizational performance include profit, return on investment, earnings per share, market share, revenue growth and current ratio (Bora and Bulut, 2008).

1.1.3 Telecommunication Industry in Kenya

Kenya mobile telephony industry is one of the most established industries in Africa and accounts for 7% of mobile phone subscribers in Sub-Saharan Africa. The International Telecommunications Union report indicates that Kenya has the third highest number of subscribers, after Nigeria and South Africa that respectively account for 26% and 19% of mobile cellular subscriptions in Sub-Saharan Africa (Kaloki, 2010).

The telecommunications sector has seen fast mobile phone growth since the beginning of the liberalization of the in industry in 1999. The process was started by the establishment of the Communications Commission of Kenya (CCK) in February of that same year through the Kenya Communications Act, 1978. CCK's role was to license and regulate telecommunications, radio communication and postal services in Kenya. In year 2000, some 180,000 Kenyans had access to a mobile phone and by the end of 2006; the figure had grown to 7.3 million people, an increase of more than 4,000 percent (Kaloki, 2010).

Kenya’s telecommunication industry is fast-growing and is characterized by tight competition between the four operators that include Airtel Networks Kenya Limited (Airtel), Safaricom Limited (Safaricom), Essar Telecoms Kenya Limited (Yu), and Telkom Kenya Limited (Orange) (CCK, 2013). The mobile phone industry currently

accounts for around 2 percent of Kenya's Gross Domestic Product (GDP), and analysis show the sector as holding great potential for further growth (CCK, 2013). The growth potential of the industry has attracted many players in the industry who have been making huge profits; but lately, most of the players in the industry have been making huge losses with only one of the four firms in the industry being profitable.

1.1.4 Mobile Network Operators in Kenya

Kenya has four mobile phone operators who include Airtel Networks Kenya Limited, Safaricom Limited, Essar Telecoms Kenya Limited, and Telkom Kenya Limited (CCK, 2013). All the companies have made considerable growth since their inception but only Safaricom has been profitable with all the other operators making huge losses that have led to Yu mobile to consider quitting the Kenyan market.

The mobile phone companies have created employment to thousands of Kenyans both directly and indirectly mostly through mobile money transfer dealership. The rapid growth in the mobile money has positively contributed to economic growth through enhanced financial access. Safaricom is the main player in the industry with over 60% of the subscribers and occupying over 90% of the money transfer services via Mpesa. Airtel is second, Orange third and Yu fourth in aspects of market share (CCK, 2013).

Safaricom dominance in the mobile phone industry has made it hard for other operators to get adequate market and be able to make profits. Safaricom made the highest profits in East and Central Africa in 2009/2010 which communicated the great potential of the mobile phone that saw the entry of Yu mobile and acquisition of part of Telkom Kenya. However, both Orange and Yu mobile have been making huge losses that made Yu mobile consider quitting the Kenyan market and selling a part of

assets to Safaricom and Airtel. The same decision is reported to be under way by the Orange shareholders. The question that has always been asked by analysts and scholars is what is it with Safaricom that has seen its continuous domination of the mobile phone industry?

1.2 Research Problem

Explaining why organizations in the same industry and markets differ in their performance remains a fundamental question within strategic management circles. There is no conclusive established framework that completely explains the source of variation in organisational performance. While Studies have established a direct relationship between strategy and performance, the influence of strategic innovation has not been investigated. In addition, the difference in financial performance of telecommunication firms remains to generate questions.

Strategic innovation is considered as critical requirement for the growth and profitability of organizations. It has a considerable impact on corporate performance by producing an improved market position that conveys competitive advantage and superior performance (Walker, 2004). Study by Gebauer, Worch and Truffer (2012) found that strategic innovation enhances competitiveness, overall productivity and value maximization of the firm. The need for strategic innovation is more to private sector organizations operating in increasingly competitive market and in which case innovation is often a condition for survival (Tidd, Bessant and Pavitt, 2001). Organisations that have adopted strategic innovation strategies achieve their success by moving beyond industry norms or 'sustaining' innovations to achieve certain business model innovation, thereby disrupting established competitors and generating value for themselves, their customers and their shareholders (Markides, 1998).

Firms in the mobile telecommunication industry in Kenya are operating in increasingly competitive, highly regulated and dynamic market and therefore they have to formulate strategies to ensure their survival. The telecommunication industry environment has of late been affected adversely by the changing operating environment that has seen three out of the four firms in the industry make huge losses (CCK, 2013). Interestingly, while Safaricom is making the highest profits in East and Central Africa, Airtel, Orange and Yu have been making huge losses that have led to the management of both Yu and Orange consider leaving the Kenyan market.

The unanswered question arising from the trend is; is it that Safaricom has adopted an innovative strategy which all the others firms in the industry are not aware or have not adopted since strategic innovation has been found to have positive impact on profitability; or is it that there other specific strengths with Safaricom that all the other firms don't have?

In this regard, various studies have been done trying to understand this dynamics in the telecommunication industry and strategic innovation. Gebauer, et al., (2012) found that a significant enabler of strategic innovation in recent years has been the emergence of information and communication technologies that have reduced transaction costs and accelerated the exploitation of strategic innovation at the industry level. McAdam and Keogh (2004) found out that the firms' inclination to innovations was of vital importance in the competitive environments in order to obtain higher competitive advantage. Geroski, (2005) found that direct effects of innovations on firm performance are relatively small, and the benefits from innovations are more likely indirect. Micheline and Reinhilde (2008) found that innovative strategies involve mostly technology acquisition, by acquiring know-how

embodied in machinery and equipment, exclusively but also substantially, in combination with own internal development.

Odhiambo, (2008) studied the innovation strategies at Safaricom Ltd while Gitonga, (2003) studied the innovation processes and the perceived role of the CEO in the telecommunication industry innovations were an important part of firm success. Karanja, (2009) studied the innovation strategies adopted by insurance companies in Kenya and Lusweti, (2009) who studied the innovation strategies adopted by radio stations in Kenya. While these studies have focused on both telecommunication industry and (or) strategic innovation, none of them has studied the effect of strategic innovation on performance of the mobile telecommunication firms.

Therefore, this study sought to find out the effect of strategic innovation on mobile telecommunication firms' performance. It answered the question; what is the effect of strategic innovation on performance of mobile telecommunication firms' in Kenya?

1.3 Research Objectives

The overall objective of the study was to determine the influence of strategic innovation on performance of telecommunication firms in Kenya. The specific objectives were:

1. To examine the strategic innovations adopted by mobile telecommunication companies in Kenya.
2. To find out the effect of strategic innovations on performance of mobile telecommunication companies in Kenya.

1.4 Value of the Study

The research is of significance to various parties who include the management, the general public and customers and researchers and academicians. To the management, the study findings have demonstrated the contribution of strategic innovation to performance of their firms. Therefore by management adopting the study findings, they can come up with strategic innovation strategy which will ensure increased financial returns.

To the customers and the general public, adoption of strategic innovation as a result of this study will lead to improved products and processes which will lead to superior products and more customer satisfaction. Increased firms profitability also implies that the firms will be able to develop better products, achieve growth and create employment.

To policy makers, the study revealed key information explaining the difference in performance of mobile companies in Kenya. This ensured that regulators and policy makers like communication authority of Kenya to develop policies to boost performance of mobile companies and the mobile communication industry.

The study results on the effect of strategic innovation on firms' performance provides strong empirical evidence on the ongoing debates on the sustainability of the firms' performance in face of stiff competition in the mobile telecommunication sector. It has bridged the gap that exists in literature on strategic innovation and form a basis of future research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews existing literatureon strategic innovation and firms' financial performance. This involves review of theoretical aspects related to the study, empirical studies that relate to strategic innovation, financial returns and the research gaps therein.

2.2 Theoretical Review

A theoretical framework refers to collection of interrelated ideas based on theories. It is a set of prepositions, which are derived and supported by data or evidence. A theoretical framework accounts for or explains a phenomenon. A strategy, from military point of view refers to efficient deployment of resources with the aim of outsmarting rivals in order to gain an advantage (Mintzberg, 1987). It is a plan that provides an organization with the intended course of action and also serves as a guide when dealing with situations. In management, strategy is a unified, comprehensive and integrated plan designed to ensure that the basic objectives of the enterprise are achieved. As a plan, strategy can be a ploy, which is a specific manoeuvre intended to outwit an opponent or competitor (Mintzberg, Quinn, and Ghoshal, 2002). Barnely and Hesterly (2008) suggested that a good strategy is one that actually generates a competitive advantage that differentiates an organisation with its competitors by giving it sustainable edge that is valuable, rare and not easy to imitate.

Strategy ensures continuity in an organisation by giving coherence and direction to growth of the entire organisation (Ansoff and McDonnell, 1990). The relationship between strategic innovation and firms' performance can be explained by three

theories: the stakeholder theory, the agency theory and the organisational control theory.

2.2.1 Stakeholder Theory

Stakeholder theory was proposed by Freeman (1984) in his seminal book. Stakeholder theory can be defined by two key aspects. Stakeholders are persons (or groups) with legitimate interests in the corporation and the interests of all stakeholders are of intrinsic value. This means that a firm's management is required to give simultaneous attention to the legitimate interests of all appropriate stakeholders, both in the establishments of organizational structures and general policies and in case by case decision making.

The importance of stakeholder theory is to examine how innovation takes place and how it should be undertaken (Lusweti, 2009). According to the theory, ever increasing pace of change and innovation and the increasing turbulence of the environment make it practically impossible for firms to innovate alone (Walker, 2004). As a result, there is clear need for firms to view themselves as a node in a network of firms that enable it to continually innovate. Stakeholder theory's contribution to the field of strategy is a richer perspective on the nature of the firm, ways managers think about strategic innovation and how board members think about the interests of corporate constituencies.

Stakeholder theory recognizes that managers should acknowledge the interests of different stakeholders and should attempt to respond to them within a mutually supportive framework; management should accept the legitimacy of stakeholders as well as other stakeholders should accept this legitimacy too. Strategic innovations ought to be adopted by the management and should be done to the best interest of all

stakeholders and strategy implementation and formulation should be as consultative as possible (Bitar, 2003).

In relation to the topic, it requires the organization's management to recognize the interest of all stakeholders who include the shareholders and the employees. Stakeholders interests are maximised when the when the company makes profits and overall organization performance being good. To maximise the interests of various stakeholders, the theory view strategic innovations to be important. Adoption of strategic innovation leads to increased financial performance.

2.2.2 Agency Theory

Agency theory explains the relationship between strategies adopted by the managers and relates them to overall organization objectives and firms performance. The theory was propounded by Jensen and Meckling (1976) and views the firm as an artificial construct which serve as a nexus of contracts between individuals. The theory argues that one of the most important contracts a firm engages in is the residual claim (equity) of the shareholders on the firm's assets and cash flows.

In relevance to organization's strategic innovation and financial returns, the managers will try to adopt a strategy that maximizes their returns and not those of principals (shareholders). Since most managers remunerations are based on the financial performance of their firms, they are likely to adopt a strategic plans that will ensure that the firms continuously innovative with intention of achieving competitive advantage and increased profits. However, if the returns of the managers does not relate to the firms profitability, the company is less likely to adopt an innovative strategy.

2.2.3 Organizational Control Theory

Organizational control theory is a recent perspective with its main proponent being Sullivan (1998).The theory argues that organization strategic innovation involves learning and knowledge accumulation of a trial and error process, rooted in experimentation that is individual and collective. Collective learning is the capacity of an organization to identify new knowledge and to capture it.

The theory states that the nature of the innovation process will push firms to either adapt strategies to establish and develop such a process (innovation strategies) or rather adapt alternative strategies (adaptation strategies) that ensure a firm's survival without the uncertainty attached to the innovation process. For this, the Organizational Control Theory adopts an evolutionary approach to the analysis of innovative processes. Successful innovation can build in firms "retained" capabilities that will allow the firm to survive in the future without innovating.

The Organizational Control Theory grasps the complexity of organizations, their environments and the innovation process. For this reason, in such a perspective where uncertainty reigns, it is important to recognize that decision making is not a linear, synchronic process. Far from it, within firms pursuing innovation strategies, decision making is more an art of muddling through where every knowledge holder has to contribute (Bitar, 2003).

2.3 Empirical Review

Strategic innovations have been found to be critical requirement for the growth and profitability of organizations. It has a considerable impact on corporate performance by producing an improved market position that conveys competitive advantage and superior performance (Walker, 2004). Strategic innovation is an important ingredient

for sustained firms' performance. Much weight has been accorded on building innovative institutions and the management of the innovation progression as necessary elements of institutional survival. Firm's strategic innovation level is determined by prescribed indicators or standards of effectiveness, efficiency, and environmental accountability such as productivity, cycle time, regulatory compliance and waste reduction (Brown, 1997).

In today's knowledge economy, investments in intellectual assets are considered more and more to be key strategic elements to maintain a business' growth, profitability and competitiveness (Berry, 2000). Information technology has been established as a key enabler of change. It is also resulting into a driver of change with new products such as telephone banking, mobile banking and electronic banking (Wheelwright and Clark, 1992). Strategic competitiveness can best be achieved by firms through developing new technologies. Therefore, the only way for a firm to gain a sustainable competitive advantage is invariably upgrade its processes and activities through innovation (Porter, 1990). Even if innovation do not get direct rewards by market, it can be used to generate dynamic capabilities to manage changes in the organization's environment and to gain first-mover advantages or react speedily to market changes (Cohen & Levinthal, 1990).

Strategic innovation can take the form of product, process innovation, process innovation or marketing innovation. Product innovation means introducing the new products/services or brining significant improvement in the existing products/services. For product innovation, the product must either be a new product or significantly improved with respect to its features, intended use, software, user-friendly or components and material (Polder, Leeuwen, Mohnen, and Raymond, 2010). Change in design that brings significant change in the intended use or characteristics of the

product is also considered as product innovation (OECD, 2005). The introduction of Mpesa by Safaricom, a mobile money transfer can be seen as an example of the product innovation.

Polder at al. (2010) argues that firms bring product innovation to bring efficiency in the business and reflects the nature of strategy adopted by the firm. In highly competitive environment of today, firms have to develop strategies aimed at developing new products according to customer's needs. The aim of product innovation is to attract new customers. Shorter product life cycle of the products forces the firms to adopt innovative strategies aimed at bringing innovation in the products (Duranton and Puga, 2001). Innovative products faces low competition at the time of introduction and that is why it earns high profit (Roberts, 1999). Product innovation is one of the key factors that contribute to success of an organization.

New product development and product innovation is an important strategy for increasing the market share and performance of the business (Roberts, 1999). The studies showed that new product development has positive impact on the performance of the firm (Ettlie and Reza, 1992).Process innovation refers to the implementation of the production or delivery method that is new or significantly improved (OECD, 2005). Process innovation is about improving the production and logistic methods significantly or bringing significant improvements in the supporting activities such as purchasing, accounting, and maintenance and computing. Process innovation includes bringing significant improvement in the equipment, technology and software of the production or delivery method. Firms bring novelties in the production and delivery method to bring efficiency in the business. The new method must be at least new to the organization and organization had never implemented it before. The firm can

develop new process either by itself or with the help of another firm (Polder et al., 2010).

Firms bring process innovation as a part of overall organization strategic innovation so as to decrease the production cost and hence the level of process innovation is reflected in product costs (Olson et al. 1995). The process innovation, especially in the mobile service providers can have significant impact on the productivity and profitability. Marketing innovation refers to the implementation of new marketing method that involves significant changes in the packaging, design, placement and product promotion and pricing strategy (OECD, 2005). Organizational innovation is the implementation of new ways of organizing business practices, external relations and work place. Organizational innovation is about developing innovative strategy aimed at bringing new ways of organizing routine activities (OECD, 2005). It is the introduction of new practices of doing business, workplace organizing methods, decision making system and new ways of managing external relations (Polder et al., 2010).

Nauwankas (2013) found that the interviewees are aware of the strategies and the challenges that the organization is facing in the process of achieving its objectives. Further, the study revealed that the main challenges in the development and implementation of innovation strategies include resistance from the key stakeholders which include staff, customers, and suppliers among others, the high cost associated with formulation and implementation as well as the rapid changes in technology leading to continuous innovations. The study concluded that the sources of sustainable competitive advantage were internally generated originating out of the possession of superior and high quality internal capabilities and competencies. The sources that were found to be highly significant in generating sustainable competitive advantage

included: superior skills/capabilities of personnel, high level of service quality, continuous learning on how to do things better, effective leadership focused on continuous improvement of the bank's value adding systems and superior/valuable resources. The study recommended that innovation strategies alone were not sufficient to lead to competitive advantage but the emphasis on innovation strategies was that it could lead to sustainable competitive advantage in some cases or may lead to competitive survival.

Aswani, (2013) found that strategic innovation in universities is greatly done by the universities continuously engaging in branding and marketing activities. Also, the study results revealed that there was a strong positive relationship between strategic innovation indicators and the performance of the public universities. The results further demonstrated that a large proportion of the public universities performance could be accounted for by combined effect of strategic innovation. The study concluded that indeed there is a relationship between strategic innovation and performance of the universities.

Simiyu (2013) found that the new market innovation strategies adopted by commercial banks were availability of resources and capabilities, creating and nurturing strong brands, aggressive anti-competitors marketing campaigns, creating value through pricing, environmental analysis and response to changes, customer satisfaction and retention**.** The study also established that commercial banks adopted product innovation strategies which helped the banks to earn more profit, there was faster business growth, to invest more and also in improving the firm's productivity. The study concluded that the process innovation strategies adopted by the banks were philosophy (way of doing things), vision, performance evaluation, shared commitment by everyone in the organization and Clear Communication &

Communications channels. The researcher also concluded that the technological factors that affected the adoption of innovative strategies in the commercial banks were complexity, cost, relative advantage, image and compatibility. The study recommended that for all the commercial banks to earn more profit, increase number of customers, for their business to grow further and also for them to invest more they should embrace the adoption of the innovative strategies.

From the studies reviewed, there is no doubt that strategic innovation generally is the ability to create and revitalize the business idea and concept of the company by changing both the market of the company and the competencies and business system of the company and lead to improved organization performance. In this way, strategic innovation is concerned with developing the entire company. Evidently, organizations need to be more innovative and think proactively in their strategic management. As far as analysis of strategy is concerned, the adoption of strategies (whether collaborative strategy or competitive strategy) is thus important in managing innovations and in making the innovation happen. When the resources and capabilities required in the diffusion of innovation are not available within an economic entity, it is likely that innovators adopt collaborative strategy and vice versa. However, the innovatory strategies employed by innovators along the stages of innovation can change over time. The changes of the strategies of the innovator in the light of ever-changing market competition, in turn, influence the progress of innovation.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter discusses the research methodology that was adopted in this research with the aim of achieving the set objectives for effective interpretation of research findings. The chapter addresses the design that was adopted by the study, study population, data collection and data analysis.

3.2 Research Design

The study adopted a descriptive cross-sectional research design using a census approach because all the firms in the mobile communication industry were studied and data obtained at a specific time and to describe the study problem. A descriptive research design determines and reports the way things are (Mugenda and Mugenda, 2003). Creswell (2003) observes that a descriptive research design is used when data are collected to describe persons, organizations, settings or phenomena. The design also has enough provision for protection of bias and maximized reliability (Kothari, 2008). Descriptive design uses a pre-planned design for analysis (Mugenda and Mugenda, 2003). In this study, inferential statistics and measures of central, dispersion and distribution were applied.

A cross-sectional research design which tries to describe the occurrence of a phenomenon or to explain how factors are related in different organizations were also used (Kothari, 2008). The key advantages of cross sectional research design are that it uncovers relationships that can be studied further in other experimental and descriptive studies.

A good research design has a clearly defined purpose, and had consistency between the research questions and the proposed research method. Mugenda and Mugenda (2003) define this as simply the framework or blue print for the research. It is a framework for the collection and analysis of data that is suited to the research question. Research design is the scheme, outline or plan that is used to generate answers to the research problem (Cooper and Schindler, 2003).

3.3 Population of the Study

Population refers to the entire group of people or things of interest that the researcher wishes to investigate. Mugenda and Mugenda (2003) define population as an entire group of individual or objects having common observable characteristic. A population is a well-defined large set of objects of similar nature such as people, services, elements, events, or group of things that are of interest as a whole and are being investigated. Target population is the specific population in which the researcher wants to draw conclusion.

The target population that formed the unit of analysis for this study was the four mobile telecommunication firms in Kenya. The respondents were the directors-marketing and strategy for the four firms in the telecommunication industry. These are instrumental people in strategy management processes in the organisations. The firms constituting the study population were Safaricom, Orange, Airtel and Yu mobile. All of these companies have their headquarters in Nairobi.

3.4 Data Collection

Creswell (2003) defines data collection as a means by which information is obtained from the selected subjects of an investigation. The study used both primary and secondary data. Secondary data was obtained from the magazines, books and other

published company information relating to firms' performance and publications relating to organization strategy. Using secondary data on profitability ensured accuracy of information obtained and objectivity.

Primary data collection was done using a self-administered questionnaire consisting of two different sections: background information and organization strategic innovation. At the end of the questionnaire, there was an open space in which respondents could write any additional comments. A self-administered questionnaire is desirable because of low cost and adequacy of time for respondents to give responses. It is free of interviewer's biases and a large number of respondents can be reached (Kothari, 2008).The questionnaires were administered to the directors of marketing and strategy for the four firms in the telecommunication industry.

3.5 Data Analysis

The data collected from the questionnaires was edited for completeness and consistency. A five point Likert scale was used to code qualitative data and enable quantitative analysis of the data. According to Creswell (2003), using a Likert scale enables quantitative analysis of qualitative data making it easy to evaluate the accuracy of the information obtained.

Multiple regression analysis was used to determine the relationship between the dependent variables and independent variables. Firm performance was regressed against the various measures of organization's level of strategic innovation. The equation for firms' performance and strategic innovation constructs was expressed in the following equation = $\beta_0 + B_1X_1 + B_2X_2$. Where, Y is firm's financial performance, β_0 is a constant, $X_1$is organization strategic Innovation, $X_2$is size of the firm.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

The information collected was analysed and interpreted in line with the objectives of the study which was to determine the influence of strategic innovation on performance of telecommunication firms in Kenya. This chapter presents data presentation, analysis and interpretations. The primary data was collected using the interview guide attached in Appendix I.

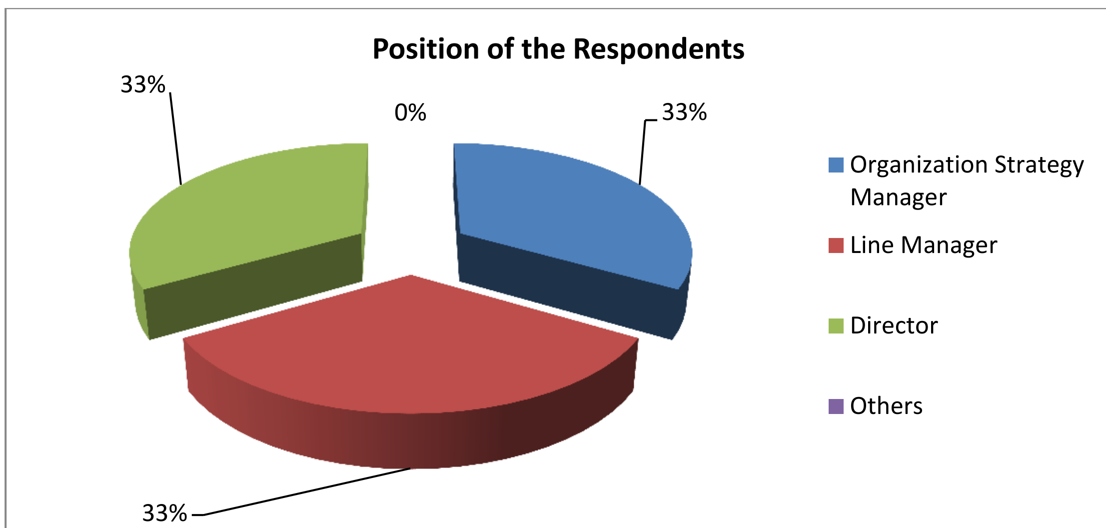
4.2 Background Information

The study target respondents were the senior management of the mobile telecommunication firms in Kenya. The questionnaires were administered through interview to ensure accuracy and reliability of the information provided. The response rate was 100% where the researcher was able to obtain data from all the mobile telecommunication firms. This could be explained by the fact that the number of firms in mobile telecommunication industry was few.

4.2.1 Position in the Organization

The accuracy and reliability of information given depends on the person who is providing it. Therefore, the question sought to obtain background information on the person providing the information so as to determine its accuracy. As shown in the figure 4.1 below, the respondents were strategy managers, line managers and 33% directors. The respondents were in a position to provide accurate and reliable information since they were in a position to access companies' sensitive information.

Figure 4.1: Position of the Respondents

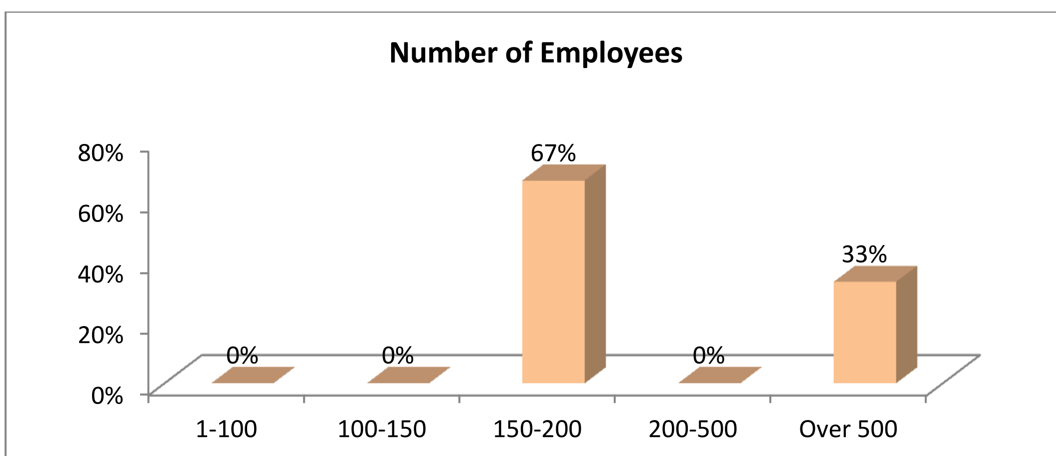


Source: Study Data

4.2.2 Number of Employees

The size of the firm in this study was measured by number of employees. As shown in figure 4.2 below, 67% of the telecommunication firms have 150 to 200 employees while 33% has over 500 employees. This means that the mobile telecommunication industry in Kenya has employed directly a minimum of 800 employees. Determining the number of employees for the company was important since it indicated the size of the firms which was important in making conclusions regarding the findings.

Figure 4.2: Firm Size

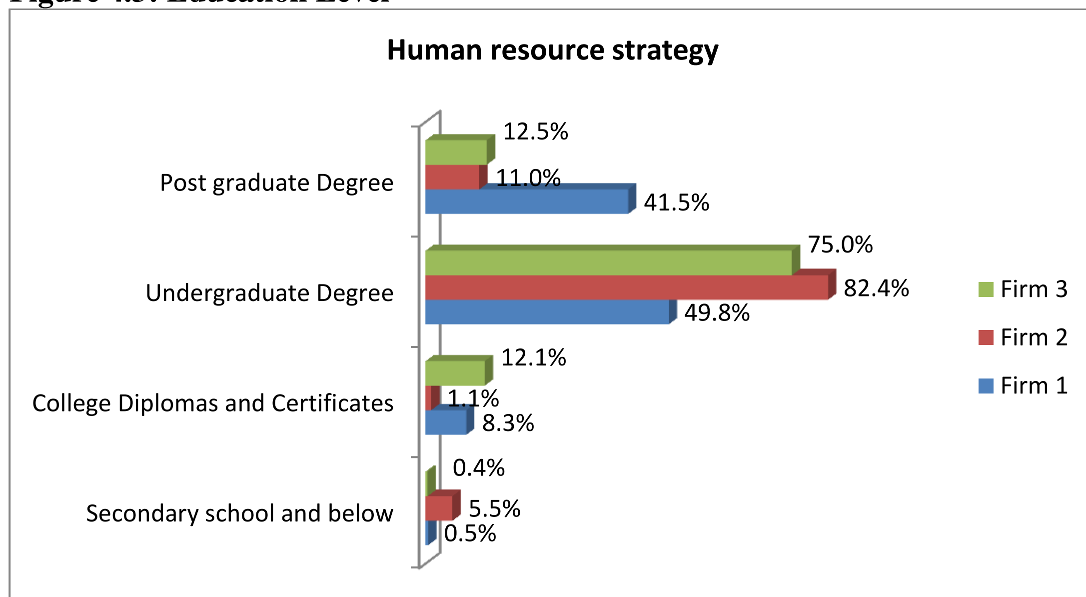


Source: Study Data

4.2.3 Education Level

This was meant to determine the level of human resource innovation put in place by management. Innovations are driven by employees and hence the quality of employees will affect the level of strategic innovation. The details are given in figure 4.3 below.

Figure 4.3: Education Level



Source: Study Data

As it can be seen in figure 4.3 above, firm one has the highest number of post graduate employees at 41.5% of total staff, has 49.8% of total staff being under graduate degree holders, 8.3% diploma and certificate holders and 0.5% secondary level and below. Firm two on the other hand has the highest number of secondary school and below at 5.5% of the total staff population, has the least number of post graduate staff at 11% and has the highest number of staff who are undergraduate degree holders. Firm three has the least secondary school and below at 0.4%, 12.1% college diploma and certificates, 75% undergraduate and 12.5% post graduate.

Overall firm two has the highest number of employees with undergraduate degree and above at 93.4% of the total staff population, firm one second with 91.3% and firm

three third at 87.5%. This implies that firm two has a superior employee's strategy since it has the most qualified man power.

4.3 Strategic Innovation

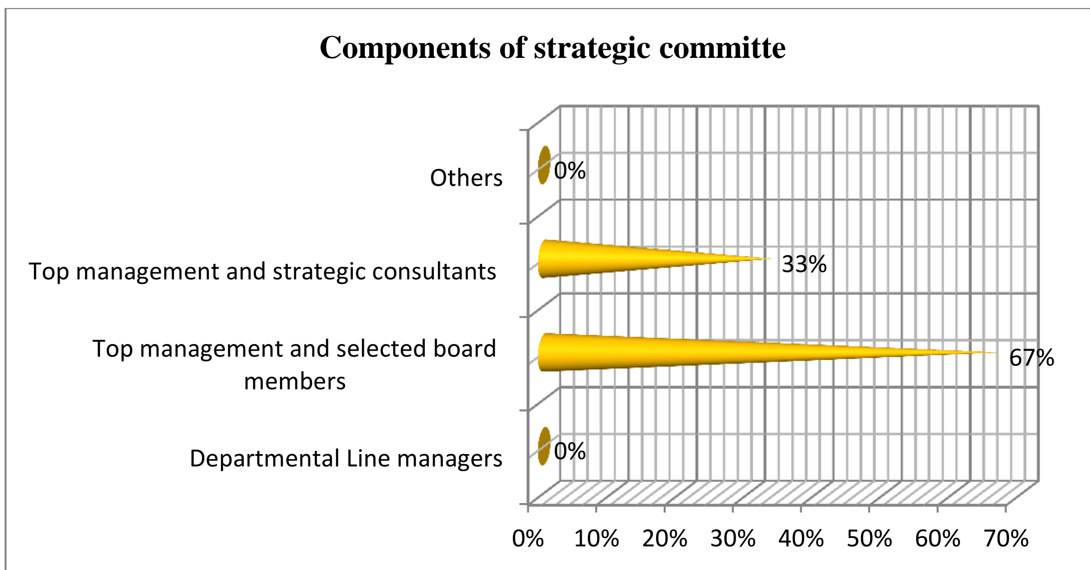
This section sought to achieve the first objective of the study which was to examine the strategic innovations adopted by mobile telecommunication companies in Kenya. The areas covers organization structure innovations, product innovations and marketing innovations.

4.3.1 Strategic Committee and Innovation

As shown in figure 4.4 below, 67% of the firms had the members of the strategic committees being made of top management and selected members while 33% had the members selected from top management and strategic consultants. The purpose of the strategic committee is to develop strategies on behalf of and in consultation/collaboration all stakeholders.

As a result, the committee should consist of very knowledgeable persons who include the management and high calibre consultants (Markides, 1998). As a result, the firm where strategic committee consist of top management and strategic consultants is expected to have better strategies.

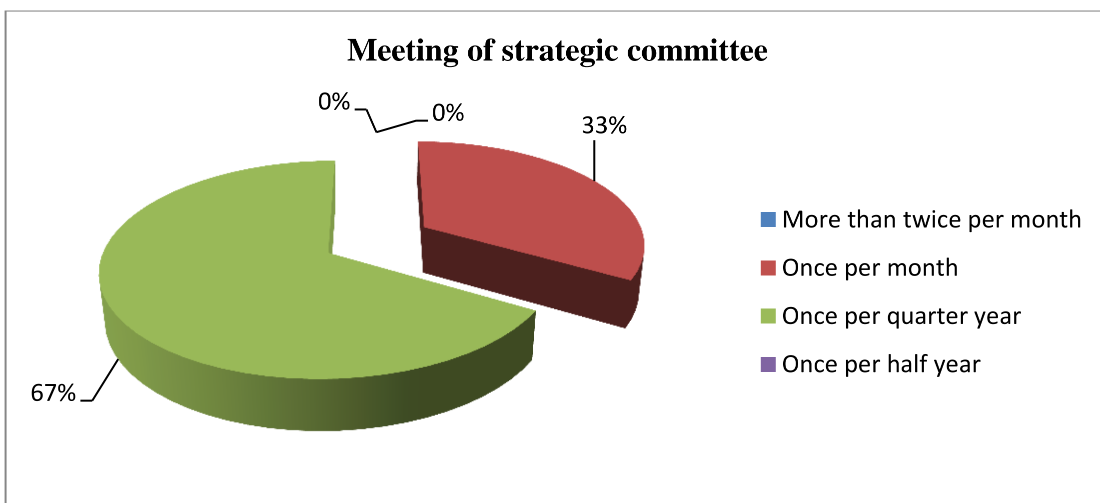
Figure 4.4: Strategic Committee Structure



Source: Study Data

As shown in figure 4.5 below, 67% of the mobile communication companies' strategic committees meet once per quarter while 33% meet once per month. The company where strategic committees meet more often have superior and more responsive strategies.

Figure 4.5: Frequency of Strategic Committee Meetings



Source: Study Data

4.3.2 Organization Structure Innovations Adopted

The level of strategic innovation was measured by a likert scale where the respondents rated their organizations by indicating the extent to which they agreed to a set of statements. The responses were coded using a scale of 1 to 5 where 1 was to no extent, 2 less extent, 3, moderate extent, 4, large extent and 5 to very large extent.

The findings are presented in table 4.1 below. As shown in the table below, the respondents indicated that on average to a large extent, employees had freedom to decide how they were going to do their work and that strategy formulation started at lowest level. To less extent, the respondents indicated that top management was not enthusiastic and confident about their work and the companies encouraged sense of confidence on the employees.

Table 4.1: Organization Structure Innovations Adopted

Statement	Average Rating	Standard deviation
Organization structure is that supervisors are able to support their teams within the organisation	3.6667	0.5774
Communication is encourages, free and open within teams	3.6667	0.5774
People feel that top management is enthusiastic and confident about their work and hence all employees feel a part of management	2.0000	0.0000
Organization encourages self-supervisory to instil a sense of confidence on the employees	2.0000	0.0000
Generally, people can get the resources they need for their work	2.6667	1.1547
Employees have the freedom to decide how they are going to do their work	4.0000	0.0000
Organization has adopted an innovative strategy so as to develop competitive advantage	2.6667	1.5275
Organization strategy starts at lowest organization level and all parties involved in strategy formulation	4.0000	0.0000

Source: Study Data

4.3.3 Product Innovations Adopted by Telecommunication Firms

The findings on the adoption and promotion of innovations by mobile telecommunication firms are shown in table 4.2 below. From the table, to a large extent, the telecommunication firms were found to be highly committed to development of new ideas and invested in technology to support firm strategy.

Table 4.2: Product Innovation Adoption

Statement	Average Ranking	Standard deviation
Innovation and new ideas on work performance is encouraged and rewarded	2.6667	1.1547
New ideas are generally resisted (R) Openness to Innovation	2.6667	1.1547
The organization is highly committed to development of new ideas and invests in the same	4	0
Staff training is encouraged and adequate orientation given	3	1
Organization has invested in technology to support firm strategy	4	0

Source: Study Data

4.3.4 Adopted Marketing Innovations

The findings on the adoption of marketing innovations by mobile telecommunication firms are shown in table 4.3 below. To a large extent, all the mobile marketing firms have a feedback channel that captures customer complaints which are used in service improvement and a marketing strategy that makes customers feel a part of the company through social responsibility and promotions.

Table 4.3: Marketing Innovation

Statement	Average Ranking	Standard deviation
Company has a feedback channel that captures customer complaints which are used in service improvement	4	0
The company has a marketing strategy that makes customers feel a part of the company through social responsibility and promotions	4	0

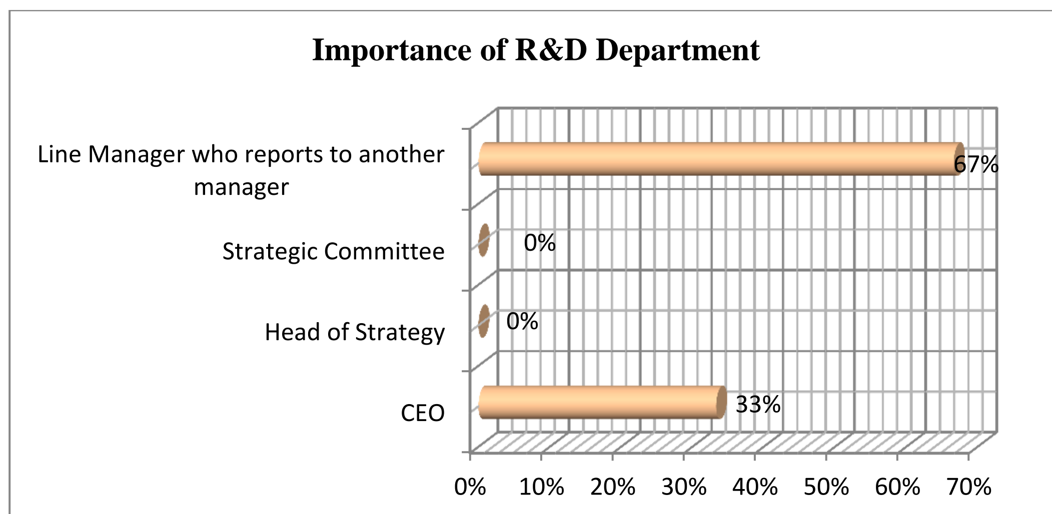
Source: Study Data

4.3.5 Innovations on Research and Development

The perceived importance of a department in an organization can be inferred from the reporting structure available in an organization and hence the measure was used to determine the perceived role of R&D department in steer heading strategic innovation.

As seen in figure 4.6 below, 33% of the mobile companies have their head of research and development reporting to CEO while 67% report to line manager. Hence, the company where head of R&D reports to CEO is likely to innovate more since it indicates the perceive role of R&D department.

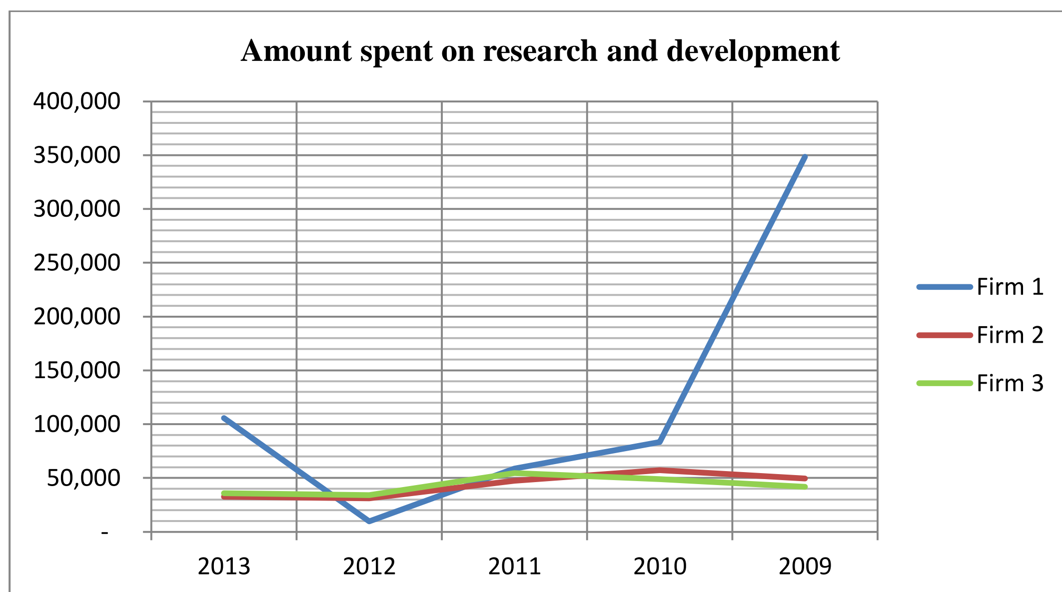
Figure 4.6: Innovations on Research and Development



Source: Study Data

As shown in figure 4.7 below, the amount spent on research and development significantly varies from one firm to the other with spending higher amounts than the other two firms. The amount spent on research and development can be observed to reduce significantly in 2009 and 2010. This could be explained by competition intensity in those years with the amount stabilizing as competition reduces. The amount spent on research and development affects the organization innovation level, leads to more superior products and hence improved performance (Frankelius, 2009).

Figure 4.7: Amount Spent on Research and Development



Source: Study Data

4.3.6 Challenges of Implementing Innovative Strategies

The key challenges faced in implementing organization strategies were found to be resistance from staff on the changes, dealing with the risk of strategic implementation, lack of implementation plan policy formulation, inadequate resources to implement the strategies, poor perception and organization politics on implementation, inadequate support from top management, interference from stakeholders in strategy

implementation and lack of capacity in terms of man power in implementation of strategy.

4.4 Effect of Strategic Innovation on Organizational Performance

This part sought to achieve the second objective of the study which was to determine the effect of strategic innovation on performance of mobile telecommunication firms. This was the main objective of the study and it involved the analysis of study variables to come up with conclusions to answer the research question mentioned in chapter one.

4.4.1 Strategic Innovations and Organization performance

From table 4.4 below, it can be seen that strategic innovation has positive effect on organization performance. Adoption of superior strategies relating to products, services, processes and human resources leads superior organization performance. This is shown by the coefficient of correlation of 0.78 implies strong and positive relationship between strategic innovation and performance. The coefficient of determination of 0.61 implies that strategic innovation accounts for 61% of changes in organization performance.

From the table, size of the firm has a coefficient of 0.0033 implying that it has a positive effect on organization performance. In this study, size was included in the model as a control variable. At 95%, the model developed is significant and hence can be used in prediction. The model developed is $Y=0.3018+0.3653X1+0.0033X2$ where Y is organization performance as a composite score of financial and nonfinancial performance, X1 is strategic innovation level as measured by score of strategies adopted and X3 is the size of the firm as measured by number of employees.

Table 4.4: Strategic Innovations and Organization performance

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.7813	0.6104	0.6042	0.3797

Model ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.3152	2	0.1576	0.1933	0.0039
Residual	0.0000	0			
Total	0.3152	2			

Model Coefficients

	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
Constant	0.301754	0.0491		0.0351	0.0000
Strategic Innovation	0.365292	0.1135	0.809917	0.2353	0.0020
Size	0.003392	0.0023	1.664698	0.3475	0.0009

Source: Research Data

4.4.2 Effect of Human Resource Innovations on Organizational Performance

As shown in table 4.5 below, innovations on human resource strategies have positive effect on organization performance. This is shown by the positive coefficient of correlation of 0.51 and coefficient of determination of 0.26. The table shows a p value of 0.006 which implies that at 95% confidence level, the effect of innovations on human resource strategies adopted by the firm is statistically significant.

Table 4.5: Innovations on Human resource strategies and performance

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.5063	0.2564	0.2173	0.04738

Model ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.0774	15	0.0774	0.3448	0.0066
Residual	0.224	1	0.2245		
Total	0.3019	16			

Coefficients

	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
Constant	2.6451	5.4725		0.0048	0.0134
HR Innovations	1.0345	1.7619	0.5063	0.0187	0.0066

Source: Research Data

4.5 Interpretation and Discussion

The study found that strategic innovation has positive effect on organizational performance. Adoption of superior strategies relating to products, services, processes and human resources leads to superior organizational performance. This was indicated by coefficient of correlation of 0.78 which implied strong and positive relationship between strategic innovation and performance.

The model obtained had a coefficient of determination of 0.61 implies that strategic innovation accounts for 61% of changes in organization performance. These findings are similar to those of McAdam and Keogh (2004) who found that firms' inclination to innovative strategies was of vital importance in the competitive environments in order to obtain higher competitive advantage.

Further, from the ratings on various forms of strategic innovations adopted by the organization, organization performance was high for firms with organization structure

where supervisors were able to support their teams within the organisation, communication between staffs and management was being encouraged free and open within teams. In addition, organizations showing higher performance had staff who felt that top management was enthusiastic and confident about their work, self supervisory was encouraged, employees had the resources they needed for their work, had freedom to decide how they are going to do their work and strategy formulation started at lowest organization level and all parties involved.

This was supported by the regression on human resource strategies and performance where coefficient of correlation of 0.51 was obtained implying a positive effect of human resource strategies on organization performance. The model revealed a coefficient of determination of 0.26 which meant that human resource strategies accounted for 26% of changes in organization performance.

Marketing innovations were found to positively affect organization performance. High performance was observed with companies who had adopted innovative strategy with an aim of developing competitive advantage, had marketing strategy that made customers feel a part of the company through social responsibility and promotions and had a feedback channel that captured customer complaints which are used in service improvement. The findings were similar to those of Nybakk and Jenssen (2012) who found that marketing innovation strategies were positively related to organization performance through increase in market share, positive perception of the firm and consequently increased sales.

Product innovations were found also found to lead to increase in the number of products and consequently superior organization performance. Higher product innovations and performance were observed on the companies where innovation and

new ideas on work performance was encouraged and rewarded, openness to innovation was in place, organization was highly committed to development of new ideas and invests in the same, staff training was encouraged and adequate orientation given and the organization invested in technology to support firm strategy. The findings concur with those of Micheline and Reinhilde (2008) who found that strategic innovations contributed significantly to being able to introduce new products, processes and overall organization performance.

The knowledge that the accuracy and reliability of information given depends on the person who is providing it led to study respondents to be only the senior managements of the telecommunication industry. Consequently, 33% of the respondents were strategy managers, 33% line managers and 33% directors. This implied that 100% of the respondents were in a position to provide accurate and reliable information since they were in a position to access companies' sensitive information.

The size of the firm in this study was measured by number of employees. 67% of the telecommunication firms have 150 to 200 employees while 33% has over 500 employees. This implied that the mobile telecommunication industry in Kenya has employed directly a minimum of 800 employees indicating the role played by the firms in Kenyan economy. Determining the number of employees for the company was important since it indicated the size of the firms which was important in making conclusions regarding the findings.

The mobile telephony companies were found to have differences in the human strategies used. Firm one had the highest number of post graduate employees at 41.5% of total staff, has 49.8% of total staff being under graduate degree holders, 8.3% diploma and certificate holders and 0.5% secondary level and below. Firm two

on the other hand had the highest number of secondary school and below at 5.5% of the total staff population, has the least number of post graduate staff at 11% and has the highest number of staff who are undergraduate degree holders. Firm three has the least secondary school and below at 0.4%, 12.1% college diploma and certificates, 75% undergraduate and 12.5% post graduate. Overall firm two had the highest number of employees with undergraduate degree and above at 93.4% of the total staff population, firm one second with 91.3% and firm three third at 87.5%. This implies that firm two has a superior employee's strategy since it has the most qualified man power.

In Kenya, the study findings concur with those of Nauwankas (2013) who found that sources of sustainable competitive advantage were internally generated originating out of the possession of superior and high quality internal capabilities and competencies. The sources that are highly significant in generating sustainable competitive advantage included: superior skills/capabilities of personnel, high level of service quality, continuous learning on how to do things better, effective leadership focused on continuous improvement of the bank's value adding systems and superior/valuable resources.

Also Aswani, (2013) found that strategic innovation in universities is greatly done by the universities continuously engaging in branding and marketing activities. Also, the study results revealed that there was a strong positive relationship between strategic innovation indicators and the performance of the public universities. Finally, Simiyu (2013) found that the new market innovation strategies and product innovation strategies enabled the banks to earn more profit, leading to faster business growth, to invest more and also in improving the firm's productivity.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This Chapter presents a summary, conclusion and recommendations drawn from the study. The conclusions are drawn from the objectives that the study sought to realize as well as the research findings. The chapter also covers the limitations of the study and makes recommendations for policy and on areas that will require more research to enhance greater understanding of the subject area.

5.2 Summary of the Findings

The objective of this study was to determine the effect of strategic innovation on performance of mobile telecommunication firms in Kenya. 33% of the respondents were strategy managers, 33% line managers and 33% directors and the respondents were in a position to provide accurate and reliable information since they were in a position to access companies' sensitive information. The size of the firm in this study was measured by number of employees.

The study found that 67% of the firms had the members of the strategic committees being made of top management and selected members while 33% had the members selected from top management and strategic consultants. 67% of the mobile communication companies' strategic committees met once per quarter while 33% meet once per month.

The perceived importance of a department in an organization was inferred from the reporting structure available in an organization in steer heading strategic innovation.

33% of the mobile companies had their head of research and development reporting to CEO while 67% report to line manager.

The study found that strategic innovation has positive effect on organization performance. Adoption of superior strategies relating to products, services, processes and human resources leads superior organization performance. This was indicated by coefficient of correlation of 0.78 which implied strong and positive relationship between strategic innovation and performance.

Human resource strategies were found to have significant positive effect on organization performance with a coefficient of correlation of 0.51 and coefficient of determination of 0.26. Adoption of superior strategies relating to products, services, processes and human resources was found to lead to superior organization performance.

The size of the firm was also found to positive effect on organization performance. In this study, size was included in the model as a control variable. At 95%, the model developed is significant and hence can be used in prediction. The model developed is $Y=0.3018+0.3653X1+0.0033X2$ where Y is organization performance as a composite score of financial and nonfinancial performance, X1 is strategic innovation level as measured by score of strategies adopted and X3 is the size of the firm as measured by number of employees.

The respondents indicated that on average to a large extent, employees had freedom to decide how they were going to do their work and that strategy formulation started at lowest level. To less extent, the respondents indicated that top management was not enthusiastic and confident about their work and the companies encouraged sense of confidence on the employees. To a large extent, the telecommunication firms were

found to be highly committed to development of new ideas and invested in technology to support firm strategy.

To a large extent, all the mobile marketing firms had a feedback channel that captured customer complaints which were used in service improvement and a marketing strategy that makes customers feel a part of the company through social responsibility and promotions. The amount spent on research and development significantly varied from one firm to the other with spending higher amounts than the other two firms. The amount spent on research and development was observed to reduce significantly in 2009 and 2010. This was explained by competition intensity in those years with the amount stabilizing as competition reduces.

The key challenges that faced organization in implementing organization strategies were found to be resistance from staff on the changes, dealing with the risk of strategic implementation, lack of implementation plan policy formulation, inadequate resources to implement the strategies, poor perception and organization politics on implementation, inadequate support from top management, interference from stakeholders in strategy implementation and lack of capacity in terms of man power in implementation of strategy.

The findings are similar to those of McAdam and Keogh (2004) who found that firms' inclination to innovative strategies was of vital importance in the competitive environments in order to obtain higher competitive advantage. Also, Micheline and Reinhilde (2008) found that strategic innovations contributed significantly to being able to introduce new products, processes and overall organization performance.

Locally, the study findings concur with those of Nauwankas (2013) who found that sources of sustainable competitive advantage were internally generated originating

out of the possession of superior and high quality internal capabilities and competencies. Also Aswani, (2013) found that strategic innovation in universities is greatly done by the universities continuously engaging in branding and marketing activities. Finally, Simiyu (2013) found that the new market innovation strategies and product innovation strategies enabled the banks to earn more profit, leading to faster business growth, to invest more and also in improving the firm's productivity.

5.3 Conclusions

The study was guided by the existing literature and empirical data. The findings thus confirmed or validated the existing body of knowledge by revealing that strategic innovation has a combined influence on the organizational performance. From the study findings and reviewed literature, the study concludes that strategic innovation has positive effect on organization performance. Adoption of superior strategies relating to products, services, marketing processes and human resources leads superior organization performance. The results further demonstrated that a large proportion of the mobile telecommunication firms' performance could be accounted for by combined effect of strategic innovation.

For telecommunication firms, the study concludes that the difference in the firms performance can be explained by the size of the firms since size was found to have significant effect on performance of the firms. Secondly, the study concludes that performance differentials could be explained to over 70% by strategies adopted by the firms since firms performance was observed to improve with adoption of innovative strategies. The study also concludes that investment in research and development and human resources strategies promotes innovations in the companies which lead to superior performance. Further adoption of market responsive strategies offers

companies in telecommunication competitive advantage. The study revealed that need to make employees be aware of the strategies adopted by the company is very important.

The study also concludes that the sources of sustainable competitive advantage are internally generated originating out of the possession of superior and high quality internal strategies, capabilities and competencies. The sources that are highly significant in generating sustainable competitive advantage include superior human resource skills and capabilities, high level of service quality, continuous learning on how to do things better, innovative products, process and innovatively organized firm structure.

The study also conclude that adopted product innovation strategies help mobile telecommunication firms to earn more profit, have faster business growth and improved investment in improving the firm's productivity. Thus, innovativeness is one of the fundamental instruments of growth strategies to enter new markets, to increase the existing market share and to provide the company with a competitive edge.

5.4 Policy Recommendations

In line with the findings, the study makes the following recommendations; the mobile telecommunication firms should invest more in research and development so as to be able to innovate more. Secondly, human resource strategies should be adopted those that will make the employees feel as a part of the management. Employees should be also be involved in all levels of strategies development and innovation encouraged and rewarded. Channels should be put in place to ensure that information can flow freely and employees' opinions captured.

Strategic innovation has positive effect on organization performance. As a result, strategic innovations should be encouraged and firms should continuously look for superior products, processes, adoption of technology and market innovations for competitive advantage. Further, the main challenge of implementing organization strategies was resistance by the employees. As a result, the study recommends the involvement of all level staff to ensure acceptance of the strategies from formulation to implementation. Finally, size of the firms studied was observed to significantly affect the performance of the firms. As a result, the study recommends that the mobile telecommunication firms to consider ways of making them bigger through mergers or otherwise so as to further improve their performance. The study also recommends that innovation strategies alone are not sufficient to lead to competitive advantage but the emphasis on innovation strategies could lead to sustainable competitive advantage in some cases or may lead to competitive survival.

5.5 Recommendations for Further Research

The study has highlighted various relevant issues that the study did not investigate, but which might be important for further research on application of strategic innovation to create a sustainable competitive advantage. First, the study only studied mobile telecommunication companies in Kenya. There is need to carry out further study on other industries in Kenya like manufacturing, banking among others and confirm whether the results will be similar.

Further study could be on the factors that affect the performance of mobile telecommunication firms other that strategic innovation. The study also never considered the strategic innovation levels for the previous years but only captured the

strategic innovation levels at the time of the study. Future research be done over year using longitudinal design and confirm whether the results will still be consistent.

5.6 Limitation of Study

This study was limited to a single industry and thus may not provide appropriate information for policy formulation that can be generalized on all the firms. This implies that the study findings can only be used to explain the differences in performance of mobile telecommunication firms but cannot be used in explaining organization performance in other industries but can only provide insights. The study was also limited by time since the researcher had to work within a limited time frame and thus exposure of the subject may have been constrained. The results would have been more conclusive if strategic innovation levels for previous years could have been determined and analyzed against those years performance.

The study was limited to the influence of strategic innovation on the organization performance and included size of the firm as a moderating variable. However, there are other key factors which could explain performance differentials among companies but were left out.

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Appendix: Questionnaire

This questionnaire is designed to collect data that will help in better understanding the effect of strategic innovation on performance of mobile telecommunication sector firms in Kenya. The data provided by this questionnaire will be treated in strict confidence. Please do not indicate your name or that of your institution.

SECTION A: DEMOGRAPHIC DATA

1. What is your current position in the organization?

   Organization Strategy Manager [ ]

   Line Manager [ ]

   Director [ ]

   Other [ ] Please Specify…………

2. How many employees does your organization have?

   1-100 [ ]

   100-150 [ ]

   150-200 [ ]

   200-500 [ ]

   Over 500 [ ]

3. Please specify the level of education of employees by indicating the number in each category as below

   Secondary school and below [ ]

   College Diplomas and Certificates [ ]

   Undergraduate Degree [ ]

   Post graduate Degree [ ]

SECTION B: ORGANIZATION STRATEGIC INNOVATION

4. Strategic committee

   i. What are the minimum qualifications and experience of the members of the committee?

   Departmental Line managers [ ]

   Top management and selected board members [ ]

   Top management and strategic consultants [ ]

   Others [ ] Please specify……….

   ii. How often do they meet?

   More than twice per month [ ]

   Once per month [ ]

   Once per quarter year [ ]

   Once per half year [ ]

5. To what extent do the following measures apply to your organization? Use a scale of 1- 5 where 1 is to less extent, 2, Moderate extent, 3, Large extent 4, Very large extent and 5 is none.

	1	**2**	**3**	**4**	**5**
Organization innovations					
Organization structure is that supervisors are able to support their teams within the organisation					
Communication is encourages, free and open within teams					
People feel that top management is enthusiastic and confident about their work and hence all employees feel a part of management					
Organization encourages self-supervisory to instil a sense of confidence on the employees					
Generally, people can get the resources they need for their work					

	1	2	3	4	5
Employees have the freedom to decide how they are going to do their work					
Organization has adopted an innovative strategy so as to develop competitive advantage					
Organization strategy starts at lowest organization level and all parties involved in strategy formulation					
Promotion of Innovations					
Innovation and new ideas on work performance is encouraged and rewarded					
New ideas are generally resisted (R) Openness to Innovation					
The organization is highly committed to development of new ideas and invests in the same					
Staff training is encouraged and adequate orientation given					
Organization has invested in technology to support firm strategy					
Marketing Innovations					
Company has a feedback channel that captures customer complaints which are used in service improvement					
The company has a marketing strategy that makes customers feel a part of the company through social responsibility and promotions					

6. To whom does the head of research and development department report to?

CEO [ ]
Head of Strategy [ ]
Strategic Committee [ ]
Line Manager who reports to another manager [ ]

7. How much did your firm spend on research and development for the last five years?

	2013	2012	2011	2010	2009
Total amount spend on R&D (Ksh. '000)					

8. How many products did your firm have for the last five year?

	2013	2012	2011	2010	2009
Number of products					

9. What are the key challenges your organization face in implementing its strategy

   i. …………………………………………………………………………

   ii. …………………………………………………………………………

   iii. …………………………………………………………………………

   iv. …………………………………………………………………………

END

Thank you for your responses