

**KNOWLEDGE MANAGEMENT AS A STRATEGIC TOOL FOR
COMPETITIVE ADVANTAGE AT SAFARICOM LIMITED KENYA**

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DECLARATION

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

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DEDICATION

This research project is dedicated to my wife, Irene and my son children Harvey, for their inspiration, support, encouragement and understanding throughout my Masters Programme. God bless you all.

TABLE OF CONTENTS

| | |
|---|-------------|
| DECLARATION..... | ii |
| ACKNOWLEDGEMENTS | iii |
| DEDICATION..... | iv |
| TABLE OF CONTENTS | v |
| ABBREVIATIONS AND ACRONYMS..... | vii |
| ABSTRACT..... | viii |
| CHAPTER ONE: INTRODUCTION..... | 1 |
| 1.1 Background of the Study..... | 1 |
| 1.1.1 Concept of Knowledge Management | 3 |
| 1.1.2 Competitive Advantage | 5 |
| 1.1.3 Telecommunications industry in Kenya..... | 5 |
| 1.1.4 Safaricom Limited Kenya..... | 7 |
| 1.2 Research Problem..... | 8 |
| 1.3 Research objectives | 9 |
| 1.4 Value of the study | 10 |
| CHAPTER TWO: LITERATURE REVIEW..... | 11 |
| 2.1 Introduction | 11 |
| 2.2 Theoretical foundation | 11 |
| 2.3 Knowledge Management practices | 13 |
| 2.4 Knowledge Management and Competitive Advantage..... | 17 |
| 2.5 Challenges of knowledge management..... | 18 |
| CHAPTER THREE: RESEARCH METHODOLOGY | 21 |
| 3.1 Introduction | 21 |
| 3.2 Research design..... | 21 |
| 3.3 Data collection..... | 21 |
| 3.4 Data Analysis | 22 |

| | |
|--|-----------|
| CHAPTER FOUR: DATA ANALYSIS, PRESENTATION, INTERPRETATIONS AND DISCUSSION | 23 |
| 4.1 Introduction | 23 |
| 4.2 Response Rate | 23 |
| 4.3 Knowledge Management Strategies to Competitive Advantage..... | 24 |
| 4.4 Impact of Knowledge Management in Safaricom Limited..... | 28 |
| 4.5 Challenges of Knowledge Management for Achieving Competitive Advantage ... | 31 |
| 4.6 Relationship of Knowledge Management to Competitive Advantage..... | 33 |
| 4.7 Discussion of Findings | 35 |
| CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS .. | 38 |
| 5.1 Introduction | 38 |
| 5.2 Summary | 38 |
| 5.3 Conclusion..... | 39 |
| 5.4 Recommendations | 40 |
| 5.5 Limitation of the study | 42 |
| 5.6 Suggestion for Further studies..... | 43 |
| 5.7 Implication on policy theory and practices | 43 |
| REFERENCES..... | 45 |
| APPENDIX: INTERVIEW GUIDE..... | 51 |

ABBREVIATIONS AND ACRONYMS

| | | |
|-------------|---|---|
| CA | - | Communications Authority of Kenya |
| CCK | - | Communication Commission of Kenya |
| GOK | - | Government of Kenya |
| GPRS | - | General Packet Radio Service |
| GSM | - | Global System for Mobile |
| ICT | - | Information and Communications Technology |
| IDC | - | International Data Corporation |
| KCA | - | Kenya Communications Acts |
| KM | - | Knowledge Management |
| KMP | - | Knowledge Management Practices |
| KPTC | - | Kenya Posts and Telecommunication |
| NCS | - | National Communications Secretariat |
| NPD | - | New Product Development |
| TKL | - | Telkom Kenya Limited |
| VoIP | - | Voice over Internet Protocol |

ABSTRACT

In the rapid changing business environment and the high technology atmosphere of the 21st century organization are becoming more innovative than ever before. Most organization in the developing and the developed world are opting for change in management, looking for ways to improve their ability to create new ideas and develop the best environment for creation of ideas. Knowledge management is now recognized as an organization most valuable asset, because knowledge is a complex asset it must be managed in a different way unlike other resources. In the fasts changing business environment, knowledge has become the mainstay of every organization in creating and sustaining competitive advantage differentiation. The recent trend in the field of strategic knowledge has been it emphasizes the role of organization knowledge as the basis of the effective competitiveness Knowledge management is the key to effective competitiveness in an organization. However, no study has focused on the impact of Knowledge management on competitive advantage. This study sought to investigate Safaricom Limited has used knowledge management as strategic tool for achieving competitive advantage. This study adopted a case study since the unit of analysis was one organization. The study used interviewed guide to collect primary data was where researcher distributed the interviewed guide personally. The study used open-ended questions that enabled the researcher to collect qualitative data. This was used in order to gain a better understanding and possibly enable a better and more insightful interpretation of the results from the study. The respondents of this study staff working at Safaricom where the study targeted to interview 5 respondents. A content analysis and qualitative analysis were employed. The data was then presented in a continuous prose as a qualitative report on risk knowledge management as a strategic tool for competitive advantage at Safaricom limited Kenya. From a target of five respondents all respondents targeted completed the interview guide making a response rate of 100%. The study concluded that Through knowledge management Safaricom has developed a range of products and services which include roaming services, data messaging, M-pesa, voice services, information and security services, Video Conferencing Telepresence, Virtual Computing and much more. Policies laid down by the government such as taxation are key challenges that the organization face in creating polices and strategies on knowledge management. On the impact of knowledge management on competitive advantage, it was established that knowledge management policy at safaricom limited is a long term strategy focused on transforming lives. The turbulent business environment, with global trends and the stringent competition in the world market resulted in the significant changes that Safaricom Limited should introduce in their current business operations. The changes are necessary for survival in the market. The Safaricom should adopt to changes in the external environment and make changes in the internal environment in terms of innovation, increasing competitiveness, employee training, increasing flexibility, improving processes and business performance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In the fast changing business environment, knowledge has become the mainstay of every organization in creating and sustaining competitive differentiation. Knowledge is dynamic. In recent times a new branch of management has emerged called Knowledge Management (Hicks, 2006). It is meant to achieve breakthrough in business performance through the synergy of people, processes, and technology. It also focuses on the management of change, uncertainty, and complexity. It serves as the source and stock of knowledge and the flow of knowledge. This includes knowledge creation, sharing and application to create and or sustain organizational value and competitive advantage (Liew, 2007).

Grant (1996) explains that the main idea of the knowledge based theory of the firm is that organizations exist in the way that they do because of their ability to manage knowledge more efficiently than it is possible under other types of organizational structures. He emphasized the firm as an institution for knowledge application devising mechanisms for integrating individual's specialized knowledge. This theory determines the competitive intensity and attractiveness of a market and help to identify where power that lies in a business situation. They are useful both in understanding the strength of an organization's current competitive position, and the strength of a position that an organization may look to move into the market. In other words, organizations are social entities that use and store internal knowledge, competencies, and capabilities that are vital for the firm's

survival, growth, and success. The theory emphasizes the organizational need for superior coordination and integration of learning by employees inside the organization and argues that heterogeneous knowledge bases and capabilities among firms are the main determinants of sustained competitive advantage and superior corporate performance

The globalization has brought many modern trends, and companies have the task to adapt them as quickly, easily and painlessly they can in order to survive in the competitive market. The vital strategic resource today is the knowledge individual and organizational. By realizing the major value of intellectual resources, companies have begun to manage rationally and improve them. Hence the importance of knowledge management as a concept of organizational knowledge, aimed at effective application of knowledge to make quality decisions. In this concept, people have a central role and the first place knowledge information, contribute to the company as a revenue contribution of products and services, preserve and increase the reputation, through the reduction of operating costs, create barriers to entry of potential competitors, by increasing customer loyalty and create innovation. The success of organizations largely depends on continual investment in learning and acquiring new knowledge that creates new businesses and improve existing performances.

1.1.1 Concept of Knowledge Management

Rao (2004) defines Knowledge management as the combination of organizational culture, strategic goals, individual needs, and the expertise of its people to create an atmosphere of learning and growth. Philosophically, knowledge management must be a vital part of corporate principles and individual jobs for knowledge sharing to succeed. It's through its conceptual components that knowledge management becomes legitimate.

There are fewer people doing more work. Organizational hierarchies are being put aside as knowledge work calls for more collaboration. The only sustainable advance a firm has comes from what it collectively knows, how efficiently it uses what it knows, and how quickly it acquires and uses new knowledge (Rao, 2004). An organization in the Knowledge Age is one that learns, remembers, and acts based on the best available information, knowledge, and know-how. All of these developments have created a strong need for a deliberate and systematic approach to cultivating and sharing a company's knowledge base one populated with valid and valuable lessons learned and best practices. In other words, in order to be successful in today's challenging organizational environment, companies need to learn from their past errors and not reinvent the wheel again and again. Organizational knowledge is not intended to replace individual knowledge but to complement it by making it stronger, more coherent, and more broadly applicative. Knowledge management represents a deliberate and systematic approach to ensure the full utilization of the organization's knowledge base, coupled with the potential of individual skills, competencies, thoughts, innovations, and ideas to create a more efficient and effective organization.

A knowledge-based system has helped in strategic decision-making by assist the human decision makers by enhancing their understanding globally it's becoming a reality today. It is our belief that the knowledge economy is rapidly becoming the largest and most successful and sustainable economy in the world. The goal of strategic knowledge management is to support management in making decisions by providing solid information and excluding superfluous data. This will help in providing an edge in competitive advantage and such a system should be sufficient to provide a greater understanding of the issues that need to be resolved without overwhelming leaders with too much information. Effective strategic knowledge management has accelerated knowledge creation, is the driver for innovation. Increasingly, products and services are becoming 'smarter' and more knowledge based (Alavi, 1999).

Pavlin (2006) correctly asserts that for knowledge to induce change the strategies, methods and tools of knowledge management will undoubtedly change, but the timeless principles will, of course, remain unchanged. To survive and succeed in the new global knowledge economy, companies must become far more effective and more productive. The new era of companies must always strive for the best relations and highest quality. There will be effective and extraordinary knowledge management, at all levels, for the individual, team, organization and global community will naturally become mainstream and ordinary, as the only way to successfully develop and grow for the future.

1.1.2 Competitive Advantage

Competitive advantage as defined by porter (1990) exists when the firm is able to deliver the same benefits as competitors but at lower cost (cost advantage) or deliver benefits that exceed those of competing product (differentiation advantage). Thus a competitive advantage enables the firm to create superior value for its customers and superior profits for itself. There can be many types of competitive advantages including the firm's cost structure, product offerings, distribution network and customer support.

Competitive strategy specifies the distinctive approach which the firm intends to use in order to succeed in each of the strategic business areas while supporting knowledge management. Many organizations are agreeing that to grow, stay competitive and survive, they have to constantly change their strategies to meet new business demands and this explains the growth of interest in knowledge management over the last decade. Those organizations that work as if their environment is still stable (old world of business), not only are they losing the competitive advantage but also they are facing huge financial losses.

1.1.3 Telecommunications industry in Kenya

The Telecommunication industry in Kenya is dominated by two mobile phone operators Safaricom Limited and Airtel Kenya Limited, and others include YU Essars Limited and Orange Mobile Limited. The result is new markets, new players, and new challenges. Market liberalization efforts have also picked up ensuing the successful partial privatization of Telkom Kenya Ltd (December 2007), divestment of GoK's 25% stake in Safaricom Ltd through a public listing (May 2008), and the launch of fourth mobile

operator YU Essars Limited (November 2008). The services provided are mainly basic voice and messages, data, voicemail, and electronic mail. The market structure is divided along fixed line and mobile phone services and end user retail and interconnection wholesale services, (<http://www.ca.go.ke>). Development of a large-scale telecommunications infrastructure in Kenya, capable of delivering efficient and affordable communications services, is recognized as a critical prerequisite for the country's economic growth.

The government policy has been the major barrier to market entry for decades, and the industry remained in the control of the former KPTC a government protected monopoly playing both roles of service provider and industry regulator. Liberalization process started in 1997 with a government policy and enacting of the communications legislations, KCA, in 1998 (GOK, 1998), establishing the industry regulator, CCK, and in July 1999 KPTC was split into TKL and PCK both 100% owned by the government (Daily Nation, 12 July 2007). The Communications Authority of Kenya (CA) has been responsible for the development and implementation of policies and strategies with respect to telecommunications services in Kenya. The Authority licenses, telecommunications operators, service providers monitor their performance on a continuous basis to ensure that they discharge the obligations as stipulated in their licenses and are adhering to the provisions of the Kenya Information and Communications Act, 1998 and the Kenya Communications Regulations, 2001 (<http://www.ca.go.ke>).

The industry has technology and service defined market structure, with various service categories licensed separately as facility or infrastructure public telecommunications service providers and non-facility service providers. At the end monopoly, other licensed operators include wireless Flashcom Ltd, Popote Wireless Ltd, and Access Wireless Ltd as Kenya Data Network; and as Jamii Telecom Ltd using VoIP technology (<http://www.ca.go.ke>).

1.1.4 Safaricom Limited Kenya

Communication in Kenya is growing with the increase of service providers from the one provider the defunct Kenya Posts and Telecommunication (KPTC) to over four providers Telkom Orange, Safaricom, Airtel and Essar, With a customer base of 21 million as at April 2014 (CCK, 2014), which is 68% of the total subscribers countrywide Safaricom is the largest provider. Safaricom Limited was started as a department of KPTC. Safaricom Limited was incorporated on 3 April 1997 under the Companies Act as a private limited liability company. It was converted into a public company with limited liability on 16 May 2002. In March 2008, 25% of the shares held by the government of Kenya were issued and offered to the public. The corporate vision is “to be Kenya’s mobile communication leader”, by enriching customer’s lives, helping individuals, businesses and communities to be more connected in the mobile world. The corporate values are focused on: customer satisfaction; employee satisfaction; individuals and group achievements and; corporate social responsibility (<http://www.safaricom.co.ke>).

1.2 Research Problem

Service enterprises in Kenya particular operate in environments characterized by increased need for knowledge to create and sustain competitive advantage. There has been increase in rivalry in the telecommunication industry over recent years. The intensive rivalry and threat of new entrants into the market is increasing, thus sustaining growth and market leadership is increasingly challenging. In order for organizations to succeed in highly dynamic business environment, it is critical that they embrace Knowledge management in their business operations. The changing customers need has forced different companies to adopt various competitive strategies. This has forced companies to invest in knowledge management and use it as a strategic tool for achieving competitive advantage.

A study by Mosoti and Mesheka (2010) focused on the knowledge management practices (KMP) in organizations in Nairobi, Kenya. Their motivation was to find out if knowledge management has been implemented. Muitu (2010) did a research on market penetration and competitive advantages strategies used by Essars Telecommunication Kenya Limited. His findings revealed that companies adopt product differentiation strategy and use it as a competitive tool. Misigo (2005) investigated on the Telecom Industry in Kenya Forecast, Opportunities & Trends and competitive advantage: Kandie (2001) carried studies on competitive environment strategies and formulation in Telkom Kenya Limited.

A study by Cricelli, Grimaldi & Ghiron, Fernández & Usero, (2009) was done to investigate the competition among mobile network operators in the telecommunication supply chain and competitive advantage used by mobile operators. Chakula (2004) did a

research on ICT policy in Africa and in particular highlighted on some of the telecommunication strategic policies in Africa and their potential to impact on development. Senaji (2005) findings show that investment capital and infrastructure are the most important factors in implementation of projects in Telecommunication industry in Kenya. Maina (2004) found that the technology strategy and government regulations influence the competitive strategic responses of telecommunication organizations in Kenya. None of these studies directly addresses the subject of use of knowledge management as a tool for competitive advantage in the service industry and this constitute a gap in literature that present study sought to bridge how has Safaricom Limited used knowledge management as strategic tool for achieving competitive advantage?

1.3 Research objectives

The research main objectives were to:

- i. Determine how knowledge management strategies have contributed to achieving competitive advantage in Safaricom Limited Kenya.
- ii. Determine the challenges of using knowledge management as a strategic tool for achieving competitive advantage in Safaricom Limited Kenya.

1.4 Value of the study

This research aimed at investigating the use of knowledge management as a tool of competitive advantage by Safaricom limited. The study is invaluable to the various stakeholders in service delivery and beyond. Specifically it is useful to the following groups:

To Safaricom Limited, the results of the study is useful to managers of the organizations in gaining a new insight on knowledge management and the resultant effect on organization performance and on what has to be done to improve the organizations' bottom-line by having a satisfied customer thorough competitive advantage.

To the policy makers, the findings provide information as to the extent of the effect of use of knowledge management as tool by telecommunication industry to achieve competitive advantage make recommendations on the possible measures to be pursued in monitoring and evaluating the policy implications of those measures.

The study is important to the researcher for in-depth understanding of the knowledge management as competitive tool for achieving competitive advantage at Safaricom Limited and the kinds of challenges, and in determination of responses, to help in providing consultancy and advisory services, this is being the researcher's field of specialization, interest and experience. The study will be important in adding to the body of knowledge in telecommunication industry and will be important for carrying out further studies in the industry.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

According to Mugenda and Mugenda (2003), literature review involves locating, reading and evaluating reports of previous studies, observation and opinions related to the planned studies. The literature review also provides the researcher with a body of knowledge and understanding of the conceptual and analytical framework in the area. This chapter will thus cover the theoretical foundation, knowledge management practices, knowledge management and competitive advantage and Challenges of knowledge management.

2.2 Theoretical foundation

Knowledge management has become the latest strategy in increasing organizational competitiveness. Competitive strategy gives a company an advantage over its rivals in attracting customers and defending against competitive forces (Ansoff, 1965). The ability gained through attributes and resources to perform at a higher level than others in the same industry or market. The nature of the competition and the sources of competitive advantage are very different among industries and even among the segments of the same industry. Successfully implemented strategies will lift a firm to superior performance by facilitating the firm with competitive advantage to outperform current or potential players in the industry. Knowledge is the key to effective competition. The challenge for companies requiring participation in knowledge-intensive sectors of the global company is to organize to effectively participate.

Grant (1996) explains that the main idea of the knowledge based theory of the firm is that organizations exist in the way that they do because of their ability to manage knowledge more efficiently than it is possible under other types of organizational structures. He emphasized the firm as an institution for knowledge application devising mechanisms for integrating individual's specialized knowledge. This theory determines the competitive intensity and attractiveness of a market and help to identify where power that lies in a business situation. They are useful both in understanding the strength of an organization's current competitive position, and the strength of a position that an organization may look to move into the market. In other words, organizations are social entities that use and store internal knowledge, competencies, and capabilities that are vital for the firm's survival, growth, and success. The theory emphasizes the organizational need for superior coordination and integration of learning by employees inside the organization and argues that heterogeneous knowledge bases and capabilities among firms are the main determinants of sustained competitive advantage and superior corporate performance.

Knowledge and the management of knowledge appear to be regarded as increasingly important features for organizational survival Gurteen (1999). The Exploration of knowledge management with respect to its content, its definition and domain in theory and practice, its use and implications, and to point out some problems inherent in the concept. The main contribution of this paper is an extensive literature survey on knowledge management as a tool for competitive advantage service sector like telecommunication.

2.3 Knowledge Management practice

Haggie and Kingston (2003) explains that Knowledge Management is one of the hottest topics today in both the industry world and information research world. In our daily life, we deal with huge amount of data and information. Data and information is not knowledge until we know how to dig the value out of it. This is the reason we need knowledge management. When each employee of an organization contributes his part of knowledge in the knowledge pool, there forms a big one that helps the organization in realizing the right path towards success.

Unfortunately, there's no universal definition of knowledge management, just as there's no agreement as to what constitutes knowledge in the first place. Davenport and Prusak (1998, p.5) give the following definitions for knowledge management for its simplicity and broad context. Knowledge Management (KM) refers to a multi-disciplined approach to achieving organizational objectives by making the best use of knowledge. KM focuses on processes such as acquiring, creating and sharing knowledge and the cultural and technical foundations that support them. Knowledge can provide many competitive advantages to both the employee and the organization. Application of correct knowledge at the right situation helps an organization to make prime decisions.

In organizations a favorable environment should be made to capture knowledge in an effective way. After capturing the knowledge, it should be refined and stored for future purpose. The refined information can be circulated within the organization to educate employees and authorities. Some benefits of KM correlate directly to bottom-line savings, while others are more difficult to quantify. In today's information-driven

economy, companies uncover the most opportunities and ultimately derive the most value from intellectual rather than physical assets (Chong Chin Wei et al., 2009). Consequently, an effective KM program should help a company do one or more of the following: Foster innovation by encouraging the free flow of ideas, over decision making, Improve customer service by streamlining response time, Boost revenues by getting products and services to market faster, Enhance employee retention rates by recognizing the value of employees' knowledge and rewarding them for and Streamline operations reduce costs by eliminating redundant or unnecessary processes.

Knowledge-oriented companies are eager to capture experiences from their workers. KM system is a way to distribute knowledge from employee to employee. It also helps a multi-site enterprise whose tasks are dispersed in many locations and different time zones. Telecommunications companies such as British Telecom, AT&T, and Deutsche Telekom have set up a position chief knowledge officer to ensure effective programs on knowledge management. It shows that these companies value intellectual assets (Strouse, 2001).

In addition, Earl (2001) found out that Knowledge management practice can be categories into five categories: Knowledge management practices are a responsibility of managers and executives and it is the explicit criteria for assessing worker performance. Firms capture and use knowledge obtained from other industry sources such as industrial associations, competitors, clients and suppliers and from public research institutions including universities and government laboratories. Firms encourages experienced workers to transfer their knowledge to new or less experienced workers and provide

informal training related to knowledge management. Firms use partnerships or strategic alliances to acquire knowledge and policies or programs intended to improve worker retention. Workers share knowledge by preparing written documentation such as lessons learned, training manuals, good work practices, articles for publication (organizational memory).

Many organizations are agreeing that to grow, stay competitive and survive, they have to constantly change their strategies to meet new business demands and this explains the growth of interest in knowledge management over the last decade. Those organizations that work as if their environment is still stable (old world of business), not only are they losing the competitive advantage; but also they are facing huge financial losses. For example, according to Alter (2002) Fortune 500 companies lose at least \$31.5 billion a year by failing to share knowledge. They also lose knowledge of best practice in a specific area of operations as a result of a key employee's departure and finally they lose in relationship with a key client or supplier or a sponsor by the departure of key individuals.

Several studies done by Day (2000) especially in developing countries have proposed Knowledge Management frameworks and models to help organizations improve their performance and to gain competitive advantage. All these models and frameworks insist on two kinds of knowledge: explicit knowledge and implicit knowledge. They also tackle the enabler factors and the process. Enabler factors such as: technology, leadership, strategy and organizational culture (control, time, motivation and commitment). The process is life cycle KMP of capture, organize, share, use and re-use to produce organization's performance and to gain competitive advantage.

Ondari and Minishi-Majanja (2007) asserts that the mission of KM is to promote the use of collective knowledge as a key development resource and establish KM platforms that will create access to existing networks and facilitate the sharing and utilization of knowledge across all sectors. According to Danskin et al., (2005) knowledge management is in a state of high growth, especially in the services industries. As the performance metrics of early adopters are documenting the substantial benefits of knowledge management, more organizations are recognizing the value of leveraging organizational knowledge. As a result, knowledge management consulting services and technologies are in high demand, and knowledge management software is rapidly evolving.

Previous study by Nonaka (1994) has demonstrated that a company's individual and organizational knowledge serves as one of the cornerstones for its sustained competitive advantages. To be successful, firms must be able to learn continually and apply their knowledge, anticipating market changes. Through superior knowledge companies can accomplish their results faster, cheaper and with higher quality than their competition.

2.4 Knowledge Management and Competitive Advantage

Numerous organizations have recognized that knowledge plays an essential role and is a crucial resource in gaining competitive advantage in today's knowledge-based economy (Alton and Dion, 2008; Anantatmula and Kanungo, 2007). Research indicates that achieving competitive advantage ranks high as the most important application of knowledge in terms of its contribution in attaining the organizational objectives. For a growing number of businesses, competitive advantage lies in the capability to create and apply intellectual expertise. In this new world of business, knowledge management becomes the primary resources and competitive advantage for individual managers and their organizations.

Organizations should therefore view knowledge as a valuable asset for building competitive advantage in the market. According to Lubit (2001), the strategic objectives of KM vary, such as developing new opportunities or creating value for the customers. Organizations are able to use their knowledge resources to not only create competitive advantage, but also build sustainable competitive advantage. He further explains that to create competitive advantage, organizations need to: internally spread tacit knowledge, and create KM capabilities and approaches in fostering innovation. Sharp (2004)

observes that combination of competitiveness and profitability suggests that businesses are looking for high-margin niche markets. To achieve and sustain these, companies must offer something special to customers, whether a product, service or mode of delivery. Developing that offering requires knowledge of customers and market trends, and an understanding of the organization's capabilities and how to capitalize on them. So, knowledge can and should make a difference to competitiveness and profits. Prescott (2001) Insist that knowledge teams must focus on competitiveness and profitability. Above all, keep the focus demand-led, because this is the area where knowledge is scarce, where things change most, and where the structured leveraging of knowledge delivers most.

2.5 Challenges of knowledge management

KM is crucial to all or any styles of trades which might facilitate the organizations to think about how to capture the tenant information within the organization. To maintain glorious service and to survive within the competitive market, individual organizations have developed a scientific approach resulting in the achievement of final business goals. In the current knowledge society , knowledge is the important source of innovation and a potential that the issue of increasing Organizational competitive element for creating sustainable competitive advantage in way that some researchers deeply believe that losing the organizational knowledge may decrease organizational output and productivity, reduce organizational memory and diminish organizational learning.

Blake (2000) identified the following challenge of using knowledge management we see the critical challenges that organizations must grapple with:

Failure to align knowledge management efforts with the organization's strategic objectives. Successful knowledge management programs often begin by addressing a critical business problem facing the company. However, many firms fail to align their knowledge efforts with their most pressing business issues. When this occurs, significant time and effort is spent on projects that have minimal impact, while key needs are not addressed or are completely overlooked. In order to remain on course the firm needs to align knowledge management with organization strategies to remain on course.

Creation of repositories without addressing the need to manage content. In many knowledge management efforts, a significant amount of attention is placed on implementing repositories: technologies designed to capture and store structured or written knowledge. These repositories can range from shared file systems to fully implemented intranet sites. Although these technologies can, and do, play a crucial role in helping store and retrieve documents, installing these systems without addressing the related cultural and content management issues can result in a host of problems. The time and money spent on trying to capture this knowledge provided little, if any, return.

Failure to understand and connect knowledge management into individual's daily work activities. A common mistake in many organizations is to implement a "one-size-fits-all" knowledge management solution without understanding the unique needs of various user groups. It has been proven that successful companies spend a significant amount of time understanding how work gets done, the knowledge requirements of individuals who are actually doing the work and the business environments in which these employees operate.

The overemphasis of formal learning efforts as a mechanism for sharing knowledge. Many organizations have invested heavily in formal learning efforts, such as classroom and online training. Although some of this training may be useful, recent studies such as one conducted by the Center for Workforce Development have shown that over 70 percent of actual learning is accomplished through informal channels. Successful companies recognize that significant learning occurs when employees attempt to jointly solve problems on a day to day basis. One way that organizations have fostered informal learning is by using and supporting communities of practice, or informal groups of employees who have a common way of working. These communities bring individuals together to ask questions, share documents and tools, and provide a forum where practitioners can tap into the experiences of others.

Focusing knowledge management efforts only within organizational boundaries. Most organizations begin with internal knowledge management efforts designed to share knowledge between employees and across the organization. Although these efforts are often valuable, many organizations stop here and don't consider the potential business opportunities associated with sharing knowledge with suppliers and customers. The Institute's research has discovered that knowledge management programs that focus on the extended enterprise often provide additional avenues for cost savings, revenue enhancement and customer retention.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the research methodology that was used in carrying out the research. This section outlined the research design for the study, the data collection and the data analysis method used.

3.2 Research design

A case study design method was used since it has a sound basis for gathering insight information from the management of the organization on the challenges the organization is facing as a result of the changes in the business environment, and how the organization responds to these challenges in order to survive. The case study method provided a means of identifying specific respondents who provided the in-depth information on the depth of challenges posed to the organization by the changes and responses to the changes.

Case studies involve in depth, contextual analyses of situations in organizations, and understanding and correctly translating the dynamics of changes critical to problem solving and the case studies provide qualitative rather than quantitative data for analysis (Sekaran, 2006). This design is most appropriate for a single unit of study because it offered detailed in depth analysis that gave valuable insights to phenomena.

3.3 Data collection

The study used primary data which was collected from key informants and Safaricom Limited data bank. To achieve this, an interview guide was used to collect primary data (see appendix 1). The interview was conducted by the researcher personally.

The data was obtained from the various management team members belonging to different departments and compared against each other in order to get more revelation on the issues under study. The respondent comprised of five (5) senior managers within the company. These were managers in charge of shift planning, finance, human resource, consumer business and ICT manager respectfully. The interviewee were selected because they were the senior managers in charge of these departments and participated in decision making at the company hence their appropriateness in providing valid information for the study.

The interview guide had unstructured questions which were used so as to encourage the respondent to give an in-depth response without feeling held back in revealing of any information. With unstructured question, a respondents response gives an insight to his/her feeling, background, hidden motivation, interest and decision and give as much information as possible without holding back.

3.4 Data Analysis

The data was qualitative in nature, due to this fact; content analysis was used to analyses the data. Mugenda and Mugenda (2003) define content analysis as a technique for making inferences by systematically and objectively identifying specified characteristics of messages and using the same to relate trends. The in-depth understanding of the responses from the respondents was used in the analysis and interpretation of the data. Analysis of data collected was compared with the theoretical approach ad documentation cited in the literature review.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATIONS AND DISCUSSION

Introduction

This chapter present analysis and findings of the study as set out in the research objectives and methodology. The results are presented on knowledge management as a strategic tool for competitive advantage in Safaricom limited Kenya. This chapter specifically covers general information of the study, the specific objectives, that is, to determine how knowledge management strategies have contributed to achieving competitive advantage in Safaricom Limited Kenya and to determine the challenges of using knowledge management as a strategic tool for achieving competitive advantage in Safaricom Limited Kenya.

4.2 Response Rate

The primary data was collected from five (5) respondents, comprising of managers in charge of shift planning, finance, human resource, consumer business and ICT manager respectfully. Incorporated in the research are findings from secondary source. The data from five (5) respondents was by direct personal interviews. A 100% was attained because of the researchers aggressiveness in booking and attending the interview in person. This response rate was excellent and representative and conforms to Mugenda and Mugenda (2003) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a rate of 70% and over is excellent.

4.3 Knowledge Management Strategies to Competitive Advantage

The study asked interviewee whether Safaricom has a written knowledge management policy or strategy and they pointed out that the organization has knowledge management strategies that covers one year and reviewed every year to evaluate it is success and it is impact on the organizations performance. The organization has a mission that aimed to promote ethical, visionary and transformative leaders rooted in African and Christian values, recognizing prior learning and diversity of human experience, empowering the marginalized and supporting women leaders in church and society and preparing learners to adapt to changing global trends. Further interviewees indicated that to remain competitive Safaricom Kenya Limited has had to design new and achievable strategic plans as competitors to have a stake in what is considered a lucrative market with great potential of growth. With the increased level of competition, firms need to maintain or grow their market share, in order to remain relevant in the market.

Interviewees pointed out that knowledge management policy at Safaricom Limited is a long term strategy focused on “transforming lives”. Likewise, interviewees indicated that Safaricom knowledge management policies are committed to developing innovative, affordable and relevant products and services that help customers to transform their lives. Safaricom does this by being responsible and by observing ethical issues that enhances organization integrity for business, individuals and entire society. Further interviewees indicated that the company has adopted knowledge based practices to gain competitive advantage by providing the best customer service in Kenya, this is accordance with the company slogan “Safaricom the better option” which portrays Safaricom as the best

communication company where it transforms the life of Kenyans by promotions and offering various products to suit different niche in the market.

On whether value system or culture of Safaricom promotes knowledge sharing within the company, interviewees indicated that sharing of knowledge among various departments has improved the company's performance and raised the standards of services and products offered by the company hence enhance competitive advantage. Through this the department are allowed to come up with various product and service which are scrutinized to see the viability and once approved the "architect" employee is recognized for the effort.

Likewise, attention to key managerial activities and attitudes, such as the development of a strong market orientation, good internal communications, a sound and innovative strategy, good stakeholder management and the ability to predict and respond to environmental and industry changes have equally lent a hand in the organizations' competitive advantage. With this support, the firm has developed a range of products and services which include roaming services, data messaging, M-pesa, voice services, information and security services, Video Conferencing Telepresence, Virtual Computing and much more. The services are all geared towards competitive advantage. The interviewees further indicated that value system within the organization has improved the culture of knowledge sharing and there has been improvement in employee relation amongst themselves which has been vital in eliminating rivalry among departments and harmonizing them to work together as one team.

On whether Safaricom uses partnerships or strategic alliance to acquire knowledge, interviewees pointed out that Safaricom has used partnerships and strategic alliance with different organizations both in Kenya and international institution to acquire much needed knowledge. Locally, Safaricom and KCB formed a strategic partnership, dubbed “Biashara Smart” with the first project a one-stop integrated solution that caters for the needs of small and medium enterprises (SMEs) in Kenya.

Safaricom also partnered with Virtual City where they launched a mobile application that aims to enhance service efficiency in Kenya’s Fast Moving Consumer Goods (FMCG) sector. M-Distributor enables businesses manage the entire value chain; which includes tracking sales transactions and deliveries, placing orders and collecting returns in real time. It also enables mobile money payments through Safaricom’s M-PESA. Internationally, Safaricom Kenya and Google sealed a pact to deliver e-mail services direct to mobile phones. The partnership is expected to increase the number of potential Internet users from the current 2.7 million to 4.4 million by virtue of Safaricom’s subscriber base. These partnership have helped in promoting its products and services across the globe and also improve what its offering to his customers when they move across the borders for business or leisure.

On whether there exists a prepared written documentation such as lessons learned, training manuals, good work practices, articles for publication of various knowledge management information interviewees pointed out that Safaricom Limited has journals and brochures and they have made them accessible to everyone in the organization.

Anyone can access the information through the intranet to keep everyone updated on the companies' policies and practices. This has enabled the company to improve its performance on its creativity and innovation of product and services within the telecommunication industry. This has also helped the company improve its employee performance since there is reward and recognition on any achievement made. However, interviewees purported that management limits access to some of the information that if leaked out may pose a threat to the companies' privacy and also may be used by competitors in developing competitive strategy. Such information includes key procedures to strategy formulation and implementation process. This sensitive information is only shared in the departments concerned so that to protect the organization strategies adopted for most the information employees are requested to sign privacy agreement to bind them not and limit the information to share. The documentation has been vital in establishing the gap of various products and services being offered by Safaricom and creating room for improvement.

Safaricom has taken strict measures that ensure any information and strategies used in knowledge management is protected and that the work agreement form signed by the employees bind him or from exposing any information related to the organization either working or outside the organization. This has been achieved by ensuring that workers are involved in the company activities making them also be part. The remuneration packages are given at a better rate and based on performance employees are rewarded. Interviewees further indicated that apart from monetary reward there is much deeper involvement of employees in the business activities like formulation of products and services.

This has given employees an opportunity to be creative and innovative in the sector. There is also top security that which is covered by the risk management team to ensure that the employee who have left do not use the information to harm or try to defraud the company in any way.

4.4 Impact of Knowledge Management in Safaricom Limited

Further the study requested interviewees to indicate the how sharing knowledge across horizontally and vertically benefits the organization. Interviewees purported that use of knowledge management practices has helped in reduction of internal and external uncertainties. The inference made here is that the company values the horizontal and vertical sharing of knowledge information. The study indicated that the benefit was that there is smooth flow of information among the staff of Safaricom. One of the ways was a platform provided within the company where employees can air their views from personal to business wise and action taken to ensure that the issues raised are directed and addressed by the person in charge of that department.

Interviewees also pointed that sharing of knowledge both horizontally and vertically has been of great benefit to the organization is such a way that most it has created a conducive environment in the work place. The competitiveness of the company is based on unity and hardworking effort of the employees within the company. The respondents identified the need for cooperation of the activities as fundamental to strategy implementation in the organization to meet external and internal growth; and the need to improve working relationships between functional departments of marketing, technology and corporate strategy to match demand for expansion for delivery of quality services.

The technical department needs to work closely with the marketing and sales departments to identify and assess the customer needs, and with all the user departments to identify and assess their needs for IT business support systems.

On the level of contribution to improved workers efficiency and productivity, interviewees pointed that use of knowledge management practices in the organization has improved worker efficiency and productivity. The growing demand for product and services has made competition cut throat. This has forced the organization to rethink its competitive strategy since the others companies are not sleeping they are constantly fighting for the market share. The management has encouraged workers to take part of the innovative team so as to meet customers need. Services like Lipa na M-PESA were invented by employees after discovering that they can pay using M-PESA apart from sending money as method of payment. Further, interviewees pointed out that the success of the company and growth is determined by the use of ready knowledge and innovation by employees by being efficient and productive to their work in creating more competitive product superior than competitors like mobile money transfer. The commitment in putting extra effort by employees will create a sustainable competitive advantage over its rivals.

On whether knowledge management has helped to improve skills and knowledge of workers within the organization, interviews pointed that knowledge management practices has helped on developing employee skills. To ensure that organizations acquire, create, organize, share, use and build on the knowledge that is needed for their successful performance requires the right skills. These skills are needed by workforce and

organizations are now beginning to include competencies in knowledge and information management in their core competency lists. Employees require good, relevant and timely information and knowledge in their workplace in order to make better decisions and take appropriate action. The human resources departments look for certain skills and compare the skills of an employee with the needs of certain job opportunities. Those inquiries create the possibility to start internal promotion. The system makes the qualifications and skills of each employee transparent.

On whether use of knowledge management helped in adding new products or services which are competitive in the industry, interview pointed that the core of the new product development (NPD) process centers on knowledge creation, utilization and the management of knowledge. Knowledge management helps the organization in coming with new product such as M-shwari, Lipa na M-pesa among others. These products development have emerged as the lifeline for the organization. Knowledge management is one of the elements that determine NPD success. Knowledge management processes in the organization includes identifying, creating, acquiring, using, sharing and storing individual and collective knowledge.

On how Safaricom has used its ability to capture knowledge from other business enterprises, organizations, technical literature, to improve its own knowledge management, interviewees pointed out that management has been able to focus on developing external knowledge management systems that foster innovation with value chain partners' more than smaller firms. Interviewees further indicated that the company has identified that knowledgeable staff should be used to the best and this in order to

continuity and reassuring competitive advantage is important. Interviewees believe that acquisition of information about the characteristics of knowledge can help its effective management. Through knowledge management the organization has created new knowledge that creates greater value as well. The Organization has also acquired sustainable competitive advantage through acquiring resources such as competent staff. Employees apply this knowledge in building infrastructure and relational activities to achieve sustainable competitive advantage. For example, through management of strategic, recently, the emphasis has been on the understanding of ‘what’ and ‘how’. In other words, what the company knows? , what it should get in order to have strong intangible core competencies and how it can achieve it.

4.5 Challenges of Knowledge Management for Achieving Competitive Advantage

On the challenges faced in creating policies and strategies to be used to carry out knowledge management and use it as a competitive tool, interviewees indicated that policies laid down by the government are key challenges that the organization face in creating policies and strategies to be used to carry out knowledge management. The government charges tax on usage of mobile phone services which is not applied to the fixed line operator. The unfair competition is causing pressure on tariff and service offers forcing the organization to continually review its prices in order to remain competitive.

Further interviewees pointed out that increased rivalry in the industry and large market share as key challenges. The company has a large market share of 60-75% which the respondents consider both an opportunity and a threat. It is an advantage to the organization as the market leader and generating high profits, but a disadvantage because

the main competitor aggressively fights back to increase its market share. The competition results in price cuts which hurt the operators, and the situation is expected to be worsened by the intended government price control on the operator with significant market power. In order to regain market leadership in the telecommunication industry in Kenya the organization responded by introducing per-second billing and aggressive marketing, but per-second billing was a unique product differentiation strategy only for a short while as it was imitated by the competitor.

Some interviewees identified existence of substitute products such as “Pesa Mkononi” and “Orange Money” and services in the market as a key challenges that organization faces in creating policies and strategies to be used to carry out knowledge management. Other companies are using CDMA technology to offer substitute products and services at lower prices and superior voice quality. In response to substitute products and services, the interviewees stated that it is important for the organization to first recognize that other wireless operators deploying wireless technologies are competitors and accept the fact that it is not possible to fight technology. Interviewees further pointed out that the organization responds by service differentiation, providing superior coverage and moving to rural areas where mobile services are not exhausted, to increase the customer base, to achieve economies of scale a move interpreted as a strategic response to the competition changes in the industry.

Some interviewees identified the introduction of new products and services by the competitors, and the changing customer needs as a key challenge of knowledge management for achieving competitive advantage. A good example is the revitalized

Airtel Kenya Ltd which has changed its marketing strategy by introducing new products that are becoming more appealing to the consumer. Airtel International is becoming more focused to Kenyan market than before, therefore encroaching into what Safaricom Ltd has dominated. Orange Kenya also has come-up with a marketing strategy where it sensitizes the subscribers that the Safaricom charges unrealistic fee when calling off-net where Orange Kenya has a standard calling rate regardless of the network the subscriber is using. The organization responds by introducing new products and services, such as mobile Internet using GPRS technology, and is now using high speed data and multimedia services, interpreted as strategic response. The competition in the market has resulted in rapid growth, rapid capacity expansion, changing organizational structures and shortage of skilled and experienced employees.

4.6 Relationship of Knowledge Management to Competitive Advantage

The study sought to establish whether the use of knowledge management has a relationship to competitive advantage that aims to improve the organization performance; interviewees pointed out that Safaricom use knowledge management as a strategy for improving its performance. The inference made here is that there is high competition in telecommunication industry and most of the organizations are striving for survival. This study established that there are number of reasons for this organization to embrace knowledge management in their business operations. The major reasons given by interviewees are: growth of business and retention of market share, improving quality in production, creating and sustaining strategic competitive advantage, nurturing creativity and innovation, key to company's business strategy, retain and capture employee

knowledge, dynamic business environment and markets, knowledge creation and knowledge transfer, helps avoid costly mistakes and ill-informed decisions, in that order. One of the senior manager in marketing department noted that knowledge management focuses on achieving the company's objectives which includes performance improvement, realizing competitive advantage and being innovative.

Interviewees also pointed out that all department need to communicate and share information with each other in order to foster sustainable competitive advantage and embrace knowledge management practices. It is being recommended that the leadership of these departments should develop an explicit policy on knowledge management in the same breath policies. Equally important, organizations should redress their organizational structure to include the position of Knowledge management manager who will be responsible for managing and driving knowledge management agenda in the organizations and who should also establish mechanisms and structures that help in sustaining knowledge acquisition over time.

On strategies used by Safaricom Limited to encourage innovation interviewees indicated use of increased workers acceptance of innovations. With the current dynamic technology innovation is inevitable and for any company survival depends on its innovative ways to meet most of the customers' needs. With proper knowledge management the company is able to create new product and services to suit every market. Some of them are the successful M-PESA which has brought easy transfer of money and has been improved over the years to also pay and acquire loans. Some of this innovative ways tend to assure employees fearing for their job that they might lose them.

Another example brought into focus was the self-service and self-care online support which customers can use without necessarily requiring customer care agents. These are some of the many innovative ideas that have been generated within and outside Safaricom.

The managers were in all agreement that the innovation department created was not for replacing employees since they are the innovators and without them identifying customers' needs and trying to meet those needs. They concluded that when proper management of knowledge is done it puts a company in a higher notch than competitors and hence translate to better performance of the company. The continuous innovation provides a greater advantage of the company and ensure that it existence is not threatened, with this it create a greater competitive advantage against other companies. The human resource manager pointed out that the innovation department was there to stay and would be of great beneficial to Safaricom as an organization and the employees in general both in financial and growth of the company.

4.7 Discussion of Findings

On the impact of knowledge management on competitive advantage, the study established that knowledge management policy at Safaricom Limited is a long term strategy focused on "transforming lives". Safaricom promotes knowledge sharing within the company among various departments has improved the company's performance and raised the standards of services and products offered by the company hence enhance competitive advantage.

Through knowledge management Safaricom has developed a range of products and services which include roaming services, data messaging, M-pesa, voice services, information and security services, Video Conferencing Telepresence, Virtual Computing and much more.

Likewise, Safaricom has gained much required knowledge through partnership such as “Biashara Smart” has resulted to one-stop integrated solution that caters for the needs of small and medium enterprises. The study conforms to Alton and Dion (2008) they pointed that achieving competitive advantage is the most important application of knowledge in terms of its contribution in attaining the organizational objectives. Use of knowledge management practices has helped in reduction of internal and external uncertainties and has improved worker efficiency and productivity. Organization has also acquired sustainable competitive advantage through acquiring resources such as competent staff. According Lubit (2001) for a growing number of businesses, competitive advantage lies in the capability to create and apply intellectual expertise.

On challenges of knowledge management for achieving competitive advantage, the study established that policies laid down by the government such as taxation are key challenges that the organization face in creating policies and strategies on knowledge management. Increased rivalry in the among the telecommunication sector players to win the market share are also the key challenges. Likewise, the study established that lack of clear policies aligned to the department objects as the key challenges of knowledge management for achieving competitive advantage. Blake (2000) identified Failure to align knowledge management efforts with the organization’s strategic objectives.

Successful knowledge management programs often begin by addressing a critical business problem facing the company. Introduction of new products and services by the competitors, and the changing customer needs as a key challenge of knowledge management for achieving competitive advantage. Aggressive marketing strategy by the competitors is being a challenge of knowledge management for achieving competitive advantage such strategy is that of Orange Kenya where it sensitizes subscribers that the Safaricom charges are unrealistic when calling off-net. According to Lubit (2001) the strategic objectives of KM vary, such as developing new opportunities or creating value for the customers.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the data findings on knowledge management as a strategic tool for competitive advantage at Safaricom Limited Kenya, the conclusions and recommendations are drawn there to. The chapter is structured into summary of findings, conclusions, recommendations and area for further research.

5.2 Summary

The study established that knowledge management policy at Safaricom Limited is a long term strategy focused on “transforming lives”. Safaricom promotes knowledge sharing within the company among various departments has improved the company’s performance and raised the standards of services and products offered by the company hence enhance competitive advantage. Through knowledge management Safaricom has developed a range of products and services which include roaming services, data messaging, M-pesa, voice services, information and security services, Video Conferencing Telepresence, Virtual Computing and much more.

Apart from these Safaricom Limited has gained much required knowledge through partnership such as “Biashara Smart” has resulted to one-stop integrated solution that caters for the needs of small and medium enterprises. Use of knowledge management practices has helped in reduction of internal and external uncertainties and has improved worker efficiency and productivity. Organization has also acquired sustainable competitive advantage through acquiring resources such as competent staff.

According Lubit (2001) for a growing number of businesses, competitive advantage lies in the capability to create and apply intellectual expertise. On challenges of knowledge management for achieving competitive advantage, the study established that policies laid down by the government such as taxation are key challenges that the organization face in creating policies and strategies on knowledge management. Increased rivalry in the among the telecommunication sector players to win the market share are also the key challenges. Likewise, the study established that lack of clear policies aligned to the department objects as the key challenges of knowledge management for achieving competitive advantage. Introduction of new products and services by the competitors, and the changing customer needs are also key challenges of knowledge management for achieving competitive advantage. Aggressive marketing strategy by the competitors is being a challenge of knowledge management for achieving competitive advantage such strategy is that of Orange Kenya where it sensitizes subscribers that the Safaricom charges are unrealistic when calling off-net.

5.3 Conclusion

Based on the study findings, the study concluded that knowledge management practices have helped the organization in reduction of internal and external environment uncertainties. Sharing of knowledge both horizontally and vertically has been of great benefit to the organization in such a way that most it has created flexibility when working. The need for cooperation and coordination of the activities as fundamental to strategy implementation in the organization to meet external and internal growth; and the need to improve working relationships between functional departments of marketing,

technology and corporate strategy to match demand for expansion for delivery of quality services. Knowledge management has also helped to improve skills and knowledge know how of workers within the organization, interviewees pointed that knowledge management has helped on developing employee skills. Knowledge management helps the organization in coming up with new product such as M-shwari, Lipa na M-pesa among others. These products development have emerged as the lifeline for the organization.

On the challenges faced in creating policies and strategies to be used to carry out knowledge management and use it as a competitive tool the study concluded that unfair competition is causing pressure on tariff and service offers forcing the organization to continually review its prices in order to remain competitive. Increased rivalry among the players in the communication industry is key challenge to the implementation of knowledge management as the competitors tries to absorb competent staff from the company as well as lowering the cost of services and unfriendly marketing strategies like one used by the Orange Kenya. Further the study concluded that the organization face some challenges in knowledge management such as lack of a two-way-communication pattern that permits and solicits questions from employees about issues regarding the knowledge management strategy.

5.4 Recommendations

Based on the findings, the study recommended that to have a sustainable competitive advantage, an organization should realize how to create, distribute and utilize knowledge management throughout an organization and how link it to organizational process.

Another important thing is a manager should know what kind of knowledge they should seek to enhance organizational activity to get sustainable competitive advantage. Additionally, the study recommends that knowledge that is isolated in one department or in a specific segment of the value chain is not utilized to its full extent. New knowledge should be harnessed and managed through internal knowledge management systems that create learning opportunities for other departments or product areas within the firm. Internal knowledge management systems may provide platforms for further development of knowledge transfer to external partners. By implementing internal and external knowledge management systems, firms can experience a greater competitive advantage and sustained success over a longer period of time.

The effectiveness of building knowledge within the firm depends on the firm's ability to monitor and absorb newly acquired knowledge from many sources and integrate this knowledge into its existing knowledge base. Establishing organizational memory via knowledge management systems is an essential task before firms venture into knowledge sharing with value chain partners. Before developing knowledge management systems, businesses need to understand the process of organizational memory.

The study recommended that firms can gain significant benefits by integrating knowledge from external sources outside the firm. Knowledge sharing can lead to increased quality and heightened customer perceptions of brand platforms. Such knowledge stores can be accessed through inter-organizational relationships with customers, suppliers, and other bodies outside the company.

The more developed the external knowledge management systems, the more likely the firm will learn from partners' knowledge for market applicability and new opportunities.

5.5 Limitation of the study

The data was collected from all the target respondent however the limitation of the study was that some respondent could not only readily understand the questions and the type of the response expected from them therefore the concept had to be explained in more simplified and understandable language. A few respondents had difficulties in providing comprehensive response to some question falling outside their filed of specialization or functional responsibilities therefore getting in-depth information in some specific issues required further explanation.

Time was a big constraint to a lesser extent as some of the respondent, due to official engagement, took long to respond to the questionnaire when the researcher visited them, but eventually direct personal interviews were carried out. The respondent generally provided adequate time for the interview to be carried out; there was adequate time for data analysis and writing of the report.

5.6 Suggestion for Further studies

The study suggested that further research on the same topic be done in the telecommunication companies in order to give reliable result that reflect the real situation in the telecommunication sector. The study also suggested that the same study be done on knowledge management as a strategic tool for competitive advantage by focusing on other sectors rather than communication sector such in banking sector in order to depict reliable information that illustrates real situation in across the sector.

5.7 Implication of the study on policy theory and practices

The study recommended that the effectiveness of building knowledge within the firm depends on the firm's ability to monitor and absorb newly acquired knowledge from many sources and integrate this knowledge into its existing knowledge base. Organization should become a learning center and providing facilities for knowledge management. Some of the facilities include workshop, knowledge management conference and refresher course, among others. When an organization becomes a resource center, the staff needs share ideas and evidence that generates new ideas which enhance organization performance and creation of knowledge. During these sessions new knowledge will be recorded and stored for use and reuse in future.

It is recommended that policy makers support knowledge management policies by companies since it has become a toll for competitive advantage. These processes will not disrupt the growth in the telecommunication industry, therefore the policy makers need to create level playing field without favoring any firms, apply best practice and adopt a consultative decision making process to include all stakeholders on the fundamentals

policy changes in the industry. A further recommendation is for the organization to be tactical in lobbying to avoid confrontation approach in order to foster good relationship with the policy makers and the regulators.

The study also recommends that the knowledge management is a tool and important in the organization as a contributing factor to a successful sustainable competitive advantage. The findings of the study pints out that for telecommucation industry to foster sustainable competitive advantage innovation and quality production they need to embrace knowledge management practices. The researcher recommends that leadership of this organization should develop an explicit policy on knowledge management in the same breath with quality and safety policy.

REFERENCES

- Alavi, M. and Leidner, D. (1999), *Knowledge Management Systems: Issues, Challenges, and Benefits, Communications of the AIS*, Vol. 1.
- Alter, S. (2002). *Information systems: the foundation of e-business*. Upper Saddle River, NJ: Prentice Hall.
- Ansoff, H.I (1965), *corporate strategy: an analytical approach to business policy for growth and expansion*, New York: McGraw-hill.
- Blake, P. (2000). *The future of knowledge management''*, Information Today, Vol. 17
- CCK. (2014). *Communication Commission of Kenya*. Retrieved from <http://www.cck.or.ke>
- Chakula, (2004). *Telecommunications Policy Trends in Africa 'Highlights of Some Key Issues'*, No. 10, May, Website http://africa.rights.apc.org/chakula10_text, 14 September 2005
- Chong Chin Wei, Chong Siong Choy, Wong Kuan Yew, (2009), *"Is the Malaysian Telecommunication industry ready for knowledge management implementation?"*, Journal of Knowledge Management, Vol. 13.

Cricelli, L., Grimaldi, M. & Ghiron, N. (2008), *The competition among mobile network operators in the telecommunication supply chain*, International Journal of Production Economics,

Daily Nation. (2007), "Government of Kenya: Telkom Kenya Privatization: The Request for Proposal (RFP) for the privatization of Telkom Kenya Limited (TKL) is now 3 available to potential bidders" Published Daily Newspaper 12 July, Nation Media Group Limited, Nairobi, Kenya.

Danskin, P., Solomon, M. R., Goldsmith, M. & Davey, J. (2005), *Knowledge Management, the value chain and competitive advantage: Lessons from the telecommunication industry*. Journal of Knowledge Management, 9(2): 91-102.

Davenport, Thomas H., and Lawrence Prusak. (1998), *Working Knowledge: How Organizations Manage What They Know*. Cambridge, MA: Harvard Business School Press.

Day, G. S. (2000), *Capabilities for forging customer relationships*. Cambridge, MA: Marketing Science Institute.

Earl, L. (2001). *Knowledge Management in Practice in Canada*. Science, Innovation and Electronic Information Division. NO.7 (online) at, <http://www.statcan.ca>. 1-14.

GOK (1998) “*The Kenya Communications Act, 1998*” Kenya Gazette Supplement, 9th November, No. 64 (Acts No. 3) pp: 193-284, The Government Printers, Nairobi, Kenya.

Grant, R . M. (1996). *Toward a Knowledge based Theory of the Firm Strategic Management Journal*, Vol. 17 (Winter Special Issue).

Gurteen, D. (1999). *Creating a Knowledge Sharing Culture*. Retrieved June 16, 2006.

Haggie, K. & Kingston, J. (2003). Choosing your Knowledge Management Strategy. *Journal of Knowledge Management Practice*, Vol. IV, 43-54.

Hick, R. C. (2006). The Five Tier Knowledge Management Hierarchy. *Journal of Knowledge Management Practice*, X, NO.1, 19-27.

Kandie, P. (2001) “*A study of the Strategic Responses by Telkom Kenya Limited in a Competitive Environment*” Unpublished MBA Research Project of the University of Nairobi, Nairobi, Kenya.

Liew, A. (2007), *Understanding Data, Information, Knowledge and Their Inter Relationships*. *Journal of Knowledge Management Practice*, VII, No. 2, 102-122.

- Lubit, R.(2001), *Tacit knowledge and knowledge management: the keys to sustainable Competitive advantage*. Organizational Dynamics, 29,164-178.
- Maina, W. (2004) “*The relationship between Technology Strategy and Competitive Performance in the Telephony Industry in Kenya,*” Unpublished MBA Research Project of the University of Nairobi, Nairobi, Kenya.
- Misigo, G. (2005) “*Employee benefits as a competitive knowledge strategy: A survey of the Telecommunications Sector*” Unpublished MBA Research Project of the University of Nairobi, Nairobi, Kenya
- Mosoti, Z., & Masheka, B. (2010).Knowledge management: the case for Kenya. *The journal of language, technology & Entrepreneurship in Africa*.
- Mugenda, O.M., and Mugenda, A.G. (2003).*Research methods: quantitative and qualitative approaches*. Revised edition. Nairobi: ACTS Press
- MuituL. K. (2011)*Market penetration strategies and competitive advantages used by Essars TelecomKenya*. Unpublished MBA project University of Nairobi.
- Nonaka, I. (1994),*A dynamictheory of organization knowledge creation*. Organization Science.

- Ondari, O. E. and Minishi, M. M. (2007). *Enhancing Governance, Performance Effectiveness and Capacity to Deliver Basic Government Services in Sub-Sahara Africa through Knowledge Management*. Paper presented at The Knowledge Management Africa (KMA) second biennial conference 2007, Nairobi, KE: 1-15
- Pavlin, S. (2006). *Community of practice in a small research institute*. Journal of knowledge management. 10 (4), 136-144.
- Penrose, E. T. (1959). *The Theory of the Growth of the Firm*. New York: John Wiley
- Porter, M. E. (1980) *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, New York: Free Press.
- Porter M.E. (1990) - *The competitive advantage of the nations*, Ed. The Free Press, A Division of MacMillan Press Ltd., New York.
- Prescott, J.E. (2001). *Proven Strategies in Competitive Intelligence: Lessons from the Trenches*. New York, NY: Wiley.
- Rao, M. (2004). *Review: Knowledge Management: concepts and best practices*. Journal of Information and Knowledge Management.

Safaricom Limited Company. (n.d.). Retrieved April, 2013, from *Safaricom website, Safaricom company homepage website, <http://safaricom.co.ke/data/index.php>*

Sekeran, U. (2006) *Research Methods for Business*, 4th Ed., Singapore: John Willey and Sons Inc.

Senaji, T. A.(2005)“*Analysis of the factors affecting Information and Communications Technology development in Kenya: The case of Network Operators*” Unpublished MBA Research Project of the University of Nairobi, Nairobi, Kenya.

Sharp, D. (2004).*Thriving in World of Hyper-competition*, Business Time, (online)

Strouse, Karen G. (2001) ” *Strategies for Success in the New Telecommunications*” Marketplace. Boston: Artech House Telecommunications Library,

APPENDIX

APPENDIX : INTERVIEW GUIDE

Section A: general information

Position/designation

Department

Section B: questions

The policies and strategies of knowledge management practices within safaricom

- 1) Does safaricom have a written knowledge management policy or strategy?
- 2) Does value system or culture of safaricom promoted knowledge sharing within the company?
- 3) Has safaricom Used partnerships or strategic alliances to acquire knowledge?
- 4) Is there a prepared written documentation such as lessons learned, training manuals, good work practices, articles for publication of various knowledge information?
- 5) Which challenges does safaricom face when creating polices and strategies to be used to carry out knowledge management and use it as a competitive tool?

Knowledge management practices used in the safaricom.

- 1) How has safaricom used knowledge management as tool for competitive advantage improve the organizationperformance?
- 2) How has safaricom done to protect the organization from loss of knowledge due to workers' departures?
- 3) Which strategies has safaricom used to increase worker acceptance of innovations?
- 4) What are the challenges faced while implementing knowledge management within Safaricom?

The result of Effective use of knowledge management in safaricom limited.

- 1) Has safaricom benefited from sharing knowledge across horizontally and vertically within the organization?
- 2) What is the level of contribution by safaricom to improved workers efficiency and/or productivity?
- 3) Has knowledge management helped improved skills and knowledge of workers within the organization?
- 4) Has the use of knowledge management helped in adding new products or services which are competitive in the industry?
- 5) How has safaricom used its ability to capture knowledge from other business enterprises, organizations, technical literature, to improve its own knowledge management?