BUILDING SUSTAINABLE COMPETITIVE ADVANTAGE IN THE MOBILE TELEPHONY INDUSTRY IN KENYA

BY

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DECLARATION

STUDENT'S DECLARATION

I declare that this project is my original work and has never been submitted for a degree in any other university or college for examination/academic purposes.

Signature: ....Date: 07/11/2011..............

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D61/71337/2008

SUPERVISOR'S DECLARATION

This research project has been submitted for examination with my approval as the University Supervisor.

Signature..Date 08/011/2011..........

DR. JACKSON MAALU

LECTURER: UNIVERSITY OF NAIROBI

DEDICATION

This project is dedicated to my iron lady; my mother Mrs. Antonine Odwesso. With your love, iron will and strength, you moulded me into the person I am today.

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ABSTRACT

Increased globalization and liberalization has increased turbulence in the environmental changes experienced by firms today presenting greater need to establish sustainable competitive advantage if they are to remain in business. To succeed in achieving sustainable competitive advantage firms must provide what buyers will perceive to be of superior value. Availability of many players provides customers with an array of options to choose from and therefore to capture their interest, it entails either a good quality product at a low price or a better quality product that is worth a premium price. While it is easy to gain sustainable competitive advantage, the challenge is sustaining market leadership. The objectives of the study were to determine the basis of sustainable competitive advantage in the mobile telephony industry and to analyze factors influencing sustainable competitive advantage in the mobile telephony industry.

The study adopted the survey research design picking eight departmental heads from each company comprising a target population of 32 respondents. The research employed a semi structured questionnaire to collect primary data which was administered through the drop and pick method. Descriptive statistics and content analysis were used to analyse the data. From the findings the study concludes that internal sources of competitive advantage are more important and relevant than the external sources. Knowledge is increasingly becoming a major source of competitive advantage as it is valuable rare, non-substitutable and imperfectly imitable. While the development of human resources is critical, it is the creation of a learning organisation to enhance the sharing and spread of knowledge among all employees rather than letting it reside in the heads of a few who could easily take it away and perhaps move over to competition. Functional capabilities such as finance, production, procurement, product or customer support, low cost or high volume production, strong marketing strategy, management team and operations and service quality can easily be decoded and acquired by competitors in the open market unlike the hard to decode distinctive competencies.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The business world is fast changing. Technology has catalysed this change and innovation is increasingly becoming the norm to keep pace with the ever changing needs of the customers. This has led to cut throat competition amongst business players; small, medium sized or large, each is striving to gain and maintain market leadership. With it has come great competition. Cut throat competition is virtually present in all markets and industries and is a major threat to the long term survival and prosperity of any organisation (Dulo, 2006). In order to keep up with competition, firms must constantly search for a competitive strategy that will ensure competitive advantage in the long term and yield market leadership.

Competitive advantage is thus the single most powerful weapon needed by firms to win and prosper in today's world. As a lethal weapon, competitive advantage enables firms to enjoy unassailable position in the market (Robert, 2000) through erecting barriers to small local rivals and new entrants. Porter (1985) argues that competitive advantage can help firms to erect entry barriers through economies of scale, proprietary products, synergistic alliances and expected retaliation. Knowledge is considered to be one of the most significant resources. While possession of more relevant knowledge make it easier for firms to win a competitive war (Inkan and Zack, 1998), companies can in addition create sustainable competitive advantage by becoming champions of defining the pattern of successful innovation and executing against it.

1.1.1 The Concept of Sustainable Competitive Advantage

Firms must respond to environmental changes if they are to be sustainable. Of greatest influence is competition. Competition determines the appropriateness of a firm's activities such as innovations, utilization of resources, cohesive culture, or good implementation that contribute to its performance (Anot Awuor, 2006). Competition threatens attractiveness of an industry consequently reducing profitability of industry players due to shrinking markets. As a result it firms feel pressured to be proactive and to formulate competitive strategies that facilitate proactive response to actual and anticipated changes in the environment (Munyoki, 2007).

It's thus a no brainer that only firms with well laid strategies convert these environmental changes to opportunities and exploit them.

Porter (1998) says competitive strategy is the search for a favourable competitive positioning in the industry and it aims at establishing a profitable and sustainable position against the forces that determine industry competition. Thus a good competitive strategy leads to a competitive advantage. For any business strategy to be capable of sustained success, it must be grounded in competitive advantage which is gained when a firm moves to a position where it has an edge over its rivals in securing customers and defending against competitive forces (Thompson and Strickland, 2002). Scholars have suggested models that can be used to guard against competitors e.g. Game Theory (Shapiro, 2000) which focuses on analyzing competitors' possible move prior to deciding the next action. Porter (1995) proposes focus on the value chain so that a firm can attain sustainable competitive advantage through cost leadership and differentiation. Tang (1995), gives 10 principles which if put together, a firm can dominate an industry. Either way, the outcome of competitive advantage is that a viable number of customers end up buying products of a firm because of the superior value it is perceived to have (Thompson 1989). Coyne (1986) argues that in order for a firm to possess sustainable competitive advantage consumers must perceive some difference between the a firm's product offering and the competitors' offering which must be due to some resource capability that the firm possesses and the competitors do not possess. In addition this difference must be some product delivery attribute that is a positive key buying criterion for the market.

The key is being able to predict the actions of others in the industry over time; by matching the firm's resources (core competencies) to the gaps and voids (opportunities) that exist in the industry, competitive advantage can be created. This advantage is sustained if competitors either cannot or will not take action to close the gap. Barney (1991) states that not all potential resources hold the potential of sustainable competitive advantage; instead these resources must possess four attributes rareness, value, inability to be imitated and inability to be substituted.

Sustainable competitive advantage therefore, is the prolonged benefit of implementing some unique value creating strategy not simultaneously being implemented by any current or potential competitors along with the inability to duplicate the benefits of this strategy. It is different from competitive advantage in that competitive advantage is the position a firm attains that leads to above normal rents/superior financial performance and the processes and positions that engender competitive advantage are not necessarily non duplicable/inimitable. It is thus possible for some companies to, temporarily; make profits above cost of capital without sustainable competitive advantage. Competitive advantage becomes sustainable competitive advantage when all duplication/imitation efforts have ceased and rival firms have not been able to create the same value that the said firm is creating. Hamel and Prahalad (1989) go ahead to state that searching for sustainable competitive advantage is not the option; firms must adopt a learning attitude in order to learn how to create new advantages that can help achieve global leadership.

1.1.2 Overview of the Kenyan Mobile Telephony industry

Kenya mobile telephony industry was liberalized in the 90's when Safaricom and the then Kencel (now Bharti Airtel) were licensed. Since then, the sector has grown tremendously and seen a lot of changes. Kencel Kenya has since then been sold three times, to Celtel, Zain and finally to Bharti Airtel. 2008 saw the entry of the third and fourth network; Econet Wireless and Telkom Kenya under the Orange Brand, this marked the turning point for growth prospects in the industry. Essar Telecoms which trades as Yu also joined the industry a while later. Other service providers in the market are V-Tel, Popote wireless, Flashcom and Butterfly. Communications Commission of Kenya (CCK) reports that at the end of December 2010 Kenya had a total of 24,968,891 mobile subscribers from 22,318,610 at the end of September 2010. At the time, Safaricom controlled 80.7% , Airtel 9.1%, Esaar Telecom (YU) 7.4% and Telkom Orange 2.7%.

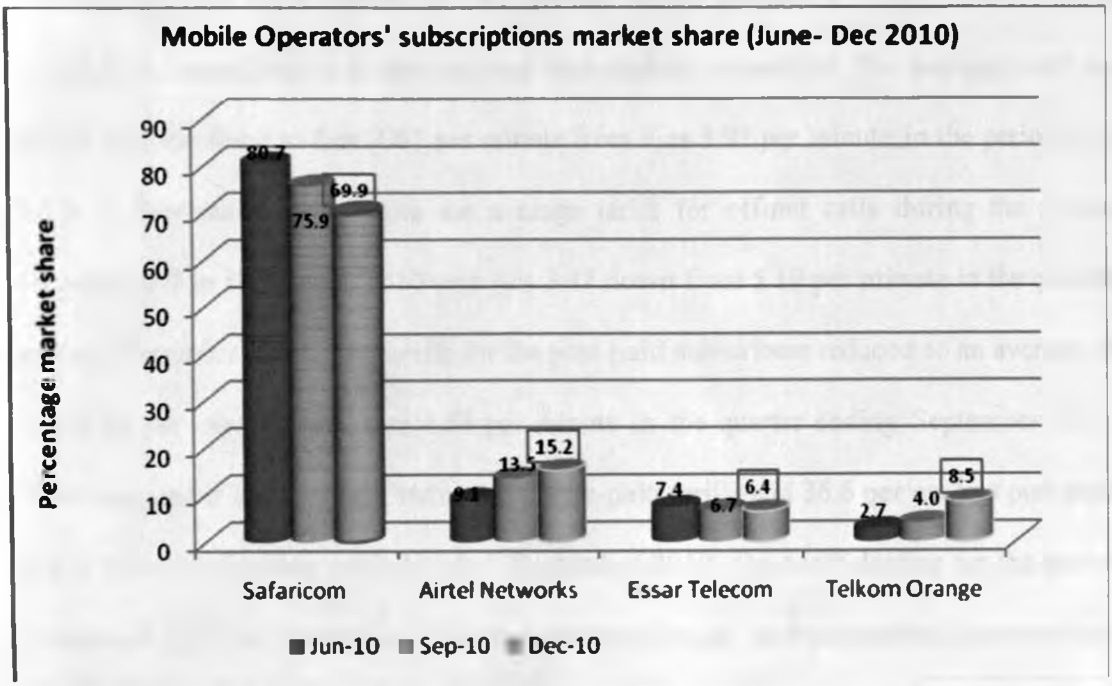

Figure 1: Mobile operators' subscriptions Market share

Source: CCK Quarterly Sector Statistics Report 2nd Quarter October-December 2010/2011

A price war has characterised Kenya's mobile communications market since 2008, following the entry of Orange. Subscriber growth is now forecast to slow gradually over the coming years, and rapidly falling Average Revenue Per User (ARPU) levels have driven one of the incumbents, Zain (which was subsequently acquired by Bharti Airtel), deeper into negative earnings, leaving only the market leader, Safaricom, with a net profit, although reduced. Financial performance improved again in the 2010/11 financial year.

According to the CCK report for the quarter ended December 2010, mobile tariffs declined as competition in both voice and data markets intensified. The average tariff for on-net calls declined to Kes 2.67 per minute from Kes 3.92 per minute in the period July 2010 to September 2010 while the average tariff for off-net calls during the period October 2010 to December 2010 was Kes 3.47 down from 5.10 per minute in the quarter ending September 2010. The tariffs for the post-paid subscribers reduced to an average of Kes 2.89 per minute from Kes 4.56 per minute in the quarter ending September 2010. This represented 31.9 per cent reduction on pre-paid tariffs and 36.6 per cent on post-paid tariffs from the previous period, July – September 2010. The tariff decline for the period September 2010 to December 2010 was attributed to an interconnection determination issued by Commission in August 2010 which reduced termination rates from Kes. 4.42 to Kes 2.21 coupled with increased competition among operators in the mobile market which followed the acquisition of Zain by Bharti Airtel whose business strategy seem to target the mass market. The low mobile termination rates, which precipitated the current price wars that have seen retail prices slashed to unprecedented levels. A termination rate is the cost attached to terminating a call outside the originating network. CCK forecasts that the termination rates will fall further to Kes 1.15 on July 1, 2012. Stiff competition in the mobile telephony market and an active industry regulator has reduced calling tariffs in Kenya to one of the lowest in Africa. Statistics from individual mobile telephony operators show that calls in Kenya average Kes 3.5 per minute, compared to an average of Sh11 in the East Africa region.

In March 2011, Mobile Number Portability (MNP) was introduced in the industry with the activation going live on April 1st 2011. It was intended for customers who wish to change their operators but cannot do so because they do not want to change their numbers. MNP was viewed as a viable avenue in which the operators with a smaller share can rope in subscribers from Safaricom. Research indicates that since the activation of MNP, the market is still skewed in favor of Safaricom which now maintains a 75%, about 17.8 million share of the subscriber, a slight fall from the share it had at the end of December 2010.Airtel doubled its subscriber base to 4.2 million about 18% of the market share leaving Telkom Orange and YU to share the remaining 7%. However, the emotional attachment to mobile numbers is uncharacteristically strong in Kenya to the extent that not many people changed operators even when the other operators calling rates were lower. YU recently dropped all call charges, still only very few have moved. Orange introduced a flat rate 100/= per month rate and few moved over.

The mobile telephony industry has transformed to a fully fledged ICT industry. With the advent of technology through the installation of the fibreoptic cables, the firms are able to not only provide mobile telephony services but data services as well. More so they have been operating mobile money transfers which has earned accolades for being a first innovation in the world. Despite the penetration of mobile telephony industry being just a little over a decade old, it is the fastest growing industry at 25%, the highest in sub – Sahara. Factors of competition revolve around building subscriber base as opposed to retention of quality clientele exhibited by the intense advertising and brand positioning touching on cost/price, customer care, network availability and reliability, corporate social responsibility among others (Ngobia, 2004).

1.2 Research Problem

Increased globalization and liberalization has increased turbulence in the environmental changes experienced by firms today presenting greater need to establish sustainable competitive advantage if they are to remain in business. The world is increasingly becoming a global village and to succeed in achieving sustainable competitive advantage firms must provide what buyers will perceive to be of superior value. Availability of many players provides customers with an array of options to choose from and therefore to capture their interest, it entails either a good quality product at a low price or a better quality product that is worth a premium price. While it is easy to gain sustainable competitive advantage, the challenge is sustaining market leadership.

Currently the mobile telephony market share is skewed in favor of Safaricom which maintains a 75%, about 17.8 million share of the subscribers, Airtel maintains 18% (4.2 million subscribers) while Telkom Orange and YU share the remaining 7%. The latter three, especially Airtel, have been wrestling Safaricom to win over its subscribers. The recent introduction of MNP seemed to have offered them a good opportunity to rope in subscribers from Safaricom but that did not quite happen. Consequently, a war of words broke out between the two major firms weeks into the introduction, with each accusing the other of sabotage and the use of nefarious tactics to prevent subscribers from switching providers.

The Kenyan mobile industry has also experienced convergence of mobile telephony and ICT. Gone are the days when mobile telephony was only about calling and sending text messages. Fast paced technological changes, increased competition and the ever changing customer needs and tastes require that mobile telephony service providers firms respond proactively or risk losing clientele both existing and potential. Increased intrusions by regulator in determining prices and the promulgation of mobile number portability make the competition stiffer consequently shrinking profit margins. Introduction of Voice over Internet Protocol (VoIP), demand by new entrants to share infrastructure and interconnection, shift towards quality and additional services rather than relying on network convergence as competitive advantage have made it necessary for firms to change tact if they are to remain relevant in the market.

Many researchers have studied sustainable competitive advantage but the contextual orientations are different. Anot (2006) looked at strategies employed by Kenya Tourist Board to establish sustainable competitive advantage for Kenya as a tourist destination. Mbugua (2006) and Ndungu (2006) explored the concept at EAPI and British Airways World Cargo Kenya respectively. Matheka (2007) analysed the role of intangible assets in sustaining competitive advantage among the Kenyan Pharmaceutical Manufacturers. Studies have also been carried out in the mobile telephony industry covering different concepts. Ngobia, 2004 researched on the basis of competition in the mobile telephony industry while another specifically explored strategic responses to competitive environment by Safaricom Limited (Munyoki S.M., 2007)

Anot (2006) suggested that similar studies be carried out within other organizations in the tourism sector to establish what is being done so as to collectively sustain impressive performance in the tourism industry. Across the borders Hoffman, 2000 studied sustainable competitive advantage recommending research to map how strategy can influence the performance by providing firms with sustainable competitive advantage. So far no study has explored the concept of sustainable competitive advantage in the Kenyan mobile telephony industry.

In light of the recent changes in the mobile telephony industry; what are the four mobile telephony service providers doing to build sustainable competitive advantage? Do these strategies take care of sustainability in future?

1.3 Research Objectives

The objectives of this study were:

i. To determine the basis of sustainable competitive advantage in the mobile telephony industry.

ii. To analyse factors influencing sustainable competitive advantage in the mobile telephony industry.

1.4 Value of the study

The finding of this study will help the policy makers, government, regulatory authorities and private sector to make informed decisions as regards the operations of mobile telephony service providers. Second, investors and management will use findings to craft competitive strategies to help cope with increased environmental changes threatening sustainable competitive advantage.

Third, the findings will provide knowledge on the benefits accruing to organisations as a result of building sustainable competitive advantage and bring out the relationship between organisation resources and sustainable competitive advantage. Lastly, study will be used as a reference tool to evaluate growth competitiveness and attractiveness of any industry.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Firms must respond to environmental changes if they are to be sustainable (Hamel and Prahalad, 1993). Of greatest influence is competition. Competition determines the appropriateness of a firm's activities such as innovations, utilization of resources, cohesive culture, or good implementation that contribute to its performance (Anot Awuor, 2006). Competition threatens attractiveness of an industry consequently reducing profitability of industry players due to shrinking markets. As a result firms feel pressured to be proactive and to formulate competitive strategies that facilitate proactive response to actual and anticipated changes in the environment (Munyoki, 2007). Only firms with well laid strategies convert competition changes to an opportunity and exploit it.

2.2 Theoretical Background

Early literature on the theories of trade between nations provided the basis for competitiveness theory. It alluded to the development of sustainable competitive advantage well before its time. Competitiveness theory evolved from the traditional trade theories, fundamentally 'The effect of the Wealth of Nations' Adam Smith in 1776 (later translated in 1937), which was revolutionary. In his book Adam Smith disputed the then existing philosophy Mercantilism view on trade which suggested that trade was a zero sum game in which a trade surplus of one country is offset by a trade deficit in another country. Smith in his argument viewed trade as a positive sum game in which all trading partners can benefit if countries specialized in the production of goods and services in which they had absolute advantage. This came to be known as the theory of absolute advantage.

Ricardo (1817) extended the theory of absolute advantage to comparative advantage where he stated that even if a country does not have an absolute advantage in any good this country and other countries will still benefit from international trade. However, Ricardo did not satisfactorily explain why comparative advantage differed across countries. To provide an explanation, in 1919 Swedish economist Eli Hecksher developed the factor proportions (endowment) theory which was later expanded by his former student, Bertil Ohlin in 1933 and later came to be known as H-O Theory. The two proposed that comparative advantage arises from differences in factor endowments, a theory which was virtually self evident.

Competitiveness theories proposed some kind of advantage as enabling a country gain more out of international trade. The same is true for the firm. If sustainable superior performance (which equals sustainable competitive advantage) is to be achieved a firm must differentiate itself. Alderson (1937) hinted at a basic tenet of sustainable competitive advantage, that a fundamental aspect of competitive advantage is the specialization of suppliers to meet the variations in buyer demand. Later Alderson (1965) recognized that firms should strive for unique characteristics in order to distinguish themselves from competitors in the eyes of the consumer. He stated that differential advantage might be achieved through lowering prices, selective advertising appeals and/or product improvement and innovations. While these concepts lay the core foundation for firms in moving toward sustainable competitive advantage, the intense nature of competition today requires that firms be more innovative and entrepreneurial in their strategy planning than just lowering prices or improving existing products. The most important question then would be how then can companies build sustainable competitive advantage?

The term "sustainable competitive advantage" emerged when Porter (1985) discusses the basic types of competitive strategies that a firm can possess (low cost or differentiation) in order to achieve a long run sustainable competitive advantage. In his book Competitive Advantage: Creating and sustaining superior performance, Porter explains the requisite approach to business success. Sustainable competitive advantage means sustainable superior performance. He goes ahead to state that structural conditions of an industry as proposed in his 5 Forces model determine average industry performance. Relatively strong competitive position and performance of a particular firm in an industry derives from two types of competitive advantage i.e. low costs and differentiation (Porter 1980). The two approaches are not however alternatives because even when competition is based on differentiation, costs still do matter.

Porter's approach suggests that differentiation and cost leadership seek competitive advantage in a broad range of market or industry. By contrast differentiation focus and cost focus strategies are adopted in a narrow market industry. Differentiation involves selecting one or more criteria used by buyers in a market and then positioning the business uniquely to meet those criteria. The strategy involves charging a premium for the product – often to reflect higher production cost and extra value added features provided for the consumer, e.g. Priority Banking at Standard Chartered Bank (K) Limited and Premiere Banking at Barclays Bank of Kenya Limited.

For cost leadership strategy, the objective of the firm is to become the lowest cost producer in the industry. If achieved the selling price can at least equal (or nearly) the average for the market then the lowest cost producer will enjoy the best profits. A strategy usually associated with large scale business offering standard products. Cost focus strategy is for businesses that seeks a lower cost advantage in just on or a smaller number of market segments. The product will be basic-perhaps a similar product to the high priced and featured market leader – but acceptable to sufficient customers. Porter's approach however raises fundamental questions; why does the successful firm not buy the unsuccessful firm and teach it how to minimize costs? Why does the successful firm not sell its expertise in cost reducing to less successful firms? Why does the successful firm not cut its prices and drive its competitors out of business? Why does the unsuccessful firm not hire the executive in charge of cost drivers from the successful firm?

A business aiming to differentiate within just one or small number of target markets segments is viewed as applying the differentiation focus strategy. The special customer needs means that there are opportunities to provide products that are clearly different from competitors who may be targeting a broader group of customers. Important issue being that the business ensures that customers really do have different needs and wants i.e. there is a valid basis for differentiation and that existing competitors are not meeting those needs and wants. This strategy is common amongst niche retailers

In the following decade authors focused on capabilities approach to firm performance. Hamel & Prahalad (1990) discussed need for firms to be willing to learn how to create new advantages that will keep them steps ahead of competition. They argued that collective learning of the core competences would help the firm stay ahead of the game. Management's ability to consolidate technology and production skills into competencies help the business adapt quickly to changing opportunities. Identification, nurturing and full exploitation of these core competencies would offer competitive advantage. Furthermore they are difficult to imitate precisely because they have to be built over a long period.

Peteraf (1993) proposes the resource based theory of the firm where she discusses the four conditions which must be met for sustainable competitive advantage; superior resources (heterogeneity within an industry), ex poste limits to competition, imperfect resource mobility, and ex ante limits to competition. The view approaches the nature of the firm's resources and how these resources are combined into capabilities. Chandler

(1990) states that building of capabilities derives from initial heavy and risky investments which allow firms to exploit the opportunities available for scale and scope. According to John Kay (1993) the foundations of corporate success are distinctive capabilities i.e. architecture, innovation and reputation. Architecture are the network relationships that define a firm and it's the capacity of firms to one, create and store organizational knowledge and routines. Two, capacity of firms to promote more effective cooperation between member so of the firm, three, capacity to achieve an open and easy flow of information between members of the firm and to and from outsiders and lastly capacity to adapt rapidly and flexibly. Reputation is the commercial mechanism for conveying information to consumers about product quality. Investing in and selling on reputation is saying in effect; a firm has a lot to lose if it fails to satisfy.

Why then is it that even after all this information is made available to the firms, some firms are able to sustain success over longer periods than others?

2.3 Sources of Sustainable Competitive Advantage

In his explanation of the conditions needed for sustainable competitive advantage to exist, Coyne (1986) explored the potential sources of sustainable competitive advantage. He discussed the types of capability gaps that a firm could possess over competitors i.e. business system gaps; position gaps regulatory/legal gaps and organizational/managerial gaps. Recognising the importance of an effective strategy to firms (creating tomorrow's competitive advantage faster than competitors copy the ones possessed today), Day and Wensley (1988) focused on the elements involved in competitive advantage. Specifically, they identified two categorical sources of competitive advantage: superior skills, which are the distinctive capabilities of personnel that set them apart from the personnel of competing firms and superior resources, which are the more tangible requirements for advantage that enable a firm to exercise its capabilities. In the present environment, one might question whether personnel could truly be considered a sustainable competitive feature of a firm. But if these personnel truly understand customers' needs and are able to foster business-intimate relationships with them, then they most certainly qualify as a sustainable competitive advantage (Srivastava et. al., 1998). Such companies include carmakers Mercedes Benz, fashion houses Gucci, Dolce and Gabbana. Locally, beverage companies Coca Cola and Kenya Breweries have embraced the idea of customer intimacy in order to deliver a highly customized end product to customers.

Other authors have elaborated on the specific skills and resources that can contribute to sustainable competitive advantage. Barney (1991) contributed to the discussion by exploring the link between a firm's resources and sustainable competitive advantage. He stated that not all firm resources hold the potential of sustainable competitive advantages; instead, they must possess four attributes: rareness, value, inability to be imitated, and inability to be substituted. Similarly, Peteraf's (1993) resource-based view of the firm designates four conditions that underlie sustainable competitive advantage, including superior resources, ex-poste limits to competition (including imperfect imitability and imperfect substitutability), imperfect mobility, and ex-ante limits to competition. Dierickx and Cool (1989) discuss inimitable resources such as non-tradeable assets which are immobile and thus bound to the firm.

Other researchers have contributed to the sustainable competitive advantage construct by more carefully delineating the specific resources and skills that aid in the development of sustainable competitive advantage. Hunt and Morgan (1995) propose that potential resources can be most usefully categorized as financial, physical, legal, human, organizational, informational, and relational. They go on to state that a comparative advantage in resources can translate into a position of competitive advantage in the marketplace, but only if the criteria proposed by Barney (1991) are satisfied and the offering has some perceived value in the marketplace. Prahalad and Hamel (1990) suggest that firms should combine their resources and skills into core competencies, loosely defined as that which a firm does distinctively well in relation to competitors. Competitive advantages are realized only when the firm combines assortments of resources in such a way that they achieve a unique competency or capability that is valued in the marketplace (Morgan and Hunt 1996).

Bharadwaj, Varadarajan, and Fahy (1993) discuss the specific combinations of skills and resources that are unique to service industries. For example, they propose that the greater the complexity and co-specialisation of assets needed to market a service, the greater the importance of innovation as a source of competitive advantage will become. They also propose that brand equity becomes an important source of competitive advantage in service industries as the level of service offered becomes more intangible and when consumers have a great need to overcome perceptions of risk. Intangible resources may indeed be better suited than tangible ones to achieve sustainable competitive advantage. Given that the achievement of sustainable competitive advantage is based on an external focus, it is interesting to note that those intangible assets that are external to the firm may contribute the most to value generation and subsequently sustainable competitive advantage.

Srivastava et. al. (1998) delineate market-based assets into two types: relational and intellectual. Relational market-based assets are those that reflect bonds between a firm and its customers and/or channel members. Examples of such assets would be brand equity or a business-intimate relationship that allows a firm to work with a customer to produce a highly customized product. An example of an intellectual market-based asset would be the detailed knowledge that firm employees possess concerning their customers' needs, tastes, and preferences. Both types are intangible and employ an outward focus on firm customers and/or channel members. To the extent that they are rare, unique, valuable, and difficult to imitate, market-based assets provide an excellent potential source of sustainable competitive advantage for a firm.

Therefore, no matter what type of business, firms may succeed in establishing sustainable competitive advantage by combining skills and resources in unique and enduring ways. By combining resources in this manner, firms can focus on collectively learning how to coordinate all employees' efforts in order to facilitate growth of specific core competencies.

Perhaps Day and Wensley's (1988) greatest contribution to the sustainable competitive advantage construct is their framework for assessing a firm's competitive situation as the first step in achieving sustainable competitive advantage. Unlike past attempts of performance outcome measures (such as profitability and market share), Day and Wensley (1988) suggest using perspectives of both the customer and the competitor to assess the firm's performance. Measures of customer input such as satisfaction and loyalty balance the competitor focus and help to complete the assessment of sustainable competitive advantage of a firm. Similarly. Day and Nedungadi (1994) propose that firms use different types of information to assess whether a competitive advantage has been obtained according to the type of orientation they have; a competitor-oriented firm emphasizes relative resources or cost positions, whereas a customer-oriented firm emphasizes segment differences and differentiation advantages.

Bharadwaj, Varadarajan, and Fahy (1993) also stress the importance of customers in determining the sources of competitive advantage; they state that a firm's skills and resources can be considered sources only if they offer benefits desired by customers.

This outward focus on customers links the sustainable competitive advantage construct to concepts such as branding, market orientation, organizational learning, innovation, customer value, relationship marketing, and business networks. These linkages are discussed below in greater detail.

2.4 Sustainable Competitive Advantage and other Strategic Concepts

Many ideas in strategy research have been linked to helping in the process of creating and maintaining sustainable competitive advantage. Four concepts are discussed below. Table

2.1 provides an overview of three other topics, along with contributing authors and their relationship to sustainable competitive advantage.

2.4.1 Market Orientation

The marketing literature provides different conceptualizations of the term "market orientation," yet they share similar components. Kohli and Jaworski (1990) see market orientation as the implementation of the marketing concept by activities such as generating information (analyzing changing customer needs and wants), disseminating information (sharing information with all departments in an organization), and actually responding to customers' needs. Other definitions of market orientation revolve around competitor-centered versus customer-centered firms. Day (1994), for example, views market orientation as a balance between being customer-centered and being competitor-centered, and that information technology can be used to help the firm to learn to act on available information faster than the competition.

Narver and Slater (1990) share a similar perspective of market orientation. They view market orientation as an organizational culture that contains three behavioral components: first, a customer orientation (understanding the target market), second, competitor orientation (understanding the strengths, weaknesses, capabilities, and strategies of key competitors, and third, interfunctional coordination, which means using resources of all departments in a firm in order to create value for target customers. An example of this latter component is provided by Ghoshal and Westney (1991), who find that a corporate culture of willingness to share information with all departments (interfunctional coordination) facilitates the learning process. Fiol and Lyles (1985) agree that a corporate culture in which all departments are flexible and are willing to accept change increases the probability that learning will occur. And the ability to learn (acquiring, disseminating, and interpreting new knowledge) is essential in a market-oriented firm.

Market orientation, then, presumes an outward focus on customers and competitors. For example, through a customer orientation, firms can gain knowledge and customer insights in order to generate superior innovations (Varadarajan and Jayachandran 1999). Also, through interfunctional coordination, teams may be formed and empowered to respond to specific customer requests and solve complicated problems that span across functional areas (Tansik 1990). Because a market orientation employs intangible resources such as organizational and informational resources, it can serve as a source of sustainable competitive advantage (Hunt and Morgan 1995).

2.4.2 Customer Value

Wodruff (1997) also sees the next major source of competitive advantage coming from a more outward orientation, specifically toward customers. He suggests a customer value hierarchy in which firms should strive to match their core competencies with customers' desired value from the product or service. Slater (1997) aids Woodruff's call by suggesting a new theory of the firm that is customer-value based. Under this theory, the reason that the firm exists is to satisfy the customer; the focus on providing customers with value forces firms to learn about their customers, rather than simply from their customers. With respect to performance differences, this theory suggests that those firms that provide superior customer value will be rewarded with superior performance as well as an sustainable competitive advantage. Therefore, the idea of customer value extends the resource-based theory of the firm to take a more outward perspective (a market orientation) as one way in which a competitive advantage can be achieved and sustained.

2.4.3 Relationship Marketing

Morgan and Hunt (1996) examine the role of relationship building as a means of obtaining resources in order to create sustainable competitive advantage. They propose that resources can be combined in order to form higher-order resources, or competencies, from which the firm can eventually achieve a competitive advantage. For example, it is difficult for outsiders to replicate the process of building a long-term relationship. Resources such as loyalty, trust, and reputation are immobile and cannot be purchased. Therefore, Morgan and Hunt (1996) state that relationships formed to acquire organizational, relational, or informational resources will commonly result in sustainable resource-based competitive advantages.

2.4.4 Business Networks

Webster (1992) offers a continuum of marketing relationships which moves from discrete transactions towards network organizations and just-in-time exchanges. As the continuum moves further from discrete transactions, more administrative and less market control occurs, as well as a shift toward elements such as trust that are key to building relationships meant to last over the long term. Similarly, Iacobucci and Hopkins (1992) and Anderson, Häkansson, and Johanson (1994) view networks as a 'step beyond' dyadic relationships, or partnerships, just as Webster (1992) does in his "continuum of marketing relationships" (p. 5). Networks consist of multiple relationships, with each participating firm gaining the resources needed to build core competencies and obtain an sustainable competitive advantage.

According to Jarillo (1988), the establishment of trust and perceived goal congruence are two factors that assist in the development of organizational networks. Jarillo states that trust is an essential element to maintaining both effectiveness and efficiency in a network relationship. Similar to Frazier, Spekman, and O'Neal's (1988) view of opportunistic behavior within the Just-In-Time exchange relationship, Jarillo (1988) sees the presence of trust as an indicator that the relationship is one of value; therefore, opportunistic behavior is less likely. If parties participating in this network exchange realize the opportunity for joint value creation, then the network can act to emphasize the individual firm's competitive advantage by allowing that firm to specialize in the activities it performs best.

Porter (1985) also discusses the formation of "coalitions" that allow the sharing of activities in order to support a firm's competitive advantage. However, Porter's "value chain" approach focuses on activities within a single firm. A new model is needed which adapts his approach in order to understand the value-added processes comprised of dyadic and network inter-firm activities which foster each firm's sustainable competitive advantage.

Table 2.1 The relationship of sustainable competitive advantage to other Concepts in Strategy Theory

Concept	Contributing Authors	Relationship to sustainable competitive advantage
Branding	Gardner and Levy (1955), Aaker (1991), Keller (1993)	Branding is what differentiates a product from competitors; brand equity is a potential source of sustainable competitive advantage
Organizational learning	Fiol and Lyles (1985), deGeus (1988), Ghoshal and Westney (1991), Glazer (1991), Day (1994b), Slater and Narver (1995)	The management of information is an asset used to gain sustainable competitive advantage; sustainable competitive advantage lies in the ability to learn faster than competitors
Innovation	Foxall (1984), Wolfe (1994). Rogers (1995), Gatignon and Xuereb (1997)	competitive advantage may result from those innovations which are consistent with the firm, both socially and technologically, and provide some distinct value to customers, either directly or indirectly

Source: Hoffman, Nicole P. (2000). An Examination of the Sustainable Competitive Advantage Concept: Past, Present and Future. *Academy of Marketing Science Review*, University of Alabama.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter shows how the data was collected and addresses the objectives in chapter one. It presents the research design, the target population (which doubles as the sample given the few players in the industry) and the techniques used in data collection and analysis.

3.2 Research Design

The study adopted the survey research design. Survey research attempts to collect data from members of a population and describe existing phenomena by asking individuals about their perception attitudes behavior and values. Moreover it explores existing status of two or more variables at a given point in time (Mugenda and Mugenda, 1999). The primary data from such a census is more reliable and is up to date and hence the choice of this method. The descriptive research enhanced systematic description that is as accurate valid and reliable as possible regarding the responses on the basis of building sustainable competitive advantage, main strategies used by mobile telephony firms in Kenya to compete against each other; how sustainable competitive advantage determines the performance of the firms and what influences competitive advantage in the mobile telephony industry.

3.3 Target Population

The population consisted of all telephony firms in Kenya. According to the Communications Commission of Kenya (CCK) there are four such firms namely, Safaricom, Airtel Networks, Essar Telecom and Telkom Orange. The study picked eight departmental heads from each company comprising a target population of 32 respondents.

3.4 Data Collection

The study employed a semi structured questionnaire to collect primary data which was administered through the drop and pick method. It consisted of four parts: Section A covered items that aimed at generating general information; Section B dealt with the basis of competitive advantage and strategies used by the mobile telephony firms; Section C focused on factors influencing competitive advantage in the mobile telephony industry and Section D covered the performance of the firms in the mobile telephony industry.

3.5 Data Analysis

Descriptive statistics and content analysis were used to analyse the data. Content analysis is done by analysing information in a systematic way in order to come up with some useful conclusions and recommendations from the detailed information about the phenomenon being studied and then trying to establish patterns, trends and relationships from the information gathered. Content analysis systematically describes the form or content of written and/or spoken matter (Mugenda and Mugenda, 1999). A basic issue when performing qualitative content analysis is to decide whether the analysis should focus on manifest or latent content.

Analysis of what the text says deals with the content aspect and describes the visible, obvious components, referred to as the manifest content. Manifest content during data analysis is where classification is developed to record the information and interpretation is then based on the frequency with which a symbol and/or idea appears this is then interpreted as a measure of importance. For this study, the data collected was coded and screened on SPSS database. It was then analyzed using SPSS data program and presented in the form of tables, percentages and variance analysis. This type of analysis was used in a similar study by Dulo (2006) in his research on sources of competitive advantage and the performance of firms in the Kenya sugar industries.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The study findings are presented on building sustainable competitive advantage in the mobile telephony industry in Kenya. The data was gathered exclusively from the questionnaire as the research instrument. The questionnaire was designed in line with the objectives of the study.

4.1.1 Response Rate

Table 4.1: Response rate

	Frequency	Percentage
Responded	26	81.3%
Non respondents	4	12.5%
Total	32	100.0%

The study targeted 32 respondents in collecting data with regard to building sustainable competitive advantage in the mobile telephony industry in Kenya. From the study, 26 out of the 32 sample respondents filled-in and returned the questionnaires making a response rate of 81.3%. This reasonable response rate was made a reality after the researcher made personal calls and visits to remind the respondent to fill-in and return the questionnaires.

4.2 Demographic Information

The study, in an effort to ascertain the respondents competence and conversance with matters regarding their companies asked questions on the position that the respondents held in their organization. From the data findings, all the respondents were senior managers in charge of various departments such as corporate strategy, human resources, regulatory, business development, and sales and marketing departments. The researcher also asked a question on the years that the respondents had worked for their organizations. According to the respondents' response, 100% of them had worked for their respective organizations for at least five years as most promotions are internal, within the organization. They also reported that the firms had a total workforce of approximately 300 employees.

Table 4.2: Ownership of the firm

	Frequency	Percentage
Owned by the government	8	30.8%
Privately owned	7	26.9%
Owned both privately and by the government	11	42.3%
Total	26	100.0%

The study further sought to establish the ownership of the firm. From the study findings, 42.3% of the respondents felt that their firm is owned both privately and by the government, 30.8% said that theirs were owned by the government while 26.9% said that their firms were privately owned.

4.3 Main Sources of Sustainable Competitive Advantage

The study wanted to establish the extent that various factors contribute to sustainable competitive advantage for the companies.

Table 4.3: Extent that various factors contribute to sustainable competitive advantage for the companies

Sources of competitive advantage	Mean	Std Dev
Strong research and development capabilities	1.8647	0.85489
Access to intellectual properties	1.7353	0.89811
Exclusive re-selling or distribution rights	2.2588	0.77621
Switching Costs	2.0588	0.77621
Ownership of capital equipment	1.7059	0.87141
Superior product or customer support	1.3471	0.91725
Low cost or high volume production	1.1706	0.56329
Economic factors	1.7059	0.97014
Superior database management and data processing capabilities	1.3824	0.69695
Strong marketing strategy	1.3529	0.59708
Access to working capital	1.8235	0.99911
Excellent management team and operations	1.6765	0.68404
Barriers to entry or monopoly	3.7647	0.81868
Service quality	2.0882	0.99598

The study found that the factors contributing most to competitive advantage for the companies include low cost or high volume production by a mean score of 1.1706, superior product or customer support as shown by a mean score of 1.3471, strong marketing strategy as shown by a mean score of 1.3529 and superior database management and data processing capabilities as shown by a mean score of 1.3824.

The study further established that the factors contributing to competitive advantage for the companies to a moderate extent include excellent management team and operations as shown by a mean score of 1.6765, ownership of capital equipment as shown by a mean score of 1.7059, economic factors as shown by a mean score of 1.7059, access to intellectual properties as shown by a mean score of 1.7353, access to working capital as shown by a mean score of 1.8235, strong research and development capabilities as shown by a mean score of 1.8647. Switching costs, service quality, exclusive re-selling or distribution rights and barriers to entry or monopoly contributed to a little extent as shown by a mean score of 2.0588, 2.0882, 2.2588 and 3.7647 for each respectively.

Sources of competitive advantage that are duplicable/imitable

The respondents felt that the sources of competitive advantage that are easier to be copied by the competitors include switching costs, superior product or customer support, low cost or high volume production, strong marketing strategy, excellent management team and operations and service quality. They added that one thing that the organizations do better than all other mobile telephony firms in the industry is marketing.

Sources of competitive advantage that are non duplicale/inimitable

The study also wanted to establish the sources of competitive advantage that are more difficult to be copied by the competitor. From the study findings, the sources of competitive advantage that are non duplicable by the competitor include access to working capital, superior database management and data processing capabilities, ownership of capital equipment, access to intellectual properties and strong research and development capabilities.

Main Strategies used by Kenyan mobile telephony firms

In this area the aim of the study was to determine the main strategies used by mobile telephony firms in Kenya and identifying the successful/unsuccessful strategies out of these. On the most successful strategies adopted by the companies, the respondents cited strong financial strategies (operation cost reduction), innovation (product, technology) and invention (new product and technological strategies) and research and development ventures aimed at developing the relevant customer knowledge. The respondents also cited investment in technology strategies like in data services where customers can access the internet through mobile internet, broadband modem and 3G router.

In addition, respondents cited continuous introduction of products and services like payment of bills though mobile phones and engagement in heavy advertisement and promotions for the same like selling subsidized phones, giving offers and other promotions. The study also found out that the introduction of off peak tariffs that encourage people to make more calls when they are relaxed and having a good time at home or wherever they are was another successful strategy. The companies have also formed partnerships with other institutions for the delivery of their services, for example Mkesho- money transfer services through the banking institutions-thus managing to keep the customers with their superior automated product delivery (such as their payments system) which differentiates them.

The data findings also show that the companies have also opened more retail shops countrywide and currently have countrywide dealer network to handle distribution and selling of its services and products.

The respondents indicated that the least successful strategy was the introduction of customer switching costs and the cost of mobile number portability intended to bar customers from switching between service providers whose results were not as immense.

Strategies used by Kenyan mobile telephony firms to compete with each other

In this area, the study wanted to establish the main strategies used by Kenyan mobile telephony firms to compete with each other. From the study findings, respondents indicated that the main strategies used by Kenyan mobile telephony firms to compete with each other include massive promotional campaigns, introducing low-cost handsets so as to make it easy for customers to subscribe, introduction of the 3G network that transfers data at a very high speed, formation of alliances with other financial institutions like banks to introduce mobile banking, introduction of multimedia messaging, video calling services, internal messaging system and fax gateway, automatic call distribution system and automated query handling

Current core competencies

Table 4.4: Current core competencies of the company that can create a competitive advantage differentiating capability that can be applied to the mobile telephony industry

	Mean	Std. Deviation
Performance and Results	2.0776	0.68135
New Product Development	1.5755	0.58821
Quality Management & Approvals	1.7347	0.91720
Supplier Management	2.4353	0.89811

The study also inquired on the current core capabilities of the company that can create a competitive advantage differentiating capability that can be applied to the mobile telephony industry. From the study findings, the current core capabilities of the company that can create a competitive advantage differentiating capability that can be applied to the mobile telephony industry to a great extent include new product development as shown by a mean score of 1.5755, quality management & approvals as shown by a mean score of 1.7347, performance and results as shown by a mean score of 2.0776 and supplier management as shown by a mean score of 2.4353.

4.4 Factors influencing sustainable competitive advantage in the Kenyan mobile telephony industry

The study also sought to establish the extent that various factors influenced competitive advantage in the Kenyan mobile telephony industry. This was analysed from two facets, threats and opportunities.

Table 4.5: Extent that various factors pose threats to firms in the Kenyan mobile telephony industry

Factors posing threat to the firm	Mean	Std Dev
Dynamic environment	2.0302	1.34840
Technological change	1.5070	1.23705
Increasing need to maintain high quality services due to	1.8824	1.09447
Changing legal environment such as the regulatory guidelines	1.6059	0.41043
Increasing inflation rate which has affected the cost of rollout	1.7059	0.87141
Global financial crisis	2.7941	1.43082
Political instability	1.5010	0.74874

The findings presented on Table 5 show the factors posing threats to firms in the Kenyan mobile telephony industry to a very high extent include political instability as shown by a mean score of 1.5010, technological change as shown by a mean score of 1.5070, changing legal environment such as the regulatory guidelines and promulgated by Communications Commission of Kenya (CCK) as shown by a mean score of 1.6059. Increasing inflation rate which has affected the cost of rollout and equipment as shown by a mean score of 1.7059, increasing need to maintain high quality services due to increased customer demand as shown by a mean score of 1.8824 pose threat to firms to a high extent. Dynamic environment and the global financial crisis as shown by a mean score of 2.0302 and 2.7941 for each, posed threats to firms in the Kenyan mobile telephony industry to a moderate extent.

Further, the study proceeded to establish the main opportunities for the mobile telephony industry players. From the responses the study found out that the main opportunities for mobile telephony firms in Kenya include the large population that has not been reached, internet services and the mobile money transfer and banking.

Ranking of business opportunities

Table 4.6: Ranking of business opportunities and issues in terms of how important each is to the company as current opportunities and/or challenges

Business opportunities and issues	Mean	Std Dev
Expansion of markets / customers	1.8235	0.93649
New products / services	2.1765	0.85803
Cost reductions	2.1471	0.60575
Training / upgrading employees' skills & abilities	1.5174	0.32703
Higher Value-added Business Functions	1.7821	0.94474
Improved Quality Performance	1.8646	0.81868
Upgrading management abilities	1.8477	0.91726
Succession plans	2.2821	0.69695
Adjusting strategic directions	2.1585	0.77622
Gaining market intelligence	1.5763	0.68409

The study sought to establish the ranking of business opportunities in terms of how important each is to the company as current opportunities and/or challenges.

From the results in Table 6, respondents indicated as important very important training/upgrading employees' skills & abilities as shown by a mean score of 1.5174, gaining market intelligence as shown by a mean score of 1.5763, higher value-added business functions as shown by a mean score of 1.7821, expansion of markets / customers as shown by a mean score of 1.8235, upgrading management abilities as shown by a mean score of 1.8477, improved quality performance as shown by a mean score of 1.8646, cost reductions as shown by a mean score of 2.1471, adjusting strategic directions as shown by a mean score of 2.1585, new products / services as shown by a mean score of 2.1765 and succession plans as shown by a mean score of 2.2821.

4.5 Performance of Firms in the Mobile Kenyan Telephony Industry

Table 4.7: Rating of the performance of the company over the last three years

	Frequency	Percentage
Very good	7	26.9%
Good	14	53.8%
Fair	5	19.2%
Total	26	100.0%

The respondents were further requested to rate the performance of the company over the last three years. From the study findings, 53.8% of the respondents rated the performance of the company over the last three years as good, 26.9% rated it as very good while

19.2% rated it as fair. The respondents added that the factors within the organization that have contributed to the above performance include research and development, price differentiation, high quality products and services, strong marketing strategy, good corporate image and new product development. The study further found that the companies' subscriber base, profits performance, mobile money transfer volumes and mobile data transfer volumes have been on the increase over the last three years.

4.6 Discussion of Findings

The study established that foundations of corporate success are a firm's internal resources. Internal sources of competitive advantage how they are combined into capabilities were more important than the external sources. Human resources, prudent financial management, working capital, superior database management and data processing capabilities, ownership of capital equipment, access to intellectual properties and strong research and development capabilities were ranked as the most important sources of competitive advantage. In addition these capabilities are deemed non duplicable thus, it is the combination of these skills and resources in unique and enduring ways that creates sustainable competitive advantage in mobile telephony industry in Kenya today. This confirms the proposition that processes and positions that engender sustainable competitive advantage are non duplicable and inimitable.

The findings revealed a positive relationship between a firm's sources of competitive advantage and performance Development of human resources, prudent financial management, working capital, superior database management and data processing capabilities, ownership of capital equipment, access to intellectual properties and strong research and development capabilities positively affected performance of firms in the Kenyan mobile telephony industry.

These findings are in tandem with previous empirical studies such as those conducted by Dulo (2006) and Anot (2006). In his research on sources of competitive advantage and performance of firms in the sugar industry in Kenya, Dulo (2006) established that human resources, sound financial management and crashing capacity were ranked as most important sources for the sugar milling firms. Anot (2006) in her case study on the strategies employed by Kenya Tourism Board to establish a sustainable competitive advantage concluded that employee training; self managing teams and pay for performance were key factors contributing to high productivity. It is therefore clear that internal superior resources and superior skills have a major role in creating sustainable competitive advantage.

This study further supports the contemporary theory on the firms' competitiveness which states that internal sources of competitive advantage are more relevant and important for the creation of a competitive advantage and superior performance than the external sources of competitive advantage. The general implication of the above findings is that the firms in the mobile telephony industry in Kenya should formulate strategies for building their internal sources of competitive advantage.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, discussion, conclusion drawn from the findings and recommendations made for policy and practice. The conclusions and recommendations drawn focus on the purpose of the study.

5.2 Summary of Findings

The study on building sustainable competitive advantage in the mobile telephony industry in Kenya had two objectives, to determine the basis of sustainable competitive advantage in the mobile telephony industry and to analyse factors influencing sustainable competitive advantage in the mobile telephony industry. To satisfy these objectives data was collected from senior managers at Safaricom, Airtel Networks, Essar Telecom and Telkom Orange.

Questionnaires were used to gather data from the respondents; a total of 26 out of the 32 targeted respondents filled the questionnaires and returned them. The questionnaire was divided into three sections addressing various issues on sustainable competitive advantage as described in chapter three of the study. The nature of data collected was qualitative and was analysed using content analysis.

Research findings revealed that mobile telephony firms in Kenya constantly in pursuit of competitive strategies that will ensure competitive advantage in the long term and yield market leadership; all the firms use cost based and differentiation approaches to help achieve competitive advantage. The study also established that major challenges and threats included political instability, changing legal environment such as the regulatory guidelines and promulgated by Communications Commission of Kenya (CCK), increasing inflation rate which has affected the cost of rollout and equipment and increasing need to maintain high quality services due to increased customer demand.

From the findings, it was established that the factors contributing most to competitive advantage for the companies include low cost or high volume production, superior product or customer support, strong marketing strategy and superior database management and data processing capabilities. Excellent management team and operations, ownership of capital equipment, economic factors, access to intellectual properties, access to working capital, strong research and development capabilities, switching costs, service quality and exclusive re-selling or distribution rights also contribute immensely to competitive advantage.

The study found that the sources of competitive advantage that are easier to be copied by the competitors include switching costs, superior product or customer support, low cost or high volume production, strong marketing strategy, excellent management team and operations and service quality. Further, the sources of competitive advantage that are more difficult to be copied by the competitor include access to working capital, superior database management and data processing capabilities, ownership of capital equipment, access to intellectual properties and strong research and development capabilities.

The study also sought to establish the threats and opportunities that exist for the mobile telephony industry. Challenges facing the industry to a great extent include political instability, technological change, changing legal environment such as the regulatory guidelines promulgated by (CCK), increasing inflation rate has affected the cost of rollout and equipment, increasing need to maintain high quality services due to increased customer demand and dynamic environment.

It was clear that the main opportunities for firms in the Kenyan mobile telephony industry include a large population that has not been reached, internet services and the mobile money transfer and banking. Further, the study also established that the business opportunities and issues that are important to the companies include training/upgrading employees' skills & abilities, gaining market intelligence, higher value-added business functions, expansion of markets / customers, upgrading management abilities, improved quality performance, cost reductions, adjusting strategic directions, new products / services and succession plans.

The study also deduced that the main strategies used by Kenyan mobile telephony firms to compete with each other include massive promotional campaigns, introducing low-cost handsets so as to make it easy for customers to subscribe, introduction of the 3G network that transfers data at a very high speed, formation of alliances with other financial institutions like banks to introduce mobile banking, introduction of multimedia messaging, video calling services, internal messaging system and fax gateway, automatic call distribution system and automated query handling.

The study further found that the most successful strategies adopted by the companies include strong financial strategies (operation cost reduction), innovation (product, technology) and invention (new product and technological) strategies and research and development ventures aimed at developing the relevant customer knowledge. There is also investment in technology strategies like in data services; customers can access the internet through mobile internet, broadband modem and 3G router. The companies also continue to introduce products and services like payment of bills though mobile phones and engage in heavy advertisement and promotions for the same like selling subsidized phones, giving offers and other promotions. The introduction of off peak tariffs that encourage people to make more calls and the introduction of different calling rates targeted for different customers with different calling needs have also contributed to good performance.

Other strategies include formation of partnerships with other institutions such as banks for the delivery of their services thus managing to keep the customers with their superior automated product delivery (such as their payments system) which differentiates them. The strategies that the companies have adopted to respond to challenges of competition have resulted in increased sales and sound profitability of the companies. The study found out that the least successful strategy was the introduction of customer switching costs and the cost of number portability intended to bar customers from switching between service providers whose results were not as immense.

The current core capabilities of the company that can create a competitive advantage differentiating capability that can be applied to the mobile telephony industry to a great extent include new product development, quality management & approvals, performance and results and supplier management. It was clear that the performance of the companies over the last three years was good. The factors within the organization that have contributed to the above performance include research and development, price differentiation, high quality products and services, strong marketing strategy, good corporate image and new product development.

5.3 Conclusion

In the modern world of stiff competition, the individual companies have been able to keep pace with the rivalry in the mobile telephony scenario by adopting various response strategies that have given them higher competitive advantage.

It can be concluded that internal sources of competitive advantage are more important and relevant than the external sources. Knowledge is increasingly becoming a major source of competitive advantage as it is valuable rare, non-substitutable and imperfectly imitable. While the development of human resources is critical, it is the creation of a learning organisation to enhance the sharing and spread of knowledge among all employees rather than letting it reside in the heads of a few who could easily take it away and perhaps move over to competition.

Functional capabilities such as finance, production, procurement, product or customer support, low cost or high volume production, strong marketing strategy, management team and operations and service quality can easily be decoded and acquired by competitors in the open market unlike the hard to decode distinctive competencies.

All the firms in the Kenyan mobile telephony industry have to contend with new challenges that stem from the fast changing and increasingly complex business environment. Some of the challenges represent growth opportunities while others spell doom. The study found that there exits many opportunities for exploitation in this industry such as a large population that has not been reached, internet services and the mobile money transfer and banking. The firms similarly have to deal with major threats such as those arising from political instability, rapid technological change, changing legal environment such as the regulatory guidelines promulgated by (CCK), increasing inflation rate, increasing need to maintain high quality services due to increased customer demand. The study underscores the role of changing legal environment such as the regulatory guidelines and promulgated by Communications Commission of Kenya (CCK) which can influence performance either way and firms must get creative in order to circumvent the pressure it puts on the market.

It can also be concluded that cost and differentiation strategies are the main strategies used by firms to compete with each other. Cost strategy is used in conjunction with different strategy to lock in the market and lock out competition. All give priority to cost based strategy because it affects the average revenue per user (ARPU) levels and consequently the company profits.

Cost based strategies are implemented through low cost/high volume production, switching costs, superior product or customer support, strong marketing strategy and superior database management and data processing capabilities. Differentiation strategies are implemented through introduction of off peak tariffs, different calling rates targeted for different customers with different calling needs.

5.4 Recommendations for policy and practice

The study recommends that firms move with speed to address the key issues such as training/upgrading employees' skills & abilities, gaining market intelligence, higher value-added business functions, expansion of markets / customers, upgrading management abilities, improved quality performance, cost reductions, adjusting strategic directions, new products / services and succession plans. Managers in the mobile telephony industry are thus urged to pay more attention to the development of internal sources if they are to win tomorrows wars. More emphasis and resources should be committed to the development of internal intangible resources while developing new and effective strategies to capitals on new market opportunities for further growth.

The firms' preparedness to ensure long term survival rather than giving way to competitive firepower could in the meantime devise better the right strategies to defend themselves against new local operators and possible foreign entrants. The firms can use a combination of cost based and differentiation strategies. Cost based strategies emerged as most important and successful strategy used by all firms. Differentiation strategies are implemented through introduction of off peak tariffs, different calling rates targeted for different customers with different calling needs. It is also manifested in the mobile money transfer charges and data services.

Firms in the mobile telephony industry should also come to terms with changing legal environment such as the regulatory guidelines and promulgated by Communications Commission of Kenya (CCK). Their operations for a long time have been based on a free market with minimal intrusion of the Communications Commission of Kenya. However with the government keen to realise its vision to improve access to information for all, the industry is yet to see more action from the industry regulator. With CCK forecasts that the termination rates will fall further to Kes 1.15 on July 1, 2012, the average revenue per user set to fall further. Firms therefore must devise proper working strategies that will ensure competitiveness in future and be able to circumvent the regulators imposition on revenue and performance

The study further recommends that the companies should heavily advertise and venture into other countries within East Africa and beyond in order to take advantage of economic liberations in those countries as a result of globalisation. This would help spread the risk of, and neutralize the challenges influencing competitive advantage arising from political instability, high inflation rates and changing legal environment that have characterized the Kenyan mobile telephony industry. They should undertake appropriate, persuasive and sustained advertisement, marketing and campaigns on products and services so as to increase their market share and customer preference. This would increase their customer base.

The study also recommends that the companies should recruit workers who have the necessary knowledge and competencies in the business to minimize on the induction and training costs. The staff should also be remunerated fairly and have better work condition and terms to ward-off staff poaching by competitors.

5.5 Suggestions for Further Research

The study recommends that further research should be done on the effect of regulatory intrusion on sustainable competitive advantage and performance in the mobile telephony industry. This is a result of the increased competitor involvement in the Kenyan mobile telephony industry where some of the players are accused of gaining unfair competitive ground and has requiring the regulator to step in to create fair play in the industry.

More research should also be done on the other companies in other industries such the banking industry so as to get comprehensive information on how they build sustainable competitive advantage. Another area that needs further research is the contribution of marketing strategy through corporate social responsibility to the overall performance of the companies in the mobile telephony industry.

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APPENDICES

APPENDIX 1: LETTER TO THE RESPONDENTS

Brenda Odwesso

C/O MBA Office

University of Nairobi

P.O.Box 30197

NAIROBI

September 2011

Dear Respondent,

RE: RESEARCH QUESTIONNAIRE

I am a postgraduate student studying Masters of Business Administration at the School of Business, University of Nairobi. I am currently conducting a research in the area of Sustainable Competitive Advantage. The topic is 'Building Sustainable Competitive Advantage in the Mobile Telephony Industry in Kenya'.

The purpose of this letter therefore is to request you to respond to the attached questionnaire. The information you give will be treated in strict confidence and will be used for academic purposes only.

A final copy of the research report would be availed to you upon request.

Yours Sincerely,

Brenda Odwesso

Email: bodwesso@yahoo.co.uk

APPENDIX 2

QUESTIONNAIRE

BUILDING SUSTAINABLE COMPETITIVE ADVANTAGE IN THE MOBILE TELEPHONY INDUSTRY IN KENYA

PART A: ORGANISATIONAL PROFILE

Q1. Name of the mobile telephony company..

Q2. Number of years since established ....

Q3. Name of the Respondent..

Q4. Position title of the respondent...

Q5. Number of years with the firm...

Q6. The total workforce...

Q7. Who owns the firm? (tick one)

a) Owned by the government [ ]
b) Privately owned [ ]
c) Owned both privately and by the government [ ]

PART B: THE MAIN SOURCES OF COMPETITIVE ADVANTAGE

Q1. To what extent are the following sources of competitive advantage for your company? (1 very low, 2 low, 3 moderate, 4 high and 5 very high)

Sources of competitive advantage	**1**	**2**	**3**	**4**	**5**
Strong research and development capabilities					
Access to intellectual properties					
Exclusive re-selling or distribution rights					
Switching Costs					
Ownership of capital equipment					
Superior product or customer support					
Low cost or high volume production					
Economic factors					
Superior database management and data processing					
Strong marketing strategy					
Access to working capital					
Excellent management team and operations					
Barriers to entry or monopoly					
Service quality					
Any other					

Q2. Which of the above listed sources are easier to be copied by your competitors?

....

....

Q3. Write one thing that your organisation does better than all other mobile telephony firms in the country.

....

Q4. Which of the sources of competitive advantage listed above are more difficult to be copied by your competitor and why?

....

....

....

Q5. What are the main strategies used by Kenyan mobile telephony firms?

....

....

Q6. Which are the most successful strategies and why?

....

....

Q7. Which are the least successful strategies and why?

....

....

Q8. Which are the main strategies used by Kenyan mobile telephony firms to compete with each other?

....

....

Q9. What are the current core capabilities of your company that can create a competitive advantage differentiating capability that can be applied to the mobile telephony industry? (Tick all applicable)

Performance and Results [ ]

New Product Development [ ]

Quality Management & Approvals [ ]

Manufacturing Capability [ ]

Supplier Management [ ]

PART C: FACTORS INFLUENCING SUSTAINABLE COMPETITIVE ADVANTAGE IN THE KENYAN MOBILE TELEPHONY INDUSTRY

Q1. To what extent do the following pose threats to firms in the Kenyan mobile telephony industry? (1 very low, 2 low, 3 moderate, 4 high and 5 very high)

Threats to mobile telephony industry	**1**	**2**	**3**	**4**	**5**
Dynamic environment					
Technological change					
Increasing need to maintain high quality services due to increased customer demand					
Changing legal environment such as the regulatory guidelines promulgated by (CCK)					
Increasing inflation rate which has affected the cost of rollout and equipment					
Global financial crisis					
Political instability					

Q2. What are the main opportunities for firms in the Kenyan mobile telephony industry?

....

....

....

Q4. Please rank all of the business opportunities and issues below in terms of how important each is to your company as current opportunities and/or challenges.(1 very low, 2 low, 3 moderate, 4 high and 5 very high)

Business opportunities and issues	**1**	**2**	**3**	**4**	**5**
Expansion of markets / customers					
New products / services					
Cost / waste reductions					
Training / upgrading employees' skills & abilities					
Higher Value-added Business Functions					
Improved Quality Performance					
Improved Schedule Performance					
Upgrading management abilities					
Succession plans					
Adjusting strategic directions					
Gaining market intelligence					

PART D: PERFORMANCE OF FIRMS IN THE MOBILE KENYAN TELEPHONY INDUSTRY

Q1. How would you rate the performance of your company over the last three years?

a) Very good

b) Good

c) Fair

d) Poor

Q2. Which factors within your organisation have contributed to the above performance?

....

....

....

Q3. The company's subscriber base over the last three years (in millions)

a) 2010 - ....
b) 2009 - ....
c) 2008 - ....

Q4. The company's profits performance over the last three years

a) 2010 - ....
b) 2009 - ....
c) 2008 - ....

Q5. The company's mobile money transfer volumes over the last three years

a) 2010 - ....
b) 2009 - ....
c) 2008 - ....

Q6. The company's mobile data transfer volumes over the last three years

a) 2010 - ....
b) 2009 - ....
c) 2008 - ....