

**RESPONSES OF SAFARICOM LIMITED TO  
CHANGES IN THE TELECOMMUNICATION  
INDUSTRY IN KENYA**

**BY**

**OLUNGA, VITALIS ONYANGO**

**A MANAGEMENT RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE  
OF MASTER OF BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS,  
UNIVERSITY OF NAIROBI**

**SEPTEMBER 2007**

## DECLARATION

This Management Research Project is my original work and has not been presented for a degree in any other university.

Signed: -----Date: -----

**Olunga, Vitalis Onyango**

**D61/P/7245/2004**

This Management Research Project has been submitted for examination by my approval as the University Supervisor.

Signed: -----Date: -----

**Dr. Martin Ogutu**

**Chairman Department of Business Administration**

**School of Business**

**University of Nairobi**

## **DEDICATION**

This Management Research Project is dedicated to my wife Jemima, my son Pius, my daughter Mercy, and my son Clement.

## **ACKNOWLEDGEMENTS**

I am greatly indebted to the faculty members of the School of Business at the University of Nairobi during my MBA course work to make it possible to prepare for this research project, and special thanks go to my project supervisor, Dr. Martin Ogutu, for his guidance throughout the period of the research project.

I am greatly indebted to the management of Safaricom Limited for material and moral support, and for the time off given to me from work to attend the classes for course work and for the time to work on this research project. Special thanks go to my personal assistant at Safaricom, Leonida, for tirelessly helping with the printing of the course work documents and this project report.

I am indebted to the respondents - the senior management team at Safaricom Limited - for accepting to spare their time for the interviews to respond to the questionnaires, and for being patient and dedicated to provide the necessary information, that has led to the completion of this research project. My special thanks go to the chief executive officer of Safaricom Limited for authorising the case study to be carried on the organisation, and for sparing his time to be one of respondents in spite of his busy schedule.

I sincerely thank and appreciate my family members: - my wife, daughter and the two sons - who missed a great deal of my time to attend to their needs during entire MBA course work period and during the time taken to work on this research project work.

## TABLE OF CONTENTS

	Page
<b>Declaration</b> .....	<b>i</b>
<b>Dedication</b> .....	<b>ii</b>
<b>Acknowledgment</b> .....	<b>ii</b>
<b>List of Tables</b> .....	<b>iii</b>
<b>Abbreviations</b> .....	<b>vii</b>
<b>Abstract</b> .....	<b>x</b>
<b>CHAPTER 1: INTRODUCTION</b> .....	<b>1</b>
<b>1.1 Background</b> .....	<b>1</b>
1.1.1 Organisational Responses to Environmental Changes.....	<b>2</b>
1.1.2 Telecommunication Industry in Kenya .....	<b>3</b>
1.1.3 Safaricom Limited .....	<b>6</b>
<b>1.2 Research Problem</b> .....	<b>7</b>
<b>1.3 The Research Objectives</b> .....	<b>8</b>
<b>1.4 The Importance of Study</b> .....	<b>9</b>
<b>CHAPTER 2: LITERATURE REVIEW</b> .....	<b>10</b>
<b>2.1 Environmental Changes and Challenges</b> .....	<b>10</b>
2.1.1 Competition Changes and Challenges .....	<b>11</b>
2.1.2 Technological Changes and Challenges .....	<b>13</b>
2.1.3 Government Policy Changes and Challenges .....	<b>15</b>
<b>2.2 Organisational Responses to Environmental Changes</b> .....	<b>16</b>
2.2.1 Strategic Responses.....	<b>18</b>
2.2.2 Operational Responses .....	<b>22</b>
2.2.3 Tactical Responses .....	<b>25</b>
<b>CHAPTER 3: RESEARCH METHODOLOGY</b> .....	<b>28</b>
<b>3.1 Introduction</b> .....	<b>28</b>
<b>3.2 Research Design</b> .....	<b>28</b>

3.3	Data Collection.....	28
3.4	Data Analysis Method .....	29
<b>CHAPTER 4: DATA ANALYSIS AND INTERPRETATION .....</b>		<b>30</b>
4.1	Introduction.....	30
4.2	The Competition Challenges.....	30
4.3	The Technological Challenges .....	40
4.4	The Government Policy Challenges .....	46
<b>CHAPTER 5: CONCLUSION .....</b>		<b>54</b>
5.1	Summary, Discussions and Conclusions.....	54
5.1.1	Introduction.....	54
5.1.2	The Challenges Encountered by Safaricom Limited.....	54
5.1.3	The Responses of Safaricom Limited to the Changes .....	57
5.2	Limitations of the Study .....	59
5.3	Recommendations for Further Research.....	60
5.4	Recommendations for Policy and Practice .....	60
<b>REFERENCES.....</b>		
<b>APPENDICES .....</b>		

## **LIST OF TABLES**

Table 1.1: Growth of Fixed Line and Mobile Phone Connections: 2001-2006

Table 1.2: Growth of Profit for f Safaricom Limited: 2000-2007

## ABBREVIATIONS

ADSL	Asynchronous Digital Subscriber Line
BWA	Broadband Wireless Access
CCK	Communications Commission of Kenya
CDMA	Code Division Multiple Access
EAP&TC	East Africa Posts and Telecommunications Corporation
EASSy	East Africa Submarine Cable System
EDGE	Enhanced Data rate for GSM Evolution
EIR	Equipment Identification Register
EMF	Electromagnetic Field
EXTELCOMS	East Africa External Telecommunications Company Limited
GOK	Government of Kenya
GPRS	General Packet Radio Service
GSM	Global System for Mobile communications
HDSL	High speed Digital Subscriber Line
HSPA	High Speed Packet Access
IBGO	Internet Backbone Service Provider
ICT	Information and Communication Technologies

IMEI	International Mobile Equipment Identity
IN	Intelligent Network
Intelsat	International Telecommunications Satellite Organisation
IP	Internet Protocol
IPO	Initial Public Offer
ISPs	Internet Service Providers
IT	Information Technology
ITU	International Telecommunications Union
JV	Joint Venture
KCA	Kenya Communications Acts
KCR	Kenya Communications Regulations
KENEXTEL	Kenya External Telecommunications Company Limited
KPLC	Kenya Power and Lighting Company Limited
KPTC	Kenya Posts and Telecommunications Corporation
LAN	Local Area Network
LLO	Local Loop Operator
MMS	Multimedia Service
NCS	National Communications Secretariat

NEMA	National Environment Management Administration
PCK	Postal Corporation of Kenya
PDNO	Public Data Network Operator
SIM	Subscriber Interface Module
SNO	Second National Operator
TEAMS	The East Africa Marine System
TKL	Telkom Kenya Limited
VAS	Value Added Services
VoIP	Voice over Internet Protocol
VPN	Virtual Private Network
VSAT	Very Small Aperture Satellite Terminal
WAP	Wireless Applications Protocol
Wi-Fi	Wireless-Fidelity
WiMAX	Worldwide Interoperability for Microwave Access
2G	Second Generation
2.5G	Second and a Half Generation
2.75G	Second and Three Quarters Generation
3G	Third Generation
4G	Fourth Generation

## **ABSTRACT**

This research study is a case study carried out on Safaricom Limited, which is the current market leader in the Telecommunication industry in Kenya. The research study is carried out to identify the key challenges Safaricom Limited is experiencing due to the changes in Telecommunication industry in Kenya and to determine how the organisation is responding to the changes. The liberalisation process in the Telecommunication industry in Kenya introduced duopoly in mobile communications, and entry into the market by a number of other players using wireless technology innovations.

The research project was conducted by collecting primary data using unstructured questionnaires by carrying out in-depth direct interviews of the senior management from across all the business divisions of Safaricom Limited. The report contains in-depth analysis and interpretation of the data, identifying key competition, technological and policy challenges posed by the changes and the strategic, operational and tactical responses to these changes. The findings of the study reveal that the organisation is facing intensive competition which results in promotional and price wars, technology innovations to support new products and services, to meet the changing customer needs.

The findings show that the government policy changes create unlevelled playing field, opening up the market for new competitors with more capital resources through further liberalization and privatization, and demanding more contributions to corporate social responsibility, and allowing new entrants to provide both fixed line and mobile phone services. The organization and other players respond by lobbying the government to create level playing field.

The recommendation is provided for further search works to be carried out industry wide to include other players in Kenya, and in the region, with the entry into the market of new competitors that provide both fixed line and mobile phone services. Further studies are suggested to be carried on what impact the IPO will have on the organisation responses to the changes in the industry and on the stock market exchange.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background

Industry is generally defined as a group of firms that sell products and services which are close substitutes for each other, and having many attributes that compete for the same customers (Porter, 1980). The Telecommunication industry comprises of a group of firms that sell fixed line and mobile phone communications products and services to the public. The services and related products provided are basic voice, text, data, facsimile, voicemail, electronic mail and Internet access (ITU, 2006a; 2006b; <http://www.itu.int>).

Telecommunication businesses are globally changing from state-owned to privately-owned, market-oriented and competing with other businesses in a range of adjacent markets as telecommunication converges with broadcasting, computing and other formally separate sectors (ITU, 2006a). The mobile phone rather than fixed lines have increasingly become the telephones of choice, bringing connectivity to rural areas of the most developing countries for the first time in the past five years (ITU, 2006b).

The liberalisation process resulted in full or partial privatisation of the government run monopolies of postal and telecommunication organisations, introducing managed competition mostly in the mobile communications around the world. The global ICT sector is undergoing a radical transformation from “plain old telecommunication service (POTS)” to one that includes voice, data, Internet access, broadband fixed line access and broadband wireless access services for high-speed data, multimedia services, and mobile TV facilities (ITU, 2004a). The reforms in Africa since 1990s had common objectives of making the business efficient and services widely available and accessible to the public at affordable tariffs, and establishing autonomous regulatory bodies (ITU, 2006b). The changes resulted in rapid growth in GSM with wireless mobile connections overtaking fixed lines in Africa in 2000 (ITU, 2004a), and the world GSM connections are now 2.4 billion, provided by 700 operators in 218 countries (<http://www.gsmworld.com>).

In East Africa- Kenya, Uganda, and Tanzania, telecommunication industry historical evolution started in 1950s when the EAP&TC and EXTELCOMS were established to provide postal and telecommunications services in the region. With the breaking up of East African Community in 1977, the Government of Kenya founded KPTC and KENEXTEL. The two were merged in 1982 under KPTC but later split in July 1999 to PCK, TKL and CCK during the liberalisation process (GOK, 1998).

### **1.1.1 Organisational Responses to Environmental Changes**

The changing customer needs, government deregulation policy and technological changes have increased the challenges for providing quality service, the firm productivity, stimulating innovations and entrepreneurship requirements. The needs for technical and managerial skills are increasingly challenging as organisations diversify their products and services in related businesses such as international services as the competition intensifies (ITU, 2006a; Thomson *et al.* 2006), and organisations need to effectively respond by matching strategy to the changing environmental conditions to survive (Porter, 1980; Andrews, 1987). If the industry is attractive, understanding of the industry structure is crucial in making decisions to respond to the environmental challenges, and organisations require a superior competitive advantage over competitors in order to survive, therefore need to respond by offering superior value to their customers better than the competitors, and require a better product positioning (Porter, 1985).

The market liberalisation coupled with inadequate and unreliable fixed line services provided great opportunity for rapid growth in mobile phone services, but as competition intensifies, the growth has become a challenge as the demands for network capacity, high quality of services and coverage extension to rural areas, resulting in rising need and cost of both physical and intangible resources, requiring economies of scale (ITU, 2004a). The intensive rivalry results in frequent price wars, advertising battles, introduction of new products, and improved customer care services, highly subsidized phone handsets for low-end market users and locking of handsets to networks in efforts to retain customers; and competition in roaming services intensify as more operators enter into agreements for customer to communicate while travelling (<http://www.gsmworld.com>).

The competition is changing towards providing value added services as a product differentiation to meet the changing customer needs. Fixed line operators are increasingly providing Internet browsing and broadband data services using HDSL and ADSL technologies; Wi-Fi for global wireless LAN access and WiMAX for broadband wireless access (ITU, 2006a). The mobile phone operators are responding by providing Internet browsing through mobile handsets and laptop computers using WAP and other IP-based technologies in addition to voice mail service, call conferencing and SMS (ITU, 2004a). The mobile phones are increasingly supporting MMS, a single message with any combination of audio, video, picture, text messages, using GPRS and EDGE technologies to support Internet access through ISPs (<http://www.gsmworld.com>).

The mobile operators are responding to fixed line broadband challenge by adopting 3G technology with higher data transmission capabilities using HSPA technology, and have introduced international roaming data services using GPRS, EDGE technologies in addition to basic voice and SMS, and the uses of VoIP and satellite technologies are increasing, to extend services to rural areas (<http://www.gsmworld.com>). Rivalry in international services is intensifying as the liberalisation of international services allows for improved customer satisfaction through regional and cross-border connectivity (ITU, 2006a). Firms enter into regional strategic alliances and business agreements to build synergies to compete effectively, and new acquisitions are increasing as growth and foreign market entry strategies among players, along with use of commercial papers and issues of IPOs in stock markets (Brealey and Myers, 2004; Pandey, 2003).

### **1.1.2 Telecommunication Industry in Kenya**

The Telecommunication industry in Kenya is dominated by two mobile phone operators - Safaricom Limited and Celtel Kenya Limited, and one fixed line operator – Telkom Kenya Limited. The services provided are mainly basic voice and text messages -SMS, and to a lesser extent data, facsimile, voicemail, and electronic mail, and there is move to provide high data broadband access services. The market structure is divided along fixed line and mobile phone services; and end user retail and interconnection wholesale services. (<http://www.cck.go.ke>).

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 (GOK, 1997) 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. The advisory body, NCS, and the Communications Appeals Tribunal were created and regulations, KCR 2001, issued (GOK, 2001a). Privatization of TKL is underway with government calling for proposals to sell 51% of the shares to strategic investor (Daily Nation, 12 July 2007).

TKL was licensed to provide fixed line and mobile telephone services, with mobile phone license issued to its subsidiary Safaricom Limited; given a five year monopoly in fixed line services in Nairobi and Mombasa, and in long distance and international services. Five year duopoly was introduced in mobile phone by licensing Kencell Communications Limited (Celtel Kenya Ltd) in February 2000. The foreign ownership in the industry was initially limited to 40% but later increased to 70% (GOK, 2001b) and is to be increased to 80% (GOK, 2007d). A third operator Econet Kenya Ltd was licensed in April 2005, but is yet to enter the market. International voice service was liberalised on 30<sup>th</sup> June 2006, when the two mobile operators were licensed to compete with TKL (<http://www.cck.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 LLOs as Flashcom Ltd, Popote Wireless Ltd, and Access Wireless Ltd; PDNOs as Kenya Data Network; and IBGOs as Jamii Telecom Ltd using VoIP technology (<http://www.cck.go.ke>). The liberalization produced mixed results of a poor performing fixed line services and rapid growth of mobile telephony, with the mobile growing from 20,000 in July 1999, now at 9 million (<http://www.cck.go.ke>), and the trend is as in Table 1.1 below (GOK, 2003; 2004; 2005; 2006b; 2007b).

**Table 1.1: Growth of Fixed Line and Mobile Phone Connections: 2001-2006**

Year end	2001	2002	2003	2004	2005	2006
Fixed Line '000'	326	332	328	280	286	287
Growth %		1.7%	(1.8%)	(16.8%)	2.5%	0.2%
Mobile Line '000'	630	1,068	1,097	4,300	5,328	7,273
Growth %		69.6%	2.7%	66.3%	56%	36.5%

Source: Government of Kenya, Economic Surveys

Safaricom Ltd now has over 6.8 million subscribers (<http://www.safaricom.co.ke>) and Celtel Kenya Ltd 2.2 million (<http://www.celtel.com>), TKL 300,000 with wireless LLOs 5,000. None facility service providers supported by facility providers include: - over 50 ISPs, resale telephone bureaus and VAS as premium rate service providers, and telecommunication dealers (<http://www.cck.go.ke>). Two attempts to license SNO aborted as the winners failed to pay licence fees, and tendering process is to restart. The SNO is to provide fixed line and mobile telephone services, (<http://www.cck.go.ke>). New ICT policy was published in March 2006 (GOK, 2006a) and Bill published in May 2007 is pending in parliament for approval, to allow for unified or technology neutral license and bring telecommunications and media services under one regulatory authority, CCK (<http://www.information.go.ke>; GOK, 2007a).

TKL is deploying wireless services using CDMA technology with national mobility and competing on prices (<http://www.telkom.co.ke>; The East Africa, 30 October-5 November 2006; Business Daily, 6 July, 2007). Celtel International has launched “one network” regional roaming product in East Africa, extended to Gabon, Democratic Republic of Congo, and Congo Brazzaville (<http://www.ke.celtel.com>), compelling Safaricom Ltd to enter into strategic business alliances with MTN Uganda Ltd, Vodacom Tanzania Ltd and Uganda Telecoms Ltd (<http://www.safaricom.co.ke>; <http://www.mtn.co.ug>; <http://www.vodacom.co.tz>; <http://www.utl.co.ug>). The industry is still attractive as winner of SNO license offered US \$ 169.6 million (Ksh 12 billion) in 2006 tender which attracted 11 bids (<http://www.cck.go.ke>). The incumbent mobile operators each paid US \$ 55 million in 2000; Econet Kenya Ltd. offered US \$ 27 million in 2005. The mobile

operators are testing 3G technology and the regulator has offered to issue licenses to the incumbents at US \$25 million (<http://www.cck.go.ke>). TKL is undergoing restructuring and the government is to sell shares to strategic investor, attracting British Telecoms, France Telecom, South Africa Telkom, among others (Business Daily, 3 July, 2007).

Celtel Kenya Limited, formerly Kencell Communications Limited, was established in 2000 as a JV company between Sammeer Group (Kenya) with 60% shares and Vivendi (France) 40%. In November 2004, Vivendi sold shares to Celtel International Group, and in March 2005 MTC of Kuwait acquired Celtel International (<http://www.celtel.com>). In March 2006, the regulator commissioned a consultant, Analysys of UK, to conduct industry cost studies to determine cost based pricing and operator with significant market power and introducing price control on 1<sup>st</sup> March 2007, imposing a price cap on whole sale interconnection and retail off-net charges (<http://www.cck.go.ke>).

### **1.1.3 Safaricom Limited**

Safaricom Limited was founded in April 1997 as a subsidiary of KPTC to provide mobile phone services, and on 26<sup>th</sup> May 2000 Vodafone Plc Group of UK acquired 40% shares with TKL retaining 60% to form a JV company (<http://www.safaricom.co.ke> ). Vodafone transferred 5% shares to an off-shore firm (<http://www.vodafone.co.uk>), Mobitelea Ventures Ltd, registered in Guernsey Island, through Vodafone Kenya Ltd (The East Africa, 20-26 November 2006; Daily Nation, 9 March, 2007; 10 August, 2007). The corporate vision is “to be Kenyan’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>).

Safaricom Limited customer base has rapidly grown from 20,000 in June 2000 to over 6.8 million, and is extending services to rural areas. The organisation has introduced mobile Internet riding on GPRS/EDGE technology, and is testing 3G/HSPA technology for high speed data and MMS and launched own international gateway services on 10<sup>th</sup> November 2006. The extensive corporate social responsibility includes sponsoring sports,

health facilities, education and environmental conservation activities through a Foundation supported by Vodafone Plc of UK (<http://www.safaricom.co.ke>), and the firm has applied for 3G technology license (GOK, 2007c). The firm reported operating loss of Ksh 605.7 million in first year but has increasingly made profits before tax reaching a record level of Sh17.79 billion in 2006-2007, as shown in Table 1.2 below (PricewaterhouseCoopers, 2001; 2002; 2003; 2004; 2005; 2006), and being declared the most profitable company in East Africa (Business Daily, 25 June 2007).

**Table 1.2: Growth of Profit for Safaricom Limited: 2000-2007**

Yr End 31 <sup>st</sup> Mar	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
EBT Sh'000,000'	(605)	1,242	3,123	5,130	8,444	12,211	17,193
Growth %		305.3%	151.7%	64.3%	64.5%	44.6%	40.8%

Source: PricewaterhouseCoopers

The Government plans to sell 25 % of Safaricom Limited shares held by TKL and called for expression of interest (EOI) for the provision of professional advisory services for the IPO and evaluations finalised, as Vodafone Plc pushes to increase its shares (The East Africa, 2-8 July 2007; 9-15 July 2007), attracting international investment banks in Wall Street London, with Dyer & Blair Consortium winning the bid for the management of equity trading estimated at Kshs 34 billion (US \$500 million) to partner with Morgan Stanley and Co. International PLC, *et al* (Daily Nation 30 August, 2007).

## 1.2 The Research Problem

The liberalisation and privatization in Telecommunication industry in Kenya has resulted in rapid growth of mobile phone services as fixed line performed poorly. The intensive rivalry and threat of new entrants into the market are increasing, thus sustaining growth and market leadership are increasingly challenging. The changing customer needs and government regulations demand for providing new products and services, improving on the existing products and services to serve the existing markets better and creating new market segments in rural and urban areas. The global mobile industry is facing rapid

technological changes and is increasingly challenging (<http://www.gsmworld.com>). The challenges intensify, as fixed line operators deploy CDMA technology to provide wireless services, and the competitors are undergoing transformation by changing ownerships leveraging their capital resources and management capabilities.

Studies have been carried out in the Telecommunication industry in Kenya, some of which are on mobile phone services and Safaricom Limited. Kandie (2001) and Koskei (2003) carried studies on strategy formulation and implementation in Telkom Kenya Limited; Maina (2001), Odhiambo (2003), Sossion (2003) and Muturi (2004) carried studies on customer perception and satisfaction in Nairobi; Anene (2002), Maina (2004), and Senaji (2005) carried out studies on technology strategy and government regulations in the industry.

The other studies are: - Towett, (2002) on perceived risks on use of mobile telephone services in Nairobi ; Ooko (2003), Mutuku, (2003) and Misigo (2005) on human resource management and employee satisfaction in Telkom Kenya Limited, Celtel Kenya Limited and the Kenya College of Communications and Technologies. But these studies have not been specific to Safaricom Ltd responses to the environmental changes in the industry.

With this background the research study is to address the following: - What kinds of challenges have the changes in the Telecommunication industry in Kenya imposed on Safaricom Limited? How has Safaricom Limited responded to various changes in the Telecommunication industry in Kenya?

### **1.3 The Research Objectives**

This research study is to address the following two objectives:

- i) To determine the challenges Safaricom Limited encounters from environmental changes in the Telecommunication industry in Kenya.
- ii) To establish how Safaricom Limited is responding to changes in the Telecommunication industry in Kenya.

## **1.4 The Importance of the Study**

The study is a fundamental, basic research to generate a body of knowledge in understanding environmental changes in the Telecommunications industry in Kenya, the kinds of challenges and how the organisation can effectively respond to these challenges. The study will be useful to the management of Safaricom Limited, in determining effective responses necessary to sustain growth and profitability in the prevailing dynamic and competitive environment.

For other existing industry players, the study will help in determining responses necessary for the firms' positioning in the industry. For the potential new entrants, the study will help in identifying the driving forces in the industry, the likely competitors' reactions, and in developing entry strategies. For the government and the regulatory authority agencies the study will be important in formulating policy and regulations in the Telecommunication industry for national social and economic development plans.

The study will be important to the researcher for in-depth understanding of environmental changes in the Telecommunication industry 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 Environmental Changes and Challenges

According to Andrews (1987), the environment of a business organisation that of any other organic entity, is the pattern of all the external conditions and influences that affects its life and development. Porter (1985) argues that the global uncertainty in environmental changes increased dramatically in the 1970s due to fluctuating raw material prices, swings in financial and currency markets, deregulation, electronic revolution, and growth of international competition. Ansoff and MacDonnell (1990) argue that, the “Industrial Revolution” of 1820 to 1900 was extraordinary strategic turbulence period and from 1900 to 1930s the focus was placed on mass production to decrease the unit cost. Drucker (1980) argues that turbulence is irregular, non-linear, erratic; but underlying causes can be analysed, predicted, and managed.

Ansoff and MacDonnell (1990) further argue that during the twentieth century, environmental changes became more frequent, less predictable, and more complex, as the speed with which new products and services invade the market increased. The changes resulted in exponential growth in products and services, new technologies, new competitors, new consumer attitudes, new dimensions of social control and increasing role of firm’s in society. Burns (2004) observes that over the last two decades, the magnitude, speed, unpredictability and impact of change in new products, processes and services increased as local markets become global, protected or semi-protected markets and industries opened up for competition, and public bureaucracies and monopolies transferred to the private sector or adopted market-oriented practices.

Collins (2001) articulates that the business world is changing and will continue to do so, but does not stop the search for timeless principles. Cooper and Schindler (2003) argue that dramatic changes experienced in the last two decades have made business organisation evolve from historical economic role to responding to the social and political

mandates, and explosive technology innovations in global communications. Thompson *et al.* (2006) observe that companies find themselves in industry situations characterized by rapid technological changes and short product life cycles, new products by rivals, and changing customer needs all occurring at once.

The major challenges facing organisations are to identify the opportunities and threats posed by the changing environmental conditions (Porter, 1980); and the major global changes have been the government policy inducing competition and technological evolution (Mintzberg *et al.* 2003; Burns, 2004; Porter, 1985). Andrews (1987) argues that the environmental influences relevant to strategic decision are in the industry, the total business community, the city, state and the world, and categorised as technological, economic, physical, social, and political; whereby change is fastest in technology, and less rapidly in politics. Johnson and Scholes (2004) and Johnson *et al.* (2006) argue that the broad environment is macro-environment, described by PESTEL framework, categorising environmental influences in six main types: political, economic, social, technological, environmental and legal environments.

According to Kotter (2001), a central feature of modern organisation is interdependence, where no one has complete autonomy; employees tied to each others by their work, technology and hierarchy, presenting a special challenge to change process, and requires alignment of people. Senge (2006) observes that the limits of growth and organisational learning often frustrate organisational changes. Drucker (2002) argues that the rapid growth puts enormous strain on business by outgrowing facilities and management capabilities, thus requiring continuous adaptation to changes.

### **2.1.1 Competition Changes and Challenges**

According to Ansoff and MacDonnell (1990), the earlier concept of competition was to dominate or to absorb the competitor, not to meet head on in the market place and the concept of marketing was that the firm which offered a standard product at lowest price was to win. Industry lines were well drawn and offered growth opportunities; and the inducement to diversify only appealed to adventurous firms. Kotler (2003) and Porter (1980) argue that competition includes all the actual and potential rival offerings and

substitutes that a buyer might consider and, and competitors are all companies offering the same products and services or same class of products and services.

Porter (1980) further argues that the relevant environment is very broad, encompassing social and economic forces, but key aspect is the industry in which a firm competes; and the intensity of competition depends on the five competitive forces: - rivalry among the existing firms, threat of new entrants, bargaining power of suppliers, bargaining power of buyers, and threat of substitute products or services; and competitors provide market signals as bluffs, warnings, and earnest commitments to action. Johnson *et al.* (2006) argue that hyper-competition occurs where the frequency, boldness and aggressiveness by competitors create a condition of constant disequilibrium and change.

According to Porter (1985), competition in an industry is the core of the success or failure of firms, and determines the activities that contribute to performance as innovations, cohesive culture, or good implementation. Competitive strategy is the search for a favourable competitive position that is profitable and sustainable and the choice depends on the industry attractiveness for long-term profitability and competitive position. Competitiveness is about gaining advantage over competitors by offering superior value to customer. The problem is identifying the sources of competition as attention is usually focused on direct rivals, ignoring other factors influencing competitiveness.

Kaplan and Norton (2006) argue that continual search for organisational form is driven by changes in nature of competition and economy and Kaplan (2007) argues that the world is constantly changing as business evolves, new products and distribution channels emerge, requiring changing the people and incentives, tangible resources, and operating style. Porter (1985) argues that firms view competitors as a threat and attention centred on gaining share and to prevent entry. But a good competitor can strengthen a firm's competitive position, to yield four strategic benefits: increase competitive advantage; improve industry structure; aid market development and; and deter entry. Thus competitors are both a curse and a blessing; seeing them as a curse, runs the risk of eroding a firm's competitive advantage and the industry structure, therefore a firm should compete aggressively but not indiscriminately.

Aaker (1996) argues that it is hard to build strong brands that resonate in customer minds due to pressure to compete on prices, proliferation of competitors, fragmented markets and media, complex brand strategies, bias against innovation, short term pressures, and many products that confuse customers. Drucker (1955; 2002) argue that the purpose of a business is to create the customer and that organisation's most important information is not about customers but about non-customers to change to become an influential group.

Towett (2000) findings on perceived risks on use of mobile telephones among consumers in Nairobi are: performance, social, time loss, financial loss if phone malfunctions or stolen, psychological, and physical; and adds that risk reduction strategy is mainly brand image. Odhiambo (2003) findings on study on customer satisfaction for mobile phones in Nairobi are: customer service, assurance, service responsiveness, access, security, product and service features, pricing, service credibility, and service equity and fairness. Sossion (2003) findings are that customers and managers perceive value differently in most of the service descriptors (quality, price, costs-benefit, service availability, etc).

### **2.1.2 Technological Changes and Challenges**

According to Porter (1985), technological change is a principal driver of competition; plays a major role in industry structural change and creates new industries, and technology is a greater equalizer, eroding competitive advantage of firms and propelling others to forefront, and a diffused technological change affects each of the competitive forces. Antoniou and Ansoff (2004) argue that technology has been the driving force in the 20<sup>th</sup> century and promises to hold the same or greater importance in the 21<sup>st</sup> century.

Technological developments are the fastest unfolding and far-reaching in extending or contracting opportunity for an established company, these include the discoveries of science, the related products development, the process improvement, and the automation and data processing (Andrews, 1987; Mintzberg *et al.* 2003). Drucker (1955) argues that technological changes can turn an organisation into loose confederation of functional empires. Drucker (2002) argues that technology has become more important, because customers are changing as distribution systems, in relation to technology and

competition, and the markets are changing faster than ever before. The explosive emergence of Internet-“Information or Knowledge Revolution” requires every business to be globally competitive, even if it sells goods and services only within local or regional market, as the distance barrier is eliminated for worldwide distribution.

Technological change is a powerful determinant of entry barriers; shifts the bargaining relationship between industry and its buyers and suppliers; alters the nature and basis of rivalry among existing competitors and creates new products or product uses that substitute for others; and broadens or shrinks industry barriers (Porter, 1985). In low-technology organisation, focus is in utilizing and expanding technology whereas in high-technology organisation, technology is critical determining factor for future success and high technology turbulence requires cutting-edge technology (Antoniou & Ansoff, 2004).

According to Porter (1985), technology strategy includes choices of technology and to seek technological leadership, whereas the tool for understanding the role of technology in competitive advantage is the value chain, as it affects cost or differentiation in primary and support activities of a firm. But Johnson and Scholes (2004) argue that technology may be easy to acquire by competitors so is not necessarily a source of competitive advantage but its exploitation is. According to Anene (2002) and Maina (2004) findings, technology strategy and government regulations influence the strategic responses of telecommunication organisations in Kenya.

Porter (1985) observes that to avoid obsolesce and promote innovation, a firm must be aware of technological changes that influence industry. Pearce and Robinson (2004) argue that creative technological adaptations result in new products, improvement in new products and marketing techniques; and forecasting the path of technological evolution is extremely important in anticipating technological changes and improving a firm’s position. Harrigan (1984) observes that technological innovation is a major cause of accelerated evolution and increased demand uncertainty and Drucker (2002) emphasises that “Information Revolution” of e-commerce is totally unpredicted and unexpected development that is changing the economy, society, and politics globally.

### **2.1.3 Government Policy Changes and Challenges**

Government policy changes have significant and tangible effects on industry structural change, through full-blown regulation of key variables such as entry barrier into industry, competitive practices, or profitability. Less direct government influence occurs through regulation of products quality and safety, environmental quality, and tariffs or foreign investments. Emerging industries face delays in gaining recognition and approvals and firms with unique technology are forced to license by regulations (Porter, 1980; 1985).

Government policy and change affect competitive advantage by influencing four determinants of national advantage - the diamond framework: - factor conditions; demand conditions; related and supporting industries and; firm structure, strategy and rivalry (Porter, 1990). Government bureaucracies and regulations increase costs and impede the ability to stay in business (Drucker, 1980), and anti-trust laws are formal attempt to limit competition antimonopoly and fair trade laws restrain competition (Mintzberg *et al.* 2003). Governments dictate particular course or direction by exercising extensive regulations and multinational corporations seeking business in parts of the world are subjected to conditions such as joint ventures or local alliances in order to be licensed to operate (Porter, 1985; Johnson and Scholes, 2004; Johnson *et al.* 2006).

According to Andrews (1987), with the increase in sensitivity to the impact on the physical environment, it is essential for an organisation to comply with the law and behave responsibly by considering how planned expansion and continued operations will affect and perceived to affect the physical environment. Porter and Kramer (2006) argues that government regulations increasingly mandate social responsibility, and efforts to improve social and environmental consequences fail due to organisations tendency to taking corporate social responsibility in generic ways, not as part their strategy. Senge *et al.* (2007) argues that for more than a century and a half, industrial growth has increased interdependence around the world that governments cannot resolve. But organisations resolve complex sustainability issues by systematic collaborative initiatives and organisational learning through personal and shared vision.

## **2.2 Organisational Responses to Environmental Changes**

All organisations operate within an external and internal environment (Porter 1980; 1985; Andrew, 1987; Ansoff and MacDonnell, 1990; Newstrom and Davis, 2002); and changing and unpredictable environment generates diversity of ideas and innovations through responses from organisations (Johnson & Scholes, 2004). The Environmental school of thought is a reactive process, not strictly strategic management and is the degrees of freedom organisations use to manoeuvre through their environments (Mintzberg *et al.* 2003), and success in business means rapid and intelligent adaptation to outside events (Drucker, 1955).

In turbulent times the enterprise has to be kept lean, capable of taking strain to take up opportunity, and unless changed organisation tends to be slack, and avoid unpleasantness (Drucker, 1980). Change in the environment necessitates continuous monitoring of a company' business, lest it falters, blurs, or becomes obsolete (Andrews, 1987). Kotter (2007) argues that over the past decade, companies have tried to be better competitors by undergoing many banners such as total quality management, reengineering, right sizing, restructuring, cultural change, and turnaround, to cope with a new and more challenging market environment, but many fail to succeed.

An administrator of a firm handles two types of tasks, when coordinating, appraising, and planning its activities: - strategic and tactical decisions, which require implementation by allocation or reallocation of resources in terms of funds, equipment and personnel, where plans can be formulated from below, but resource allocation must be from the top (Chandler, 1962). To carry on business, corporations need real assets requiring investment or capital budgeting and financing decisions (Pandey, 2003; Brealey and Myers, 2004).

The management job is managing of business, managing managers, managing of work and workers, all in short and long-terms (Drucker, 1955). The management involves two complementary activities: strategic activities requiring entrepreneurial behaviour, for future potential; and operating activities through incremental behaviour, converting existing potential to profit and growth (Ansoff & MacDonnell, 1990). Strategic

management is ambiguous, uncertain, complex, organisation-wide, fundamental and of long-term; and operational management is routine, specific and of short-term (Johnson & Scholes, 2004; Johnson *et al.*2006). Robbins and Judge (2007) argue that in today's dynamic world, leaders need to challenge the status quo, create visions of the future, and inspire organisational members to want to achieve the visions, and managers formulate detailed plans, create efficient organisational structures, and oversee day-to-day operations.

Ansoff and MacDonnell (1990) observe that environment serving organizations exhibit two major styles of behaviours: incremental behaviour, to minimize departure from historical behaviour; and entrepreneurial behaviour which seeks change; and the four primary types of management responsiveness are: operating responsiveness to minimize cost; competitive responsiveness to optimize profits; innovative responsiveness to develop near-term profit potential by new products or services and marketing strategies and; entrepreneurial responsiveness for long-term growth and profitability for continuity.

Drucker (1955) argues that business enterprise has two entrepreneurial functions of marketing and innovation, and Drucker (1964) argues that three tasks for entrepreneurial analysis are: the present business must be effective; its potential must be identified and realized, and it must be made into a different business for a different future. Porter (1980) argues that for organisations facing environmental changes, the key challenges are: the degree of competition; dominant economic features; drivers of change; and key success factors. Cooper and Schindler (2003) observe that organisations need to identify quality information and to recognise and conduct reliable research to base high-risk decisions.

Chandler (1962) argues that administrative activities are carried through four levels in complex organisations: general office of the executive which allocates resources, divisional and departmental levels which deal with one special or professional function in broader scale, and the field units with one function as marketing. The strategic or entrepreneurial decisions are made by the entrepreneurs, whereas the actions for using resources are operational or tactical carried out by managers. Andrews (1987) argues that, strategy and corporate goals come from the senior general managers and the problems

and day-to-day operations are by the subordinates, but for success and suitability, strategy process requires participation at all levels.

Strategy exists at corporate level-the overall purpose and scope of an organisation, division or business level, and departmental level-to compete in particular markets (Mintzberg *et al.* 2003; Johnson and Scholes, 2004; De Wit and Meyer, 2004; Johnson *et al.* 2006). De Wit and Meyer (2004) add a fourth level - the network or the alliances and partnerships. According to Kaplan and Norton (2000), five key principles for building strategy focussed organisations are to: - translate strategy to operational terms; align organisation to strategy; make strategy everyone's every day job; make strategy continual process; and mobilise change through strong and effective leadership.

### **2.2.1 Strategic Responses**

Strategy is defined as the determination of the basic long-term goals and objectives of an enterprise, and adoption of courses of action and the allocation of resources necessary for carrying out these goals, in view of future market demand and general economic conditions (Chandler, 1962). Strategy is the direction and the scope of an organisation over the long-term, which achieves the advantage for organisation through its configuration of its resources within a changing environment and to fulfil stakeholders' expectations (Johnson and Scholes, 2004; Johnson *et al.* 2006).

According to Andrews (1987), corporate strategy is the pattern of decisions in a company that determines and reveals its objectives, purposes, or goals, produces the principal policies and plans for achieving those goals, and defines the business the company is to pursue, the kind of economic and human organisation it is or it intends to be, and the nature of the economic and non-economic contribution it intends to make to shareholders, employees, customers, and communities; and the strategic decision is one that is effective over long period of time. Ansoff and MacDonnell (1990) argue that strategic management activity is establishing objectives and goals for the organisation, and maintaining relationships with the environment to enable pursuit of objectives consistent with the capabilities and responsiveness to environmental demands.

According to Kaplan and Norton (2000), strategy as a hypothesis implies movement of an organisation from present position to desirable but uncertain position, and is a set of cause-and-effect relationships that are explicit and testable. Further articulates balanced scorecard framework, whereby the vision and strategy are central to the architecture of the framework, and requires activities: - that are the drivers or near-term objectives - internal processes and learning, and growth perspective (lead indicators); and those that create desired outcome or long-term customer and shareholder value proposition and differentiation - financial and customer objectives (lag indicators).

Johnson and Scholes (2004) and Johnson *et al.* (2006) argue that strategic management includes: - understanding the strategic position of an organization; strategic choices of the future; and turning strategy into action. According to Pearce and Robinson (2004), strategic management is a set of decisions and actions that result in formulation and implementation of plans designed to achieve the objectives. Colley *et al.* (2002) argue that the strategic planning phase of corporate strategy formulation consists of looking towards the future, providing direction in terms of business the firm chooses to be engaged, and setting appropriate goals and objectives. Thompson *et al.* (2006) argue that the central questions in thinking strategically about company's present circumstances and prospects are: - Where are we now? Where do we want to go? How do we go there?

The design school of thought on strategy formulation proposes a simple model that views the strategy process as one of design to achieve an essential fit between external threat and opportunity and internal distinctive competence (Mintzberg, 1990). Reflecting on strategy process, there is no single school of strategy but different schools depending on assumptions and perspectives and strategy can be defined as a plan, a ploy, a pattern, a position, and a perspective; and is the pattern or plan that integrates an organization's major goals, policies, and action into a cohesive whole (Mintzberg *et al.* 2003).

Chandler (1962) argues that in formulating strategy, structure follows strategy, however may be slow in periods of rapid expansion, and unless structure follows strategy, inefficiency results. Mintzberg *et al.* (2003) argue that the organisation structures no more follow strategy in the ever-changing environment, but the two exist independently,

and influence each other; and strategy is developed from three perspectives: deliberate formulation; systematic analysis and; emergent formation. Andrews (1987) argues that determination of a suitable strategy begins in identifying the opportunities and risks in the environment and requires the achievement of fit between the internal capacity (strengths and weaknesses) and external situation (opportunities and threats) - the SWOT analysis.

There are four generic approaches to strategy according to Whittington (2001). Classical - based on the rational planning methods, where profitability is the goal. Evolutionary - where the environment is too unpredictable and competitive, making long-term plans irrelevant. Processualist - the sticky imperfect nature of human life. Systematic - linking strategy to the cultures and powers of the social systems. The approaches differ along the outcome of strategy (profit maximization or deviations), and the processes (product of deliberate calculations, or emerge by accident, muddle or inertia). The key to success is to match strategy to the market, and the organisational and social environments. Peters and Waterman (1982) argue in the McKinsey 7-S Framework concept, that intelligent approach to organising encompasses and treats as independent, at least seven variables: structure, strategy, people (staff), management style (leadership), systems and corporate procedures, guiding concepts and shared values (culture).

Porter (1980) argues that the major strategic decisions are vertical integration, capacity expansion, entry, and divestment. Harrigan (1984) argues that vertical integration is the use of outsiders as well as own business units by a firm to forge a vertical system for supplying goods, services and capabilities, and alternatives are a mix of approaches that change over time with industry condition changes. Whittington (2001) argues that three important types of growth strategy are: innovation of new products and services; diversification; and internationalization by foreign direct investments-FDI and international joint ventures and alliances.

According to Collis and Montgomery (1995) the resource based view (RBV) of strategy underlying premise is that each organisation possesses unique resources that give competitive advantage over rivals; and strategy combines internal analysis of phenomena within companies with external analysis of the industry and the competitive environment.

Porter and Kramer (2006) articulates that the most strategic corporate social responsibly occurs when a company adds social dimension to its value proposition, making social impact integral to overall strategy, to benefit society and to the firm; and Senge *et al.* (2007) argues that healthy business must include healthy social and environmental systems for its success.

Effective management directs the visions and efforts of all managers towards a common goal (Drucker, 1955). The vision and mission are clear when business starts but over a time the mission may change to take the advantage of new opportunities or to respond to new market conditions. The mission statement is shared with managers, employees, and customers to provide shared purpose, direction, and opportunity for the long-term (Johnson & Scholes, 2004; Kotler, 2004; Pearce & Robinson, 2004; Senge, 2006).

Senge *et al.* (2007) articulates that making sense of complex issues like sustainability requires systems-thinking skills and strategic guidelines, and organisational metrics must be tailored to the specific people, culture, market, technology and history of the enterprise. Kandie (2001) findings indicated that the challenges facing TKL were: lack of financial resources, technological changes; overstaffing and turnover; bureaucratic process and procedures; poor attitude and culture. Koskei (2003) concluded that the strategy is formulated at TKL from the top without much involvement of the lower level staff and strategy implementation failed because of lack of support from the corporate culture and procedures and lack of linkages to strategy formulation.

Porter (1985) in the value chain concept articulates that every firm is viewed as a collection of activities performed to design, produce, market and deliver, and to support its products and services, in two categories. Primary activities: - inbound logistics, operations, outbound logistics, marketing and sales, and services. Support activities: - firm infrastructure, human resource management, technology development, and procurement. Firm's infrastructure is at times viewed as "overhead", but is a powerful source of competitive advantage, as in a telephone operating company, where negotiating and maintaining good relation with regulatory body can be the most important activity.

## 2.2.2 Operational Responses

The operational strategies are concerned with how the component parts of an organisation deliver effectively the corporate and the business level strategies in terms of resources, processes and people (Johnson and Scholes, 2004; Johnson *et al.* 2006). The operations management is concerned with exploiting the present strategic position to achieve objectives, converting the potential into actual profit, and matching capability to the turbulence of the firm's environment (Ansoff and MacDonnell, 1990).

Innovation concerns things that are done differently whereas operations concerns things that are already being done (Drucker, 1986). The middle level general managers are faced with reconciliation between short-term and long-term considerations, to transform general strategic directions into operating plans and programs (Andrews, 1987). Strategic planning must be augmented by a detailed operational planning system to achieve the desired results for the strategic goals and objectives through implementation (Colley *et al.* 2002) and operational effectiveness means performing similar activities better and more efficient than rivals (Mintzberg *et al.*, 2003).

Porter and Kramer (2006) articulates that incorporating corporate social responsibility into core business operations, is essential to good citizenship and adds value to the business and the society, and proposes two approaches:- the value chain framework or inside-out linkages; and the diamond framework or outside-in linkages. Drucker (1955; 1980) articulate that political influence requires managers to understand the needs of the politician. Drucker (1982) argues that commercial interest and proprietary know-how must be balanced with public interest when tackling systematic issues, which are larger than individual organisation. According to Graham and Bennett (1998) managers need to be politicians and must establish good relations with various stakeholders and contend with a number of situational factors.

The value proposition describes the unique mix of product, price, service, relationship, and the image (brand) offers, determines the market segments to which the strategy is targeted and differentiation through three strategy themes of product leadership, customer intimacy, and operational excellence (Kaplan and Norton, 2000). A company executes its

strategy well only if it aligns the strategies of its business units, support functions, and external partners, and establishes of an office of strategy management unit at the corporate level (Kaplan and Norton, 2005). A management system is a set of processes and practices to align and control an organisation, and include procedures for planning strategy and operations, and best system is one based on the balanced scorecard framework (Kaplan and Norton, 2006).

Managerial culture emphasises rationality and control, and a manager is a problem solver, adopts impersonal, passive attitude towards goals imbedded in organisation's history and culture (Zaleznik, 1992). Leadership and management are complementary, and both are necessary for success in an increasing complex and volatile business environment. Management is coping with complexity and good management brings degree of order and consistency; leadership by contrast is coping with change (Kotter, 2001). Managers not only plan, organise, coordinate and control but are reflective thinkers; and their activities are strongly oriented to action (Mintzberg, 1990). A manager's two specific tasks are: creating a true whole of a firm that is larger than the sum of its parts; and to harmonize the requirements of immediate and long-range future in all decisions and actions. A manager sets objectives, organizes, motivates and communicates, measures, and develops people (Drucker, 1955).

For the twenty-first century corporations to survive in competitive environment, requires effective learning, empowerment, and commitment from everyone; communication tools as focus-groups, organisational surveys, and management by walking around (Argyris 1994). Real transformation takes time and requires to be tied to a well communicated vision; and without short-term wins people will resist change (Kotter, 2007). Senge (2006) articulates that the fundamental difference of a learning organisation from traditional authoritarian one is the mastery of basic five disciplines: systems thinking, personal mastery, mental model, shared vision, and team learning; with system thinking, the "fifth discipline", as the concept that underlies the five disciplines - is seeing wholes, interrelationships not things, and seeing patterns of change not static snapshots.

According to Luthans, (2005), in generative leaning organisation emphasis is on

continuous experimentation and feedback, examining effect of decisions, and change of behaviour, to match rapid environmental changes and challenges. According to Kaplan and Norton (2005), no strategy can be effective unless the people are motivated to learn and trained; Bennis and O'Toole (2005) argue that the strongest force for change is the business community, but the major challenge is to balance practice and theory to develop interpersonal skills and practical wisdom.

The forecasting of human resources requirements in an organisation is often subdivided into long-range and short-range forecasts and the latter being unavoidable by most firms (Flippo, 1984). The most important role in human resources management is increased involvement in developing and implementing strategy, as firm's competitiveness depends on employees (Dessler, 2003). Human resources must be concentrated on a few major opportunities for producing significant business results (Drucker, 1964). Succession plan in organisation management levels is critical to its success, in a hypercompetitive and dynamic markets (Bennett & Miles, 2006). According to Miles and Watkins (2007), complementary-leadership is common and is institutionalized and the inherent risk can't be avoided in large organisations but can be managed by four pillars of alignment: - a common vision, common incentives, communications, and trust.

Senaji (2005) findings show that investment capital and infrastructure are the most important factors in implementation of projects in Telecommunication industry in Kenya, then knowledge and skills, affordability and government policy, and according to Misigo (2005) findings, organisations in the industry mostly use retirement benefit scheme and leave allowance as a basis of competitive strategy but employees are not involved in negotiations. According to Ooko (2004), employees in mobile phone industry in Kenya perceive that motivation by increases in incentive pay is linked to performance among sales and technicians and organisations use group and individual incentive.

Pande *et al* (2000) the six sigma way concept to achieve and sustain success in the high-risk 21<sup>st</sup> century, articulates six sigma themes as: focus on customer, data and facts driven, process focus and improvement, proactive, boundary-less collaboration, drive for perfection, and tolerance for failure. The success factors include: cost reduction,

productivity improvement, market-share growth, customer retention, product cycle-time reduction and defect reduction, culture change, product and service development.

According to Hammer (2007a) business has embraced process management to achieve improvement by focussing on measuring, and redesigning customer-facing and internal processes. Hammer (2007b) argues that companies develop sophisticated strategic measurement systems based on tools such as the balanced scorecard, key performance indicators, computerized dashboards but success is inhibited by organisation boundaries, use of own point of view, not customer perspective; measuring only a component of what matters. Kaplan (2000) argues that, factors such as performance appraisal, incentives, and internal competition prevents employees from leaning, growth and innovation.

Focus of marketing concept is consumer needs, shaped by the environment and the culture, education and experiences; three elements of strategic framework are marketing segmentation, targeting, and positioning (Porter, 1985; Schiffman and Kanuk, 2004). Consumer research developed as an extension of marketing research to improve managerial decision making (Schiffman and Kanuk, 2004). Aaker (1996) argues that the objective of brand strategy is to create a business that resonates with customers, avoid competitor strengths and exploit their weaknesses, exploit own strengths and neutralize own weaknesses; a brand with strong, memorable symbol, and a range brand with dynamic vision that creates identity across product classes. Kaplan (2000) in copyright of Maslow theory on hierarchy of needs - five sets of goals - the basics needs are: physiological, safety, love, esteem, and self actualization; which change as they are met.

### **2.2.3 Tactical Responses**

Tactical responses are the short duration, adaptive, action-oriented realignments that opposing forces use to accomplish limited goals and, the strategic and tactical difference lies primarily in the scale of action or perspective of the leader. A tactic to a chief executive officer may be strategic to a marketing head if it determines the viability of the firm (Mintzberg *et al.* 2003). Tactical decisions are more involved in ensuring the efficient and steady use of current resources already allocated, dealing with day-to-day activities for smooth and efficient operations, and to coordinate the functional activities

to focus on current market demand (Chandler, 1962). Tactical adjustments will always be needed but are made with the framework of the basic strategic decisions (Drucker, 1955). According to Johnson and Scholes (2004); and Johnson *et al.* (2006), a big bang to change might be needed on occasions, as during a crisis, or need to change direction very fast to exploit window of opportunity, but can be disruptive, and in terms of scope, the issue is whether it can occur within the current paradigm (current cultural assumptions) as realignment of strategy (as turnaround strategy) rather than a fundamental change which is more of transformational.

Johnson and Scholes (2004) and Johnson *et al.* (2006) further articulate that in a turnaround strategy the emphasis is on speed of change and rapid cost reduction and/or revenue generation activities. Senge (2006) observes the symptomatic intervention, and the quick fix solve the problem but only temporarily, whereas a fundamental solution works more effectively, but strengthening the fundamental response and weakening symptomatic response require long-term orientation and shared vision to avoid pressures to divert investment into short-term problem solving. Luthans (2005) argues that, in adaptive learning organisation, employees react to environmental changes with routine and standard responses resulting in short-run solutions. According to Porter (1985), recognising and accurately reading market signals are significant for developing competitive strategy. The firms are mutually dependent, feel the effect of each other's moves and react. The competitive move can be offensive responses to improve position, defensive reactions which can be threatening or cooperative to deter competitor, but broad approach is to use superior resources and capabilities, retaliatory resources and diversionary tactics, to force the outcome skewed towards the interest of the firm.

Porter (1985) further observes, a firm that continuously invest to gain competitive advantage by improving its relative cost position and differentiation will be difficult to challenge successfully, even with vigorously offensive strategy. Senge (2006) argues that a goal limited to defeating a competitor is transitory, and once the vision is achieved, it can easily turn into a defensive posture that rarely calls for creativity and innovation. According to Mintzberg *et al.* (2003) differentiation strategies are: - price used as image to feign differentiation; support differentiation as selling the product at a special credit;

quality to make the product better; design for offering something truly different, breaking away from dominant design; and un-differentiation strategy, copycats by management.

According to Kotler (2004), tactical responsiveness can be achieved through the marketing plan, which operates at two levels: strategic marketing plan that lays out the target market and the value proposition based on market opportunities; and tactical marketing plan that specifies the marketing tactics: product features, promotion, pricing, sales channels, and service. Kotler *et al.* (2006) argues that alignment of sales and marketing functions to working together improves corporate performance metrics and creates value for the company and the customer. Drucker (1964) observes that economic results require managers to focus on the smallest number of products, services, customers, markets, distribution channels, end-users that will produce the largest amount of revenue. Kaplan and Norton (2000) argues that tactical details for implementing strategy objectives change whereas strategic themes may remain the same in rapidly changing environment to cope with opportunities and threats.

According to Odhimbo (2003), due to dynamism in the market in Kenya today, characterised by stiff competition, deregulation and changing customer loyalty, there is need for marketers to cultivate a competitive edge for customer loyalty by enhancing customer satisfaction. The factors of customer dissatisfaction for mobile subscribers in Nairobi are poor network coverage, high pricing, and the poor quality of handsets on special offers, among other factors which determine the level of satisfaction such as customer service, product/service features, service reliability, accessibility in terms of distribution, security, equity/fairness in terms of promotion, that should be considered while drawing up marketing strategies to realign with the processes of the organisation.

According Sossion (2003), the mobile phone has gained popularity in Kenya but the operators are facing a challenge to offer better services to customers who have become more sophisticated with option of shifting loyalty. There are significant differences in perception of value among mobile phone subscribers in Nairobi, in terms of quality, convenience and price, which vary with age, gender and level of education, requiring managers to price their services in line with customer expectations.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The research methodology covers the research design for the study, the data collection method, and the data analysis method.

#### **3.2 Research Design**

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

Case studies place more emphasis on a full contextual analysis of fewer events or conditions and their interrelations (Cooper and Schindler, 2003). Case studies involve in-depth, contextual analyses of situations in organisations, 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). The proposed case study is on responses of Safaricom Limited, to challenges posed by changes in the Telecommunication industry in Kenya.

#### **3.3 Data Collection Method**

The data for the study is primary data to be collected from the senior management team of Safaricom Limited, through unstructured questionnaires (Appendix 1(a) introduction letter and 1(b) the question samples). The questionnaires contain open-ended questions, and are designed to identify the major challenges posed by the environmental changes in the Telecommunication industry in Kenya and the responses to changes, in terms of the strategy formulation and implementation in the organisation.

The target number of respondents to be interviewed is ten (10), to comprehensively cover all areas of the business in the organisation. The respondents include the chief executive officer and six other chief officers in charge of divisions: chief finance officer, chief corporate affairs officer, chief technical officer, chief commercial officer under whose docket is sales and marketing, chief revenue officer, and chief human resource officer. Three heads of functional departments of marketing, corporate strategy and planning and, business planning and development are included as well.

The researcher is to conduct direct, personally administered or telephone interviews and the questionnaires are to be sent through electronic-mail by use of Internet followed by the direct interviews. The direct interview method is preferred in this case study, for obtaining in-depth information from the respondents. However in the event the respondent is not available for the direct interview, for instance, to cause minimal interference with their work, or due to any other reason, such as being away from office, electronic mail response shall be used, followed with telephone interview. The e-mail communication method is extensively used in the organisation and most of the respondents may consider it as the preferred means of responding to the questions.

### **3.4 Data Analysis Method**

The nature of the data to be collected is from the direct personally administered interviews and electronic mail responses followed by telephone interviews, targeting the specific individuals drawn from top and middle level managers of Safaricom Limited. The in-depth understanding of the responses from the respondents will be used in the analysis and interpretation of the data. The environmental changes and challenges they pose to organisation will be categorised as: - competition changes and challenges; technological changes and challenges; and government policy changes and challenges. The responses to the changes are to be analysed and interpreted as strategic, operational and tactical responses. The case study analysis method is considered to have a broad appeal to management and policy analysts for planning and monitoring purposes.

## **CHAPTER FOUR**

### **DATA ANALYSIS AND INTERPRETATIONS**

#### **4.1 Introduction**

The primary data was collected from ten (10) respondents, comprising the chief executive officer, chief officers of all the six divisions in the organisation and three selected heads of functional departments for corporate strategy and planning, business planning and development, and marketing. The data from nine (9) respondents was by direct personal interviews and from one (1) respondent was by electronic mail response followed by telephone interview. The key challenges posed by competition, technological and government policy changes identified by the respondents are qualitatively analysed for in-depth understanding to determine their nature and the general picture of the impact they pose on the organisation, and the organisation responses to the challenges are qualitatively analysed and interpreted as strategic, operational and tactical responses.

#### **4.2 The Competition Challenges**

The key competition challenges identified by the respondents are: - lack of level playing field created by the government policy changes; the intensive rivalry in the industry; substitute wireless products and services; the threat of entry of new competitors; and the changing customer needs and wants. The impact these challenges pose in the market lead to rapid rollout of new products and services, price reductions and promotional wars, and now the competition is extending across the regional and international borders. The competition has resulted in rapid growth, rapid capacity expansion, changing organisational structures, and shortage of skilled and experienced employees.

##### **4.2.1 Lack of Level Playing Field**

Some respondents identified lack of level playing field created by government policy changes as a key competition challenge. The regulator has allowed TKL and other licensed wireless local loop operators to deploy CDMA technology to provide wireless services, therefore opening entry into the wireless market through backdoor, without charging license fees as provided in 4.4.1 below. The government charges exercise duty levy on usage of mobile phone services which is not applied to the fixed line operator,

TKL and other wireless operators in the industry as elaborated in 4.4.2 below. This gives TKL a competitive advantage to offer lower prices to the customers, than the organisation can offer. The respondents identified as challenges, the support given by the regulator to TKL and wireless LLOs in demanding for low wholesale interconnection termination rates, and the unfair and emotional reactions, accusing mobile operators for unfair competitive practices. The unfair competition is causing pressure on tariff and service offers and on profit and loss (P/L) accounts, increase costs and affecting EBITDA, forcing the organisation to continually review its prices in order to remain competitive. The organisation responds by lobbying the government to remove the taxes which are specific to the mobile phone services, and other unfair practices that favour the wireless LLOs and TKL as elaborated in 4.4.1 and 4.4.2 below. This can be interpreted as both strategic and a tactical responses to the government policy changes.

#### **4.2.2 Rivalry in the industry and high market share**

Some respondents identified increasing rivalry in the industry and high market share as key challenges. The company has a high market share of 60-75% which the respondents consider both an opportunity and a threat. It is an advantage to the organisation as the market leader and generating high profits, but a disadvantage because the main competitor aggressively fights back to increase 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.

Some respondents identified gaining and sustaining market leadership was a challenge at the start up of the business in the year 2000, because the main competitor, Celtel Kenya Ltd was ahead of competition, achieving 60% market share for a few months. In order to regain market leadership the organisation 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. The organisation continues to incur heavy advertising cost as the competitor is aggressively advertising, compelling the company to respond to resist potential loss of the market share, as part of its operational and tactical responses to the competitor moves.

### **4.2.3 Substitute Products and Services**

Some respondents identified the increasing substitute products and services in the market as a key challenge. TKL and other wireless LLOs are using CDMA technology to offer substitute products and services at lower prices and superior voice quality. The TKL wireless service offer is having national mobility, bundling both voice and data services, and gaining competitive advantage by introducing multi-user handsets that can support both CDMA and GSM wireless services.

In response to substitute products and services, the respondents stated that it is important for the organisation to first recognise that TKL and other wireless operators deploying wireless technologies are competitors and accept the fact that it is not possible to fight technology. The respondents further stated that the organisation responds by service differentiation, providing superior coverage and moving to rural areas with no services, to increase the customer base to achieve economies of scale, a move interpreted as a strategic response to the competition changes in the industry.

### **4.2.4 Threat of New Entrants in the Industry**

Some respondents identified threat of entry into the market of third mobile operator and second national operator as a key challenge. The SNO is to be awarded technology neutral license to provide both fixed and mobile phone services, which will likely give it competitive advantage over the mobile operators, as no clear guidelines have been issued by the regulator how the licenses of the incumbent mobile operators which restrict them to mobile services only, will be transformed to create level playing field.

The respondents indicated that the organisation responds to unified licence challenge by continuous monitoring the potential entrants and analysing their competencies, compelling the organisation to strategically increase the level of investment to diversify and differentiate its products, preparing to introduce HSPA data services using 3G technology which is much more expensive than the 2G technology currently being used to provide the basic voice and low speed data services. The organisation is preparing to be a major provider of services to small and medium scale enterprises-SMEs and corporate enterprises, distinct from consumer markets of the moment, but requires

carrying out detailed consumer research and market segmentation, as a strategic response.

Some respondents identified the intended sale of 51% of the government shares in TKL to strategic investors as a key challenge. The sale is attracting international investors, creating opportunity for entry to competitors with more capital resources which require the organisation to provide additional resources in order to compete effectively. The respondents indicated that the Vodafone Group Plc UK is fighting to increase shares from current 40% to 51% but the government declined, and is preparing to sell 25% through IPO at the Nairobi Stock Exchange and retain 35%. The organisation is therefore facing a challenge in its strategic responses to sustain competitive advantage.

#### **4.2.5 New Products and Services/ Changing Customer Needs**

Some respondents identified the introduction of new products and services by the competitors, and the changing customer needs as key challenges. The revitalised Celtel Kenya Ltd has changed its marketing strategy by introducing new products that are becoming more appealing to the consumer as Celtel International is becoming more focused to Kenyan market than before, therefore encroaching into what was dominantly for Safaricom Ltd. The organisation responds by introducing new products and services, such as mobile Internet using GPRS/EDGE technology, and is now testing 3G/HSPA technology for high speed data and multimedia services, interpreted as strategic response.

Some respondents identified understanding and meeting the changing customer needs as key challenges, as the consumer becomes more aware of data services. The corporate customer needs are rapidly changing from basic voice service to data, value added and premium rate service, requiring change in technology to deploy new equipment, and competition is becoming more intensive as TKL, Popote Ltd, Access Wireless Ltd, and Kenya Data Network Ltd offer data services at lower prices whereas the products are not well differentiated. Safaricom Ltd is only starting to establish itself to offer data, email and Internet browsing services, despite having a network extensively established countrywide and being perceived as technology leader.

The respondents stated that organization responds to changing customer needs by

keeping the customer unaware of the technology but enlightened of the use and the value of the services supported by the technology. The organisation is investing in the state of the art technology from Ericsson to support largely data services, and is extensively extending services to rural areas. But regular market surveys, to determine and anticipate customer needs have not been effectively carried out, and the results of the few studies have not been impressive. The investment decision to diversify in the premium service is can be interpreted as a strategic response for customer retention.

The organisation introduces similar or better products and services to match the competitor offers, launching new value added products considered more beneficial and rewarding to customer; developing unique and differentiated product and service offerings such as MPesa- mobile phone banking service for money transfer service, bundled tariff plans, loyalty management services (LMS) as “BONGA” for winning free airtime and mobile phone handsets, and providing free SIM card swaps-replacements- to curb churn; mobile office” using the GPRS/EDGE technology and virtual private networks connectivity for Internet and email services, and recently Blackberry to improve on corporate offerings. These can be interpreted as both strategic and tactical responses.

The respondents further identified product and service innovation ahead of the competitor as a challenge, because the competitor frequently imitates the products, for example, the “per-second billing”, Safaricom’s ‘Simu ya Jamii-community phone service” with Celtel’s “Simu Yetu-our phone”, M-Pesa, with - “Sokotele”, and Blackberry, thus posing a challenge to use new product innovation and differentiation as competitive strategy.

Some respondent identified the need for fast tracking of new products development whilst ensuring that functionality and risks are well managed as an effective strategic response. The respondents further stated that implementation of cross functional teams is a critical key success factor but the cross-divisional cooperation is lacking in the organisation. The organisation has formed strategic business alliances, partnering with premium service providers such as “Wananchi Online” and to a lesser extent is diversifying to provide wholesale interconnection services to other licensed operators.

#### **4.2.6 International Products and Services**

Some respondent identified competition on international products and services as a key challenge. The organisation commissioned own international gateway system on 10<sup>th</sup> November 2006, to provide international voice and data services, but faced with implementation problem due of lack of technical skills. The organisation has entered in business alliance with Jamii Telecom Ltd and Popote wireless for VoIP traffic to be more competitive on prices. This can be viewed as strategic response, by vertical integration strategy, diversifying in related business, supplemented with business alliances.

The respondents stated that the traditional international roaming service, characterised with high prices, had not attracted intensive competition in the past and not drawing a lot of attention, but the situation has drastically changed with licensing of the mobile operators to install own international gateways, making possible the setting up of cross-border direct interconnection links in the region to provide roaming services at low prices, with Celtel International introducing “one network” product in East Africa.

The respondents further stated that Celtel International has repositioned itself in East Africa by extremely reducing charges on roaming services, and has extended “one network” product to Gabon, Democratic Republic of Congo and Congo Brazzaville, thus extending the competition footprint past Kenyan borders, and intends to extend the same in all the 15 countries in Africa where it is operating, posing a bigger challenge in the continent. By launching new products that are appealing to the customers the competitor is being perceived as more innovative provider compelling Safaricom to respond.

The respondents indicated that organisation has formed business alliances with Vodacom Tanzania and MTN Uganda to offer home tariff to customers roaming in the region – sub branded “Kama Kawaida - remains the same”- in response to “one network” product of Celtel International. This has realized excellent results, and negotiations are ongoing with MTN Rwanda and Vodacom South Africa. However topping up of the accounts for prepaid roaming service remains a challenge as the customers are unable to use the foreign networks’ scratch cards while roaming, forcing operators to distribute the partner networks’ cards in their respective countries- viewed as a tactical response - whereas

Celtel International has achieved this through IN platforms from one equipment supplier across its networks - which can be viewed as a strategic competitive advantage.

The respondents further stated that the organisation is negotiating with Vodafone Group of companies to have special arrangements in the countries where they operate to respond to increasing competition in international roaming service on a global basis. The organisation is exploring the possibility of using of the planned East Africa Submarine cable System (EASSy) and The East African Marine cable system (TEAMS) to provide international services at a lower cost compared to using the expensive satellite communications links via Intelsat satellite network. These are considered strategic responses for future repositioning in the delivery of international services.

#### **4.2.7 Price Wars and Promotional Challenges**

Some respondents identified price competition as intensifying with Celtel International introducing one tariff across networks at extremely low prices, by removing charges for receiving calls applied in the traditional roaming service, and Celtel Kenya Ltd reducing off-net calls below the interconnection cost, compelling the organisation to react. The price cuts and price have been persistence, and causing a challenge in maintaining profit margins. The change in shareholding ownership of the competitor is a challenge as the revitalised Celtel International introduces products and services which are more appealing to the customers, re-branding and repositioning in the region therefore creating churn opportunities for Safaricom's customers.

The respondents indicated that the organisation responds to price wars by providing attractive offers to customers on on-net calls, and introduction of long off-peak periods. In the process of introduction of new tariff offers, the organisation carries out reviews to make sure that the objectives of the tariffs are met, and that the offers make financial sense to customers and the firm. The tariff reviews are regularly carried out and services are improved to react to the competitor moves. These moves can be considered as tactical responses that may not lead to long-term competitive advantage.

Some respondents identified unethical promotional attacks from the competitor as a

challenge. The competitor frequently releases bad publicity messages, attacking Safaricom Ltd, for instance media messages implying that Safaricom's network is congested whereas Celtel's network is connected. The respondents indicated that the organization responds by promoting own products and services, without necessarily attacking the competitor in retaliation, avoiding bad advertising practices. The organisation fosters good relationship with advertising agency, to ensure clear understanding of the organisation's requirements. The organisation is in control of own adverts and the language of communication, using a mix of local languages and English, for example BAMBA 50 and 100 for low denomination top ups card for Shs 50 and Shs 100 respectively, SAMBASA-for transferring of credit, *et cetera*.

Some respondents indicated that the offers are made in the form of unique products and services, and the organisation has maintained a strong brand which is identified with the local market. As a start up, the firm used TKL partnership brand as a competitive and entry strategy, to gain goodwill and customer loyalty, but later changed to give prominence to Vodafone brand particularly in roaming services. The organisation is avoiding using purely foreign brand to make the company more acceptable to Kenyans, which can be interpreted as a brand strategy to sustain competitive advantage. The JV Company improved service delivery and customer services, resulting in rapid growth, and is rolling out services to rural areas. The JV was therefore an effective entry strategy.

#### **4.2.8 Rapid Growth and Capacity Expansion Requirements**

Some respondents identified resources for capacity expansion as a key challenge to match the rapid growth. The organisation has experienced exponential growth from 20,000 subscribers in the year 2000, to over 6.8 million, which requires continuous expansion of network capacity, upgrade of internal IT business support systems including database storage capacity, and use of state of the art quality control processes. The growth frequently surpasses the projected expansion requirement, resulting in network congestion, which inhibits growth and compromises the quality of the services. The organisation responds by continuously allocating more resources to expand the facilities and recruit personnel to meet the demand. The organisation has raised funds from the local market through commercial papers in order to meet the capacity expansion rollout

targets. The organisation cannot sit back and watch as this is dangerous for its survival, therefore pre-empting changes in the market by incorporating in its strategic planning process, short-term 12 to 15 months' financial plans.

The organisation responds by high budget allocation for capital expenditure (CAPEX) for capacity expansion and extension of coverage to meet the demand in both urban and rural areas, and for the day-to-day operational expenditure (OPEX) for network maintenance, in terms of additional equipment and human resources, to deliver quality products and services, and practices elaborate cost control measures to maintain high profit margins. The organisation therefore has in place effective strategic and operational responses, but requires improving its short-term tactical responses to cope with the unexpected growth.

#### **4.2.9 Human Resource and Organisational Structure**

Some respondents identified shortage and retention of skilled personnel as a key challenge, particularly university graduates in telecommunications and electronics engineering field, as competitors tend to provide better offers. The respondents indicated that the organisation endeavours to apply best practices in reward and motivation of staff to control turnover, which is currently about 5%, but at one stage reached 25% in 2003. The organisation regularly reviews employee incentives and rewards to maintain competitive compensation packages. The basic salaries and allowances, and the medical cover, are benchmarked with offers provided by leading and best paying organisations in the country and in the region, and economic factors such as inflation rate are considered.

The organisation provides insurance health cover to all employees using Apollo Insurance Company Ltd, staff group life insurance by UAP Provincial Insurance Company Ltd and retirement benefit managed by Alexander Forbes Financial Services. The organisation practices performance based reward system and has policies for: staff recruitment, job placement, and employee motivation; training and development, and career progression; performance reviews are carried out annually, and is implementing quarterly reviews and Balanced Scorecard (Norton and Kaplan, 2000). The organisation can therefore be viewed as have incorporated effective human resource management practices in its strategic and operational responses to meet the individual and organisation needs.

Some respondents identified the rapid organisational structure changes to match the growth, and the implementation of succession plan as key challenges, because growth often surpasses the projected plans. There exists a policy to train and develop talented personnel with potential competencies for succession at various management levels, but number of talented personnel is inadequate. The firm adopted traditional hierarchical organization structure with a wide span of control at the top, and limited matrix structure with reporting relationships to Vodafone Group UK. The structure has rapidly changed by expanding the middle management and supervisory levels as the number of personnel increases from 100 in the year 2000 at the headquarters in Nairobi with one branch in Mombasa to current 1,400 of which 5% are foreigners. Other branches have been opened in Nakuru, Kisumu and Eldoret as distribution channels and for customer care management. A new headquarters building was put up in 2006 earlier than planned. The organisational structure is not strictly following its strategy due to rapid growth.

The respondents identified the need for cooperation and coordination of the activities as fundamental to strategy implementation in the organisation 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.

The respondents further indicated the organisation uses task forces and cross-functional teams for implementation of projects, and operational activities which require different talents and skills, and has established office of strategy management for strategy formulation. The firm has extensive IT network to manage its value chain, and employees are provided with computers for Internet, email access and management information systems (MIS) and Oracle software is used for financial and human resources management. Work is in progress to improve documentation and implementation of ISO 9000 specification and standardization of the processes organisation wide.

#### **4.2.10 Corporate Social Responsibility**

Some respondents identified corporate social responsibility (CSR) as a key challenge as the demands from government and the community increases, therefore the expenses on CSR increases tremendously every year. The organisation includes CSR activities in its corporate strategic and operational plans, and works closely with the local authorities, city and town councils administrations countrywide, extensively contributing to community development projects, sponsoring: water supply facilities, sanitary facilities in markets and urban centres, construction of schools, sponsoring sports, health care facilities, education for needy students, and environmental conservation activities, through Safaricom Foundation supported by Vodafone Plc of UK.

To extend services in rural areas with low economic returns the organisation improves access roads and builds runways for access to most of the sites and provides electricity under the capital contribution scheme of KPLC, which become available for use by rural communities as well. The CSR is therefore part of the strategic and operational responses of the organisation, to achieve and sustain competitive advantage.

### **4.3 The Technological Challenges:**

The key technological challenges identified by some respondents are the speed and the complexity of global mobile communications technology evolution; the technology innovation in the organisation; the rapid capacity expansion that requires costly technology solutions; and training to acquire the necessary skills; and lack of supporting infrastructures as national transmission backbone, roads and electricity in the rural areas.

#### **4.3.1 Global Technological Evolution**

Some respondents identified the rapid global technological evolution is a key challenge as new technologies are rapidly being introduced in the market on global basis. The first generation cellular mobile systems in early 1980s were the analogue systems, evolving to more complex 2G digital systems from 1987, to the 2.5G, 2.75G, the so called GPRS and EDGE systems, to 3G to support high speed data and multimedia services and now to the next generation mobile networks or 4G technology, to support wireless broadband access.

The respondents indicated that evolution of other wireless technologies, which are not in the evolution path of GSM systems, such as Wi-MAX for broadband access, used by fixed line operators, are much faster whereas the technology evolution is much slower in mobile Next Generation Mobile Networks (NGMN). The use of optical fibre technology to meet the capacity growth requires more investment in infrastructures and development of skills by specialised training or acquisition of new skilled personnel. The technology evolution from the first generation analogue mobile systems to 2G was fairly steady and smooth transition. Similarly the evolution from 2G to 2.5G and 2.75G for low speed data has been fairly smooth, but the evolution to 3G is disruptive, and complex. The rapid technology evolution often results in technology obsolescence, rendering some of the equipment unusable before full lifespan - before returns on investments are achieved.

The respondents indicated that the low cost handset project initiated by GSM Association for emerging markets which made handsets available at US \$ 40 to US \$ 30 ex-factory prices, has a great contribution to growth especially for voice and SMS in the low-end user market segment, stimulating rapid subscriber acquisition. Some operators including Vodafone UK are now working on US \$20 handsets for the emerging markets where they have presence. The operators from emerging markets are engaging GSM Association to work on similar low cost handset initiative for 3G data services. The low cost handsets initiative has reduced the grey market and theft of mobile handsets though still a key challenge. The operators in East Africa were forced by the regulators to install EIR in efforts to curb the theft of mobile handsets but the offenders are reprogramming and tampering with international mobile equipment identity (IMEI) number of mobile handsets, rendering EIR ineffective. Every mobile handset has a unique identity number-IMEI- which can be viewed on the handset by pressing keys-`*#06#`-, that can be used for blocking stolen handset, if EIR is effectively put in use.

#### **4.3.2 Technology Innovation in the Organisation**

Some respondents identified technology innovation as a key challenge. Limitations are experienced in innovations to support the launch of new services and to provide quality services. The upgrades often results into launch failures of some products, for example telescopic charging billing system designed to give free minutes could not provide

information in monetary units to the customers. The organisation responds to technology complexity and speed of change by adapting new technologies through trials to develop business cases before investing in equipment, and has extensively used the low-cost handsets to boost its customer growth. The trials on 3G are ongoing in Nairobi and Mombasa, using few friendly corporate customers and individuals. Although the equipment supplier is Siemens, consultants from Ericsson are used, to help in training technical staff as short-term solutions, and for developing long term strategy as Ericsson is considered the global leaders in the GSM technology.

The respondents indicated that the technology evolution to 3G requires costly investment in a separate network infrastructure, whereas the number of users for data services is still very small, and the handsets are too expensive hindering the uptake of the service, and return on investment will be slower than in voice services. The organisation responds by recognising technology evolution, and sticking to the GSM technology evolution path that responds to price and functionality, and considered more cost effective than embracing multiple technologies. The organisation responds to technology obsolescence by gradually phasing out the obsolete equipment, replacing it with the new equipment to reduce the risk of financial losses. The recognition of and embracing new technology, and replacing obsolete equipment are strategic responses for positioning in the market.

Some respondents identified IP based services and evolution to Next Generation Networks (NGN) for the fixed line broadband services, using ADSL, Wi-Fi and WiMAX technologies, and the CDMA technology being rolled out by TKL as key challenges. The new technologies are creating opportunities for entry and introduction of new products by existing competitors, and the VoIP technology has cannibalised circuit switched traffic. The organisation responds to new technologies by being innovative, by launching new products and services, and has identified the need for establishing R&D unit as critical to enhance innovation and to focus on the applications of new technologies, but the required resources are highly prohibitive in terms of initial capital investment and human resource.

The respondent further identified the lack of electricity in rural areas and the unstable power supply from KPLC Limited as a key challenge. The organisation is being

innovative by installing diesel engine generator sets in all sites, dual sets in sites where there is no power supply and single sets as standby power supply in sites where there is power, to provide uninterruptible power supply. The Company deploys automatic power distribution line phase selector systems, to select the power line phase with the best quality supply where three phase power supply is used, to minimise the power interruptions where commercial power supply is unstable. This is a technology innovation developed together with by a local power company, as a strategic solution.

The company is researching on deployment of alternative technologies, such as renewable energy sources as wind and solar, with wind turbines in one site and solar energy in two sites as pilot projects, which are considered a more cost-effective compared to engine generator sets. Solar works well in areas as North Eastern Province but the security poses a major challenge as extra cost is incurred to install security systems to remotely monitor the sites electronically, to reduce the theft of solar panels. Power storage battery banks are used, some buried underground for safety, to minimise the cost of running the generators sets for 24 hours. The generator sets are run for 10 hours and the battery banks run for the remaining 14 hours daily, to minimise the fuel consumption.

#### **4.3.3 Network Performance for Quality of Service**

Some respondents stated that to ensure good network performance for high quality service requires continuous technology innovation for capacity expansion and extending coverage in remote areas. The key challenge to provide adequate capacity is due to the inability of internal users to comprehensively specify the types and capacity dimensions of the business support systems required because of lack of knowledge. This often results in under-provision of capacity, for instance in the billing and customer support systems, the Oracle system for accounting and human resource management, thus adversely lowering the quality of the services, particularly in customer management.

The respondents stated that the organisation continuously expand the capacity and has extended network coverage in all major urban centres and major roads (highways) countrywide, and now extensively rolling out in rural areas. The indoor coverage solution is used in buildings to improve coverage, and use is made of satellite technology, VSAT,

for backhauling to the base stations in remote areas where the national transmission backbone links are inadequate or not available. Technical consultancy firms, Cell-plan and Siemens, are hired to improve on network design for better call quality.

#### **4.3.4 Cost of Technology Solutions**

Some respondents identified cost of technology solutions as a key challenge, because GSM technology is generally expensive, resulting in high cost of business. The 3G technology trials have not gone so well, and it is uncertain whether the services will attract potential customers, thus requires robust business case before implementation. The technology solutions provided by the vendors are too expensive to emerging markets, since they are tailored to the developed markets. The extension of coverage in rural and remote areas, with no terrestrial backbone transmission infrastructure, requires application of costly satellite technology for backhaul links to the mobile radio base stations. The organisation invests heavily on equipment for internal IT business systems for financial and human resource management and technical training for the employees.

The lack of electricity supply and access roads is a very costly in extending of services to rural areas and in operations and maintenance activities. There are 20% of the sites in places with no power at all out of the total sites countrywide, and the frequent power failures accounts for 75% of the overall system failures in the network, resulting in long time outages, that increases the fuel consumptions by diesel engine generator sets for running the stations. The organisation is quite innovative as elaborated in 4.3.2 above.

The respondents identified that minimizing the costs as challenge requiring outsourcing of certain services as distribution, and cutting cost by technology innovation. The organisation responds by reducing leakages in its value chain, to ensure that all revenues due, are received through improved credit management and auditing of internal processes. Some respondents identified the need to adapt to technology that is not sophisticated, more relevant to the local market and cheaper to deploy, and the need of developing local technology solution options instead of relying on global vendors; by adapting the technology solutions to the local environment using the local resources.

### **4.3.5 Technical Training and Development**

Some respondents identified training and development to acquire knowledge and specialized technical skills as key challenges. Technology evolution from 2G to 3G is posing a challenge in development of the specialised high level technical skills as this is extremely costly as the training opportunities are limited. There is shortage of skilled personnel who can be directly recruited from the local labour market and deployed in technical areas without first being trained to learn new technologies. The lack of equipment and programmes for training in modern technology in local universities and technical institutions adds to the challenge. There is need to update training programmes, upgrade training facilities in mobile communications, and development of lecturers to keep a breast with the state-of-the-art technology.

The organisation responds by partnering with local universities to develop programmes tailored to the industry needs, sponsors students for undergraduate courses in telecommunications and electronics engineering and provides laboratory equipment such as computers. A pilot programme has been started by sponsoring 20 students at Moi University, who are to be employed in the organisation on successful completion of their studies. Similar programmes are to be extended to the University of Nairobi and Jomo Kenyatta University of Agriculture and Technology. The organisation provides internship to students and working opportunities for the university lecturers during vocation, and hires highly qualified university graduates for management trainee programmes.

The organisation employs consultancy services as short-term solution and develops own personnel as a long-term solution, though the cost of hiring consultants is very high as compared to sourcing from the local market, generally at a ratio of 1:10. The cost of training and development is reduced by including training service in equipment supply contracts and use of workshops and internal training by vendors to provide technology focussed training, to fully exploit the existing resources. The organisation provides to employees on the job training, by using the equipment vendors and attachment to other partner organisations which have developed in the new technology, sponsorships to training institutions outside the country, and support to attend global and regional GSM Association forums. The organisation offers training opportunities to the management

team in technology and innovations to close the technology myopia gap, and training the customer care personnel to improve on education of customers on the applications of new product innovations. The respondents stated that the rapid upgrading of the IT business systems requires continuous training of the staff and hiring new employees as well.

#### **4.4 The Government Policy Challenges**

The key government policy challenges identified by some of the respondents are: impartial and uncertain policy changes; taxation on mobile phone services and universal service obligations; further liberalisation and privatization in the industry, the changing investment policies and the highly speculated IPO listing of the company shares; price and quality regulations; lack of radio spectrum for expansion and technology innovation. The changing environment management policy, the outdated labour laws, the government policy on health services, and worsening insecurity in the country, were identified as key challenges as well. The relationship with the telecommunication industry regulatory and other government ministries identified as having significant impact on the business.

##### **4.4.1 Impartial and Uncertain Policy Changes**

Some respondents identified impartiality on the part on the regulator to manage fair play in the industry as a key challenge. The regulatory authority has favoured the fixed line operator, TKL and other LLOs by allowing entry into the wireless market without charging license fee, whereas the incumbent mobile operators each had to pay a license fee of US \$ 55 million for their licenses. The government charges excise duty on mobile services but not on wireless services provided by TKL as elaborated in 4.4.2 below. The long delays and slow policy and regulatory framework changes are key challenges as policy changes have lagged technological and competition changes, causing uncertainty.

The failed attempts by the regulator to license third mobile operator and second national operator are causing uncertainty, making it difficult to develop long-term plans with reasonable accuracy. Liberalisation of international gateway took two years after the end of monopoly period, and the process to develop ICT sector bill and legislation started in 2001 is not yet concluded, to introduce universal service fund contribution, national roaming and mobile number portability, causing uncertainty. There is lack of policy

guidelines for unbundling and sharing of telecommunication infrastructures.

The respondents identified the appointment and composition of the board of the regulatory authority as a key challenge as the process is fully government controlled; therefore the decisions by the regulator are significantly influenced by the political arm of the government and lacks independence. The respondents identified the need for independent regulatory authority, for fair competition to prevail; and the difficulty in sourcing of capital for investment from the financial institutions and investors because the political influence is causing uncertainty. There is need to manage the relationships with the government and the regulator, requiring the organisation to be part of the change processes, by taking a more proactive approach than it does today. The investment policy in telecommunication industry is less favourable compared to manufacturing industry where 10% writing down of equipment investment cost and 15% rebate on the taxation is applied as industrial development allowance.

The respondents identified need to work close with the governments to keep up with the changing political environment in the country, and good relationships with the regulator and the competitors is required to curb the development of adverse anticompetitive regulations. The organisation engages the government to make the appropriate policy changes, promotes good working relationship for fast and fair decisions, as a strategic response. The organization sponsors government and CCK projects and functions to be supportive of national activities, as tactical response, but more is required to be done. The organisation responds by lobbying the government to remove the taxes which are specific to the mobile phone services, and other unfair practices that favour the wireless LLOs and TKL. This can be viewed as a tactical response to the policy changes.

#### **4.4.2 Policy on Taxation and Universal Service Obligations**

Some respondents identified high level taxation and universal services obligations imposed by the government as unfavourable and key challenges to mobile operators. The government charges 10% exercise duty levy on usage of mobile phone in addition to 16% VAT, and 30% corporate tax, whereas the fixed line operator, TKL and other licensed fixed wireless operators in the industry are not subjected to the exercise duty tax burden,

giving them a competitive advantage to offer lower prices than the organisation can offer. The excise duty is considered as a regressive tax policy as it adds to subscription fee, hitting the poor most, and detrimental to growth. In addition, the tax legislation does not consider licence fee as a tax deductible expense and TKL as incumbent did not pay a license fee therefore has an advantage to charge lower prices.

The organisation responds by lobbying the Ministry of Finance through Ministry of Information and Communications to reduce the tax burden. The mobile operators in Kenya are to form a lobby group association to build synergies to lobby the government, and possibly to extend its membership to cover the East Africa Community, since the tax policy airtime usage has been harmonised in the region. The mobile operators in Africa are working with GSM Association in engaging international tax consultants to conduct studies on the impact of taxation and other regulatory fees on growth of mobile services, and using reports of empirical studies to lobby the governments through international forums. For instance, the recently concluded case study by Deloitte & Touché on behalf of the operators in East Africa region including Rwanda revealed negative impact of taxation on growth of mobile subscriptions (<http://www.gsmworld.com/>).

Some respondents indicated that taking legal actions as alternative choice for instance, a case on taxation on licence fee is awaiting ruling at High Court in Kenya, after an appeal by Kenya Revenue Authority (KRA). The universal service obligation is to increase with universal service fund in the new legislation, in addition to the current 0.5% of the annual gross turnover, annual operating fee and high spectrum charges levied by the regulator. The government demands for extension of services in rural areas with low rates of returns, and relatively low average revenue per user (ARPU) compared to urban centres.

The respondents further indicated that the organisation together with the competitors and other players in the industry will continue to lobby the government to minimize the level of contribution toward the universal service fund. In addition, the organisation uses low cost radio equipment and low cost towers to compensate for low ARPU in the rural areas, and rolls out community phone service (Simu Ya Jamii), as economical approach to serve the low end users in the market, which can be viewed as strategic responses.

#### **4.4.3 Liberalization and Privatization in the Industry**

Some respondents identified further liberalization and privatization in the Telecommunication industry, being carried out by the government, as key challenges. In order to attract investors, the government is to reduce the mandatory 30% local shareholding requirement in the industry to 20%, opening up opportunity window for more financially able competitors to enter the market. The government is preparing to sell 25% of its shares in Safaricom Ltd through IPO, and 51% of TKL shares to a strategic partner, and TKL is currently undergoing extensive restructuring process to make it more viable and attractive to foreign investors.

The hyper speculative IPO of the shares is a challenge to the organisation, because the preparation will take management time for its routine operational activities. Some respondents indicated that the IPO may not make a big difference to the organisation as the government will still retain 35% shares. In response, Vodafone Group of UK is lobbying Ministry of Finance for more shares and to keep the government shareholding to a non-controlling share level, and the organisation is factoring the restructuring of TKL and the potential new entrants in its strategic in plans.

#### **4.4.4 Price Regulation and Service Quality Control**

Some respondents identified price regulation and service quality control as challenges. The regulator controls the quality through equipment standardization and type approval processes which causes delays in the importation of the equipment, and the recent intervention by the regulator to control quality of service, by launching quality measurement equipment on 15<sup>th</sup> May 2007 to monitor the quality of the services provided by mobile phone operators. The service quality control calls for additional investments to expand capacity to improve on quality, and compelling the organisation to increase its budget allocation of resources for day-to-day operational expenses for maintenance of the network to deliver quality services to avoid regulatory intervention.

The respondents identified price control implemented by the regulator on 31<sup>st</sup> March 2007 as posing a challenge. The regulator commissioned a consult - Analysys of UK - to conduct industry cost study of the market and consequently imposed price regulation on

wholesale voice interconnection service on a sliding scale for three years and a price cap of Ksh 30 on retail prices for off-net calls (calls from one network to the other). The second phase is to control voice service prices offered by the operator with significant market power (SMP) once determined, which will likely stifle and distort competition. However some respondents stated that although the price regulation is a challenge, it acts as a catalyst for the company to reduce prices to benefit the consumer.

The respondents indicated the organisation is to accept the first year reduction of interconnection wholesale rate but will continue to engage the regulator in future to remove the price control, and industry operators will continue lobbying the government to leave the market competition forces to drive the prices. There is need for the industry players to pre-empt the controls on the operator with significant market power by progressively reducing prices to avoid the regulatory intervention. The organisation is changing its strategy to increase data traffic which is not regulated by rolling out a 3G network, and is adopting total pricing strategy, and implementing new innovative pricing models. These are viewed as both strategic and tactical responses to the changes.

#### **4.4.5 Policy on Radio Spectrum Resource**

Some respondents identified scarcity of radio spectrum resource as increasingly key challenge with further liberalization as more players enter the market. The scarcity of spectrum and spectrum management problems often results in radio frequency interferences which affects the quality and availability of services, although the regulator has installed spectrum monitoring and management system. Part of the spectrum for mobile services is used by fix networks, posing a challenge in expanding mobile networks. The repossession of part of the GSM 900 MHz spectrum by the regulator to create room for third mobile operator is posing a challenge. The regulator is to repossess 2.5 MHz, part of the 12.5MHz bandwidth allocated to each of the two mobile operators, of which Celtel Kenya Ltd has already surrendered but Safaricom Ltd has not. There is high demand for spectrum of 3G technology as well as WiMAX technology, and the organisation has failed to secure frequency allocation for WiMAX.

The organisation has responded to spectrum scarcity in the GSM 900 MHz band by

successfully lobbying for allocation of 10 MHz bandwidth of spectrum in the GSM 1800 MHz band and carried out network re-design using new equipment to expand capacity in urban centres. The network re-design strategy has been used in terrestrial microwave bands as well to create extra transmission links capacity; and in response to spectrum scarcity for WiMAX technology the organisation considers sticking to the established evolution roadmap of GSM technology and partnerships with other operators that are implementing WiMAX technology and consider acquisitions and joint ventures options.

#### **4.4.6 Policy on Conservation of the Physical Environment**

Some respondents identified the undue long delays in site access approvals processes by the government that slow down the network rollout as a key challenge. The Ministry of Lands approval processes for mobile radio base station site buildings take too long and delays the network rollout especially in the urban centres. Initially there was no requirement to obtain approvals from the NEMA to build radio towers and mobile base station sites but this is now mandatory in addition to approvals from the Kenya Civil Aviation Authority and the Local Government - city, town and municipal councils. The situation is worsening by the growing concerns from the communities about EMF radio radiations effects from mobile phone equipment which frequently results in protracted negotiations for site access. This results in high cost of equipment inventory storage before the equipment is installed and put into service. In response, the organisation employs agents for site acquisition, and do outsource the civil works constructions to local contractors, creating job opportunities, but at additional cost.

There are new environmental laws and policies that have detrimental effects to the provision of mobile services are being developed whereas supporting guidelines are lacking. The EMF radio radiation awareness and concerns are increasing but no governing legislations, policy guidelines or regulations are in place. The organisation responds by continuously lobbying the government to provide the guidelines and appropriate policies; and uses own resources to create public confidence to convince communities that there are no health hazards related to installations in residential areas, near schools and hospital and, in the use of mobile handsets. The arguments are based on World Health Organisation reports and other international standardization.

#### **4.4.7 Policy on Development of Supporting Infrastructures**

Some respondents identified as a key challenge the lack of supporting infrastructure such as electric power supply and access roads, due to inadequate government policy for rural development, making investment in rural areas costly and unattractive. The organisation undertakes elaborate and costly technology innovation measures by constructing own power generators and rural electricity distribution systems in 4.3.2 above. The company builds power distribution infrastructures to extend the services to some of the sites, under the capital contribution scheme of the KPLC, creating a miscellaneous account to cater for these expenses, and KPLC compensates the company to some extent as the distribution lines are used to supply power to residents and commercial businesses in these areas as part of rural electrification programme.

#### **4.4.8 Labour Laws and Policy on Health Services**

Some respondent identified out-dated labour laws and health services policy as key challenges. Labour laws have not been reviewed; some since colonial era. New Bills have been prepared but not passed by parliament to enact new laws. Piece meal changes carried out by the Minister for Labour, including Immigration Laws affecting the vendor equipment vendors and other foreign experts hired by the organisation. There is a pending National Hospital Insurance Fund (NHIF) legislation where by the employer and employee is to pay 3% basic salary as contribution in addition to pension contribution.

The respondent further indicated that the organisation responds by lobbying the government through various lobby groups such as Federation of Kenya Employees (FKE), Kenya Institute of Management (KIM); and other organisations dealing with employment and labour matters in the country and in the region. The lobbying for review of Immigration Laws is ongoing to facilitate hiring of expatriates in the specialized areas. The organisation on its part has engaged health insurance firms to provide health covers to its staff, at an additional cost, since NHIF value is not attractive to the employees.

#### **4.4.9 Policy on Industrial Training**

Some respondent identified government policy on industrial training as an additional tax burden. The contribution toward the Directorate of Industrial Training is anticipated to be

increased from the current Ksh 250 per head count for every six months to 0.5 % of the gross payroll per month, for engineering firms, 0.25% for agricultural firms, etc. This is an additional levy; but the value of the training programmes provided does not meet the organisation needs. The vendor training is not recognised by the Directorate of Industrial Training, therefore does not meet individual needs. The organisation responds by lobbying the government both directly and through KFE to change the decision on training levy and has delivered formal submissions to the government to and awaiting response, and is urging the vendors to locally register their training programmes with the Directorate of Industrial Training to gain recognition and to make their training relevant.

#### **4.4.10 Insecurity and Crime in the Country**

Some respondents indicated that the insecurity and the rate of crime in the country are worrying and growing challenges. This has been the case in rural and remote areas for a long time but is now worsening in urban centres, and the organisation has to invest heavily in very expensive security fences. The respondents further indicated that theft of mobile handsets is a criminal activity that is worsening due to lack of adequate legislations to curb theft of the mobile handsets. The respondents stated that though the organisation and other operators in East Africa are compelled by the regulators to install EIR in the effort to curb the theft of mobile handsets, legislations are lacking thus making the EIR irrelevant. Even if the stolen mobile handsets are blacklisted, the operators are not able to utilise the exchange of the information process effectively, because there are no laws to charge the offenders for reprogramming the international mobile equipment identity number of mobile handsets.

The organization and other players in the industry are lobbying government to institute appropriate legislation to illegalise reprogramming of and tampering with IMEI number of mobile handsets, and enforce installation the EIR by other operators for blacklisting of stolen mobile handsets for EIR to effectively work in the region. The organisation has been cooperating with other operators in the East African region to install EIR and share the information on the stolen handsets, however not all operators have responded positively, therefore requires intervention by regulators and governments.

## CHAPTER FIVE

### CONCLUSION

#### 5.1 Summary, Discussions and Conclusions

##### 5.1.1 Introduction

This research study is to address two objectives: - to determine the challenges Safaricom Limited encounters from environmental changes in the Telecommunication industry in Kenya and; to establish how Safaricom Limited is responding to changes in the Telecommunication industry in Kenya. This chapter therefore covers the summary and discussions of the challenges the organisation encounters and the responses to the changes in relation to the literature review and the conclusions drawn from the analysis.

##### 5.1.2 The Challenges Encountered by Safaricom Limited

In addressing the first objective, the results show that the organisation increasingly encounters key challenges from intensive rivalry, rapid technological changes and government policy changes. The direct competition was initially from the mobile phone operator Celtel Kenya Limited, but TKL is now providing similar or substitute products that are cheaper and more appealing to the consumers, and to a lesser extent, competition is from wireless Local Loop Operators, and there is threat of new entrants. The competition has resulted in intensive price and promotional wars, and is in line with Porter (1980) concept of five forces in the industry that impact on competitive advantage.

The findings reveal that the competition has been accelerated by the GSM technology which is easy to deploy and difficult to match by the fixed line technology, but the industry situation has changed as fixed line operator introduces CDMA technology to provide substitute wireless services. This agrees with Porter (1985), Andrews (1987), Mintzberg *et al.* (2003), Antoniou and Ansoff (2004 and Thompson *et al.* (2006) arguments that technological change is a powerful determinant that alters rivalry among competitors. In conclusion, the technological change is creating opportunity for new products and services and posing a threat of new substitute products from competitors.

The findings reveal that mobile phone technology is easy to imitate by the competitor so is not necessarily a source of competitive advantage but its application is, as argued by Johnson and Scholes (2004), therefore achieving competitive advantage through product differentiation is a key challenge. The industry is changing towards high speed data services and to fixed-mobile convergence, driven by customer wants, as argued by Kaplan (2000) in copyright of Maslow concept of hierarchy of need. The organisation finds itself in situations of rapid technological changes, launches of new products and fast evolving customer needs, as argued by Thompson *et al.* (2006). In conclusion, the technology imitation and rapid technological changes make product differentiation not a unique competence to achieve long-term competitive advantage in the industry.

The findings reveal that the organisation is facing a challenge to match the regional roaming service initiative by the competitor, as argued by Drucker (2002), that every business must be globally competitive, and by Porter (1980; 1985) and Antoniou and Ansoff (2004) that technology innovation is a unique differentiation factor. The organisation is facing a challenge to compete in international services after liberalisation, according to Burns (2004) concept of global liberalization and privatisation of industries. It can be concluded that as competition extends beyond the national borders, requiring the organisation to be more innovative to match the competitor moves, and liberation of international services has created an opportunity to diversify in a related business.

The findings show that rapid growth and high market share increase investment in capacity expansion, as the growth often surpasses the projected capacity expansion, resulting in congestion in the network, and low quality of service, as argued by Andrews (1987) that strategic process requires resource allocation with awareness of strategic as well as operational consequences. It can be concluded that the organisation is facing a challenge of making reconciliation between short-term and long-term considerations.

The findings show that there is shortage of technical skills in the industry because the government training policy lags behind technological changes, as argued by Porter (1990) that government policy on training affects other determinants of competitive advantage,

and the high demand for skilled personnel, as argued by Drucker (1955) that technological changes will require highly number of skilled and trained employees, and the challenge will be the shortage, and by Bennis and O'Toole (2005) that the major challenge is to balance practice and theory. In conclusion, lack of required skills, and training and development of employees are key challenges for achieving capability for sustainable competitive advantage in the organisation.

The findings show that the rapid growth results in rapid organisational structure changes and does not necessarily follow the growth strategy because of the rapidly changing environment, as argued by Chandler (1962) and Mintzberg *et al.* (2003). The implementation of succession plan is lacking in the organisation posing a key challenge, as argued by Bennett and Miles (2006); the employee turnover, and training and performance appraisals are key challenges, as argued by Drucker (1955) and Luthans (2005). It can be concluded that that rapid growth is a key challenge due to heavy investment, employee acquisition, motivation and retention.

The findings further reveal that there exist divisional boundaries within the organisation that hinders development of new products and services which requires cross-divisional and functional teams or task forces, as argued by Andrews (1987), Senge (2006) and Robbins and Judge (2007). The workforce diversity in the organisation is a challenge, in line with Luthans (2005) concept of managing workforce diversity in organisation with diverse cultures. In conclusion, teamwork development is posing a key challenge.

The findings reveal that the government, activists, the media, and communities are increasingly demanding from the organisation to account for the social consequences of its activities as the community becomes increasingly sensitive about telecommunication infrastructure installations, as argued by Andrews (1987) and Porter and Kramer (2006). This delays implementation of network coverage and expansion strategy. In conclusion the organisation faces challenges to comply with the laws and behave responsibly.

The findings show that the government policy changes on regulations, taxation, privatisation and investment create unlevelled playing field requiring intensive lobbying.

The findings show that slow changing regulations on the laws for labour and health services, poor insecurity situation, and further liberalisation are causing uncertainty in setting of long-term objectives, thus has significant influence as argued by Porter (1980; 1985), and price and quality controls are reducing profit margins as argued by Drucker (1980). The findings further reveal that relationship with the industry regulator and other government ministries is important in gaining competitive advantage, as argued by Porter (1985). In conclusion, the organisation is facing a challenge in managing relationships with the government and other stakeholders.

The findings reveal that the further government liberalization and privatisation policy is changing the industry structural conditions, to open up entry to new competitors and investors with more resources, as argued by Porter (1980; 1985; 1990) and Burns (2004) concept of global liberalisation and privatisation trend. The highly speculated IPO of the Safaricom shares is a challenge in developing its strategic objectives. In conclusion, the changing industry conditions will increase the rivalry and key challenge that requires the organisation to review its position.

### **5.1.3 The Responses of Safaricom Limited to the Changes**

In addressing the second objective, the results show that Safaricom Limited responds to competition by embracing technological changes, entering into business alliances, and lobbying the government for level playing field. The organisation introduces new products and services to achieve a superior competitive advantage over competitors as argued by Porter (1980; 1985). The organisations continuously review its position in order to compete effectively, as argued by Andrews (1987). Conclusions can be drawn from the analysis that the organisation is continuously innovative in new technologies to provide new products and services to respond to the increasing rivalry in the industry.

The findings reveal that the organisation has not effectively performed market segmentation, but Porter (1985) and Schiffman and Kanuk (2004) argue that focus marketing is important for strategic targeting, and positioning. The organisation responds to price wars and price regulations by launching new tariffs, and has used vertical integration to provide international voice services, in line with Porter (1980) and

Harrigan (1984) concepts of vertical integration as a major strategic decision tool; and is using strategic business alliances to provide regional and international roaming services, in line with Johnson *et al.* (2006) and Whittington (2001), but lags in technology innovation in regional roaming. In conclusion, the organisation requires conducting marketing research to focus on profitable market segments, and to be more innovative.

The findings show that the organisation has made a strategic choice to gradually implement 3G services by trials to manage technological complexity and to develop a business case. This can be viewed as strategy developed from deliberate formulation and systematic analysis as argued by Mintzberg *et al.* (2003). The 3G technological adaptation will result in new products, and forecast the path of technological evolution to improve the firm's position, as argued by Pearce and Robinson (2004), but the firm lacks R&D unit. The organisation responds to technology obsolescence, by gradually replacing the old equipment to reduce cost, as argued by Porter (1985). In conclusion, the organisation is innovative on new technologies, new products and services, and incorporates in its strategic plans the replacement of the equipment to avoid technology obsolescence but requires to establish R&D unit for improve on its performance.

The findings show that management perception is that the organisation provide competitive salary rewards and incentives but is till facing employee turnover challenge. Past studies reveal that incentive pay is linked to performance (Ooko, 2004), and the organisations in Telecommunication industry in Kenya use retirement benefits and leave allowances to motivate and retain employees (Misigo, 2005). The organisation therefore must improve on employee acquisition, motivation and retention policies.

The findings further show that the organisation provides training for the technical and management employees in collaboration with local training institutions and suppliers to build human resource, to narrow the technology gap myopia, as argued by Ansoff (2004) and by Luthans (2005) concept of the need for the people to be motivated to learn and trained for effective strategy implementation, Argyris (1994) and Kaplan and Norton (2005) concepts of the need for effective learning to survive in competitive environment, and Collis and Montgomery (1995) in the resource based view (RBV) concept of

strategy, that human resource is a unique resources that give competitive advantage. Thus the organisation continuously provides training and development to employees at all levels, to develop unique resources in technical and managerial kills.

The finding further reveal that the organisation has established the office of strategy management and is implementing Balanced Scorecard and ISO 9000 as tools for improvement on its performance, but lacks alignment of people to implement its corporate strategy, as argued by Kaplan and Norton (2000; 2005). The organisation is implementing customer-facing and internal processes, as argued by Hammer (2007a; 2007b). Inclusion, the efforts being made by the organization to implement Balanced Scorecard is likely to improve performance if sustain competitive advantage, if people are aligned to the strategic objectives.

The findings reveal that the organisation incorporates corporate social responsibility programmes in its strategic and operational plans, as argued by Porter and Kramer (2006). The organisation responds to poor government policy in rural electrification by providing alternative technologies to extend services to rural market, as a source of accelerated evolution and increased demand, as argued by Harrigan (1984). Thus the organisation is using technology innovation to create unexpected market segment in rural areas. The organisation responds to the changing government policy by establishment of a lobby groups and engaging industry experts to put pressures on the government to create level playing field. The organisation has embarked on price reduction in response to competition and price regulation and is responding to IPO by getting management prepared to embrace the change and incorporating it in its long-range plans.

## **5.2 Limitations of the Study**

The data was collected from all the target respondents however the limitation of the study was that some respondents could not readily understand the questions, and the type of responses expected from them, therefore the concepts had to be explained in a more simplified and understandable language. A few respondents had difficulties in providing comprehensive responses to some questions falling outside their fields of specialisation or functional responsibilities, therefore getting in-depth information on some specific

issues required further explanations. Time was a constraint to a lesser extent as some of the respondents, due to official engagements, took long to respond to the questionnaires, but eventually direct personal interviews were carried out, except for one case where response was by email followed by telephone interview. The respondents generally provided adequate time for the interviews to be carried out, and there was adequate time for data analysis and writing of the report.

### **5.3 Recommendations for Further Research**

The government policy changes are increasingly opening up the market for new entrants through privation, and to move towards technology neutrality for provision of both fixed line and mobile phone services with Telkom Kenya Limited taking this opportunity to introduce wireless services. It is therefore recommended for further research work to be carried out to determine how the organisation continues to respond to the changing industry conditions. The highly speculative IPO of the shares will change financial structure and the management style, as the organisation will have to deal with different stakeholders with varied interests. It is recommended for further research works to be conducted to determine how the IPO will impact on the responses to the changes in the market, and the impact the IPO will have on the stock market.

The case study has focused on Safaricom Limited, therefore the findings have not provided for an industry wide picture. Further research is therefore recommended for an industry wide study to include other organisations in the industry, and other studies can be extended to the region given the global nature of mobile phone service. With the anticipated entry of new players with both fixed and mobile licenses, studies can be conducted to identify their entry strategies, and responses from the incumbents.

### **5.4 Recommendations for Policy and Practice**

The organisation management needs to prioritise the activities that give quick significant improvements to respond to the complexity and speed of change. It is recommended for the organisation to continually improve on its strategic, operational and tactical responses. The findings have indicated that limited consumer satisfaction research has been carried out in the organisation and customer segmentation is not in practice. It is

therefore recommended for the organisation to perform regular consumer research and consumer satisfaction surveys to have a clear understanding on the target market niches and consumer responses in order to meet the changing customer needs.

With the speculated IPO, it is recommended for the organisation to include strategic plans to meet the interest of expanded groups of stakeholders and investors to satisfy their needs in order to win their support. The results indicate that there is lack of cohesive culture in the organisation, and that the organisation is developing balanced scorecard, therefore it is recommended for the organisation management to align the organisational behaviour to its strategy, to eliminate the divisional boundaries, for successful implementation of the balanced scorecard tool. It is further recommended that the performance measurements and indicators be made simple to understand; and rewards and incentive be competitive and highly motivating as the competition intensifies.

The direct competition is not only coming from the mobile phone operator, but from fixed line operator introducing wireless technology to provide similar and substitute products and services that are a threat to the organisation. It is recommended that the organisation establishes R&D unit and to be more innovate to develop new products and services, improve on service delivery and to create new market segments, by using leading technology innovations. The findings show that network congestion is prevalent, therefore it is recommended for the organisation to provide adequate resources for capacity expansion to match the rapid growth.

It is recommended to the government to carry out liberalisation and privatisation processes in a manner not to disrupt the growth in the Telecommunication industry, therefore the government to create level playing field without favouring any firms, apply best practices and remove taxes and levies specific to mobile phone services, and should adopt a consultative decision making process to include all stakeholders on the fundamental policy changes in the industry. Further recommendation is for the organisation to be tactical in lobbying government, to avoid confrontational approach in order to foster good relationship with the policy makers and the regulator.

## REFERENCES

- Aaker, D. A. (1996) **Building Strong Brands**, London: Free Press Business.
- Andrews, K. R. (1987) **The Concept of Corporate Strategy**, 3<sup>rd</sup> Ed., New York: McGraw-Hill.
- Anene M. (2002) “The Convergence of the Telecommunications, IT and the Media and the Implications of Regulations in Kenya” **Unpublished MBA Research Project of the University of Nairobi**, Nairobi, Kenya.
- Ansoff, H. I. and McDonnell, E. J. (1990) **Implanting Strategic Management** 2<sup>nd</sup> Ed., London: Prentice Hall Europe.
- Antoniou, P. H. and Ansoff, H. I. (2004) “Strategic Management of Technology” **Technology Analysis and Strategic Management**, Vol. 16 No. 2 pp: 275-291.
- Argyris, C. (1994) “Good Communication that Blocks Learning” **Harvard Business Review** July-August, pp: 77-85.
- Bennett, N. and Miles, S. A. (2006) “The Second in Command: The misunderstood role of the chief operating officer” **Harvard Business Review** May, pp: 71-78.
- Bennis, W. G and O’Toole J. (2005) “How Business Schools Lost Their Way” **Harvard Business Review** May, pp: 96-104.
- Brealey, R. A. and Myers, S. C. (2004) **Principles of Corporate Finance** 7<sup>th</sup> Ed., New Delhi: Tata McGraw-Hill.
- Burns, B. (2004) **Managing Change** 4<sup>th</sup> Ed., London: Prentice Hall.

Business Daily (2007) “Safaricom profit sparks price wars in voice telecoms market”  
**Nation Media Group Publication**, 25 June, Nation Media Group Limited,  
Nairobi, Kenya.

Business Daily (2007) “BT emerges frontrunner in race to buy Telkom” **Nation Media  
Group Publication** 3 July, Nation Media Group Limited, Nairobi, Kenya.

Business Daily (2007) “Telkom spices market with big price reductions” **Nation Media  
Group Publication** 6 July, Nation Media Group Limited, Nairobi, Kenya.

Celtel International website: <http://www.celtel.com>

Celtel Kenya Limited website: <http://www.ke.celtel.com>

Chandler, A. (1962) **Strategy and Structure: Chapters in the History of the American  
Enterprises**, Cambridge Massachusetts: The MIT Press.

Colley, J. L.; Doyley, J. L.; Hardie R. D. (2002) **Corporate Strategy**, New Delhi: Tata  
McGraw-Hill.

Collins, J. (2001) **Good to Great**, London: Random House Business Books.

Collis, D. J. and Montgomery, C. A. “Competing on Resources” (1995) **Harvard  
Business Review** July-August, pp: 118-128.

Communications Commission of Kenya website: <http://www.cck.go.ke>

Cooper, D. R., and Schindler, P. S. (2003) **Business Research Methods**, 8<sup>th</sup> Ed., New  
Delhi: Tata McGraw-Hill.

Daily Nation (2007a) “Safaricom Deal Under Probe” **Published Daily Newspaper** 9  
March, Nation Media Group Limited, Nairobi, Kenya.

Daily Nation (2007b) “Government of Kenya: Telkom Kenya Privatization: The Request  
for Proposal (RFP) for the privatization of Telkom Kenya Limited (TKL) is now

- available to potential bidders” **Published Daily Newspaper** 12 July, Nation Media Group Limited, Nairobi, Kenya.
- Daily Nation (2007c) “MPs move to block Sh 34b Safaricom sale” **Published Daily Newspaper** 9 August, Nation Media Group Limited, Nairobi, Kenya.
- Daily Nation (2007d) “Safaricom advisor to earn 5 cents pay: Dyer & Blair bags coveted post in firm’s share sale” **Published Daily Newspaper** 30 August, Nation Media Group Limited, Nairobi, Kenya.
- De Wit, B. and Meyer, R. (2004) **Strategy: Process, Content, Context**, 3<sup>rd</sup> Ed., London: Thomson Learning.
- Dessler, G. (2003) **Human Resources Management**, 9<sup>th</sup> Ed., New Delhi: Prentice-Hall.
- Drucker, P. F. (1955) **The Practice of Management**, Oxford: Butterworth – Heinemann.
- Drucker, P. F. (1964) **Managing for Results**, Oxford: Butterworth – Heinemann.
- Drucker, P. F. (1980) **Managing in Turbulent Times**, Oxford: Butterworth – Heinemann.
- Drucker, P. F. (1982) **The Changing World of the Executive**, Oxford: Butterworth – Heinemann.
- Drucker, P. F. (1986) **The Frontiers of Management**, Oxford: Butterworth – Heinemann.
- Drucker, P. F. (2002) **Managing in the Next Society**, Oxford: Butterworth – Heinemann.
- Flippo, E. B. (1984) **Personnel Management** 6<sup>th</sup> Ed., Singapore: McGraw-Hill.
- GOK (1997) “Postal and Telecommunications Sector Policy Statement” **Issued by Ministry of Transport and Communications**, The Government Printers, Nairobi, Kenya.

- GOK (1998) “The Kenya Communications Act, 1998” **Kenya Gazette Supplement**, 9<sup>th</sup> November, No. 64 (Acts No. 3) pp: 193-284, The Government Printers, Nairobi, Kenya.
- GOK (2001a) “The Kenya Communications Regulations, 2001” **Kenya Gazette Supplement** 4<sup>th</sup> May, No. 33 (Legislative Supplement No. 21) pp: 223-335, The Government Printers, Nairobi, Kenya.
- GOK (2001b) “Kenya Communications Policy Guidelines” **Kenya Gazette** Special Issue, 3<sup>rd</sup> December, The Government Printers, Nairobi.
- GOK (2003) “Economic Survey, 2003” **Central Bureau of Statistics, Ministry of Planning and National Development**, The Government Printers, Nairobi.
- GOK (2004) “Economic Survey, 2004” **Central Bureau of Statistics, Ministry of Planning and National Development**, The Government Printers, Nairobi.
- GOK (2005) “Economic Survey, 2005” **Central Bureau of Statistics, Ministry of Planning and National Development**, The Government Printers, Nairobi.
- GOK (2006a) “Information and Communications Technology Policy Guidelines” **The Kenya Gazette** Special Issue, 31<sup>st</sup> March, Gazette Notice No. 2431 pp: 693-706, The Government Printers, Nairobi, Kenya.
- GOK (2006b) “Economic Survey, 2006” **Central Bureau of Statistics, Ministry of Planning and National Development**, The Government Printers, Nairobi, Kenya.
- GOK (2007a) “The Kenya Communications (Amendment) Bill, 2007” **Kenya Gazette Supplement** Special Issue, 17<sup>th</sup> May, Bill for Introduction into the National Assembly No. 51 (Bills No. 22) pp: 1205-1317, The Government Printers, Nairobi, Kenya.

GOK (2007b) “Economic Survey, 2007” **Central Bureau of Statistics, Ministry of Planning and National Development**, The Government Printers, Nairobi, Kenya.

GOK (2007c) “Application for Authorization to Provide Third Generation Broadband Wireless Service (3G)” **The Kenya Gazette**, 3<sup>rd</sup> August, Vol. CIX-No. 53, No. 7456 pp: 2443, The Government Printers, Nairobi, Kenya.

GOK (2007d) “Equity Participation in Telecommunications” **The Kenya Gazette**, 10<sup>th</sup> August, Vol. CIX-No. 55, Gazette Notice No. 7481 pp: 2452, The Government Printers, Nairobi, Kenya.

GOK, Ministry of Information and Communications website:  
<http://www.information.go.ke>.

Graham, H T and Bennett, R. (1998) **Human Resources Management**, 9<sup>th</sup> Ed., Essex: Prentice Hall.

GSM Association (2007)” **GSM Association Press Supplement**, The GSM Association Printers, London, UK.

GSM Association Website: <http://www.gsmworld.com>

Hammer, M. (2007a) “The Process Audit: A new framework, as comprehensive as it easy to apply, is helping companies to plan and execute process-based transformation” **Harvard Business Review** April, pp: 111-123.

Hammer, M. (2007b) “The 7 Deadly Sins of Performance Measurement [and How to Avoid Them]” **MIT Sloan Management Review**, Vol. 48 No. 3 pp: 19-28.

Harrigan, K. R. (1984) “Formulating Vertical Integration Strategies” **Academy of Management Review Journal**, Vol.9 No. 4 pp: 638-654.

ITU (2004a) “African Telecommunication Indicators 2004” **ITU Publication**, International Telecommunication Union, Geneva, Switzerland.

ITU (2004b) “Trends in Telecommunication Reform 2004/2005: Licensing in an Era of Convergence” **ITU Publication**, The International Telecommunication Union, Geneva, Switzerland.

ITU (2006a) “Trends in Telecommunication Reform 2006: Regulating in the Broadband World” **ITU Publication**, 7<sup>th</sup> Edition, The International Telecommunication Union; Geneva, Switzerland.

ITU (2006b) “Building an inclusive society for all in Africa: Regulatory Challenges and Opportunities in Africa” **ITU Publication**, The International Telecommunication Union; Geneva, Switzerland.

International Telecommunications Union website: <http://www.itu.int>

Johnson, G. and Scholes, K. (2004) **Exploring Corporate Strategy**, Sixth Edition, New Delhi: Prentice-Hall.

Johnson, G.; Scholes, K.; Whittington, R. (2006) **Exploring Corporate Strategy, Text and Cases**, 7<sup>th</sup> Ed., London: Prentice-Hall.

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.

Kaplan, A. R. (2000) **The Maslow Business Reader: Abraham H. Maslow**, New York: John Wiley and Sons, Inc.

Kaplan, R. S. (2007) “What to Ask the Person in the Mirror” **Harvard Business Review**, January, pp: 86-95.

Kaplan, R. S. and Norton, D. P. (2000) **The Strategy Focused Organisation: How**

- balanced scorecard companies thrive in the new business environment**,  
Boston: Harvard Business School Press.
- Kaplan, R. S. and Norton, D. P. (2005) “The Office of Strategy Management” **Harvard Business Review**, May, pp: 72-80.
- Kaplan, R. S. and Norton, D. P. (2006) “How to Implement a New Strategy Without Disrupting Your Organization” **Harvard Business Review**, March, pp: 100-109.
- Koske F. K. (2003) “Strategy Implementation and its challenges in the Public Corporations: The Case of Telkom Kenya Limited” **Unpublished MBA Research Project of the University of Nairobi**, Nairobi, Kenya.
- Kotler, P. (2004) **Marketing Management**, 11<sup>th</sup> Ed., New Delhi: Prentice-Hall.
- Kotler, P.; Rackham, N.; Krishnaswamy, S. (2006) “Ending the War between Sales and Marketing” **Harvard Business Review**, July-August, pp: 68-78.
- Kotter, J. P. (2001) “What Leaders Really Do” **Harvard Business Review** December, pp: 3-12.
- Kotter, J. P. (2007) “Leading Change: Why Transformation Efforts Fail” **Harvard Business Review** January, pp: 96-103.
- Luthans, F. (2005) **Organizational Behaviour**, 10<sup>th</sup> Ed., New York: McGraw - Hill/Irwin International.
- Maina, P. M., (2001) “Perceived Service Quality. The case of Mobile Phone Services” **Unpublished MBA Research Project of the University of Nairobi**, Nairobi, Kenya.
- 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.

- Miles, S. A, and Watkins, M. D. (2007) “The Leadership Team: Complementary Strengths or Conflicting Agendas?” **Harvard Business Review** April, pp: 90-98.
- Mintzberg, H. (1990) “The Design School: Reconsidering the Basic Premises of Strategic Management” **Strategic Management Journal**, Vol. 1, pp: 171-195.
- Mintzberg, H. (1990) “The Manager’s Job: Folklore and Facts” **Harvard Business Review** March –April, pp: 4-16.
- Mintzberg, H.; Lampell, J.; Quinn, J. B.; and Ghoshal, S. (2003) **The Strategy Process, concept, context, cases** 4<sup>th</sup> Ed., New Jersey: Prentice – Hall/Pearson.
- Misigo, G. (2005) “Employee benefits as a competitive human resource strategy: A survey of the Telecommunications Sector” **Unpublished MBA Research Project of the University of Nairobi**, Nairobi, Kenya.
- MTN Uganda Limited website: <http://www.mtn.co.ug>
- Mutuku, C. M. (2003) “A Survey of Managers’ attitude in Work Force Diversity in the Telecommunications Sector in Nairobi” **Unpublished MBA Research Project of the University of Nairobi**, Nairobi, Kenya.
- Muturi, P. W. (2004) “Factors that determine customer loyalty to a mobile phone service provider: A case of mobile phone users in Nairobi” **Unpublished MBA Research Project of the University of Nairobi**, Nairobi, Kenya.
- Newstrom, J. W. and Davis, K. (2002) **Organisational Behaviour** 11<sup>th</sup> Ed., New Delhi: Tata McGraw-Hill
- Odhiambo, B. E. (2003), “Determinants of Customer Satisfaction for Mobile Phone Subscribers in Nairobi” **Unpublished MBA Research Project of the University of Nairobi**, Nairobi, Kenya.
- Ooko, P. A. (2003) “Employee Perception of the link between Performance and Incentive

- Pay: The Case of Selected Employees in the Mobile Phone Industry”  
**Unpublished MBA Research Project of the University of Nairobi**, Nairobi,  
 Kenya.
- Pande, P. S.; Neuman, R. P.; Cavanagh, R. R. (2000) **The Six Sigma Way: How GE  
 Motorola and other top companies are honing their performance**, New York:  
 McGraw-Hill.
- Pandey, I. M. (2003) **Financial Management**, 8<sup>th</sup> Ed., New Delhi: Vikas PVT Ltd.
- Pearce II, J. A. & Robinson, Jr., R. B. (2005) **Strategic Management: Formulation,  
 Implementation and Control** 9<sup>th</sup> Ed., New York: McGraw-Hill/Irwin.
- Peters, T. J. and Waterman Jr, R. H. (1982) **In Search of Excellence: Lessons from  
 America’s best-run companies**, London: Profile Books Limited.
- Porter, M. E. (1990) **The Competitive Advantage of Nations**, London; Palgrave  
 Publishers Ltd.
- Porter, M. E. and Kramer, M. R. (2006) “Strategy and Society: The Link Between  
 Competitive Advantage and Corporate Social Responsibility” **Harvard Business  
 Review**, December, pp: 78-92.
- Porter, M. E. (1980) **Competitive Strategy: Techniques for Analyzing Industries and  
 Competitors**, New York: Free Press.
- Porter, M. E. (1985) **Competitive Advantage: Creating and Sustaining Superior  
 Performance**, New York: Free Press.
- PricewaterhouseCoopers (2001) “Annual Report and Financial Statements for the Year  
 Ended 31 March, 2001” **Unpublished Annual Report and Financial  
 Statements, Safaricom Limited**, Nairobi, Kenya.
- PricewaterhouseCoopers (2002) “Annual Report and Financial Statements for the Year

- Ended 31 March, 2002” **Unpublished Annual Report and Financial Statements, Safaricom Limited**, Nairobi, Kenya.
- PricewaterhouseCoopers (2003) “Annual Report and Financial Statements for the Year Ended 31 March, 2003” **Unpublished Annual Report and Financial Statements, Safaricom Limited**, Nairobi, Kenya.
- PricewaterhouseCoopers (2004) “Annual Report and Financial Statements for the Year Ended 31 March, 2004: Safaricom Limited” **Unpublished Annual Report and Financial Statements, Safaricom Limited**, Nairobi, Kenya.
- PricewaterhouseCoopers (2005) “Annual Report and Financial Statements for the Year Ended 31 March, 2005” **Unpublished Annual Report and Financial Statements, Safaricom Limited**, Nairobi, Kenya
- PricewaterhouseCoopers (2006) “Annual Report and Financial Statements for the Year Ended 31 March, 2006” **Unpublished Annual Report and Financial Statements, Safaricom Limited**, Nairobi, Kenya.
- PricewaterhouseCoopers (2007) “Annual Report and Financial Statements for the Year Ended 31 March, 2007” **Unpublished Annual Report and Financial Statements, Safaricom Limited**, Nairobi, Kenya.
- Robbins, S. P. and Judge, T. A. (2007) **Organizational Behaviour** 12<sup>th</sup> Ed., New Delhi: Prentice-Hall.
- Safaricom Limited website : <http://www.safaricom.co.ke>
- Schiffman, L. G. and Kanuk, L. L. (2004) **Consumer Behaviour** 8<sup>th</sup> Ed., New Delhi: Prentice-Hall.
- Sekeran, U. (2006) **Research Methods for Business**, 4<sup>th</sup> 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.

Senge, P. M. (2006) **The Fifth Discipline: The Art and Practice of The Learning Organisation**, London: Random House Business Books.

Senge, P. M.; Lichtenstein, B. B.; Kaeufer, K.; Bradbury, H.; Carroll, J. S. (2007) “Collaborating for Systematic Change” **MIT Sloan Management Review**, Vol. 48 No. 2 pp: 44-53.

Sossion, B. (2003) “A survey of customer perception of telephone providers’ value propositions in Nairobi” **Unpublished MBA Research Project of the University of Nairobi**, Nairobi, Kenya.

Telkom Kenya Limited website: <http://www.telkom.co.ke>

The East African, (2006) “Revealed: Mystery firm secretly owns 5pc of Safaricom shares” **Published Weekly Newspaper**, 20 -28 November, Nation Media Group Limited.

The East African, (2007) “Government of Kenya: Invitation for Expressions of Interest (EOI) for the Provision of Professional Advisory Services for the Public Offer (IPO) of 25% of Safaricom Limited” **Published Weekly Newspaper**, 9-15 July, Nation Media Group Limited.

Thompson Jr, A. A.; Strickland III, A J; Gamble, J. E; Jain, A. K (2006) **Crafting and Executing Strategy: The Quest for Competitive Advantage; Concepts and Cases**, 14<sup>th</sup> Ed., New Delhi: Tata McGraw-Hill.

Towett, J. C. (2002) “A survey on Perceived Risks on the use of Mobile Telephone Services among Consumers in Nairobi” **Unpublished MBA Research Project of the University of Nairobi**, Nairobi, Kenya.

Uganda Telecoms Limited Website: <http://www.utl.co.ug>

Vodacom Tanzania Website: <http://www.vodacom.co.tz>

Vodafone Group Plc UK Website: <http://www.vodafone.co.ke>

Whittington, R. (2001) **What is Strategy – and does it matter?** 2<sup>nd</sup> Ed., London: Thomson Learning.

Zaleznik, A. (1992) “Managers and Leaders: Are They Different?” **Harvard Business Review** March –April, pp: 3-11.

## APPENDICES

### **Appendix 1(a): Questionnaire Introduction**

Dear Sir

This questionnaire is designed to study aspects of leadership and managerial responses of Safaricom Limited to the challenges posed by environmental changes in the Telecommunication industry in Kenya, as being influenced by regional and global changes. The study is for a management research project to be submitted in partial fulfilment of the requirements for the award of the degree of MBA at the School of Business, University of Nairobi.

The information will help in building an in-depth understanding of the responses to the environmental changes, that have made Safaricom achieve its strategic objectives, thus the great success, and to determine the sustainability of these goals in the ever increasing competitive environment. Because you are the one who can give a correct picture of the responses to the challenges out of the experience of your leadership as the CEO of the organisation, I kindly request you to respond to the questions and preferably have a short session with you for a direct interview.

Your response will be used only for the academic purpose and will be kept strictly confidential. Thank you very much for your time and assistance. I greatly appreciate the help provided in furthering this research endeavour.

Cordially,

Vitalis Olunga

## **Appendix 1(b): The Question**

Below are some of the changes that have affected the Telecommunication industry in Kenya. For each change, kindly indicate the major challenges the organisation is facing as a result of the type of changes and what are the corporate long-term and short-term measures undertaken to respond or cope with the challenges:

### **1 Competition Changes:**

**Challenge 1:** -----  
-----  
-----  
-----

**Response to the Challenge 1:**-----  
-----  
-----  
-----

**Challenge 2:** -----  
-----  
-----  
-----

**Response to the Challenge 2:**-----  
-----  
-----  
-----

**Challenge 3:** -----  
-----  
-----  
-----

**Response to the Challenge 3:**-----

-----  
-----  
-----

**2 Technological Changes**

**Challenge 1:** -----

-----  
-----  
-----

**Response to the Challenge 1:**-----

-----  
-----  
-----

**Challenge 2:** -----

-----  
-----  
-----

**Response to the Challenge 2:**-----

-----  
-----  
-----

**Challenge 3:** -----

-----  
-----  
-----

**Response to the Challenge 3:**-----

-----  
-----  
-----

**3 Government Policy Changes**

**Challenge 1:** -----

-----  
-----  
-----

**Response to the Challenge 1:**-----

-----  
-----  
-----

**Challenge 2:** -----

-----  
-----

**Response to the Challenge 2:**-----

-----  
-----

**Challenge 3:** -----

-----  
-----

**Response to the Challenge 3:**-----

-----  
-----

**Thanks for your time and the valuable response.**