CRITERIA USED BY MOBILE PHONE COMPANIES IN SETTING CALL PRICES IN TANZANIA

A Case Study of Airtel Tanzania Limited

By

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A Dissertation submitted in Partial Fulfillment of the Requirements for Award of Degree of Master of Business Administration in Corporate Management of Mzumbe University

2014
CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation entitled **CRITERIA USED BY MOBILE PHONE COMPANIES IN SETTING CALL PRICES IN TANZANIA**, in partial fulfillment of the requirements for award of the degree of Master of Business Administration in Corporate Management of Mzumbe University

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DEDICATION

This work is dedicated to my lovely dad and mom, QS Ewald B.S Mrosso and Jovita Mrosso. Also a hand of appreciation to my lovely brother Brian, sisters Mary and Brenda, my lovely daughter Philomena and my fiancée Lucia Pancras for their prayers.

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LIST OF ABBREVIATIONS

ICT – INFORMATION AND COMMUNICATIONS TECHNOLOGY

TTCL – TANZANIA TELECOMMUNICATION COMPANY LIMITED

TCRA – TANZANIA COMMUNICATIONS REGULATORY AUTHORITY

TPTC – TANZANIA POSTS AND TELECOMMUNICATIONS CORPORATION

ZANTEL – ZANZIBAR TELECOMMUNICATION COMPANY LIMITED
ABSTRACT

The current economic situation makes it particularly important that private sector projects exploiting Information and Communications Technology (ICT) achieve successful outcomes. Tanzania Regulatory framework determines regulation and policy pertaining to control prices and thus ensure consumer protectionism.

The overall objective of this study was to assess the criteria used by mobile phone companies in setting their prices per call per minute, a case of Airtel Tanzania Limited. Specifically, the study wanted to determine operational costs of making a call per minute, establish the profit margin wanted by the mobile companies and to find out the criteria used in setting prices of making a call. It further examined the satisfactory of the prices charged by the mobile companies under study and to determine the minimum possible price that can be charged per call per minute at Airtel Tanzania Limited.

The study reviewed some literature relevant in order to get the necessary theoretical background to the topic. In order to collect data, both primary and secondary data, were used. These include questionnaires, observation, interviews and documentaries. Data was collected from 30 respondents. The study revealed that, some competition among the mobile phone operators should be used as primary criteria to be used by mobile phone companies to set price of making a call. Other factors used as criteria include, operational cost, profit margin, investment returns, and market behavior.

The study concluded that mobile phone companies have several criteria in setting prices. It is thus recommended that prices to be set should be based on competition among mobile phone companies. This will likely reduce price per call to customer
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CHAPTER ONE

INTRODUCTION

1.1 Background Information

In 2002, the total number of mobile (cellular) phones in use worldwide exceeded the number of landlines. Current projections suggest that the world will continue to add mobile lines faster than fixed lines; indeed, the next billion new phone users will use primarily mobiles (ITU 2003; Lanvin 2005). Both the developed world and the developing world are participating in this boom, but in different ways.

Mobile phones have become the primary form of telecommunication in both developed and developing countries. Globally, mobile phone networks play the same role that fixed-line phone networks did in facilitating growth in Europe & North America in the 20th century. The industry has experienced explosive growth in a relatively short time span.

In 1993, there was liberalization of telecommunication sector in Tanzania, which resulted into dissolution of Tanzania Posts and Telecommunications Corporation (TPTC) in early 1994. As a result, mobile companies were established to reduce the monopoly existed in the communication sector. The Mobitel Company (currently known as Tigo) was the first licensed operator in the Tanzanian cellular market.

In 2003 the Tanzania Communications Regulatory Authority (2012) was established to license and regulate the postal service, broadcasting services and communications
sectors in Tanzania. In 2005 it introduced a licensing framework and the concept of technology neutrality. Over the last five years, the percentage and amount of mobile phones has increased rapidly and this shows no signs of abating. Currently 59% of the Tanzanians are subscribed as user of a mobile phone (Wikipedia, 2008).

We observed the dominating mobile service providers to be Vodacom, Airtel, Tigo, and Zantel. Most of the people we came across owned at least a sim card from either one of them; several had a sim card of both. We did not encounter any individual that did not recognize either of the trademarks. To our knowledge all telecommunication providers offer discounts for calls or text messages between members to improve user loyalty. Furthermore users frequently receive discount offers that give them the opportunity to buy larger amounts of credit, calls or text messages at a lower price. In addition to these standard mobile services, all four main providers offer payment services.

As was estimated in 2009 by Finscope, by then already 46% of the Tanzanian population had direct or indirect access to these payment services, which we believe to have increased ever since. In 2011 alone, the total volume of mobile phone transactions reached 157,025,351 with a value of 6.75 trillion Tanzanian shilling. These numbers demonstrate the widespread availability, mobile use knowledge and utilization of mobile phones in Tanzania. As a result we do believe that the network coverage, the availability of mobile device and knowledge about the use of these devices are not main barriers to the introduction of health technology in Tanzania. (TAN 2012 Market Research).
1.2 Statement of the Problem

Although mobile phone usage started in major cities, the service has quickly spread in rural areas as well, wherever the network is available. Apart from the expanded mobile phone usage, there has also been an increase in the number of network providers. While in late 1990s there was only one network provider, to date there five network providers: Tigo, Vodacom, Airtel (formerly called Celtel), Tanzania Telecommunication Company Limited (TTCL), and Zantel. According to the statistics available an increased competition among network providers has resulted in reduction of costs for mobile phone users.

Keen competition exists in Tanzania mobile phone industry. High competition among mobile phone companies in Tanzania has caused a substantial reduction of tariff per minute from an average of TZS 500 in 2000 to the current average of TZS 60. Companies are competing in terms of coverage to reach customers with no mobile phone services, particularly in village area. Also companies are engaged in promotion in order to attract more customers.

Therefore, each mobile company responds to the other company’s action either in terms of service coverage, tariffs reduction, promotion, etc. Mobile phone customers in Tanzania are moving from using one company’s mobile phone line to another or handling more than one line in order to avoid high operation costs.

Despite this reduction of cost, majority of Tanzanians are still complaining that the cost is still high. It is not clear why these mobile phone companies are ready to
reduce their prices when there is competition and not reduce cost on their own. This study therefore intends to assess the criteria used by the mobile phone companies in setting their prices per call per minute.

1.3 Objectives of the study

1.3.1 General Objective

The overall objective of this study was to assess criteria used by mobile phone companies in setting their prices per call per minute.

1.3.2 Specific Objectives

(i) Determine operational costs of making a call per minute.

(ii) Establish the profit margin wanted by the mobile companies under the study.

(iii) Find out the criteria used in setting prices of making a call.

(iv) Examine the satisfactory of the prices charged by the mobile companies under study.

(v) Determine the minimum possible price that can be charged per call per minute.

1.4 Research questions

(i) What are the operational costs of pricing a call per minute?

(ii) What is the profit margin wanted by the mobile companies under the study?

(iii) What are the criteria used in setting prices of making a call?

(iv) What is the satisfactory of the prices charged by the mobile companies under study?
What is the minimum possible price that can be charged per call per minute?

1.5 Significance of the study

Now days many service industry need to mobilize all internal energies of their firms/organizations in order to cope with the increasing competition and changing business environment (Kotler, 2001). If used, the study will help various mobile phone companies to develop new insights in marketing strategies by being able to offer the best prices to one to make a call. This study will act as a base for other researchers who are interested in researching the same area. The study is undertaken when the country is subjected to high competition in mobile phone services. This study will point out factors which mobile phone companies shall undertake to determine prices for making calls. It will also help various policy makers in the country to understand the economic contribution of mobile phone industry, which enables them to make strategic decisions, involved the running of mobile phone companies in Tanzania.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The first part of this chapter provides competing notions of competitions while the second part discusses mobile phone market. The third part of this chapter describes prices, while the fourth part explains the service availability. Services quality is explained in fifth part while promotion is covered in the sixth part. The seventh part shall discuss the conceptual framework while the last part shall be the conclusion part.

2.2 Competing Notions of Competition

Competition in economics is a term that encompasses the notion of individuals and firms striving for a greater share of a market to sell or buy goods and services. The notion of competition is central to economic theory, but its meaning and the ways in which it is perceived to work and contribute to development, differ widely among theorists, policy-makers, bureaucrats and business people. Indeed the history of economic thought provides some deeply contrasting views about the meaning of competition. Amongst them, the concept of perfect competition has survived as the standard model for analysis and has had a profound influence on policy-making concerned with the regulation of competition.

Yet the notion of this form of competition is very different to the concept envisaged by classical economists such as Adam Smith (McNulty 1967). When Adam Smith was writing in 1776, the concept of competition was familiar, and was formulated in
the context of independent rivalry between two or more persons. Viewed in this way
competition acts as a force that would, in the long run, eliminate excessive profits
and unsatisfied demand. The classical economic literature emphasized price
determination through the notion of competition as replacing ethically and politically
oriented price administration as the focus of economic analysis (McNulty 1967).

Participants in the market would change price in response to market conditions
principally through a process of rivalry. Adam Smith’s major contribution to this
analysis appears to have been to add systematic thinking to earlier views on the
subject. Since then the development of a notion of competition gave the profession
an analytical rigour akin to the character of a science (Mill 1864 I, 306). According
to Edgeworth (1881, p50) without the notion of competition, economics as a
discipline would be referred to as a dismal science.

By the late nineteenth century the analytical development of the concept of
competition differed in many respects to that portrayed by Adam Smith.
Mathematical refinement, initially by Cournot, and continued through the works of
Edgeworth (1881), Clark (1915) and Knight (1946), took the concept of competition
in a different direction (Stigler, 1957). In this neo-classical development, price
became a parameter rather than a variable.

The competitive analysis is a statement of the business strategy and how it relates to
the competition. The purpose of the competitive analysis is to determine the strengths
and weaknesses of the competitors within your market, strategies that will provide
you with a distinct advantage, the barriers that can be developed in order to prevent
competition from entering your market, and any weaknesses that can be exploited within the product development cycle.

The first step in a competitor analysis is to identify the current and potential competition. As mentioned in the "Market Strategies" chapter, there are essentially two ways you can identify competitors. The first is to look at the market from the customer's viewpoint and group all your competitors by the degree to which they contend for the buyer's dollar. The second method is to group competitors according to their various competitive strategies so you understand what motivates them.

Once you have grouped your competitors, you can start to analyze their strategies and identify the areas where they are most vulnerable. This can be done through an examination of your competitors' weaknesses and strengths. A competitor's strengths and weaknesses are usually based on the presence and absence of key assets and skills needed to compete in the market.

According to theory, the performance of a company within a market is directly related to the possession of key assets and skills. Therefore, an analysis of strong performers should reveal the causes behind such a successful track record. This analysis, in conjunction with an examination of unsuccessful companies and the reasons behind their failure, should provide a good idea of just what key assets and skills are needed to be successful within a given industry and market segment.

Through your competitor analysis you will also have to create a marketing strategy that will generate an asset or skill competitors do not have, which will provide you
with a distinct and enduring competitive advantage. Since competitive advantages are developed from key assets and skills, you should sit down and put together a competitive strength grid. This is a scale that lists all your major competitors or strategic groups based upon their applicable assets and skills and how your own company fits on this scale.

The neoclassical economists viewed competition as a state of affairs rather than as a process as depicted by classical economists. It is built around the notion that the market is characterized by a state of equilibrium that is dependent on forces of demand and cost structure that determine who survives and who fails, and is formally presented in the idea of perfect competition. The neo-classical focus is on the effects of competition rather than a definition of the underlying behavioral process that characterizes competition. As Knight states, perfect competition involves no presumption of psychological competition, emulation, or rivalry’ (Knight, 1946).

The profit maximizing behavior based on notions of rational decision-making that underlies the neo-classical approach leads to the selection of output and choices over entry and exit in relation to observed profit opportunities. This has been subject to a barrage of criticisms. In the perfectly competitive model an enterprise seeks to maximize profits, and correspondingly selects an output where marginal costs equal the market price. As long as profit opportunities appear to exist, enterprises will continue to enter the industry. In the long run it is argued that enterprises that remain will produce at the minimum efficient scale.
Alternative maximizing behavior has been suggested by Baumol (1967) in relation to sales revenue, and Cyert and March (1963) have suggested that enterprises pursue a satisficing behavior in an attempt to resolve a number of potentially conflicting managerial objectives. Alternative theories have viewed profits as accruing less as a result of a predictable rational process than one related to the outcome of a process of natural selection and survival (Penrose 1952). It could be claimed that the classical and neo-classical interpretations of competition are fundamentally incompatible. Even discounting the view that the notion of perfect competition can only be used as an ideal or benchmark for analytical purposes, precisely because it is an abstract condition, does not appear to satisfy the argument that the concept is incompatible with any idea of competition. This view was stated forcibly by Hayek (1948) who claimed that perfect competition meant the absence of competitive activities.

The classical and neo-classical concepts of competition differ fundamentally, therefore, in their view of what competing means. The classical economists related the concept to business behavior that involves organizational and technological changes. The neo-classical view is not about behavior but is more concerned with market structure. Under neoclassical economics, the concepts of competition and the market have become merged, with competition taking a back seat. The market deals with exchange relationships as the most important notion, rather than production relationships. In this way neo-classical enterprises are viewed as differing from one another with respect to the kind of product or factor market in which they buy and sell (Knight, 1946).
The concept of workable competition also emerged from the literature in the 1930s as a concept to counteract the view that perfect competition is not a reliable basis for making normative appraisals of the working of actual markets. A set of criteria that defined workable competition was developed that reflected the demands of the public interest. The criteria related to performance, conduct and structure and drew on the works of 18 eminent writers (Sosnick 1958). Using their extended neo-classical criteria, markets could be viewed as almost workable, workable or optimum.

A variety of schools have expressed their fundamental dissatisfaction with the equilibrium concept of competition. The Austrian and Evolutionary schools view competition as a dynamic discovery process in which entrepreneurs seek new profit opportunities set in a world of constant change (Hayek 1948; Littlechild 1986; Schumpeter 1978). They are interested in change over the relatively long run. In contrast to static neo-classical theory, profits earned by successful entrepreneurs are not viewed as inefficiencies but as signals that entrepreneurs are responding to changing market conditions.

The first difficulty that any assessment of competition policy must confront is the contrasting ways in which an economic approach to competition can be formulated. Despite the centrality of this notion in economic theory it has come to attract multiple shades of meaning not all of which translate easily with the idea of competition held by businessmen. A theory which is designed to understand the allocation of given resources to given ends using given means of transformation will be quite different in scope and character to one which is focused on the development
of resources, uses and transformations. If the first where the limiting outcome of the second the different views could be presented as natural complements. But this is not easily reconciled with the fact that the natural outcome of a competitive process is market concentration rather than the dispersal of economic influence.

Depending on the theory one starts from one ends up with quite different perspectives on appropriate competition policies. The central difference, for our purposes, between the competing concepts of competition is that between states of equilibrium and processes of change. The modern theory of resource allocation presents competition as an equilibrium state of a market dependent on those fundamental forces of demand and cost structure that determine the number of viable survivors. That is to say the state of competition is equated with the structure of the market which is measured by the number and relative size of the surviving firms.

From this follows the familiar taxonomy with perfect competition at one end of a spectrum and monopoly at the other, each defined in terms of a relation between market share and the consequential ability to increase price above marginal costs.

Between these extremes lies less clear-cut territory either in relation to the idea of monopolistic competition or in relation to concepts of oligopolistic interaction in which expectations of rivals’ behaviors have overwhelming significance. The crowning achievement of this approach remains the theory of perfect competition even though the problems of competition policy usually lie in that middle ground.

This brings together three independent ideas: in relation to perfection of the market; in relation to freedom of entry and exit; and, in relation to the number of competitors.
In respect of the first and second of these attribute the reasoning mirrors that of classical thinking since Adam Smith; freedom of entry and exit being the ground rule that permits the equalization of the rate of return on capital across different lines of investment.

What is new is the emphasis on market structure and in particular the notion of atomistic behavior in which each firm is required to take the prices at which it buys and sells as market determined data, beyond its influence. By combining together these three ideas, the doctrine of perfect competition generates a coherent set of standards against which to appraise any market situation. Does a firm earn profits in excess of the competitive minimum? Does firm influence prices of its output or inputs such that they are higher or lower than they would otherwise be? These are important background issues in all approaches to the regulation of competition but they provide only one possible approach to the competition problem. Wide varieties of economists have expressed their dissatisfaction with the equilibrium, structure, conduct and performance view and have proposed a return to the idea of competition as a process, not a state of affairs.

Morgenstern (1972) claims that competition as a word employed by economists has lost touch with business reality because it has replaced concepts of struggle and rivalry with concepts of equilibrium. GeorgescuRoegen (1967) puts it very clearly when he argues that perfect competition involves only passive behavior, and that, “In every domain, but especially in economics, competition means in the first place
trying to do things in a slightly different manner from all other individuals” (p.33). Hence non-price forms of competition become of predominant significance.

Finally, we can consider the insight of Joan Robinson (1954) who claimed that, “In the broad sense in which businessmen understand it [competition] largely consists in destroying competition in the narrow economist’s sense” (pp.245-246) Most influential of all is the position taken by Hayek (1948) that an equilibrium view of competition is a contradiction in terms, “If the state of affairs assumed by the theory of perfect competition ever existed, it would not only deprive of their scope all the activities which the verb ‘to compete’ describes but would make them virtually impossible” (p.92) What this leads to ineluctably is the discovery process view of competition.

Competition is an instituted process, a set of arrangements and institutions to explore the space of possibilities linking human needs and knowledge of the resources and methods at our disposal to meet these needs. This process is open ended and depends crucially on the possibility that firms may behave differently; in short, it is linked inseparably to the possibilities for innovation. This is the great strength of the Austrian and evolutionary viewpoints, competition is the process that guides economic development and it knows no state of equilibrium. Indeed capitalism and equilibrium are incompatible concepts. Schumpeter is the economist who perhaps has seen this connection most sharply with his clear understanding that capitalism is of necessity a method of economic change, the method known as creative destruction.
From this perspective the nature of competition depends on three broad factors: The different kinds of behaviors engaged in by firms, to gain competitive advantage. Of course in the presence of different behaviors the notion of the number of competitors loses all substantive effect. Who is to say that two different firms may not compete more intensively than many identical ones.

Secondly, The openness of the market place to entry by new rivals and the pressures that lead to the exit of marginal producers, and the processes within the market which establish a link between inter firm differences in profitability and changes in market position. Thirdly, degree to which the innovation of new products and production methods can alter the established distribution of competitive advantages. As we shall see below, it is the analysis of behaviors and not structures that is a central feature of the practice of the British competition authorities.

Market structure is at most a test for the possibility of adverse behaviors; it is not conclusive in its own terms.

We can gain further understanding of the relevant issues by a short digression upon the nature of contests, games, sports or races performed within institutionalized rules of the game. Frank Knight, the great neoclassical economist had important insights into the relation between competition and contest in his famous essay “the Ethics of Competition” written in 1923. Knight argues that any contest has a number of characteristics. Chief among these is an accepted set of enforceable rules of the game that determine the nature of the contest, the principles according to which the
contest is organized, and the terms for entry and exit in the contest. The rules of the
game, a code of conduct, serve to co-ordinate the actions of the rivals, to define
permissible and inadmissible behaviors, and to establish the set of prizes and the
terms on which they are awarded. One important issue here is clearly the fairness of
the rules, “Do they constitute a level playing field?”

Given the rules the second important element is the set of contestants and their
associated competitive characteristics. However should the performances of the
contestants be uniquely ranked in each play of the contest we should hardly call this
a contest, for the results would be perfectly predictable. Thus the third element, an
inherent degree of uncertainty arising from the incompleteness of the rules, the
impact of unforeseen contingencies and, most important of all, the lack of
predictability in relation to the behavior of the contestants

Neither the outside observer (and competition authorities are outside observers) nor
the contestants themselves can observe and interpret the plans and strategies of the
rival players or predict the multiplicity of contingent circumstances that bear on the
outcome of a contest. Luck is an essential ingredient, the fall of the favorite the
success of the dark horse, are an essential part of the picture. In this sense contests
are organized as discovery procedures, social devices for finding the best among a
range of rival behaviors. Albeit that which is best is entirely contingent on the rules
the prevailing contestants and the element of luck As Alchian (1951) remarked so
perceptively: “As in a race, the award goes to the relatively fastest even if all the
competitors’ loaf. Even in a world of stupid men there would still be profits” (p.213)
Of course, the element of luck cannot be overwhelming either, if outcomes are entirely random this would destroy the necessary link between characteristics of the competitors and the outcomes without which incentives fail.

It is this set of ideas that has come also to play a central role in evolutionary accounts of the competitive process. Here competition depends upon the variety of behaviors in a population of firms. That variety is translated into differential profits in markets and thus into patterns of selection in terms of differential growth and decline. Innovation processes continually reshape that pattern of variety and provide the developmental impetus to drive the selection process (Nelson and Winter, 1982, Metcalfe, 1998, Dosi, et al1988) It is a characteristic of these approaches that the idea of a competitive equilibrium has no role in the analysis. Instead there is a competitive order, a pattern of co-ordination within and between both sides of the market. Coordination, how individual economic behaviors fit together and achieve mutual consistency, is central to any analysis of real-world competition, equilibrium is not. Capitalism is never in a state of rest, there are always reasons to change, always grounds to challenge established positions.

This perspective gives us important insights into the role of market institutions in modern capitalism. As order producing devices, market arrangements are to be judged not only on their efficiency in allocating resources to competing ends but on their role in facilitating adaptation to new possibilities and in creating incentives to explore new possibilities. A competitive order is an open order, an open order that can be transformed by innovations of many different kinds. This order, and the way
that it changes, may bear little relation to the conventional idea and measure of market structure.

Two further brief observations are in order before we proceed. The first is the connection between the competitive order and economic growth and development. Competition is a powerful means to stimulate growth. Good institutional frameworks enable firms with better products or better methods of production to increase their share of the market and thus to claim a greater share of an economy’s productive resources. Selection works to increase productivity by virtue of this transfer mechanism. Moreover, open markets enable innovations to be injected into the contest so adding further to the possibilities for selection to increase the efficiency of activity. Open markets also signal the benchmarks that any innovation must better if it is to gain a market position. These benchmarks are provided by the prevailing pattern of prices and they form a basis for calculating the profitability of any new venture.

Secondly, we should not forget that the dynamic, restless nature of market capitalism is dependent on the fact that market activity is closely related to the generation of new knowledge: not only scientific and technological knowledge but knowledge of market and organization. It is the attribute of knowledge that, as Popper (1986) expresses it, every addition to knowledge opens up further opportunities to create yet further knowledge. The production of knowledge by means of knowledge is central to modern economic growth and indeed to the operation of dynamic competition
Drawing on Schumpeter’s analysis these perspectives view competition less in terms of price but in terms of new technology, new sources of supply and new types of organizational development which provide cost and quality advantages. ‘It is not (price) competition which counts but the competition from the new commodity, the new technology, the new source of supply, the new type of organization and competition which commands a decisive cost or quality advantage and which strikes not at the margin of profits and the outputs of the existing firms but at their foundations and their way of lives’ (Schumpeter, 1943).

This approach is rooted in the behavioral theory of the firm and emphasizes learning capabilities and adaptive behavior and the interactions between these behaviors (Metcalfe 2000). This entails a shift from perceiving competition in terms of a state of equilibrium, characterized by different market structures, to competition as a process of change premised on the existence of the differential behavior of firms and the economic arguments. In equilibrium theory, the behavior of the firm is often depicted as a form of anti-competitive market behavior. In this respect, the evolutionary perspective indicates that economic progress is only possible, in what is, from a neo-classical viewpoint, an inefficient world.

This view was earlier shared by Adam Smith when he hinted at the importance of changes in the techniques of production and organization when he stated that ‘competition of producers who, in order to undersell one another, have recourse to new divisions of labor, and new improvements of art, which might never otherwise have been thought of’ (Smith, p 706 cited in McNulty 1968). As Metcalfe (1993)
claims the evolutionary approaches are less developed but have clear lines of differences with the equilibrium approach to competition.

The fundamental difference is the displacement of equilibrium and optimization as the organizing concepts. Evolutionary theory is concerned with why the world changes endogenously, and with why technological competition is the driving force behind structural change and economic development. It is concerned with the process of adaptive learning and the creation of novelty. Indeed it is by this change in approach that attention is switched to the strategic, cognitive and organizational aspects of firms which explain why they behave differently (Arthur and Lane, 1993). Nelson and Winter (1982) define this innovation process in terms of dynamic efficiency. Decisions about technological innovation are made with great uncertainty which make it difficult to assess the results of different strategies that are adopted by enterprises. Again competition, unlike in neo-classical theory, does not only relate to prices and costs, but to a wider set of variables and welfare increases not only in response to price reductions but to improvements in quality and product variety (Jorde and Teece 1992).

The evolutionary account of the competitive process is therefore characterized by a competitive order rather than a competitive equilibrium. As Metcalfe has stated ‘competition depends upon the variety of behaviorisms in a population of firms. That variety is translated into differential profits in terms of differential growth and decline. Innovation processes continuously reshape the pattern of variety and provide the developmental impetus to drive the selection process’ (Metcalfe, 2000).
The competitive order changes with innovation and therefore is conceptually different to the idea of market structure portrayed in neoclassical economic theory and of its measurement in terms of the concentration of firms. The evolutionary approach has been used to explain how competitive advantage, as opposed to comparative advantage, explains successful development (Teece 1987). The contrast has been made between the UK’s earlier comparative advantages in the industrial sphere which gave way to Germany’s superior competitive advantage achieved through investment in production, marketing and management.

2.3 The mobile phone market

Substantial evidence now exists of the development benefits of mobile telephony. These include: improved connectivity that has enabled countries to leapfrog the need to develop fixed line infrastructure, providing connectivity to many people for the first time; its role in reducing transaction costs for both households and enterprises; facilitating job creation and private sector development; and enhancing access to financial services.

The mobile phone market is relatively young and evolving fast. Regulation is important for competition in this area, and regulators are grappling with how best to handle this fast changing market.

Until recently, Kenya has had a relatively concentrated market compared to the other four countries, and prices were relatively high. However, competition in the market increased through the entry of two new players in 2008/09, and since then tariffs
have fallen by as much 50%. Zambia has the lowest mobile penetration rate and highest tariffs of the five countries. The market is performing relatively poorly, at least in part because of a lack of competitive neutrality in relation to the government monopoly that controls the international gateway. The government charges high tariffs to private operators to access the gateway, which means that private operators have to subsidize their international calls to be price competitive with the state firm (Karen et.al, 2010).

In Ghana there appears to be intense competition between the operators. The country has good mobile penetration and relatively low prices, and an effective regulator that has facilitated a competitive market. There has been good regulation of interconnection and the liberalization of the international gateway, as well as an effective form of a universal access fund. The lack of these elements has slowed down market development in other countries (Karen et. al, 2010). The Vietnamese mobiles market is heavily dominated by state owned enterprises, but the operators do appear to compete fiercely with each other, and the sector is performing fairly well (Donner, 2007).

Bangladesh has a relatively competitive mobiles market and the lowest tariffs across the five countries. There are some regulatory concerns, however, such as a regulated price floor, which is not in line with international best practice, and has been set at less than the regulated termination charge. This puts smaller mobile operators and new entrants at a disadvantage and highlights the importance of considering potential competition impacts when taking regulatory decisions.
Cross-national assessments in the developing world find users treating mobiles as both a complement and as a substitute (Garbacz and Thompson 2005, 2007); with first-time phone users choose a mobile line rather than a fixed one. Hamilton (2003) uses national-level penetration and environmental variables from 23 African nations to observe both substitution and complementary effects (depending on income level), and to argue that competition from mobile service actually improves landline availability.

Hodge (2005) uses household subscription data to estimate a complement-versus-substitution point in South Africa, finding that prepaid mobiles were more attractive for low-income users with low telecommunications expenditures, despite higher per minute rates. Users preferred prepay plans to the alternative of paying a monthly fee (plus a lower per-minute rate) for a landline phone. Esselaar and Stork (2005) echo Hodge, using a 9-country household survey to find evidence of a substitution effect across a broad stretch of incomes, not just among the poor.

Indeed, liberalization is a present theme across much of the regulatory work mentioned above. Varoudakis and Rosso (2004) are critical of the relative lack of liberalization in the Middle East and North Africa; they see higher levels of mobile penetration in competitive markets like Jordan and Egypt than in less competitive ones like Iran, Syria, and Libya. Mureithi (2003) calls for greater liberalization in African markets, in order to bring more competitors into national markets, many of which had only two mobile carriers. Stovring (2004) contrasts the broad successes of liberalized, competitive mobile markets with the poorer record of many African
nations’ fixed-line privatization initiatives. Wallsten’s (2001) analysis reinforces this, finding that between 1984 and 1997 competition from mobile providers in African and Latin America had more impact on overall telephone penetration than privatization of landline providers.

The telecommunication system has been a fastest growing medium of communication rejuvenating global interface interactions. Since, currently telecommunication sector is experiencing phenomenal global change with the liberalization and privatization of the sector (Beard and Hartmann, 1999), which in turn, widens a fierce competition. The system has opened an ocean of opportunities for the potential consumers to enjoy versatile choices among the service providers. Now days, due to breathtaking competition, the telecommunication service providers tend to offer innovative services as well as competitive prices just to attract handful magnitude of customers. The nature of the competition today in the global telecommunications industry seems to center on market activities that aim at gaining competitive advantages through strategic combinations of resources and presences in multiple products and geographical areas (Chan-Olmsted and Jamison, 2001). The success of telecommunication industry depends on prudent efforts and feasible investments. In Tanzania the tariff rates have been changing over time depending on the inter-calling from one company operator to another. Table 2.1 presents the off net tariff since year 2000.
Table 2. Off Net Tariff

<table>
<thead>
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<th>Off Net Tariff (calling to other operators)</th>
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<tr>
<td>TTCL</td>
<td>7</td>
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<tr>
<td>TIGO</td>
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<tr>
<td>VODACOM</td>
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<td>AIRTLE</td>
<td>7</td>
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<td>ZANTEL</td>
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Source: Airtel Annual Report (2012)

2.4 Price

Price plays a vital role in telecommunication market especially for the mobile telecommunication service providers (Kollmann, 2000). It includes not only the buying price but also the call and rental charges. Generally, a price-dominated mass market leads to customers having more choices and opportunities to compare the pricing structures of diverse service providers. A company that offers lower charges would be able to attract more customers committing themselves to the telephone networks, and hence, significant number of “call minutes” might be achieved.

According to Kollmann (2000), income from the number of call minutes determine the basic commercial success for the network providers. He also added that the success of the telecommunication sector in a market place largely depends on continuing usage and pricing policies, which need to be considered on several levels. Draganska and Jain (2003) stated that a common strategy for a company extending their product or service is to differentiate their offerings vertically. In this era of
information age, price competition has become cutthroat in mobile telecommunication industry.

Trebing (2001) mentioned that there are three sets of strategies for pricing behavior. The first is limit entry pricing, which is used for protection of the market position of the firm; second is the high access charges for new entrants, and the third one is tie-in sales to write off old plant or standard investment against captive customers. According to the author, limit entry pricing involves setting low prices in highly elastic markets to attract or retain large customers with monopolistic buying power, while maintaining high prices in inelastic markets. Consumer research over the past three decades has documented the persistent impact that price has on consumer perceptions of a product (Janakiraman et al., 2006; Vanhuele et al., 2006).

Customers in telecommunication industry have preconceived notions about the price and value of telecommunications services. Customers have historically complained about the level of local charges, more than they have about long distance; although, local service is frequently offered at a price lower than actual cost. When long-distance service is priced well over cost, and local service is generally priced well under cost, customers expect to pay very low prices for local services and apparently do not mind that long distance could be less expensive but is not (Strouse, 1999).

Munnukka (2008) indicated that a significant and positive relationship exists between customers’ price perceptions and their purchase intentions, and that the formation of price perceptions is significantly influenced by satisfaction with pricing and services. Munnukka (2005) also explained that in mobile services sector business
practitioners are facing problems in pricing decisions as they are short of knowledge on their customers’ price sensitivity levels and dynamics. It was discovered that mobile service customers differ significantly in their price sensitivity levels; customers with moderate usage of mobile services are least price sensitive, while intensive and low-end users are most sensitive to price changes. From the consumer’s perspective, price is what is given up or sacrificed to obtain services.

On the other hand, other considerations may suggest that collusion is difficult; providing a rationale for the more competitive prices that we will end up observing. First, Fudenberg and Maskin's (1986) Folk Theorem indicates that collusion on the monopoly outcome may be a possibility but not a necessity, with a whole range of other outcomes possible, including marginal-cost pricing. How firms arrive at their repeated-game strategies and the market arrives at equilibrium in the presence of this multiplicity of equilibrium has been the subject of active research inspired by Axelrod's (1984) seminal work.

A second factor hindering collusion is the relatively large number of firms in our market: hundreds of firms were listed on the price comparison website (our data covers a smaller group of the 24 lowest-price firms each hour, for a total of 47 with significant presence during the sample period). For many reasons, collusion is harder to sustain with more firms. Third, although in principle firms were able to adjust price instantaneously, in practice prices were not continuously changed, with lags of days or even weeks between price changes. Why firms showed inertia in price changes is in part the subject of our analysis.
Davis and Hamilton (2004) offer four suggestions: menu costs, information-processing lags, customer acceptance, and strategic recognition of rival responses. To this list we would add a fifth: costs of continually monitoring market conditions, and computing best responses to these, leading to periods of inattention.

Interesting price patterns can emerge with staggered price setting in repeated games. The seminal paper in this area, Maskin and Tirole (1988), showed that if two firms set prices in alternating periods, there exist Markov-perfect equilibrium exhibiting a focal price and also others exhibiting cycling prices (called Edgeworth cycles after Edgeworth 1925). Although we will not see marked Edgeworth cycles in our price series, firms' rankings in the price list will exhibit cycles for some firms reminiscent of Edgeworth cycles, and one of the goals of the analysis will be to characterize these rank cycles.

Recent theoretical research has pointed to the robustness of the cycling equilibrium. Wallner (1999) shows that Markov-perfect equilibrium with price cycles can emerge even if the repeated game has a finite horizon. Eckert (2003) shows that while equilibria with cycling prices exist for a large range of firm sizes, focal-price equilibrium require the two firms to be close enough in size. Work showing that asynchronous pricing will emerge

The price cycles that emerge in the literature cited in the previous paragraph are solely a function of firm strategy and not driven by fluctuations in market conditions. Of course, price
cycles and other interesting movements may be generated by underlying fluctuations in demand and/or cost. Indeed these market fluctuations may affect the nature of firms' strategies, typically providing another factor hindering collusion (Tirole 1988). Classic papers on super games in the presence of market fluctuations include Rotemberg and Saloner (1986), analyzing the case of observable shocks, and Green and Porter (1984), analyzing the case of unobservable shocks. Several more recent papers have added market fluctuations to repeated games with staggered pricing (Fishman 1992, Eckert 2004, Leufkens and Peeters 2008).

Much of the theoretical literature tends to focus on symmetric strategies, in contrast to our findings that firms adopt heterogeneous strategies that fall into identifiable clusters. The theory does suggest some rationales for heterogeneous strategies. Not knowing the strategies rivals are playing to say nothing of the best response to these strategies, different firms may be experimenting with different strategies, one or some of which may begin to emerge as dominant through survivorship or other evolutionary forces, along the lines of Axelrod (1984).

In the model of Hansen et al. (1996), with duopolists in a Bertrand game with differentiated products, an unanticipated negative demand shock may elicit asymmetric responses as a decrease in one firm's price reduces the benefit to the other from changing its price, and it may decline to do so if price changes involve a fixed cost. In Lal and Matutes' (1989) model, manufacturers of a product bundle charge different prices for the individual components although the overall bundle is sold for the same total amount. This strategy allows firms to compete for different
segments of the heterogeneous population of consumers with their differentiated products. Such strategies may be relevant for our market, because the product under consideration may be offered to induce consumers to buy other products along with it or as a substitute for it, so multiproduct strategies may be important in our market and may contribute to heterogeneity in strategies.

2.5 Service Availability

Consumer’s perception of product quality is always an important aspect of a purchasing decision and market behavior. Consumers regularly face the task of estimating product quality under conditions of imperfect knowledge about the underlying attributes of the various product offers with the aid of personal, self-perceived quality criteria (Bedeian, 1971 adapted by Sjolander, 1992). According to Sjolander (1992) the consumer behavior in modern market is different from the theoretical case of consumer decision making in free markets.

Generally, free and competitive markets are composed of buyers and sellers each of whom must possess perfect information about all possible products and their respective utilities; a well-defined and explicit set of performances; the ability to determine optimal combination of various products given their budget constraints; a knowledge of prices, which does not affect the subjective wants or satisfaction of the consumer (Monroe and Petroshius, 1973 adapted by Sjolander, 1992).

Notwithstanding the Rahman et al. 2889 facts, it is necessary to define quality in the first place before it can be measured. Although, there is no global definition of quality exists (Sebastianelli and Tamimi, 2002), it can be defined in a varieties of
ways. Yoon and Kijewski (1997) pointed out that quality can be categorized into two perspectives. One is the marketer’s perspective, which is typically product-based or manufacturing-based and the other one is consumer’s perspective, which is typically user-based or value-based.

Generally, product quality from the marketer’s perspective is associated with specific feature, function or performance of a product. On the other hand, product quality from the consumer’s perspective is associated with the capacity of a product to satisfy consumer needs (Archibald et al., 1983). According to Lambert (1980), consumers often attribute quality to branded products on the basis of price, brand reputation, store image, market share, product features and country of manufacture. So, price is an indicator to measure the product quality, which is based on the theory that quality is a measure of the utility, or the want-satisfying capacity of products (Sjolander, 1992).

The author has also added that the more the quality a product possesses, the more the utility it contains, and the higher the price it will obtain in an open market exchange. This means that similar products offered to the market at different prices, contain different amounts of utility, and that there is a direct relationship between quality and price. The actual price-quality relationship is a complex interaction between price, brand name, store image, product features, and brand awareness (Lambert, 1980; Gerstner, 1985).
Oliver (1993) identified a few major elements that differentiate between service quality and satisfaction. It was suggested that, the dimensions that comprise quality judgments are quite specific to the service delivered. As for satisfaction, it can be determine by a broader set of factors including those which are outside the immediate service delivery experience (e.g. a mobile phone subscribers satisfaction depend with his/her mobile phone operators may be influenced by whether his/her need; mood on that particular day when that consumer want to purchase a line).

Ting (2004) indicated that perceptions on service quality do not depend on experiences with the service environment or service providers, while judgments for satisfaction depend on past experiences. He also mentioned that quality is believed to be determined more by external cues (e.g. price, reputation) whereas satisfaction is more driven by conceptual cues (e.g. equity, regret). Based on this evidence from the service literature, service quality and satisfaction will be viewed as two different constructs that are unique but related. As the analysis suggests, service quality is the antecedent towards satisfaction.

Overall, the quality of a product is also related to the availability of the product’s main functional features on one hand and the consumer’s experience-in-use of the other auxiliary features on the other hand (Yoon and Kijewski, 1997). A product’s main functional features are the sources of the primary benefits that the consumers expect to obtain when purchasing a product. In general, consumers’ evaluations of a product’s overall quality are related to the availability of these features in comparison with the competition (Lambert, 1980; Nowlis and Simonson, 1996).
Hence, it is necessary for the telecommunication service providers to effectively communicate with the consumers for measuring the quality. Quality reflects the extent to which a product or service meets or exceeds consumers’ expectations (Wal et al., 2002). Therefore, the success of the telecommunication sector in the marketplace significantly depends on product quality and availability.

### 2.6 Services Quality

Service may be available but not quality which meet the customer’s expectation. According to Leisen and Vance (2001) service quality helps to create the necessary competitive advantage by being an effective differentiating factor. Service quality was initiated in the 1980s as the worldwide trend when marketers realized that only a quality product could not be guaranteed to maintain competitive advantage (Wal et al., 2002).

The topic of measuring service quality has been studied extensively in the past-15 years. The study of McCleary and Weaver (1982) indicated that good service is defined on the basis of identification of measurement behaviors that are important to customers. Zemke and Albrecht (1985) suggested that service plays an important role in defining a restaurant’s competitive strategies and identified systems and strategies for managing service. Both the service management and the marketing literatures suggest that there is strong theoretical underpinning among customer satisfaction, customer loyalty, and profitability (Hollowell, 1996).
Defining service quality and its components in a form that is actionable in the workplace is an important endeavor that any business company cannot take lightly. Moreover, many scholars agree that service quality can be decomposed into two major dimensions (Gronroos, 1984; Lehtinen and Lehtinen, 1982). The first is referred to by Zeithaml et al. (1985) as “outcome quality” and the second by Gronroos (1984) as “technical quality”. However, the first dimension is concerned with what the service delivers and on the other hand; the second dimension is concerned with how the service is delivered.

However, competitive advantage by firms is a value-creating strategy, simultaneously which is not implemented by any existing or potential competitors (Barney, 1991). As a result, service quality can be used as a competitive advantage which is related to customers’ satisfaction and also leads to consumer loyalty and future purchase (Johnson and Sirikit, 2002). In particular consumers prefer service quality when the price and other cost elements are held constant (Boyer and Hult, 2005). It has become a distinct and important aspect of the product and service offering (Wal et al., 2002).

Moreover, according to them, a competitive advantage also sustained when other companies are unable to duplicate the benefits of this strategy. Service quality is essential and important for a telecommunication service provider company to ensure the quality service for establishing and maintaining loyal and profitable customer (Zeithaml, 2000; Leisen and Vance, 2001). Conversely, Johnson and Sirikit (2002) state as service delivery systems have the ability to allow managers of company to
identify the real customer feedback and satisfaction on their telecommunication service. Since, quality reflects the customers’ expectations about a product or service. Lovelock (1996) stated that this customer driven quality replaced the traditional marketing philosophies which was based on products and process. Service quality is different from the quality of goods.

Research on services and services marketing has grown considerably (Bateson, 1995; Henkoff, 1994; Koepp, 1987). Academics and practitioners have demonstrated interest in issues that surround the measurement of service quality and the conceptualization of the relationship between service quality and consumer satisfaction (Fisk et al., 1993). Bateson (1995) states that quality is generally conceptualized as an attitude, the customer’s comprehensive evaluation of the service offered. It is built up from a series of evaluated experiences and hence is less fluctuating than attitudes built from the emotions of satisfaction.

Since, services are intangible, perishable, produced and consumed simultaneously and heterogeneously (Zeithaml and Bitner, 2000). So, it sounds as a major problem for the telecommunication service providers, especially for the mobile telecommunication service providers to deliver quality service consistently as changes in market compositions and competing characteristics have been surfacing incessantly.

Berry (1981); Gronroos (1990) and Gummesson (1990) stated that if a management wanted its employees to deliver an outstanding level of service to customers, it must
be prepared to do a great job with its employees. Gronroos (1981) stated that internal marketing should create an internal environment which supports customer consciousness among staff. Wolf and Zwick (2008) found that employee involvement and financial incentives and inducement were often honored as efficient way for increasing the organizational productivity.

A number of authors have explored the links between individual HR practices and corporate financial performance. Lam and White (1998) reported that firm’s HR orientations (measured by the effective recruitment of employees, above average compensation and extensive training and development) were related to return on assets, growth in sales and growth in stock values.

Service organizations are shifting their focus from 'transactional exchange' to 'relational exchange' for development of mutually satisfying relationship with customers. Bennet (1996) described that CRM seeks to establish long term, committed, trusting and cooperative relationship with customers characterized by openness, genuine concern for the delivery of high quality services, responsiveness to customer suggestions, fair dealings and willingness to sacrifice short term advantage for long term gains.

As suggested by (Levitt, 1986; Gronroos, 1994; Morgan, 1994; Gummesson, 1999; Bejou Et al, 1998) trust, commitment, ethical practices, fulfillment of promises, mutual exchange, emotional bonding, personalization and customer orientation have been reported to be the key elements in the relationship building process. Schneider
and Bowen (1999) suggested that companies manage how to implement concern for customer needs in all actions that might influence customer's feelings about relationship with the firm.

M. Sareen and Sarika Tomar in their article, “Sustainable competitive advantage gaining through strategic HRM” (2000), opine that until two decade ago the contribution of human resource management was considered peripheral to the organization’s growth and development. They further mention that in recent years there has been a shift in thinking—it is the human resource that is the critical factor in the success of one organization from the other. HR is the key to competitive advantage. Better HR practices offer the organization a chance to gain sustained competitive advantage. To cope up with the shift in the external environment successfully, business organizations require a further shift in the operations of the human resource department and in the attitudes of the management.

According to Wang and Lo (2002), marketing and economics quality often depends on the level of product attributes. They also state that there are two primary dimensions for quality in operations management. At first, fitness of use, which refers to product or services that is supposed to do and possess features to meet the customer needs. The other one is reliability, which represents the product that is free from deficiencies.

Accordingly, it is important for a company to understand how customers perceive their service quality. Consequently, Rust and Oliver (1994) pointed out that
companies need to measure consumers’ satisfaction with their products and services. Generally, service and product quality always lies in the minds of the consumers depending on individual buying capacity, buying behavior, demand, taste, and fashion criteria and obviously the competitive markets that provide significant differentiation strategies.

Therefore, it seems a downright necessity for the mobile telecommunication service provider to communicate directly with the potential consumers for measuring possible quality attributes.

According to Wal et al. (2002), quality reflects the extent to which a product or service meets or exceeds consumers’ expectations. Wang and Lo (2002) studied on comprehensive integrated framework for service quality, customer value, and customer satisfaction and behavioral intentions of customers in China’s mobile phone sector.

They conceptualized factors with service quality as antecedents to customers’ overall evaluation of service quality rather than dimensions or components of the construct. Herein, they found that the competition between two mobile phone service providers is more intense than ever. This competition is not only in ensuring network quality by a large amount of investment in network extension and upgrading but also in customer acquisition and retention by direct and indirect price reduction efforts.

Customer perceptions of the quality of a service are traditionally measured immediately after the person has consumed the service. In fact, consumer’s
perception of service quality at the time he or she next decides whether or not to buy the service may better explain repeats buying behavior (Plamer and O’Neill 2003). Quality has been defined as a characteristic that goods or services must possess in order to be perceived as useful. Hence, what is a quality product to one demographic may not necessarily be a quality product to another (Praxiom, 2005).

Crosby et al. (2003) examined how perceptions of quality are created and maintained in the minds of consumers. Phusavat and Kanchana (2008) described quality represented the most important competitive priority. Quality was given the highest weight of 36.4%, while service provision, customer-focus, and know-how were at 20.4, 12.9 and 12.5%, respectively. The remaining weights were 9.8% for costs, and 8.0% for flexibility. The impact of perceived quality on the attitude toward the extension can be unambiguously positive.

In spite of that, Omotayo and Joachim (2008) attempted to find the relationship between customers’ services on customer retention in telecommunication industry in Nigeria. They reached that if retention is not managed, customer’s loyalty may be lost. The hypotheses of their research were supported indicating strong relationship between customer service, satisfaction and retention in the communication industry in Nigeria. The findings of the study showed strong support for the application of customer service to enhance customer retention. The results further showed that the respondents in this study have a positive impression towards their telecom company’s ability to meet their changing needs.
This demonstrates that the respondents would likely stay with their telecom companies as long as the companies are able to satisfy their changing needs. Besides that, in hypercompetitive environments like the wireless industry, keeping existing customers is one of the most effective ways to drive profitability, as it is more costly to attain a new customer than to retain an existing one (Mobile, 2005).

When evaluating service quality for mobile phone service providers, the main focus in this study was the network availability when mobile phone customer needs to call, sms or using internet and any other services provided by a network provider. Therefore service quality is represented by easy and quick accessibility of a package of services provided by a particular mobile phone company. Examples some mobile phone companies have a poor or limited network in most rural areas. Although this study concentrated in urban areas, specifically Dar es Salaam, most people in the city have relatives in those rural areas where frequency calls and sms are performed.

Therefore, mobile phone’s customers prefer companies which have a full network and all the time in their respective villages in order to access their relative. Service quality in terms of network availability is important to all mobile phone users. Most mobile phone users want a seamless mobile phone experience with the least number of dropped calls or sms possible. Dropped calls and static or signal interference are among the measures of network quality which discourage most mobile phone customers.
2.7 Promotion

Promotion is one of the medium which is used by organization to communicate with consumers with respect to their product offerings (Rowley, 1998). It is an important part for all companies, especially when penetrating new markets and making more or new customers (Kotler et al., 1999). The authors also state that promotion is the activities that communicate about the products or services and its potential merits to the target customers and eventually persuade them to buy. Generally, promotion is concerned with ensuring that consumers are aware about the company/firm and its products that the organization makes available to those consumers (Root, 1994).

There are some recent empirical papers addressing the promotion effect on consumer stockpiling behavior under price or promotion uncertainty. Erdem and Keane (1996) and Gonul and Srinivasan (1996) establish that consumers are forward looking. Erdem et al. (2003) explicitly model consumers ‘expectations about future prices with an exogenous consumption rate. In their model, consumers form future price expectations and decide when, what, and how much to buy. Sun et al. (2003) demonstrate that ignoring forward looking behavior leads to an over estimation of promotion elasticity.

Blattberg, Eppen, and Lieberman (1981), Gupta (1988), Neslin, Henderson, and Quelch (1985), Shoemaker (1979), Ward and Davis (1978), and Wilson, Newman, and Hastak (1979) find evidence that promotions are associated with purchase acceleration in terms of an increase in quantity purchased and, to a lesser extent, decreased inter purchase timing. Researchers studying the brand choice decision-for
example, Guadagni and Little (1983) and Gupta (1988)-have found promotions to be associated with brand switching. Montgomery (1971), Schneider and Currim (1990), and Webster (1965) found that promotion-prone households were associated with lower levels of brand loyalty.

Blattberg, Peacock, and Sen (1976, 1978) describe 16 purchasing strategy segments based on three purchase dimensions: brand loyalty (single brand, single brand shifting, many brands), type of brand preferred (national, both national and private label), and price sensitivity (purchase at regular price, purchase at deal price). There are other variables that may be used to describe purchase strategies, examples are whether the household purchases a major or minor (share) national brand, store brand, or generic, or whether it is store-loyal or not. McAlister (1983) and Neslin and Shoemaker (1983) use certain segments derived from those of Blattberg, Peacock, and Sen but add a purchase acceleration variable to study the profitability of product promotions.

Throughout the world, consumer sales promotions are an integral part of the marketing mix for many consumer products. Marketing managers use price-oriented promotions such as coupons, rebates, and price discounts to increase sales and market share, entice trial, and encourage brand switching. Non-price promotions such as sweepstakes, frequent user clubs, and premiums add excitement and value to brands and may encourage brand loyalty (e.g., Aaker 1991; Shea, 1996).
A large body of literature has examined consumer response to sales promotions, most notably coupons (e.g., Sawyer and Dickson, 1984; Bawa and Shoemaker, 1987 and 1989; Gupta, 1988; Blattberg and Neslin, 1990; Kirshnan and Rao, 1995; Leone and Srinivasan, 1996). Despite this, important gaps remain to be studied. It is generally agreed that sales promotions are difficult to standardize because of legal, economic, and cultural differences (e.g., Foxman, Tansuhaj, and Wong, 1988; Kashani and Quelch, 1990; Huff and Alden, 1998). Multinational firms should therefore understand how consumer response to sales promotions differs between countries or states or province.

Consumer promotions are now more pervasive than ever. Witness 215 billion manufacturer coupons distributed in 1986, up 500% in the last decade (Manufacturers Coupon Control Center 1988), and manufacturer expenditures on trade incentives to feature or display brands totaling more than $20 billion in the same year, up 800% in the last decade (Alsop 1986; Kessler 1986). So far, not much work has been done to identify the purchasing strategies that consumers adopt in response to particular promotions, or to study how pervasive these strategies are in a population of interest. Blattberg, Peacock and Sen (1976) define a purchase strategy as a general buying pattern which "incorporates several dimensions of buying behavior such as brand loyalty, private brand proneness and deal proneness." A greater understanding of the different types of consumer responses to promotions can help managers to develop effective promotional programs as well as provide new insights for consumer behavior theorists who seek to understand the influence of different types of environmental cues on consumer behavior.
More specifically, the objectives of any promotional strategy are: increase sales; maintain or improve market share; create or improve brand recognition; create a favorable climate for future sales; inform and educate the market; create a competitive advantage, relative to competitor’s products or market position; improve promotional efficiency (Rowley, 1998). Research on the use of marketing tools in Malaysia is very scanty at best, hence, little is understood about the Malaysian customers and their purchase behaviors, especially with regards to how they respond to the various promotional strategies practiced by marketers.

Malaysian consumers respond more to free sample, price discount, in-store display, and bonus pack than coupon (Ndubisi and Moi, 2006). Promotion is when companies inform, persuade, or remind customers and the general public of its products (Kotler and Armstrong, 2003). Promotions impact consumers’ purchasing behavior and decisions towards that particular brand, especially during the sales promotion period (Freo, 2005).

According to Alvarez and Casielles (2005), promotion is a set of stimuli that are offered sporadically, and it reinforces publicity actions to promote the purchasing of a certain product. Promotional offer consists of several different objects to create a better sale impact, for example, coupons, samples, premiums, discounts, contests, point-of-purchase displays and frequent-buyer programs. Each of the promotion techniques is intended to have a direct impact on buying behavior and perception about the company or service providers. The objectives of promotion will be reached to a greater extent when it is done sporadically, when the consumer does not expect
it. Promotional actions must be well planned, systematically organized, and commonly integrated into the subject corporation’s strategic marketing plan.

2.8 Conceptual Framework

The study assesses mobile phone companies use operational costs in determining cost of a call per minute. It assumed that operation cost of making a call is one of the factors that determine piece to be charged in making a call per minute and hence determine the satisfactory price of making a call per minute.

The study further assumes that profit margin required by the mobile phone companies also play a vital role of determining the price to be charged to customers in making a call per minute and hence determine the satisfactory price of making a call per minute.

However, the study further assumes that low cost charges, sms tariffs rates and other service charges are important facts to be considered by these mobile phone operators in determining the total cost to making a call per minute. Therefore, determining the satisfactory prices of making a call per minute. All these factors are further explained in Figure 1 below.
2.9 Conclusion

Literature review has shown that markets characterised by more competition, with more players, more dynamic entry and exit, and more intense rivalry for customers (e.g. through price promotions, special offers, and marketing campaigns etc.) tend to deliver better market outcomes. These outcomes include lower prices and better access to services for consumers, including other businesses that rely on these products as inputs for their own enterprises. It is also important to ensure that domestic production is internationally competitive, and can, therefore, generate increased exports, foreign exchange, jobs and industrial growth. The introduction of competition or indeed even the prospect of increased competition can have a significant and immediate impact on prices.
Sometimes the involvement of government is self-serving, while at other times it is essentially benevolent in nature. In some countries and markets, there is a close relationship between business and government, as government actors seek to share in some way in the profits of businesses, (e.g. through ownership or taxation etc.). This gives government an incentive to protect those businesses from competition. In these situations the relationship between business and government seems in practice to determine commercial success more than market competition, and competition authorities may face political barriers to addressing competition problems.

This kind of relationship between government and big business creates powerful economic elite, with vested interests in opposing pro-competition, pro-growth reforms. One way to tackle vested interests, who oppose reform, is to establish and facilitate coordination amongst other interest groups who stand to gain from reform. This includes household and industrial consumers and potential new entrants to the market. Competition authorities can build the evidence base, which can be used to help mobilize such interest groups to lobby for reform. Thus, where political difficulties and resourcing and capacity constraints make legal enforcement problematic for competition authorities in developing countries, they can still play a valuable role in promoting competition through advocacy and evidence building, and engagement with other government agencies to ensure that policy is pro-competitive.

In sum, competition improves the performance of markets, generating better outcomes including lower prices, greater productivity and competitiveness leading to industrial growth and jobs, and better access to services. It can undermine the
dominance of a few powerful players, allowing new enterprises to gain a foothold in the market, and underpinning private sector development and employment creation.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The first part of this chapter provides area of the study, while the second described its research design. The third part of this chapter gives the study population. Sample size and sampling procedures are examined in part four of this chapter. However, the fifth part of this chapter explained the data collection methods while the sixth part of the chapter provided the data processing analysis. The seventh part of this chapter has covered the data quality while the last part explained the validity and reliability of data.

3.2 Area of Study

The research was conducted on the basis of surveys and statistical analysis. It involved both qualitative and quantitative approach, and it was based on the cross sectional study, where a survey was conducted to cover four major competitive mobile phone companies in Tanzania, namely, Vodacom, Airtel, Tigo and Zantel. Headquarters of Airtel Tanzania limited at Dar es Salaam was visited to collect information so as to generate answers to the research questions.

Also mobile phone customers in Dar es Salaam were visited in the Mobile company shops and asked to fill the questionnaires prepared. The surveys and analysis as such,
was properly set to address questions raised in the research objective context, through provision of ground for answers to the research questions by the participants.

3.3 Research Design
As defined by Kothari (1990), a research design is an arrangement of conditions for the collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. Research design constitutes the blueprint for the collection, measurement and analysis of data. Therefore, both desk research and field research was employed.

3.4 Study Population
The study aimed at collecting data from two groups. Firstly, all customers who are using mobile phones in Tanzania and at this case those using Airtel Network. And lastly, Tanzania mobile phone operators and at this case Airtel Tanzania limited managers. However, background characteristics of such population such as sex, marital status, education level, and Age were vital and not ignored. Such population was important to be used to meet the objectives of this study and thus provide reasons upon criteria used by mobile phone companies in setting call prices in Tanzania.

3.5 Sample size and Sampling Procedure
The sample size of this study was 30 respondents, where 20 respondents were customers while 10 respondents were Airtel managers who were policy makers. In order to collect information from such population, Airtel shop at Head Quarters at
Airtel House Morocco, Dar es Salaam, were visited daily in 5 days and chose 4 customers every day who were used in this study, and therefore 20 respondents were used in this study. However, 10 Airtel managers who are strategic policy makers were used in the study of which at most 2 managers were chosen from each department namely Finance, Marketing, Sales and Distribution, Human Resources and IT.

In this study, questionnaires were filled by all respondents being both Airtel Customers and employees. However, a random sampling survey was employed to collect information from these 30 respondents. Since most people in Dar es Salaam have mobile phone, a random sampling technique was adopted and questionnaires were given out to all respondents. Sampled respondent who rejected to fill questionnaire was dropped immediately and replaced with another respondent until 30 respondents reached.

3.6 Data Collection Methods

The study used both primary and secondary data.

3.6.1 Primary Data

In collecting primary data the study used close and open ended questions. Two types of questionnaires were used in this study; questionnaires for customers as attached on Appendix 1 and for mobile phone companies’ officials as attached on Appendix 2. Two sides were used to avoid biasness and get balanced information. Both mobile phone company officials and customers were required to fill in questionnaires on the
spot. Both mobile phone companies and customers in Dar es Salaam were interviewed through research questionnaire.

3.6.2 Secondary Data

Secondary data were collected from different sources of mobile phone Company, and regulatory authorities. Such sources include publication, documentaries, magazines, newspapers, books, Journals, internet and video recorded speeches.

3.7 Data Processing and Analysis.

The following concentration ratio model was used to measure the level of competition in mobile phone companies.

\[ CR_i = \frac{\text{Sales of the leading Company in the market}}{\text{Total Sales all Companies in the Market}} \]

Where CR is the concentration ratio

Therefore,

\[ CR_i = \sum X_i, \text{ where } X_i \text{ is market share of the } ith \text{ leading Company.} \]

The higher the CR the poor the competition in the market. Normally when the \( CR_i = 100 \) the market structure is known as a monopoly and \( CR_i \approx 0 \) for a perfectly competitive industry.
Therefore, the concentration ratio measures the extent to which an industry/company is more competitive than other industries/companies in the market.

3.8 Data Quality

Data were checked before analyzed. The data were cleaned, where missed information was identified and removing of duplications, detecting entry errors, and checking for inconsistencies such as outliers, etc. Both qualitative and quantitative data were cleaned before used for analysis. The analysis was based on the research questions and objectives.

3.9 Validity and Reliability of data

Joppe (2000) defines reliability as the extent to which results are consistent over time and an accurate representation of the total population. If the results of a study can be reproduced under a similar methodology, then the research instrument would be considered to be reliable. Embodied in this citation is the idea of reliability or repeatability of results or observations. Validity on the other hand determines whether the research truly measures that which it is intended to measure or how truthful the research results are. In other words, does the research instrument allow you to hit "the bull’s eye" of your research object? The researchers generally, determine validity by asking a series of questions, and often look for the answers in the research of others.

To ensure reliability and validity of the study, the researcher undertook pre-test questionnaires by interviewing 20 customers, where each company was represented by 5 customers. The idea is to see whether the instrument was appropriate for the
study and to ensure reliability and validity. During pre-test of questionnaires, all questions which were seen to be ambiguous were modified or deleted. The researcher not only depended on questionnaires, but also on direct observation that took place from time to time during data collection in order to compare the results with the opinions of respondents.

Secondary data was analyzed using concentration ratio model presented in subsection 3.5 above. At the same time primary data which were gathered from questionnaires were analyzed using the Statistical Package for Social Scientists (SPSS). It is a special computer package for data analysis. The advantage of this package is that it can be used to analyze questionnaires with many questions including both closed ended and open-ended questions (Kothari, 1985). The package was used to determine frequency in order to analyze the number of respondents belonging to each question.
CHAPTER FOUR

FINDINGS AND DISCUSSION

4.1 Introduction

The first part of this chapter provides background characteristics of respondents in terms of age, sex, level of education, marital status and work experience. However the second part of this chapter discusses what operational costs of making a call per minute is. Also, the third part, explains the profit margin wanted by the mobile companies under the study. The fourth part, gives the criteria used in setting prices of making a call. Moreover, the fifth part examines the satisfactory level of the prices charged by the mobile companies under study. Lastly, to determine the minimum possible price that can be charged per call per minute.

4.2 Background Characteristics of the Respondents

4.2.1 Age

Age of the respondents is one of the most important characteristics in understanding their views about the particular problems; by and large age indicates level of maturity of individuals in that sense age becomes more important to examine the response. Age plays a significant role on influencing usage of mobile phones. In reply to the question of age, majority of them, about eighty percent (80%) were below 35 years old as seen on table 4.1
Table 4.1: Total Respondents by Age Groups

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 25 Years</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td>25 - 35 Years</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>36 - 45 Years</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Above 45 Years</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source:** Study Findings, 2014

This finding from Table 4.1 shows that age groups of below 25 years and that between 25 to 35 years are most owners of mobile phone. In this respect, only 20% we seen to be elders while, 80% of them being youth. Therefore, youth are most owners of mobile phones because they can easily adopt usage of mobile phones regardless the cost of making a call and speed of growth of technology in the world.

4.2.2 Sex

Sex is an important variable in a given social situation which is variably affected by any social or economic phenomenon and globalization is not an exception to it. Hence the variable sex was investigated for this study. Data related to gender of the respondents is presented in the Table 4.2.
Table 4.2: Total Respondents by Sex

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>20</td>
<td>67</td>
</tr>
<tr>
<td>Female</td>
<td>10</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Study Findings, 2014

It is quite clear that out of the total respondents investigated for this study, overwhelming majority (67 per cent) of them were males whereas about 33 per cent were found to be females. This signifies that, most male can afford to buy mobile phones than female.

4.2.3 Marital Status

Marriage is one of the most important social behaviors to examine. In a developing country like Tanzania, it has undergone many changes. The perceptions and attitudes of the person can also differ by the marital status of the persons because the marriage might make the persons little more responsible and matured in understanding and giving the responses to the questions asked.

Table 4.3: Total Respondents by Marital Status

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>22</td>
<td>73</td>
</tr>
<tr>
<td>Single</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>Widow/Separated</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Study Findings, 2014
Table 4.3 shows that overwhelming number of the respondents (73 per cent) were married and remaining (27 per cent) were unmarried, whereas none of the respondents were found to be widows. The respondents under the category separated or widower were extremely negligible. Since the average respondents were from late adolescent age group, this is the age at which, normally, a person gets married and shoulders responsibilities. 

4.2.4 Education

Education is one of the most important characteristics that might affect the person’s attitudes and the way of looking and understanding any particular social phenomena. In a way, the response of an individual is likely to be determined by his educational status and therefore it becomes imperative to know the educational background of the respondents. Hence the variable ‘Educational level’ was investigated and the data pertaining to education is presented in Table: 4.4

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Secondary</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Diploma</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>High Degree</td>
<td>22</td>
<td>73</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Source:** Study Findings, 2014

Table 4.4 shows that about 16 per cent of the respondents were educated up to high school and relatively lesser number of them. The number of respondents attaining
higher education was extremely high (73 percent). Only ten per cent of the respondents were educated up to the diploma graduates level. It can be concluded from the Table above that large the respondents were progressive in education which is so important today to create a knowledge based society. This also signifies that most mobile phone users are highly educated people.

4.2.5 Number of Mobile phone Lines

It is important to examine how many people are using more than one mobile phone considering the cost of making a call in Tanzania. Though it is very expensive and costly, this behavior has become vital. In response to the question of number mobile phone line a person might have, below in Table 4.5 were observations.

Table 4.5: Total Respondents by Mobile Phone lines

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Two</td>
<td>17</td>
<td>57</td>
</tr>
<tr>
<td>Three</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>Four</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>More than Four</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Study Findings, 2014

It is observed that majority of respondents (57%) are owning more two different mobile phones, compared to those with a single mobile phone of only about 13%. This shows a vital point that competition among mobile phone operators has not lead to cost advantages to users. People might be running away from the cost of making a
call from one operator to another operator. This furthermore, led us to examine more why should it be expensive to make a single call from one operator.

4.3 Operational costs of making a call per minute

Since the respondents behavior did not justify as to why making a call was expensive, it was then important to understand what determines the prices of making a single call in a mobile company. The survey intends to establish the total operational cost that one incurs in making a call in one minute. Below is the response

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interconnection cost</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>Termination Cost</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Volume of Incoming Calls</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>Market Cost</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Study Findings, 2014

It is observed that, forty percent (40%) of the respondents prefer Market cost to determine the cost of marking a single call in a mobile company. This might be due to forces of supply and demand that determines the price to be charged on a call. However, 27% of the respondents prefer prices of a call to be determined by the inter-connection cost. This is the cost between two or more operators. This highlights that inter-connection cost is the only feasible cost of which people can easily measure or calculate. Very few 10% of respondents believe that termination cost to be used as basis of determining the cost of making a call in a mobile company.
Termination cost seems an indirect cost, and that is why basing on such observation it was necessary to use some other parameters.

4.4 Profit margin wanted by the mobile companies

Mobile companies do set prices for calls per minute basing on certain profit margins and that is why it was very important to ask this question basing on such grounds. However, not all mobile operators believe on such grounds. Therefore, the survey was intended to determine the profit margin set by Airtel Tanzania Limited as basis to determine price of making a call per minute. Responses were as portrayed below.

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit Margin Ratio below 71</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Profit Margin Ratio at 71</td>
<td>23</td>
<td>77</td>
</tr>
<tr>
<td>Profit Margin Ratio above 71</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source:** Study Findings, 2014

The survey results show that majority 77% of the respondents prefer prices of calls per minute to be measured at Airtel’s expected profit margin of 71. This might be due to the fact that, it’s the only price to be charged by Airtel and at the same time not overcharge the customer. Hence a win win situation. However, only 10% of the respondents believe, that the company should charge a bit above the expected Airtel profit margin ratio of 71. The fact here is, may be customers might be worried that the company won’t make any suitable profit to make it last longer. And if so,
customers might lose their money. Lastly, 13% of the respondents believe that a company should charge below the expected profit margin. And this might be based on the fact of attracting competition between mobile operators. However, this is not a win-win situation as the mobile operator is losing on this voice product. Basing on all these facts, it was necessary to look upon other factors that must be looked at on determining the price of making a call by a mobile operator. Hence rising of below arguments

4.5 Criteria used in setting prices of making a call

Different mobile operators should have benchmarks upon setting prices of each of their products. Basing on this aspect it was again vital know and understand what are the criteria used by mobile phone operators in determining or setting price on making a call per minute. Therefore, the survey intends to establish the criteria used by Airtel in setting prices of making a call in one minute. Below were the responses.

Table 4.8: Total Respondents by criteria used in setting prices of making a call

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations Cost</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Profit Margin</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Investment Returns</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Market Behavior</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>Competition level</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Source:** Study Findings, 2014
Table 4.8 shows that, majority 40% believes that any mobile phone operator should look at competition level to determine the price of making a call per minute. This shows that competition price is the best price regardless uncertainties. However, market behavior is believed to be a better basis of setting price than investment price by 27% and 7% respectively. Again in line with responses against operational cost discussed earlier, market forces plays a vital role. Basing on most respondents belief, these two key points competition level and market behavior, should be the basis of pricing a call per minute. To discuss this further it was necessary to ask the below question and measure the degree of responsiveness.

4.6 Satisfactory prices charged by the mobile companies

To further get more confidence on the market behavior and competition level as basis to determine price on making a call per minute it was important to ask this question and determine the satisfactory prices to be charged by mobile phone operators. At this point, basing on questionnaires sent to Airtel, Table 4.9 below discusses and portrays the results.

Table 4.9: Total Respondents by satisfactory prices charged in making a call

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Behavior</td>
<td>10</td>
<td>33</td>
</tr>
<tr>
<td>Competition level</td>
<td>16</td>
<td>53</td>
</tr>
<tr>
<td>Government / Regulator Prices</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Operational Cost</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Study Findings, 2014
The survey results show that majority 53% believes that satisfactory prices should be determined by the level of competition. Meaning satisfactory price of making a call per minute should be a competitive price. It should be the price determined by the extent of competition available in the telecommunication industry. This is subjective to previous arguments highlighted by previous surveys as shown on Table 4.8. It is believed that when one mobile phone operator comes in the market with new product that is highly competitive at relatively better prices, most subscribers become best users of that product. This is justified by 3% responses that assume prices to be set by Telecommunication Authority as the Government body. Hence, to further get more supportive evidence more questions were asked as seen in the next key point.

4.7 Minimum possible price that can be charged per call per minute

Here the survey was intending to establish the minimum possible price to be charged by mobile phone operators when making a call per minute. However, this question wanted to explore further previous arguments that satisfactory prices should be determined by market competition forces. Therefore, in response to this question, results are portrayed on Table 4.10 here under.

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Behavior</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Competition level</td>
<td>20</td>
<td>67</td>
</tr>
<tr>
<td>Government / Regulator Prices</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Operational Cost</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Study Findings, 2014
As seen on Table 4.10, again the majority 67% believes that minimum possible price a customer should be charged in making a call per minute should be determined by the level of competition. This seems justifiable since no one was comfortable with being charged by prices basing on operational cost. This might be due to the fact that most respondents believes that mobile phone operations are highly exposed to high level of technology which should be very expensive when improved and that they might not feel comfortable to be exposed on such conditional environment.

Also, it’s further seen that, responses to be neutral at 17% upon government policies and regulation and market behavior. This might be due to the fact that the market is highly exposed to the government policies which seem to at high extent affect the market negatively. Meaning, at most time Government bodies can easily take control of the market behavior through Taxes, rules, regulations and such other related facts. Hence non win – win situation
CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Considering the findings of this research as reported in chapter 4, conclusion can be deduced as follows, generally it can be said that price to be charged when a person makes a call per minute can be influenced by both Respondents behavior and key objectives of the study as in detailed discussed. However, such factors not only have a vital role on determining the price of making a call per minute but also have to be considered before deciding from which network one should make a call

Findings show that majority agree on the level of competition between mobile operators namely; Airtel, Vodacom, Tigo, Zantel, Sasatel, TTCL and SMART. However, basing on this high level of competition prices are still high and increasing on daily basis thus not in a price competitive advantage. Literature shows that high competition leads to better price competition, but in this scenario, the survey portrays out a completely different picture. Respondents seem to be unsatisfied with prices despite this stiff competition

Tanzania Communication Regulatory Authority (TCRA) provides the guidelines, pricing rules, telecommunication ethics and procedures to be adopted and used by mobile phone companies whether being local or foreign companies. This is
subjected to protecting consumer taste and preference, and quality of service to be provided. They also emphasize on the price evaluation towards promoting not only free and fair competition among providers but also price protectionism to consumers.

This study concludes that competition among the mobile phone operators should be used as primary measure of price of making a call despite some other factors like operational cost, Profit margin, investment returns, and market behavior.

5.2 Recommendations

From the findings of the study, and the conclusion made above, the study recommends the following:

(i) Competition level should be the major determinant of the minimum and satisfactory pricing mechanism to be charged to a person when making a call per minute despite the mobile phone company hugeness and value in the market and economy respectively.

(ii) The Government bodies such as Tanzania Communication Regulatory Authority should play a great role of consumer’s protectionism. It should not under or over look any mobile phone operator regardless the value it has in the market, the extent of coverage, the nature of investment, location of business, or ownership structure of that particular company but rather protect and ensure customer satisfaction is highly maintained.
(iii) Mobile phone providers should be punished without being bias in case it does not adhere to regulatory procedures and requirements. This is the only way to protect consumers especially the over pricing problem.

(iv) It’s observed that we still have few mobile phone operators in Tanzania. It is easy for the mobile phone company’s owners and managing directors to sit on a round table and agree not to reduce price upon increase in competition among them. This behavior should not be over looked. It should be treated with sever disciplinary measure by the Government bodies incase such activities have been discovered practiced.

(v) Lastly, it is important to the Government to sometimes reduce tax that is charged to mobile phone operators so as to provide a room for reduction of the cost of production. This will reduce the ongoing high profit margin ratio and hence providing conducive environment to mobile phone operators.
REFERENCES


Airtel Annual Report, (2012), Tariff Trend


Edgeworth, F (1881), “Mathematical Psychics”, London, Paul Kegan


APPENDICIES

Appendix 1: Mobile Phone Customers’ Questionnaire

1. Gender
<table>
<thead>
<tr>
<th>MALE</th>
<th>FEMALE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Age
   | a) Below 25 years | b) 25 – 35 years | c) 36 – 45 years | d) Above 45 years |
   |                  |                  |                  |                  |
   |                  |                  |                  |                  |

3. Education level
   | a) Primary | b) Secondary | c) Diploma/Degree | d) High Degree |
   |            |             |                   |               |
   |            |             |                   |               |

4. How many mobile phone lines do you use?
   | a) Two | b) Three | c) Four | d) More than Four |
   |       |         |        |                  |
   |       |         |        |                  |

5. The Mobile Phone company he/she is registered
   | a) Vodacom only | b) Tigo only | c) Airtel only | d) Zantel only | e) More than one (Mention) |
   |                 |             |                |               |                           |
   |                 |             |                |               |                           |

6. The most line used by the respondent
   | a) Vodacom | b) Tigo | c) Airtel | d) Zantel |
   |           |        |          |          |
   |           |        |          |          |
7. What is the most reason for using more than one line

<table>
<thead>
<tr>
<th>Reason</th>
<th>a) Low tariff rates</th>
<th>b) To avoid high cost by calling other network lines</th>
<th>c) Service coverage where I normally call does not allow my preferred line</th>
<th>d) If network is down to my preferred network line</th>
</tr>
</thead>
</table>

8. The mobile phone company I am registered charge low call charges

<table>
<thead>
<tr>
<th>Perception</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

9. Low call charges has encouraged me to join this company

<table>
<thead>
<tr>
<th>Perception</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

10. The mobile phone company I am registered charge low sms rates

<table>
<thead>
<tr>
<th>Perception</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

11. Low sms rates has encouraged me to join this company

<table>
<thead>
<tr>
<th>Perception</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

12. The mobile phone company I am registered has large service network coverage

<table>
<thead>
<tr>
<th>Perception</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

83
13. Large service network coverage by the mobile phone company I am registered encouraged me to join this company

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

14. There are many promotions in this company

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

15. Different promotion provided by mobile phone company I am registered encouraged me to join this company

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

16. There are large number of services provided by this company

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

17. Large number of services encouraged me to join this mobile phone company

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

18. Internet provided encouraged me to join this company

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

19. High quality services provided has encouraged me to join this company

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

20. Competition has increase access to mobile phone services in Tanzania

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>
21. There is still a need to increase number of mobile phone companies in Tanzania

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

22. Provide your own views on how to improve competition in mobile phone industry in Tanzania

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.................................................................................................................................
Appendix 2: Mobile Phone Service Provider’s Questionnaire

1. Name of the company
   (a) Vodacom
   (b) Airtel
   (c) Tigo
   (d) Zantel

2. Year of establishment ……………………………

3. What is the most reason for some customers to maintain more than one network lines

4. What is the most reason for using more than one line
   (a) Low tariff rates
   (b) To avoid high cost by calling other network lines
   (c) Service coverage where I normally call does not allow my preferred line
   (d) If network is down to my preferred network line I shift to other network line

5. Expansion of coverage has helped my company to defeat other mobile phone companies

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. Different promotion techniques have helped my company to defeat other mobile phone companies

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

7. An increase in the number of services has helped my company to defeat other mobile phone companies

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

8. Low call charges has helped my company to defeat other mobile phone companies

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

9. Low sms rates has helped my company to defeat other mobile phone companies

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

10. Internet service has helped my company to defeat other mobile phone companies

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

11. Number of services offered has helped my company to defeat other mobile phone companies

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>
12. High quality services has helped my company to defeat other mobile phone companies

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

13. Duration of stay since establishment has helped my company to defeat other mobile phone companies

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

14. Overall ranking of the company in terms of service provision to customers

<table>
<thead>
<tr>
<th>Very good</th>
<th>Good</th>
<th>Average</th>
<th>Bad</th>
<th>Very bad</th>
</tr>
</thead>
</table>

15. What can you say with regards to the existing competition of mobile phone companies in Tanzania

<table>
<thead>
<tr>
<th>Very Unattractive</th>
<th>Unattractive</th>
<th>Attractive</th>
<th>Very Attractive</th>
</tr>
</thead>
</table>

16. Competition has increase access to mobile phone services in Tanzania

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

17. There is still a need to increase number of mobile phone companies in Tanzania

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

18. Provide your own views on how to improve competition in Tanzania

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