FACTORS INFLUENCING CONSUMER ADOPTION OF PREPAID TARIFF PLANS IN THE MOBILE TELECOMMUNICATIONS INDUSTRY IN NAIROBI, KENYA

BY

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DECLARATION

STUDENTS DECLARATION

I declare that this research project is my original work and has not been presented to any other University for the award of a degree.

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SUPERVISOR'S DECLARATION

This research project has been submitted with my permission as the University Supervisor.

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DEDICATION

This research is dedicated to my lovely daughters, Audrey, Alexis, Tasha & Thalia and their cousin sister Sharon for their understanding during my study & research. These five wonderful girls are awesome and were indeed my source of strength and inspiration.
ABSTRACT

The objective of this study was to determine the factors that influence the consumer adoption of prepaid tariffs in the Mobile telecommunications Industry in Nairobi, Kenya. It is argued that Promotions through advertising plays a significant role in influencing customer choice but this may just be one of the factors that influence choice and even if so, this has to be verified through a study.

The study was done through a questionnaire administered randomly to 250 respondents in Nairobi. Key attributes were tested to ascertain consumer awareness of services offered and how they are charged, Mobile service provider performance rating and if the services offered do indeed influence consumer choice of prepaid tariff plans and hence adoption. And the study covered adoption across gender, age group and income levels.

Of all the factors that were considered in the study, affordability, friends and relatives influence, consumer awareness of services offered by Mobile service providers, network coverage and clarity were found to be the factors that largely influenced consumer adoption of prepaid tariff plans in mobile telecommunications industry in Nairobi, Kenya.

We can therefore conclude that advertising and promotions which is a key awareness driver is a major contributor to adoption of prepaid tariff plans. Consumer response is based on their knowledge and awareness.
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CHAPTER ONE: INTRODUCTION

1.1 Background

Due to intense competition from existing and new entrants into the markets, organizations need to focus more on consumers and their needs. Organizations are therefore challenged to produce goods or develop services that would attract and retain the customers. An organization needs to leverage on its core competencies and assets for strategic success. With its awareness, perceived quality, associations and customer loyalty, a brand is usually the most powerful asset that a firm owns (Aaker, 1996). A brand is a singular idea or concept that you own (Airtel Networks Kenya, 2006). It is a name and/or symbol associated with a known and trusted set of attributes, benefits and values, which appeal to the heart and mind. A brand-customer relationship drives purchase decisions and this is built from the brands value proposition. Aaker (1996) defines brand value proposition as a statement of functional, emotional, and self-expressive benefits. A firm then has the challenge to leverage the brand to create longer and stronger business entities.

The entry of new players in the market and stiffening of competition by existing players has increased the level of competition and firms are continuously reviewing their bundle of benefits to offer quality and affordable products that would satisfy consumer needs and encourage repurchase and hence adoption. The nature of economic competition in real world is in a state of perpetual change (Shridharan, 1999). This implies that improvements and innovations should be continuous and are inevitable if an organization has to remain competitive. The nature and extent of
competition has also been influenced by changes taking place in the environment and realignment of economies. Such changes include liberalization and globalization.

Globalization is the strategy of approaching worldwide markets with standardized products (Pearce II, 2007). These markets are usually created by consumers who prefer low priced standardized products to high priced customized products. This simply means that products can be found in all markets with similar attributes, meeting same quality standards and being offered at relatively the same price. Liberalization on the other hand refers to relaxation of government restrictions in areas of social or economic policy. The term is often used to refer to economic liberalization especially trade liberalization or capital markets liberalization and in many economies it is often associated with privatization of government-held property which is usually done through floating of shares to either retail or institutions investors.

Firms react differently to competition based on the nature of the environment in which they operate in. Arguably, one of the most commonly used competitive strategies in attacking competition is product diversification which implies a strategic portfolio change. A strategic portfolio change occurs when a firm either changes the market it serves, and/or technology it uses, and/or geographical location in which it does business (Ansoff, 1988).

The other two widely employed forms of response to competition are mergers and acquisitions. Wheelen (2005) defines acquisition as the purchase of a company that is completely absorbed as an operating subsidiary or division of the acquiring corporation. A merger on the other hand is a transaction involving two or more corporations in which stock is exchanged and in which only one corporation survives
(Wheelen, 2005). Mergers usually occur between firms of somewhat similar size. The resulting firm is likely to have a name derived from its composite firm. Mergers and acquisitions have been proliferating because they are major growth engines for businesses and is a strategy that ensures a company remains competitive and relevant for a long period of time. Some organizations have adopted this growth strategy to block new entrants by forming one big monopoly.

1.1.1 Product Adoption

New products and innovations often come with high risks of possible failure in the market due to low acceptability or even total rejection by consumers. This has led to extensive research by marketers to unveil and discover the critical success factors affecting adoption as well as on the process of innovation diffusion itself. This is to ensure that an organization produces products and/or services that are not only relevant to the consumers but also competitive in terms of affordability and utility.

Adoption is an individual’s decision to become a regular user of a product (Kotler, 2003). In the mobile telecommunications industry, this process is described as acquisition and retention of subscribers. In studying factors influencing consumer adoption of prepaid tariffs, the research will be addressing acquisition and retention of subscribers in the Industry which has been characterized by limited loyalty from consumers who are often dual in nature. The product adoption process focuses on the mental process through which an individual passes from first hearing about an innovation to final adoption (Kotler, 2003). There are five adopter categories namely; innovators, early adopters, early majority, late majority and laggards. These adopter categories are on the basis of adoption speed where a majority are either early adopters or early majority.
The mass market approach used by early marketers to market products has had two main drawbacks namely; heavy marketing expenditures and many wasted exposures (Kotler, 2003). These drawbacks lead to a more sensible approach; heavy user target marketing. This approach works so long as the heavy users are identifiable and are early adopters. However, even within the heavy-user group, many heavy users are loyal to existing brands. This phenomenon has forced marketing companies to research more on consumer behavior in order to develop products and services that would appeal more to consumers and hence increase their market share.

1.1.2 Prepaid tariff plans

Kollman (2000) defines tariff plans as a charging structure used by Mobile telecommunications service providers (MSP), that sets out in detail the services available and amounts payable for services under a certain category. Tariffs are structured to cater for consumers calling requirements, volume of usage, affordability and mode of payment. There are those subscribers who require mobile telecommunications services for official or social use like keeping in touch with close families and friends and this determines the volume of usage and the mode of payment. Service affordability is key to most prepaid subscribers where tariff variations based on the rate and timing is of great importance.

Gitari (2006) defines tariffs as a detailed description of the services offered, value added services available, discounts, peak and off peak calling times and charges payable by a subscriber for using specified services at a particular time. Tariffs are divided into two categories, namely; prepaid and postpaid. Prepaid tariffs are those that are paid upfront while postpaid are those that a subscriber upon signing an agreement with the mobile telecommunications service provider commits to settle the
bill within a specified time period usually thirty days. Most consumers prefer prepaid tariff plans as its usage is easy to control. Prepaid service also offer such value added services as credit share which is flexible for any amounts as defined by the MSP. This flexibility allows subscribers to share airtime credit to family and friends who are located in remote areas where airtime distribution is not reliable.

The mode of payment by a subscriber to an MSP determines whether a tariff is prepaid or postpaid. The tariffs describe the different prices payable for using particular services in specific quantities at specific times (Gitari, 2006). The payment rates vary due to differences in service quantities, times as well as billing and value added services, and this is what differentiates the range of tariffs that the mobile telephone service providers have to offer. Prepaid subscribers usually purchase a particular amount of airtime depending on their use requirements and disposable income. Widely used is the scratch card which upon loading into your mobile phone using prescribed menu by the MSP, allows a subscriber access to a specified amount of airtime to use for both voice and data services. Another airtime purchase alternative for prepaid subscribers which is now gaining popularity amongst Kenyan subscribers is the electronic voucher distribution (EVD). This mode of distribution which is also known as electronic mobile top up allows airtime to be dispensed to the consumers by vendors directly into their phones.

1.1.3 Mobile Telephone Industry in Kenya

Since the entry of mobile telecommunications into the Kenyan market in 1990s, the industry has grown tremendously from less than 100,000 in 2004 and to the current figure of more than 22 million subscribers. The technology has also developed to include digital services with state-of-the-art equipment that offer subscribers
improved voice and data services. Safaricom was the first Global Systems for Mobile Communications (GSM) operator in Kenya and began offering services in 1997. Kencell then followed in the year 2000 having won the second GSM operator license in 1999. Kencell Communications has since changed ownership three times with the current entity known as Airtel Networks Ltd.

Other players in the market include Essar trading under the brand name Yu and Telkom Kenya Ltd trading under the brand name Orange after the Kenya Government privatization that led to the acquisition by the European giant telecommunications company, Orange. The Kenyan market has since recorded a steady growth in subscriber acquisition with fierce competition from all the four players in this industry.

Safaricom Ltd which is the market leader has seen her market share drop from 81% to 76% between the last quarter of 2010 and the first quarter of 2011 according to the Communications Corporation of Kenya figures (CCK, 2011) though Airtel still remains Safaricom’s closest challenger at 14% market share. The significant growth in the mobile telecommunications sector could be attributed to the availability of bundled package that promotes cheaper handsets preloaded with airtime and SIM cards coupled with the reduction in tariffs. Telkom Kenya has had the benefit of billions from France Telecom that acquired majority shareholding last year, 2007 for ksh. 26.7billion (Smart Company, 2008). However, the entry of Bharti Airtel through acquisition of Airtel Networks has complicated the tariff across all operators.
1.2 Research Problem

According to CCK (2006), the mobile telephone service in Kenya started in 1992 with the analogue system that was widely known as the extended total access communications system (ETACS) and was commercially launched in 1993. Gitari (2006) explains that during the initial launch period, the services were so expensive that it's was only a few in the upper bracket of the society who could afford the service. This slowed the growth in this sector and locked many from benefiting from this important mode of communication.

The Industry has experienced stiff competition between the main players, Safaricom and Airtel Networks with both emphasizing on tariff reductions as a competitive strategy. The progressive fiscal policies by the government resulting in tax reduction and/or elimination on terminals and the regulator's maximum tariff policy by operators has also allowed for a steep reduction in tariffs charged to users.

According to Mallat (2008) in a study on Consumer adoption of a new electronic payment service, mobile payments, the objective was to explore consumer adoption of mobile payments by empirically examining the adoption determinants that are specific for the mobile payment systems. The study contributes to existing mobile commerce and adoption research by presenting a detailed description of factors that enhance and inhibit mobile payment adoption, and by giving propositions for future research of this emerging topic.

According to a research study of mobile phone operators in the United Kingdom on network effects and the choice of mobile phone operator, the proportion of off-net calls falls as mobile operators charge a premium for off-net calls, but even in the
absence of any price differential between on-net tariff and off-net tariff, there is still a
form of pure network effect, where a disproportionate number of calls are on-net
(Hedelberg, 2007).

A number of studies have been done on Consumer adoption but none has been done
on the factors influencing the choice of the consumers in the adoption of the prepaid
tariff plans. This academic research therefore, seeks to address the knowledge gap by
asking the question; what factors influence the consumer adoption of prepaid tariff
plans in the mobile telecommunications Industry in Nairobi?

1.3 Objectives of the Study

The study’s main objective is to explore the factors that influence consumer adoption
of prepaid mobile tariff plans among Nairobi residents. Specifically, the research will
address the following issues:

i. Determine the level of Consumer awareness of services offered by Mobile
   service providers.

ii. Establish the Service provider performance rating of factors that influence
    Consumer adoption of prepaid tariff plans.

iii. Determine the factors that affect consumers' adoption of prepaid tariff plans.

1.4 Value Of the study

For Marketers in the industry, the study will provide insights into new opportunities
that exist in the Industry and how to harness these opportunities. Marketers are
constantly reviewing their bundle of benefits or offers to the consumers to maintain
and gain their market share.
The study will also be of great benefit to mobile phone service providers. With increased consumer awareness and sophistication being a big challenge to most organizations, this study would be relevant in helping to design relevant marketing programs. This will result in saving on advertisements & promotional activities. The organization will therefore proceed to make accurate forecasts and even estimate expected revenues for marketing planning purposes.

For Academicians, the study will add more knowledge in the area of tariff adoption and thus stimulate further research. In this particular study, academicians may still identify gaps related to consumer tariff adoption and hence an opportunity to further research in this area.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter summarizes the information from other researchers who have carried out their research in the study on consumer adoption. It takes us through consumer behavior, nature and characteristic of services, quality of services, product adoption process and theories on adoption.

2.2 Consumer Behavior

Kardes (1999) defines consumer behavior as the study of human responses to products, services and the marketing of products and services. The focus on the consumer is the key contribution of marketing to business practice and hence the study of consumers is important to marketing managers and marketing researchers. Understanding consumer behavior helps organizations to develop better products and services, promote their products and services more effectively, and devise marketing plans and strategies that foster sustainable competitive advantage for their products and services. Organizations that loose sight of their customers cannot compete effectively against firms that stay close to their customers.

Ehrenberg (1988) explains that consumer behavior is complex and it encompasses repurchase needs and attitudes, the experience of previous usage, and external influences such as advertising and promotions, retail availability, personal selling and word of mouth effects, and differences in product formulation, packaging and pricing. Consumers have to make decisions on what to buy, how much, at what cost, when and where to buy. There are various usage or consumption activities and responses
which generate post-usage feelings of consumption and changes in attitude and these are aspects of consumer behavior. Individuals responsible for managing business enterprises and other organizations need to understand consumer behavior in order to adapt the products and distributive resources of the organization to the demand of the consumers (Engel, 1978).

2.3 Nature and Characteristics of Services

Research has shown that one of the mega trends of recent years has been the phenomenal growth of services. Kotler (2003) comments that service industries are quite varied. The government sector is in the service business, the private non-profit sector, a good part of the business sector and many workers in the manufacturing sector such as accountants and legal staff are really service providers. Kotler (2003) goes ahead to define a service as any act or performance that a party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product.

Services have four major characteristics (Kotler, 2003; Zeithaml and Bitner, 1996; Schiffman and Kanuk, 2004); intangibility, inseparability, heterogeneity and perishability. Intangibility is an important aspect that makes services unique. Unlike physical products, services can not be seen, felt, tasted, heard or smelled before they are bought. They are therefore more difficult to demonstrate in an exhibition thus their marketing requires imaginative personal selling. To reduce uncertainty, buyers will look for evidence of the service quality. They will draw inferences about quality from the place, people, equipment, communication material evidence to “tangibilize the intangible” (Kotler, 2003). Intangibility therefore presents several marketing challenges. Services cannot be patented therefore easily copied by competitors.
Services cannot be easily displayed or communicated so quality may be difficult for consumers to assess.

In most instances, services cannot be separated from the person selling them. They are typically produced and consumed simultaneously. Since the client is also present as the service is produced, provider-client interaction is a special feature of services marketing. The presence of the customer may affect (positively or negatively) the outcome of the service transaction. For example a customer who is queuing to pay a water bill and is in a hurry may complain of inefficient service by the tellers thus negatively impacting the experiences of other customers. The quality of service and customer satisfaction will be highly dependent on what happens in ‘real time’ including actions of employees and the interactions between employees and customers (Zeithaml and Bitner, 1996).

Services are normally heterogeneous rather than homogeneous. This means that unlike manufactured products, it is difficult if not impossible to standardize the output of different sellers of presumably the same service (Kibera and Waruingi, 1988). Because services are performances, frequently produced by humans, no two services will be precisely alike. Therefore, organizations and people ensuring consistent service quality find it a very challenging task. Quality depends on many factors that cannot be fully controlled by the service supplier such as the level of demand for the service or the ability and willingness of personnel to satisfy consumers’ articulate needs. Services are also highly perishable; they cannot be saved, stored, returned or resold. According to Kotler, the perishability of services is not a problem when demand is steady but when demand fluctuates, service firms have a big problem.
2.4 Service Quality

Service quality is a concept that has aroused considerable interest and debate in the research literature because of the difficulties in both defining it and measuring it with no overall consensus emerging on either (Wisniewski, 2001). There are a number of different "definitions" as to what is meant by service quality. One that is commonly used defines service quality as the extent to which a service meets customers' needs or expectations (Lewis and Mitchell, 1990; Dotchin and Oakland, 1994). Service quality can thus be defined as the difference between customer expectations of service and perceived service. If expectations are greater than performance, then perceived quality is less than satisfactory and hence customer dissatisfaction occurs (Parasuraman et al., 1985; Lewis and Mitchell, 1990).

Whilst there is no general agreement on the nature of Perceived Service Quality, and whilst explanations are regularly changing and increasing, key researches and opinions on the topic can arguably be combined into the following guiding base definition: Perceived Service Quality is the result of a process. It is a customer's comparison, summarized in an attitude, of the believed goodness or badness of all dimensions of a particular service experience or service provider, in relation to expectations. According to Oliver (1997), customer satisfaction is achieved by providing valued services and products where value is the positive difference between customers' actual experiences and their service delivery expectations.

Productive employees also create value. Satisfaction is generated by high-quality support services and by being empowered to provide value and resolve customer complaints. Leadership that emphasizes the importance of each customer and employee must support this customer service culture. These leaders must be creative
and energetic (not lofty or conservative), participatory and caring (not removed or elitist) that is, one who can be a coach, teacher or listener (not just a supervisor or manager). Such a leader demonstrates company values (rather than simply institutionalizing policies) and motivates by mission (rather than by fear).

Fornell (1992) reiterates that customers whose complaints are satisfactorily resolved often become more company-loyal than customers who were never dissatisfied. Armstrong and Symonds (1991) said every complaint is a gift if handled well. They have found out that companies that encourage disappointed customers to complain and also empower employees to remedy the situation on the spot achieve higher revenues and greater profits than companies that do not have a systematic approach for addressing service failures. Consumer satisfaction is the central element of the marketing concept (Erevelles and Leavitt, 1992). Satisfaction is an evaluation rendered that the experience was at least as good as it was supposed to be, in effect, an evaluation of an emotion” (Hunt, 1977, pp. 459-460).

Most authors tend to use the terms satisfaction and quality interchangeably, but it is important to be precise about the meanings and measurement of the two concepts. Although they have certain things in common, satisfaction is generally viewed as a broader concept whereas service quality assessment focuses specifically on dimensions of service. Based on this view, Perceived Service Quality is a component of Customer Satisfaction (Zeithaml and Bitner, 1996). Service quality is a focused evaluation that reflects the customer’s perception of elements of service such as interaction quality, physical environment and outcome quality. These elements are in turn evaluated based on specific service quality dimensions. Satisfaction on the other hand is more inclusive; it is influenced by perceptions of service quality, product
quality and price as well as situational and personal factors. For example, service quality of a water provider is judged on attributes such as how responsive staff are to customers, how promptly bills are sent and how accurate they are, and how reliable the water supply is. Customer satisfaction will certainly be influenced by perceptions of service quality and other factors like consumer’s emotional state and experiences while waiting in queues to pay bills.

Researchers have conducted studies to understand the quality of service from different perspectives. Parasuraman (1987) argued that process rather than outcome of service delivery should play an influential role in customers’ evaluation of overall service quality because most of the time, customers have a hard time in identifying the service outcome. Service quality directly affects satisfaction with service (Marquardt, 1989; Nemeroff, 1989). Parasuraman, Zeithaml and Berry (1988) and Oliver (1997) defined perceived service quality as a global judgment of the service, thus treating it as a cognitive construct. In contrast, customer satisfaction is usually considered to be a more affective concept.

Oliver (1994) found that perceived service quality was influenced by performance alone, not by affective constructs, whereas customer satisfaction was affected by both cognitive (disconfirmation) and affective antecedents. Marketing academics generally agree that service quality is externally defined by the customer (Fornell 1992; Parasuraman, Zeithaml and Berry 1985; Gronroos 1984). However, some simply state that it is “the consumer’s comparison between service expectations and service performance” (Woodside, Frey and Daly 1989 p.6) without providing any conceptual foundation.
Parasuraman, Zeithaml and Berry (1984) formulated the above service-quality model that highlights the main requirements for delivering high service quality. The model identifies five gaps that cause unsuccessful delivery. There is no assumption that a customer necessarily evaluates the quality of a service experience or service provider after each service encounter.

We know through simple observation, that customers often speak of how a service or service provider is better or worse than expected, better or worse than usual and relatively good or bad. Comments such as these suggest there are many reference points in memory which are used by customers, not just two reference points as suggested by the “Zone of Tolerance”. Whilst this is not scientifically tested evidence, we know that every one of us have made and heard comments about particular services on numerous occasions. Such evidence therefore, provides us with a common sense hunch and sense of direction, concerning the nature of what is taking place in the minds of customers when evaluating the quality of service experiences or service providers. The fundamental psychology framework suggests that following attention, perception, storage in memory and manipulation of service experiences and all other relevant interacted information, expectations in the form of schemata can be formed as a means of comparison for specific service experiences. To be of any use however, schemata should cover the whole range of experience in order to allow a service experience to be compared relatively with all other experiences.

The type of customer and customer’s mood contribute a lot to the perceived service quality. Some customers may be more cognitive than others and be more likely to evaluate experiences rationally at the cognitive level. Individuals with a high need for cognition tend to look for information and to think about different aspects of their
experiences. Such individuals will evaluate service quality first and then decide whether they are satisfied. Other customers may be emotional and are likely to evaluate experiences at the emotional level. Individuals with high affect intensity (Larsen and Diener 1986) tend to magnify their emotions and feel experiences more deeply than others. Such customers will experience (dis)satisfaction with the service at an emotional level and form a judgment about the service based on this emotion. The customer's mood in the service situation is also likely to influence causality between customer satisfaction and service quality. Even mild moods can have a significant impact on behavior and evaluation.

Waiting has also been known to cause bad moods in customers and those that encounter a delay will evaluate the service provided negatively. When paying for water bills, it is known that there are sometimes very long queues. Waiting can be time-consuming, annoying and frustrating thus a customer often reacts in an emotional way. The study of waiting and delays is a relevant topic, in particular, to services marketing. Although many delays are caused by inefficiencies in the service delivery process, waiting in some service situations seems to be almost unavoidable.

For example, the deadline for paying water bills for neighboring estates is often concurrent and most customers prefer paying on the last day thus having very long queues. Maister (1985) has proposed several situational effects on consumer's perception of waiting. Among others, he suggested the following four propositions: (1) Unoccupied time feels longer than occupied time; (2) preprocess waits feel longer than in-process waits; (3) uncertain waits are longer than known, finite waits; (4) unexplained waits are longer than explained waits. If service consumes waiting period, customers probably do not pay as much attention to the wait. Oliver (1997)
comments, “Everyone knows what satisfaction is, until asked to give a definition. Then it seems, nobody knows”. Satisfaction is the most basic of customer concepts and building from various definitions, it is the customer’s evaluation of a product or service in terms of whether it met their needs and expectations.

2.5 Product Adoption Process

The main objective of many businesses is the shareholders’ wealth maximization which can only be achieved with a continuous and uninterrupted flow of revenue usually resulting from highly differentiated strategies. Organizations’ unique capability, assets, value propositions and market positioning is an impetus for the development of products and services with greater appeal to both existing and potential customers. It is in the interest of an organization to attract and lock-in customers for assured revenue. Kotler (2003) summarizes consumer adoption process as the process by which customers learn about new products, try them, and adopt or reject them. Much marketing activity concerns the planning and introduction of new products.

Gordon (1941) in his model, illustrates seven stages of product adoption namely awareness, comprehension, attitude, legitimation, trial adoption and dissonance. These stages denote the process through which a consumer goes before finally becoming a regular user of a product. The first stage is perception of need or motive and search for relevant knowledge to satisfy the need. Then the product’s existence becomes known at the second stage. The third stage is the consumer perception of what the product is. Attitude which is the disposition towards the product is the fourth stage followed by the conviction that the right cause of action is to try the product and maybe a commitment to adopt. Acceptance and continued purchase use is the sixth
stage. Product trial may reinforce the legitimation stage or result in product abandonment. Product improvement may increase adoption rate; a set of improvement curves define the pace of progress hence the rate of adoption. An improvement curve measures progress in a key performance metric over time. Typical metrics include cost of customer acquisition, time to market, direct manufacturing cost per unit, number of defects per thousand products and reported customer satisfaction (Hamel, 2002).

Gordon (1941) singles out Marketing and Communications as the main factors that influence product adoption. Reasons for potential adopters to reject an innovation could be as a result of poor marketing, lack of marketing research at the basic level or wrong research in general. Sometimes communication may also not be sufficiently persuasive to help the consumer form a favorable disposition of the new product.

According to Kotler (2003), adopters of new products have been observed to move through five stages, namely Awareness, Interest, Evaluation, Trial and finally Adoption. At the first stage, the consumer becomes aware of the innovation but lacks information about it. A consumer may be aware of the innovation from a friend, a relative or through media campaigns and other marketing activities. At the second stage, the consumer out of awareness is stimulated and makes an effort to seek more information about the innovation. Either by engaging the source of the information or by participating in the events or campaigns on the innovation, a consumer considers whether to try the innovation or not at the third stage.

The actual trial of the innovation to improve a consumer’s estimate of its value is done at the fourth stage. A consumer then becomes a regular user of the product at the last stage. In addition to the dimensions that influence adoption, the process by which
individuals adopt an innovation is also crucial. Understanding of adoption dimension and process is therefore imperative for the success of an innovation. Mansfield (1961) hypothesized that the proportion of individuals who adopted an innovation increased with more information available and on greater experience of the product.

A population of consumers could be segregated into five categories with reference to their propensity to adopt a new product. The categories are innovators, early adopters, early majority, late majority, and finally laggards, (Rogers, 1995). All these categories behave differently to new innovation and hence the difference in adoption rate.

Late adopters normally adopted products on having more information and on greater exposure to the product. As such, late adopters were generally considered to be more risk averse. Though the risk perception among individuals may be different, the decision process which leads to final adoption is fundamentally the same, and this is well summarized in Rogers' (1995) Model of Innovation Decision Process. The length of the introductory stage is a function of the rate of diffusion, or the speed by which the new product or innovation spreads throughout the system (Moore, 1993)

The adoption process could be demarcated into five phases, namely, knowledge of innovation, persuasion, decision, implementation, and confirmation. The process begins with the acknowledgement of the presence of an innovation, which could be driven by communication and needs, among other factors. The second stage entails the persuasion of the innovation to be adopted. This is the phase where the factors affecting the rate of adoption would fit in. The five dimensions of complexity, compatibility, observability, trialability, and relative advantage proposed by Rogers (1941) are the main driving forces of persuasion. The third stage involves decision-
making by the adopter after considering all the persuasion factors. Implementation would only occur when the innovation is accepted, and confirmation involves the post adoption behavior by the adopter. The post adoption behavior includes repurchase and continuous use. In this research, the main emphasis would be the second phase of the innovation adoption process that is the phase of adoption persuasion. In particular, this study would explore the dimensions that affect adoption and their relevance to the mobile telecommunications Industry; an industry which is highly driven by rapid technological changes, stiff competition, and constant tariff reviews to match consumer affordability and calling patterns.

2.6 Development of Theories on Adoption

Rogers (1962) introduced five main dimensions that influenced the adoption of an innovation, namely, complexity, compatibility, observability, trialability, and relative advantage. Rogers and Shoemaker (1971) further discussed these five dimensions which formed the foundation of subsequent studies on adoption of new innovations. Ostlund (1974) built on this research by adding a sixth dimension, the perceived risk of adoption. Rogers (1995) indicated that early adopters tend to be less risk averse than late adopters, hence providing an association between risk attitudes and adoption of innovation. Smith and Andrews (1995) explained that when the perceived risk of the innovation increased, it would have a negative impact on the evaluation of the product and this further correlated risk with the adoption of innovation.

The number of dimensions thought to effect adoption continued to expand through the years with Tornatzky and Klein (1982) proposing ten dimensions. They conducted a meta-analysis of all past studies on the innovation characteristics that had an impact on innovation adoption. Of the ten dimensions they introduced, five were those
proposed by Rogers (1962). The additional five new dimensions introduced were cost, communicability, divisibility, profitability, and social approval. Communicability tended to mirror observability while divisibility and cost paralleled trialability; the original dimensions laid down by Rogers (1962). Smaller units of an innovation would mean lower per unit cost and hence a higher propensity to try. Consumers prefer purchasing smaller quantities of a product they have not used before to reduce waste in case the product is abandoned due to dissatisfaction or not meeting expectations.

Kalish and Lilien (1986) postulated that the price of the innovation would affect its market potential. However, Jam and Rao (1990) contended that prices affect the rate of adoption rather than the market potential. In an earlier study, Kamakura (1988) had suggested that prices of innovation affect the timing of adoption and not whether consumers would adopt the product or not. Lower prices would encourage consumers to buy the product at an earlier date, but not necessarily motivate them to buy just for that reason. The perceived utility would play a big role in purchase for trial. Prices affecting rate of adoption would be true only to products with a narrow price range (Kamakura, 1988). Another view of price affecting rate of adoption was by Mason (1990), who provided empirical evidence that product attributes rather than price should be the main impetus for adoption.

In view of the various opinions, Moore and Benbasat (1990) tried to summarize and redefine the various dimensions. After an extensive instrument development process, they arrived at a classification of seven characteristics that included compatibility, complexity, trialability, relative advantage, result demonstrability, visibility, and image. However, they did not incorporate price as one dimension but treated it as part
of trialability.

Besides exploring the factors that influence adoption, some researchers have proceeded to explore the impact of marketing mix on new product adoption. Thomas and Hirokazu (1999) witnessed extensive coverage on how advertising could affect new product adoption and Thomas and Charlotte (1999), saw how product characteristics affected the rate of adoption.

2.7 Factors Influencing the Adoption Process

According to Kotler (2003), marketers recognize a number of adoption process characteristics to include; differences in individual readiness to try new products, the effect of personal influence, differing rates of adoption, and the differences in organizations readiness to try new products.

In each product, there are pioneers and early adopters. After a slow start, an increasing number of people adopt the innovation, the number reaches a peak, and then it diminishes as fewer non adopters remain. Each of the five adopter groups differ in their value orientations (Rogers, 1983). Innovators are venturesome and are willing to try new ideas. Early adopters are opinion leaders and are guided by respect and image; they adopt new ideas early but very carefully. The early majority are deliberate and adopt new ideas before an average person. The late majority are skeptical and only adopt after a majority have tried. Finally the laggards are tradition based and only adopt an innovation if it takes a measure of tradition itself. An innovating firm should research on the demographic, psychographic, and media characteristics of innovators and early adopters before designing and directing media communications to them (Kotler, 2003).
Kotler (2003) defines personal influence as the effect one person has on another’s attitude or purchase probability. Although personal influence is an important factor that influences product adoption, its significance is greater in risky situations and in the late adopters than early adopters. Personal influence is also more important in the evaluation stage of the adoption process than in the other stages. Companies often target innovators and early adopters with their product roll-outs. Some products catch on immediately while others take a long time to gain acceptance.

Kotler (2003) explains this phenomenon using five characteristics that influence the rate of an innovation adoption. Though Kotler (2003) has used the case of personal computers to explain this, the same can be used in the study of adoption in the mobile telecommunications. The rate of adoption is negatively related to complexity and perceived risk (Moore, 1983). Perceived risk is the subjective estimate of the probability that something will go wrong and the cost of failure. While (Kotler, 1983) identified five characteristics, (Moore, 1983) identified perceived risk as the sixth characteristic but this may not be relevant to this study of consumer adoption of tariffs since there is no clear perceived risk.

The first characteristic is relative advantage which is the degree to which innovation appears superior to existing products. The greater the relative advantage, the more quickly the product will be adopted. The concern of this study is to investigate and to give recommendations about packaging of tariffs to make them more appealing and hence be adopted by subscribers. For example, a tariff plan that has the advantage of a lower rate to frequently called numbers, may appeal more to members of one family, close friends or social groups who call each other frequently. Compatibility, the second characteristic on innovation adoption can be defined as the degree to
which the innovation matches the values and experiences of the individual. Different tariff plans are designed for different demographics and socio-economic situations. Such tariff plans may include on-net and off-net tariff plans, peak and off-peak tariff plans, business tariff plans and even family tariffs.

The third characteristic, complexity, is the degree to which the innovation is relatively difficult to understand. Consumers prefer clear and simple tariff plans that are easier to comprehend. Divisibility which is a fourth characteristic is defined as the degree to which the innovation can be tried on a limited basis. Limited trial may not be very difficult in tariff plan adoption as the cost of acquisition is usually minimal. At introduction, mobile telecommunication operators offer default trials on tariff innovation after which migrating from one plan to another attracts a fee. A third party influence can also induce trials and hence increases adoption rate.

The fifth characteristic is communicability. This is the degree to which the beneficial results of use are observable or describable to others. Not all tariff plans are clearly communicable. The communication messages may mean different things to different people depending on ones understanding level and culture and hence the need to be communicated to the target group in a clear form and through the right communication channel.

Kotler (2003) highlights other innovation characteristics for further research. These are cost, risk and uncertainty, scientific credibility, and social approval. Only cost may be an additional relevant characteristic to our study of factors influencing prepaid tariff adoption in Kenya. In his contribution to the adoption process, Kotler (2003) points out that many marketers today are targeting heavy users and early adopters of new products because both groups can be reached by specific media and
tend to be opinion leaders. The Consumer adoption process is influenced by many factors beyond the marketers' control, including consumers' and organizations' willingness to try new products, personal influences, and the characteristics of new products or innovation (Kotler, 2003).

2.8 Consumer Adoption in Telecommunications Industry

Throughout the information age, telecommunications industry has been providing human connectivity through fixed line networks since Albert Graham Bell’s invention of the telephone in 1867. Since this time, millions and millions of fixed optical and copper networks have been created globally and the telecommunications industry has grown from a single point to point connectivity network to one which connects billions of people worldwide. Currently, there exist two overarching technologies within the telecommunications industry, fixed line and wireless communications. There is significant interconnectivity between the two major technologies. Fixed networks are essential to the operation of wireless networks.

According to a research study of mobile phone operators in the United Kingdom on network effects and the choice of mobile phone operator, the proportion of off-net calls falls as mobile operators charge a premium for off-net calls, but even in the absence of any price differential between on-net tariff and off-net tariff, there is still a form of pure network effect, where a disproportionate number of calls are on-net (Hedelberg, 2007).

The paper seeks to explore the role of network effects in the consumer's choice. It contributes to the existing literature by taking a new approach to the study tested for direct network effects and using individual-level data, analyzed the impact that the
immediate social network has on consumer choice in network markets. Two sources of data were used for empirical analysis namely market-level data from the British telecommunications regulator and micro-level data on consumers' usage of mobile telephones from a survey.

Two classes of models which illustrate the role of network effects were estimated in the study. The first is an aggregate model of the comparative volume of on-net and off-net calls. The second is a model of the individual consumer's choice of operator.

Individual choice shows considerable inertia, as expected, but is heavily influenced by the choices of others in the same household (Hedelberg, 2007). There is some evidence that individual choice of operator is influenced by the total number of subscribers for each operator, but a much stronger effect is the operator choice of other household members. This study clearly indicates the role that tariffs play on consumer choice and network preference.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, we explain the research design that was used as well as the methods of collecting and analyzing data. This includes the target population, the sample design and procedures, data collection methods and procedures as well as data analysis procedures.

3.2 Research Design

The research was a descriptive survey. According to Rubin and Luck (1992), a study concerned with finding out who, what, which and how of a phenomenon is a descriptive design. The research study to describe the perception and satisfaction on factors that influence consumer adoption of prepaid tariff plans. Gitari (2006) and Odhiambo (2003) used descriptive research design for related studies. A survey was most appropriate because it enabled the Researcher to collect data from varied study units for comparison purposes. The purpose of this study was to determine and establish how the factors influencing adoption vary according to different categories of Consumers.

3.3 The Population

The target population was all adult subscribers residing or visiting Nairobi. This included both potential and existing subscribers who were either be making enquiries to purchase, have purchased and were coming for a repeat purchase or had purchased and had come to either complain or seek more clarification on tariffs. The survey was limited to consumers who were visiting the retail outlets dealing in the mobile phones.
and top up cards and or accessories and also those who were met in the streets or in
the offices. The choice of Nairobi Central business district was deliberate to the study
because of accessibility, mix of subscribers in terms of socio-demographics and the
high number of subscribers.

3.4 Sampling Design and Sample

A total of 250 respondents were interviewed in 10 identified streets of Nairobi central
business district and the estates. The streets targeted were, Moi Avenue, Tom Mboya
Street, Koinange street, Luthuli Avenue, Mfangano street. And the estates or areas
targeted included Nairobi West, Buruburu, Umoja, Kayole, Embakasi. According to
Cooper and Emory (1994), a sample of above 250 is representative of a population of
12 million.

3.5 Data Collection

The primary data was captured using a structured questionnaire. The Questionnaire
was in parts with part A capturing the Demographic profile of the respondent. Part B
of the Questionnaire looked at a list of services offered by the mobile service provider
and the Consumer awareness of the Services. Part C looked at the factors that
influenced the consumer choice of prepaid tariff plans and to what extent those
factors influenced the consumer adoption. The last part of the Questionnaire will be
part D looked at the rating of the Service provider based on the services offered.

The research assistants employed to administer the survey will be stationed at the
retail outlets to capture data from at least 5 customers who enter the shop and the data
will be captured at hourly intervals.
3.6 Data Analysis

The Study looked at each of the adoption determinations as per the questionnaire and the contributing factors. Conceptual content analysis was adopted in the analysis of data collected. Content analysis is defined by Creswell (2003) as a technique for making inferences by systematically and objectively identifying specific characteristics of messages and using same approach to relate trends. According to Mugenda and Mugenda (2003) the main purpose of content analysis is to study the existing information in order to determine factors that explain a specific phenomenon.
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

In this Chapter, we analyzed our data and documented our findings based on the original objectives of the study. We used the mean scores to determine the factors that influence prepaid tariff plans adoption.

4.2 Data Analysis

The survey focused on establishing the key factors, if any, that did influence the choice of prepaid tariff plans for interviewed subscribers. But to exhaustively study the said factors, we designed our questionnaire to address the three main objectives namely; awareness of services offered by service providers, the MSP rating and lastly the key factors that influence adoption of prepaid tariff plans.

The study interviewed a total of 250 respondents both male and female with varying age groups and income levels. To cover all bases, the age groups varied from under 20 to over 60 years and the income levels from below Kshs.10,000 to over Kshs.50,000 from both gender. The majority of those interviewed were between the ages of 20 years and 50 years of age and this represented 78% of all the respondents. This sample represented a population of subscribers who reside in Nairobi and satellite towns who mainly use the cell phone for business and social calls or personal calls. A bigger proportion of this group are the young professionals who are keen to be in touch for business prospects and socially after hours and so connectivity is vital to them as well as the cost and convenience as they use the phone a lot. The other group interviewed comprised of respondents above the age of 60 years who were
mainly retirees and business people and those under 20 years who were mainly students and school leavers who use their phones for social calls.

### 4.2.1 Consumer Awareness

Under consumer awareness, the research looked at awareness of key services or attributes in terms of gender, age group and Income levels on a five point scale where 5 equals very greatly aware, 4 equals greatly aware, 3 equals moderately aware, 2 equals a little aware and 1 equals not at all aware.

#### Table 4.1: Gender and Awareness

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scratch card top up</td>
<td>4.72</td>
<td>4.73</td>
<td>4.73</td>
</tr>
<tr>
<td>Virtual top up</td>
<td>3.83</td>
<td>3.99</td>
<td>3.91</td>
</tr>
<tr>
<td>Prepaid roaming</td>
<td>3.54</td>
<td>3.76</td>
<td>3.65</td>
</tr>
<tr>
<td>Off-peak charges</td>
<td>4.49</td>
<td>4.45</td>
<td>4.47</td>
</tr>
<tr>
<td>Balance enquiries</td>
<td>4.52</td>
<td>4.53</td>
<td>4.52</td>
</tr>
<tr>
<td>Call baring</td>
<td>3.61</td>
<td>3.41</td>
<td>3.51</td>
</tr>
<tr>
<td>Call forwarding</td>
<td>3.70</td>
<td>3.51</td>
<td>3.61</td>
</tr>
<tr>
<td>Call wait/call hold</td>
<td>3.83</td>
<td>3.62</td>
<td>3.73</td>
</tr>
<tr>
<td>Internet Service</td>
<td>4.31</td>
<td>4.26</td>
<td>4.28</td>
</tr>
<tr>
<td>Credit Share</td>
<td>4.26</td>
<td>4.09</td>
<td>4.18</td>
</tr>
<tr>
<td>Mobile Money</td>
<td>4.65</td>
<td>4.71</td>
<td>4.68</td>
</tr>
<tr>
<td><strong>Grand Mean</strong></td>
<td><strong>4.13</strong></td>
<td><strong>4.10</strong></td>
<td><strong>4.11</strong></td>
</tr>
</tbody>
</table>

The overall awareness was high among the respondents with a grand mean score of 4.11 implying that respondents interviewed were greatly aware of the services offered by mobile telecommunications. There appears to be no significant difference in awareness amongst gender though male scored higher than female. This result was
greatly influenced by awareness of scratch cards, balance enquiry, off-peak charges and mobile money which scored highly on one hand and call baring, call forwarding, prepaid roaming on the other hand recording lower mean scores. Subscribers interviewed were very greatly aware of scratch card top followed by Mobile money where respondents were quick to mention Mpesa as the main money transfer service and as their number one choice. The balance enquiry and off-peak charges also recorded high mean scores. The services that registered a lower mean scores in awareness included, prepaid roaming, call baring, call forwarding, and call wait/call hold.

Table 4.2: Age Group and Awareness

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Mean score</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Under 20yrs</td>
<td>20 - 40yrs</td>
<td>41 - 60yrs</td>
<td>Over 60yrs</td>
<td>Total</td>
</tr>
<tr>
<td>Scratch card top up</td>
<td>4.56</td>
<td>4.79</td>
<td>4.80</td>
<td>4.83</td>
<td>4.74</td>
</tr>
<tr>
<td>Virtual top up</td>
<td>4.00</td>
<td>3.14</td>
<td>3.47</td>
<td>4.08</td>
<td>3.67</td>
</tr>
<tr>
<td>Prepaid roaming</td>
<td>3.07</td>
<td>4.00</td>
<td>4.07</td>
<td>3.75</td>
<td>3.72</td>
</tr>
<tr>
<td>Off-peak charges</td>
<td>4.60</td>
<td>4.33</td>
<td>4.67</td>
<td>4.64</td>
<td>4.56</td>
</tr>
<tr>
<td>Balance enquiries</td>
<td>4.36</td>
<td>4.63</td>
<td>4.64</td>
<td>4.42</td>
<td>4.51</td>
</tr>
<tr>
<td>Call baring</td>
<td>3.70</td>
<td>3.19</td>
<td>3.15</td>
<td>3.62</td>
<td>3.41</td>
</tr>
<tr>
<td>Call forwarding</td>
<td>4.00</td>
<td>3.20</td>
<td>3.00</td>
<td>3.00</td>
<td>3.30</td>
</tr>
<tr>
<td>Call wait/call hold</td>
<td>4.30</td>
<td>3.33</td>
<td>3.14</td>
<td>3.58</td>
<td>3.59</td>
</tr>
<tr>
<td>Internet Service</td>
<td>4.42</td>
<td>4.50</td>
<td>3.93</td>
<td>4.33</td>
<td>4.29</td>
</tr>
<tr>
<td>Credit Share</td>
<td>4.27</td>
<td>4.22</td>
<td>4.40</td>
<td>4.35</td>
<td>4.31</td>
</tr>
<tr>
<td>Mobile Money</td>
<td>4.72</td>
<td>4.63</td>
<td>4.71</td>
<td>4.64</td>
<td>4.68</td>
</tr>
<tr>
<td>Grand Mean</td>
<td>4.18</td>
<td>4.00</td>
<td>4.00</td>
<td>4.11</td>
<td>4.07</td>
</tr>
</tbody>
</table>

The awareness among the respondents recorded a grand mean score of 4.07 implying that the respondents were greatly aware of the services. The awareness trend was the
same for age group with scratch card awareness recording a mean score of 4.74. off-peak charges, mobile money and balance enquiry also recorded a higher mean score while call baring, call wait and prepaid roaming recorded lower mean scores.

4.2.2 Mobile Service Provider Rating

The Mobile Service Provider rating was limited to the four players in the Kenyan market namely; Safaricom, Orange, Airtel and Essar or Yu. The rating was based on the performance of the services offered according the interviewed subscribers. The rating was done on a five point scale where 5 equals to a very great extent, 4 equals to a great extent, 3 equals to a moderate extent, 2 equals to a little extent and 1 equals to no extent at all.

Table 4.3: MSP rating

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Safaricom</th>
<th>Orange</th>
<th>Airtel</th>
<th>Essar(YU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy to subscribe</td>
<td>4.2</td>
<td>4.3</td>
<td>4.4</td>
<td>4.4</td>
</tr>
<tr>
<td>Network coverage</td>
<td>4.6</td>
<td>4.6</td>
<td>4.7</td>
<td>4.5</td>
</tr>
<tr>
<td>Variety of airtime vouchers</td>
<td>4.7</td>
<td>4.2</td>
<td>4.3</td>
<td>4.3</td>
</tr>
<tr>
<td>Excellent customer Service</td>
<td>4.6</td>
<td>4.4</td>
<td>4.1</td>
<td>3.9</td>
</tr>
<tr>
<td>Accurate billing</td>
<td>4.2</td>
<td>3.9</td>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>Discounts offered</td>
<td>3.5</td>
<td>4.1</td>
<td>4.3</td>
<td>4.2</td>
</tr>
<tr>
<td>Advertising and promotion</td>
<td>4.4</td>
<td>4.2</td>
<td>3.8</td>
<td>4.5</td>
</tr>
<tr>
<td>Variety of services on prepaid</td>
<td>4.3</td>
<td>4.3</td>
<td>4.1</td>
<td>4.3</td>
</tr>
<tr>
<td>Availability of airtime</td>
<td>4.8</td>
<td>4.4</td>
<td>4.2</td>
<td>4.1</td>
</tr>
<tr>
<td><strong>Grand mean</strong></td>
<td><strong>4.4</strong></td>
<td><strong>4.3</strong></td>
<td><strong>4.2</strong></td>
<td><strong>4.2</strong></td>
</tr>
</tbody>
</table>

Safaricom performed better than the other mobile service providers scoring 4.4 implying the performance was rated better to a great extent. Safaricom was followed by Orange brand while Airtel brand and Yu brand tied in number three with a grand
mean of 4.2. The result was drawn from a sample of 250 respondents and 9 attributes. Safaricom scored higher than any other service provider with the highest mean scores coming from ease of subscription, network coverage and airtime availability. Safaricom has the highest mean score on airtime availability implying that they perform to a very great extent better in airtime distribution. This is consistent with the current market share reports where Safaricom is considered the market leader in terms of subscriber acquisition and airtime distribution.

4.2.3 Factors Influencing Adoption

From the study, most respondents indicated that indeed there are a number of factors that influence their choice and adoption of prepaid tariff plans amongst the ones in the questionnaire.

Table 4.4: Adoption factors

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>Easy to subscribe</td>
<td>4.30</td>
</tr>
<tr>
<td>Network coverage</td>
<td>4.30</td>
</tr>
<tr>
<td>Variety of airtime vouchers</td>
<td>4.30</td>
</tr>
<tr>
<td>Excellent customer Service</td>
<td>4.30</td>
</tr>
<tr>
<td>Accurate billing</td>
<td>4.00</td>
</tr>
<tr>
<td>Discounts offered</td>
<td>4.10</td>
</tr>
<tr>
<td>Advertising and promotion</td>
<td>4.00</td>
</tr>
<tr>
<td>Variety of services on prepaid</td>
<td>4.40</td>
</tr>
<tr>
<td>Friends and family use it</td>
<td>4.50</td>
</tr>
<tr>
<td>Availability of airtime</td>
<td>4.60</td>
</tr>
<tr>
<td><strong>Grand Mean</strong></td>
<td><strong>4.30</strong></td>
</tr>
</tbody>
</table>
The factors that influence consumer adoption range from operator or network driven to social factors. The order and importance of each factor surveyed and how it influenced their adoption varied from respondent to respondents. For example, a majority of the under 20 years population did indicate that since their main use of the cell phone was for social communication, they were key to sign up and enjoy services from the network provider who would accord them the best use and value for their money since most are unemployed and college graduates hence the low spenders.

4.3 Results of the Survey

From the interviewed candidates, the attributes provided in the questionnaire namely; Easy to subscribe, wide network coverage, variety of airtime vouchers, excellent customer service, accurate billing for services used, advertising and promotions, friends and relatives use it and availability of airtime did in fact play a major role in influencing their choice of prepaid tariff plans. The results are better represented in a graph;

*Figure 4.1: Adoption Factors*
From the data collected, it was noted that irrespective of the income levels of the respondents and/or their respective age groups, the factors under investigation in the questionnaire did in fact play a significant role in influencing subscriber choice of prepaid tariff plans. The demographics were just for purposes of the depth of the study but do not significantly influence adoption of the prepaid tariff plan. The factors were thereafter grouped into 5 broad categories namely, Affordability, Used by Friends and relative, Awareness of services and how they are charged, Ease of subscription and Network Coverage and Clarity.

4.3.1 Affordability

Price charged per call is a key influencing factor in the adoption of prepaid tariff plans especially among the under 20 years of age who registered their great satisfaction with a network operator that charged less per second of airtime. Some of those interviewed went further to explain that they would subscribe and stay on a network that charged lower off-peak rates compared to the ones that charge a flat rate.

On the other hand, the young professionals and experts though keen on lower call rates, also felt that easy to subscribe tariff plan and friendly mode of billing did play a key role in influencing their decision of the tariff plans. Price charged per call and accurate billing services used were the key determinants under affordability.

4.3.2 Friends and Relatives Use it

Though very closely tied to affordability, friends and relatives influence plays a significant role in determining the choice of prepaid tariff plans. This factor stands out together with ease of subscription and availability of airtime as the key determinants of adoption. This is more so for subscribers who use mobile phones for
personal and social calls. Among the candidates interviewed, both male and female expressed that to a very great extent friends and relatives did in fact play a major role in their choice of prepaid tariff plans. The fact that mobile phone operators charge lower rates for on same network calls, family and friends tend to be on the same network to reduce communication costs. Network operators do charge less for on same network calls to increase their subscriber acquisition and retention. Some operators like Airtel Networks have even gone further to introduce what is known in the Industry as the Close User Group (CUG) where a group within the network are charged a preferential tariff for calls to each other.

4.3.3 Awareness of Services and How they are charged

Awareness of services and how they are charged was also identified as a key factor influencing adoption of repaid tariff plans. This implies that clarity in and intensity of communication through advertisements and promotions would highly influence a subscriber to join a network. The age group of under 20 years and over 60 years were more greatly aware of the services offered by mobile phone operators than the other age groups but overall the awareness was great with a grand mean score of 4.11 for both male and female and a grand mean score of 4.07 for all the age group. This implies that most respondents felt that their service provider had to a great extent performed well in addressing awareness factors to influence their adoption.

4.3.4 Network Coverage and Clarity

Network coverage and clarity also featured as a big influencer of adoption with respondents indicating that they would adopt a tariff plan from a network operator with highest network coverage within Kenya and if that network is clear. These
respondents indicated that even in Nairobi there are certain areas where the network is intermittent or congested most of the time. This manifests itself through generated calls often going into voice mail with prompts that the person called is not available while actually the person called had his phone on. This is a new phenomenon different from total network coverage absence. This has forced some subscribers to have alternative network as a back up to ensure that they still communicate. There are cases where the connection is available but no clarity.
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In this chapter, we summarize and conclude all our findings and make recommendations for future study and for policy and practice.

5.2 Summary of Findings

Marketing as a discipline is about identifying the consumer needs and availing products and services that would satisfy those needs in the most convenient, appealing and affordable manner so that an organization’s objective of profit maximization is achieved. Marketers are often faced with a challenge in satisfying consumer needs and have resorted to marketing research as a means of identifying what the consumer needs. This is not always accurate and may lead to huge expenditures in advertising and promotions. The case is not different in the telecommunications sector where marketers have been faced with a big challenge of identifying factors that influence consumer adoption of prepaid tariff plans and hence find it extremely difficult to come up with relevant marketing initiatives that would attract and retain customers. Subscribers have also adopted a dual SIM strategy which implies use of different tariffs at different times. This consumer behavior is influenced by among other factors; affordability, network coverage, consumer promotion and peer or social influence as revealed in the study. Dynamism is often the order of the day in organizations when it comes to product innovation. Organizations have to know what the consumers want rather than finding out what they actually want.
From the foregoing, we can therefore say that the factors influencing consumer adoption of prepaid tariffs vary across demographics, social settings like family and friends, advertising and promotions, affordability and the total number of subscribers per operator. Consumer calling habits may also influence prepaid tariff adoption as some subscribers make more calls during peak times while others are driven by the need to communicate rather than the timing. Related studies by Gitari (2006) and Odhiambo (2003) have attempted to address some of the behavioral patterns of consumers in the mobile telecommunications industry especially on tariff perception and customer satisfaction.

5.3 Conclusion of the Study

We can therefore conclude that to a large extent the adoption of prepaid tariff plans in the Telecommunications Industry is largely influenced by affordability though we can’t for a fact say that affordability as a single factor influences adoption of prepaid tariffs. Advertising and Communications plays a vital role in creating awareness before consumers make a choice. A tariff plan can be affordable but because of lack of awareness, the adoption rate will be low. And again consumers need it simple as the study reveals. The number of people you know and associate with like friends and relatives also influences ones choice as this reduces the cost of calling as modeled by the network operators. The Close User Group (CUG) concept by Mobile phone operators was coined around relationships whether work related, social or related by blood. This is to encourage a larger group to join a network for their own benefit or for the benefit of the organization they represent. The network operator hence benefits through increased subscriber acquisition and retention of subscribers. Network coverage and clarity directly affect the cost of calling. Call drops and
repeating words while on phone because of coverage and clarity respectively increases the time one is on phone and this automatically increases call cost; the more you stay on phone the more you pay for a generated call.

Network operators largely make money through calls made on their networks or data transmitted through their networks. This implies that they can only maximize their revenues by increasing the number of subscribers, retaining those subscribers and also by charging a premium per each call generated. The latter is not feasible especially in a market with four strong players competing for the same subscribers. It is therefore imperative that the players in this industry come up with a bundle of benefits that meet the consumer needs at the most affordable rate. This is more so for an Industry that is yet to reach maturity in terms of tele-density and where tariff rates are still viewed as the most important influencer of adoption. The services offered by the operators have become largely uniform with the biggest differentiator being quality of that service, the tariff and customer care.

5.4 Limitations of the Study

The study could also have some limitations depending especially on the questionnaire design and administration;

The people who were interviewed were those who were met in the streets and at the shops and its likely that respondents who would have given a contrary view may not have been interviewed based on the timing of the interviews. This left out those who were in offices or in institutions where the interviewers didn’t go into.
There is a possibility that the respondents either did not give genuine answers to the questions intentionally or ignorantly because of lack of clarity. This could have led to wrong data being captured for analysis and thereby leading to wrong information.

5.5 Recommendations For Further Research

Family and friends as a factor influencing choice of prepaid tariff plans could offer an area of Research. Its is widely believed and this study has also proved that Family and friends is a big influence of prepaid tariff plans adoption. An independent study to determine the extent of this influence would be an interesting study area.

Another recommendation would be to determine the extent to which off-peak rates determine the duration of calls. Do subscribers call longer during off-peak and if so, does the increase in call time justify a reduction of tariff during off-peak? Mobile service providers may be losing revenues during off-peak that is not justifiable.

5.6 Recommendations For Policy And Practice

It should be mandatory for all prepaid subscribers to sign awareness forms assisted by representatives of the mobile companies on subscription so that they are fully aware of their subscription. Usually the SIM card vendors are usually in a hurry to sell and unsuspecting subscribers usually find themselves in plans that do not meet their needs. This increases the rate at which subscribers leave some networks.

All advertising and Promotions campaigns by companies should be vetted by a government body in charge of trade communications before being released to the consumers to ensure that the communication is clear for consumers to make informed choices.
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APPENDICES

Appendix 1: Letter of Introduction

Letter of Introduction

University of Nairobi,

School of Business

P.O. Box 30197,

Nairobi

8\textsuperscript{th} August 2008

Dear Respondent,

I am a postgraduate student in the school of business, University of Nairobi. I am conducting a management research project on factors influencing consumer adoption of prepaid tariffs in the Telecommunications Industry with a focus on Nairobi. This is in partial fulfillment of the requirements for Master of business Administration degree.

Kindly fill the attached questionnaire to the best of your knowledge. The information you give is purely for academic research and will be treated with strict confidence. A copy of the final report can be made available on request.

Your assistance will be highly appreciated. Thank you in advance.

Yours faithfully,

Phillip Adede

MBA Student

Dr. Martin Ogutu

Supervisor
Appendix 2: Questionnaire

Part A: Demographic Profile of the respondents

Please respond to the questions below to the best of your knowledge

1. Name of respondent
   (Optional) _______________________________________________

2. Gender of the respondent
   Male [ ] Female [ ]

3. Please indicate your average monthly household income
   Below Ksh. 10,000 [ ] Between Ksh. 10,001 – 20,000 [ ]
   Between Ksh. 20,001 – 50,000 [ ] Above Ksh 50,000 [ ]

4. Please indicate the Age Group which best describes your age
   Under 20yrs [ ] 20 – 40yrs [ ]
   41 – 60yrs [ ] Over 60yrs [ ]

5. Please indicate your most often Mobile telephone service provider (please tick where applicable)
   Airtel Networks Kenya [ ] Telkom Orange [ ]
   Safaricom Ltd [ ] Essar Telecom [ ]

6. How did you get to know your current mobile telecommunications provider?
   Newspapers and magazine [ ] Radio and TV advertisements [ ]
   Sales representative [ ] Dealer [ ]
   Friends and relatives [ ]

7. For how long have you used the mobile telephone service provider?
   Less than 1 yr [ ] 1 yr [ ]
   2 yrs [] Over 2yrs [ ]

8. What is the most common nature of calls you make from your phone?
   Personal [ ] International [ ]
   Business [ ] Social [ ]

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**Part B: Consumer Awareness**

Below is a list of services offered by the MSP; To what extent are you aware of each of the following services and their charge? Please circle as appropriate on a scale of 1 to 5, where; 1=Not at all, 2=A little aware, 3=moderately aware, 4=Greatly aware, 5=Very greatly aware.

<table>
<thead>
<tr>
<th>Service/Feature</th>
<th>Aware of service</th>
<th>Aware of charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scratch card top up</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Virtual top up</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Prepaid roaming</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Off-peak charges</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Balance enquiries</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Call baring</td>
<td>1 2 3 4 5</td>
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</tr>
<tr>
<td>Call forwarding</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Call wait/call hold</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Internet Service</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Credit Share</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Mobile Money</td>
<td>1 2 3 4 5</td>
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</tr>
</tbody>
</table>
Part C: Service Provider Rating

Below are factors that influence consumer choice of prepaid tariff plans. To what extent do you feel your Service provider of choice performed in addressing these factors? Indicate on a scale of 1 to 5 below where 1=No extent, 2=A little extent, 3=Moderate extent, 4=Great extent, 5=Very great extent.

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Safaricom</th>
<th>Orange</th>
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<tr>
<td>Easy to subscribe</td>
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<tr>
<td>Network coverage</td>
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<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Variety of airtime vouchers</td>
<td>1 2 3 4 5</td>
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<td>1 2 3 4 5</td>
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</tr>
<tr>
<td>Excellent customer Service</td>
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<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Accurate billing</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
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</tr>
<tr>
<td>Discounts offered</td>
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<tr>
<td>Advertising and promotion</td>
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<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
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</tr>
<tr>
<td>Variety of services on prepaid</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Availability of airtime</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
Part D: Choice of Prepaid Tariff Plans

Below are factors that influence consumer choice of prepaid tariff plans. To what extent does each of the following factors influence consumer adoption of prepaid tariff plans? Please mark appropriately by a tick (✓) on a scale of 1 to 5 below where 1=No extent, 2=A little extent, 3=Moderate extent, 4=Great extent, 5=Very great extent.

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<td>Variety of airtime vouchers</td>
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<tr>
<td>Excellent customer Service</td>
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<td>Accurate billing</td>
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<tr>
<td>Discounts offered</td>
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<td>Advertising and promotion</td>
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