

**THE EFFECTS OF SELECTED FACTORS ON THE QUALITY OF
SERVICE PROVIDED BY TELECOMMUNICATIONS SERVICE
PROVIDER IN TANZANIA: THE CASE OF TIGO**

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTERS IN BUSINESS
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CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by the Open University of Tanzania a dissertation entitled: *The Effects of Selected Factors on the Quality of Services Provided by Telecommunication Service Providers in Tanzania*, in partial fulfillment of the requirement for the degree of Master of Business Administration of the Open University of Tanzania.

.....

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Date

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DECLARATION

I, **Gertrude M. Moragwa**, declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

Signature

Date.....

DEDICATION

This Research Paper is lovingly dedicated to my late Mother Jacqueline Kombo Moragwa; (may her soul rest in eternal peace), my father; Michael Moragwa and my beautiful sisters; Roselyne and Lisbert Moragwa they have been my constant source of inspiration. They have given me the drive and discipline to tackle any task with enthusiasm and determination. Without their love and support this project would not have been made possible.

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ABSTRACT

This study aimed at assessing the effects of selected factors on the quality of services provided by telecommunication service providers in Tanzania. The study was conducted in Dar es Salaam, with respondents drawn from the three municipalities of the city. The population involved in the study included staff from the telecommunication industry as well as customers in the industry. The study found out that factors such as product price range, effective communication and customer care all have impact on service provider's quality of service, customer satisfaction as well as customer's choice/ preference of telecommunication service provider. From the findings, the study made a number of recommendations as follows; industry stakeholders to invest in innovations and new technologies to meet customer's changing needs, development of convenient dimensions of service provisions and promotion of customer service to enhance customer satisfaction.

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LIST OF ABBREVIATIONS

CAPEX	:	Capital Expenditure
CS	:	Customer satisfaction
MMS	:	Multimedia Messaging Service
SMS	:	Short text Messaging Service
TBC	:	Tanzania Broadcasting Commission
TCC	:	Tanzania Communication Commission
TCRA	:	Tanzania Communications Regulatory Authority
TTCL	:	Tanzania Telecommunication Company Limited

CHAPTER ONE

1.0 INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Introduction

This is an introductory chapter. It gives an overview of the telecommunication industry in Tanzania and the main problem the industry currently faces. It also states the statement of the problem, the objectives of the study, the research questions as well as the scope of the study. The limitations of the study are also presented in this chapter.

1.2 Background of the study

The telecommunication industry has proven enormous success in marketing of its products. For the last ten years, the number of mobile phone subscribers had increased to millions, with few service providers. The demand for mobile phones across African is huge and rapidly expanding. 'An Overview of Evidence' pointed out that less than 3% of the population had access to a telephone in 2001, but the number of mobile subscribers has already grown to over 50 million, representing over 7% of the population. The number of subscribers is currently expanding at around 35% a year and is forecasted to continue over the next few years.

The rapid expansion of markets is clearly linked to liberal regulatory environments, where operators have been given freedom to respond to customer requirements. Globally, the industry recognizes that its next one billion customers will be won by companies that develop business models that work for poorer people. This presents enormous opportunities for the delivery of pro-poor services.

1.2.1 Tanzanian Contexts

Until 1992, state owned Tanzania Posts and Telecommunications Corporation (TPTC) held monopoly in the provision of communications and regulated the sector. Zanzibar Telecommunications Company Limited (Zantel) enjoyed similar control in the Isles. Though decision to restructure and liberalize communication sector came in 1993, in practice the actual process took off four years later, with the coming onto the picture of National Telecommunication Policy in 1997 (TCRA, 2010).

Pointedly, the policy sought to "promote the liberalization and competition of the telecommunications sector and ensure reliable provision of these services to all economic sectors" (TCRA, 2010 P.11). The guidelines also set out for the sector's institutional set-up by separating the roles of the government, operators and the regulator. Likewise, it established sunset period of exclusivity to the operators whilst leaving other services (mobile, data and paging) open to competition.

Government's first plus was its decision to standardize regulatory framework. Two agencies, the former Tanzania Communication Commission (TCC) and Tanzania Broadcasting Commission (TBC) were merged to form Tanzania Communications Regulatory Authority (TCRA) in 2003. TCRA Act No. 12 of 2003 categorically provides for, inter alia, the responsibility of promoting fair competition and economic efficiency, safeguard consumer interests, the promotion and monitoring of availability and quality of regulated services and their tariffs. It is also empowered to grant licenses as well as enforcing their conditions. For the first time, Tanzania adopted a flexible policy instrument geared towards boosting private sector

investment, with a broad array of steadfast, reasonably priced domestic and international telecommunications.

1.2.2 Liberalization of the Telecommunications Sector in Tanzania

Liberalization in the aspect of telecommunication in Tanzania was enacted under Tanzania Telecommunication Commission (TTC) Act (1992). The Act was to make a provision for the regulation and functions of communication companies which were to be established. In 1993, the monopoly of the state owned Tanzania Posts and Telecommunication Company (TPTC) came to an end by an Act of parliament, Tanzania Communication Act Number 8 of 1993. The demise of the TPTC gave birth to Tanzania Telecommunication Company (TTCL) to provide telephone services, and Tanzania Posts Corporation (TPC) to provide postal services (TCRA, 2010).

Liberalization has allowed in greater private involvement. Among the notable plans in the media industry is an agreement by operators to move from analogy to digital broadcasting by 2015. Transparent liberal policy and fertile regulatory framework attracted investors in droves to exploit fresh business opportunities. The first mobile phone company in Tanzania, Mobitel, was registered in 1994, deploying an analogy network, followed by Tritel, which installed Global System of Mobile communication (GSM) supplied by Siemens.

Yet, up to 1998, out of a population of about 30 million people, the two companies had attracted only 37,900 subscribers. With only three players in the sector, competition was far from being effective. For instance, Mobitel used to charge both

incoming and outgoing calls in foreign currency (US Dollars), making their services look more of a redundant luxury. The ailing state owned Tanzania Telecommunication Company Limited (TTCL), due to its inefficient monopoly, enjoyed well over 70 percent market share, while the country's tele-density was as low by the end of 1998.

The real competition in the mobile phone industry in Tanzania came with Vodacom's market debut in 1999. It deployed modern digital technology, linking up Tanzania with its network towers. With massive investment in rollout programmers in the first four years, Vodacom became the first telecom firm to book a million subscribers by the end of 2007 (TCRA, 2009).

The latest entrance of Celtel International, TiGO and Zantel has seen cut-throat competition over consumer tariffs, as well as expansion in the range of services provided to consumers. For instance, Vodacom's subscribers, who incidentally happen to be customers to the pan-territorial CRDB Bank, can inquire about the status of their account balances through short messaging services (SMS), a value adding service.

Recently, in response to the fertile regulatory climate, Tanzania has a fully competitive telecom sector with two fixed-line operators (TTCL and Zantel) and six operational mobile networks, with four additional players licensed under a new converged regulatory regime. Growing at a rate of 50% p.a., the mobile market passed the ten million subscriber mark in 2008 with four dominating major operators: Vodacom, Airtel, Tigo and Zantel. At a penetration level of only around

30%, growth is set to continue. The liberalization of VoIP Internet telephone as well as the introduction of 3G mobile and other wireless broadband services is boosting the Internet sector which has been hampered by the low level of development of the traditional fixed-line network (TCRA, 2009).

1.3 Background to the Problem

MIC Tanzania Limited also known as Tigo, is one of the seven active mobile telecommunication service providers operating in Tanzania. Other service providers operating in Tanzania are Vodacom Tanzania, Airtel, Zantel, Sasatel, TTCL and Benson Informatics. According to the Quarterly Telecommunications Statistics Report of June 2010 as Report by Tanzania Communications Regulatory Authority (TCRA), MIC Tanzania Limited is ranked 3rd position in the market with 22.9% of the market share, behind Vodacom Tanzania - the market leader with 40.9% and Airtel Tanzania with 25.1%. Tigo has an average growth rate of 1% from the previous quarter of March 2010.

MIC Tanzania Limited positions itself as the first cellular network in Tanzania that appeals to youths and the low income earners of Tanzania. In terms of the subscriptions, Tigo has over 4.4 million subscribers in its customer base (TCRA, 2010) and claims that its network reaches most parts of the country (www.tigo.co.tz). MIC Tanzania Limited has many services for its customers. Its services are either pre or postpaid. It is famous for the voice or call services, international calling services, postpaid data International roaming, traffic data services through Short text Messaging Service (SMS) and the Multimedia Messaging Service (MMS). There are also a lot of other tailor-made services such as

the Blackberry services, mobile internet services, mobile banking and money transfer services through *Tigo-Pesa*, Virtual Home Environment roaming service and WAP.

MIC Tanzania is also popular for its innovative product packages such as *Tigo Rusha*, an electronic recharge and credit transfer service and *Niwezeshe*, an emergency credit (air time) advance to all prepaid customers. In order to increase its customer base, Tigo runs consumer promotions like the *Jikoki na Tigo, Scratch and Win* and 1 Shilling per second call rate that have greatly impressed consumers. MIC Tanzania is the only mobile service provider with the lowest electronic reload voucher with the value of Tanzania Shillings 250.00 which is aimed at its pre-paid low income bracket customers. MIC Tanzania is a very popular mobile telecommunication service provider in the region.

1.3.1 Mobile Phone Operators and Improved Services

Mobile service providers in Africa are increasingly electing to out-task optimization of their networks to trusted partners with the expertise to enhance multi-vendor infrastructure and systems. Subscriber growth in Africa remains extremely buoyant. In 2008 the number of customers outstripped North America (with 280 million subscribers) and by 2012 they are predicted to reach 425 million, an average of 36.25 million new connections per year. But volume does not equate to Average Revenue per User (DSTI, 2007). Indeed, with many Customers generating low margin business, service providers have to maintain tight Capital Expenditure and Operating Expenditure controls, especially in times of economic uncertainty. This

must be achieved while meeting the demand both for large numbers of connections and quality of service.

Quality of Services remains an important issue. Dropped calls, failed connections, and call quality are high on the agenda for legislators. Action to advance Quality of Call of Services in some markets has seen service providers expected to provide free calls (in lieu of dropped calls), the implementation of monthly penalties (if service targets are not met), and even restrictions on promotions activity targeting new customers. And while customer demand is strong, competition for new subscribers is intense.

As well as meeting legislators' Quality of Services demands, the customer experience is a critical area with service providers keen to differentiate their business by enhancing voice performance, supporting roaming, launching special offerings (such as guaranteed service benchmarks for high-value customers), and introducing data products. With investment capital scarce, operators are turning to optimization. Expertise to achieve the lowest possible CAPEX per subscriber through effective network design and enhancement of their existing assets is important. Cost savings can then be diverted to more advanced technologies such as UMTS/HSPA.

There is also an expectation from the business team that any new services must be launched quickly and at a high quality to capitalize on market demand. With the drive to add data capabilities, networks are becoming more complex to operate. Moreover, the ability to retain talented engineers required to maintain and enhance

systems is limited by the rapid growth in mobile networks during the last five years. If one combines all of these challenges it is clear that African service providers face a unique set of challenges: to deliver the best possible subscriber experience in an ever more complex network, at the lowest possible cost in the shortest possible time while servicing huge demand. If ever the phrase “doing more for less” applies, it’s now. Faced with these pressures, service providers are increasingly turning to management service expertise to cost-effectively optimize network performance.

This study provides insights into the quality of services and types of techniques that are being exploited to drive network performance. The study also dwells on the quality of services offered by these service providers so as to accommodate the increased level of customers.

1.4 Statement of the Problem

By 2011, global cellular phone service subscribers are expected to nearly double. Competition in the telecommunications industry is intense and several factors are forcing major changes. Mergers and consolidation have completely altered the industry’s landscape and cross-border ownership of telecom businesses is making this a globalized industry. Deregulation and privatization will have a continual effect worldwide. Telecommunication, Internet and wireless technologies are continuing to advance rapidly, quickly changing customer preferences, disrupting traditional communication methods and forcing prices downward (Normile, 2011).

To the side of user, dropped calls, failed connections, and call quality have remained the main challenge to service providers as the time goes on. Subscribers are

experiencing poor services from their service providers (Normile, 2011). Firms in the industry have made efforts to alienate problems facing the industry whereby improved technology has been put in place to support the telecommunication systems and improve operations and also resources have been directed towards staffing and staff trainings to ensure improvements in customer care and service delivery (TCRA, 2010).

Despite efforts done by the service providers services offered are poor and do not satisfy most of their customers. De Silva and Airtel Udeen (2007) urged for further research into this area to help understand the dynamics of the relationship between increased level of customers and the services rendered by service providers. They argue that telephones alone cannot be the silver bullet that will bring and retain the hundreds of millions of the anticipated customer base rather the service offered in the industry.

1.5 Objective of the Study

The general objective of this study was to examine the effects of selected factors on the quality of service provided by telecommunication service providers in Tanzania, the case being Tigo.

1.5.1 Specific Objectives

- i. To examine the extent to which communication effectiveness contributes to quality of service provided by telecommunication service providers.
- ii. To examine the extent to which prices charged for services affect quality of service provided by telecommunication service providers.

- iii. To examine the extent to which customer care affects the quality of service provided by telecommunications service providers.
- iv. To examine the extent to which service provider's interaction with customers enhances the quality of service offered by service provider.
- v. To examine the extent to which call services and facilities affects quality of service offered by service providers in the telecommunication industry.

1.6 Research Questions

- i. To what extent does communication effectiveness contribute to quality service provided by telecommunication service providers?
- ii. To what extent do prices charged for services affect quality of service provided by telecommunication service providers?
- iii. To what extent does customer care affects the quality of service provided by telecommunication service providers?
- iv. To what extent does service provider's interaction with customers enhance the quality of service offered by service providers?
- v. To what extent do call services and facilities affect quality of service offered by service providers in the telecommunication industry?

1.7 Significance of the Study

To the management of mobile telecommunication service providers it is expected that the findings and results will provide a more reliable scientific measure to the service provider on the current level of customer satisfaction with their services. This will help them to improve their infrastructure, enabling it to accommodate the existing number of customer base.

This study also provides empirical support for the management strategic decisions in several critical areas of their operations. Above all, it provides justifiably, valid and reliable guide to activities such as designing workable service delivery and improvement strategies. The management can use the findings and results of the study as the road map for creating and delivering customer value, achieving customer satisfaction and eventually loyalty.

On the government's side the findings are useful to the Ministry of Communications and TCRA. It is expected that the finding and results of this study will avail resourceful information and more reliable guide to the policy making and monitoring these service providers in their operation so that to make sure the increased level of customers goes in hand with improvement with their services and infrastructure. It also act as a yardstick for measuring partly their respective policy goals and objectives which include enhancing the reliability and efficiency in the provision of communication services and creating a level playing field (TCRA, 2010).

It is further expected that the findings of the study will help TCRA, among other things, to facilitate the availability of acceptable communication facilities to consumers, to ensure communication systems operations achieve the highest level of efficiency in the service provision. The findings also assist TCRA in ensuring that mobile operators like Tigo are responsive to customers' and community needs and that the interests of mobile telecom customers in Tanzania are protected.

As far as the Industry stakeholders are concerned, the study also provides useful information that allows them to bring up useful suggestions to the improvement in

the service delivery of the respective mobile operators in Tanzania. The findings of this study also contribute the knowledge to society and academicians as well and overcome the problem on poor services offered by mobile phones operators in developing countries. The study also serves as a secondary data for anyone who is interested to carry out researches on the Telecommunication sector. The study is also a fulfillment for the requirements of Masters of Business Administration (MBA) Degree of The Open University of Tanzania.

1.8 Scope of the Study

The scope of the study is based on users of mobile telephone services from Dar es Salaam city population which is known to offer a fairly dense population of mobile users in Tanzania. Dar es Salaam was chosen because of other reasons like being the headquarters of Tigo Tanzania, the centre of Tanzania economy and almost all the headquarters of the public sectors are located in this city. Second, the selection was based on the researcher's accessibility to the data required. It has been estimated that 420,000 Vodacom subscribers are found in Dar es Salaam from which the desired sample was selected (BuddeComm, 2009).

1.9 Limitations of the Study

In carrying out the study a number of limitations were encountered: The budget constraint was a limitation when carrying out this study. The availability of enough resources especially financial was a hindering factor. This made the researcher to conduct the research within Dar es Salaam region only. In Overcoming this constraints arrangement for personal and family support was accessed to ensure the budget was met. Moreover, the time for conducting this study was limited. The

research needed a lot of time in order to get enough information from different mobile phones subscribers. In overcoming this constraint, a detailed time schedule was developed so as to ensure the appropriate use of time. Also, some respondents were not ready to volunteer to offer the required information. The lack of knowledge concerning mobile phones service providers was an expected limitation, in overcoming this respondent awareness on the importance of the research was highly observed.

Some data/opinions needed for this study were considered confidential and/or personal in nature hence, its accessibility become difficult. So high degree of confidentiality was assured/guaranteed and maintained for the respondents.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter presents the literature to the study. The chapter begins by defining key concepts used in the study. Furthermore it presents the theories and models on customer satisfaction, quality of service, customer care, the conceptual definitions, theoretical analysis, empirical analysis, conceptual framework, the underlying theory or assumptions, elements or variables, relationships between the elements and statement of hypotheses.

2.2 Definitions of the key concepts

2.2.1 Service Quality

Service quality has been defined as customers' overall impressions of an organization's services in terms of relative superiority or inferiority (Johnston, 1995). Furthermore, service quality is considered to not only meet but to exceed customer expectations, and should include a continuous improvement process (Lloyd-Walker and Cheung, 1998). For example customers evaluate banks' performance mainly on the process of their interpersonal contacts and interactions. Service quality arises from a comparison of the difference between service expectations developed before an encounter with banks and the performance perceptions gained from the service delivery based on the service quality dimensions (Grönroos, 1990).

2.2.2 Telecommunication Industry

The telecommunications industry is responsible for radio, television, voice communications and broadband services (TCRA, 2010).

2.2.3 Customer Satisfaction (CS)

Customer satisfaction is a term that has received considerable attention and interest among scholars and practitioners perhaps because of its importance as a key element of business strategy, and a goal for all business activities especially in today's competitive market (Grönroos 1984, et al and Lovelock and Wirtz, 2007). The concept has been variously defined by many authors. (Kotler and Keller 2006:144) asserts that "Satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a product's performance (outcome) in relation to his or her expectation".

Satisfaction is a "psychological concept that involves the feeling of wellbeing and pleasure that results from obtaining what one hopes for and expects from an appealing product and/or service" (WTO, 1985: 4) CS is "as an attitude like judgment following a purchase act or a series of consumer product interactions" Youjae Yi (1990) cited in (Lovelock and Wirtz 2007:41). CS is "a consumer's post purchase evaluation and affective response to the overall product or service experience" (Oliver, 1992:52). Besterfield (1994: 15) "Satisfaction is merely the result of things not going wrong; satisfying the needs and desires of consumers.". On his part (Bruhn, 2003:20) CS is "an experience-based assessment made by the customer of how far his own expectations about the individual characteristics or the overall functionality of the services obtained from the provider have been fulfilled."

2.3 Theoretical Perspectives

2.3.1 Introduction

This section discusses about different theoretical issues pertaining to the study, mainly concentrating on the SERVQUAL model and its connection to the telecommunication industry.

2.3.2 SERVQUAL Models in the Telecommunications Industry

SERVQUAL is a multiple item scale used to measure expectations and perceptions of service quality and is the seminal work in both the conceptualization and operationalization of service quality (Parasuraman *et al.*, 1985:1988). This 22-item scale was primarily used in service and retailing organizations. The goal of the research was to quantify the latent construct, "service quality" so that firms could identify areas which needed improvement. Organizations can then use this information to make changes that will better meet customers' needs.

According to (Parasuraman *et al.*, 1985; 1988) SERVQUAL instrument has received widespread acknowledgement as a breakthrough in service quality assessment and is considered as an established tool for measuring service quality. As such, SERVQUAL has been adapted to many industries, such as banking, healthcare, finance and the like. However, many studies have found that the instrument must be somewhat modified before it can be used by different firms in different industries. For example Babakus and Boller (1992), argue that the five dimension factor structure of SERVQUAL is unstable across various sectors of the economy. In fact, they found that as few as two dimensions emerge, while Carman, (1990) concluded that as many as eight dimensions exist. With these discrepancies across industries,

several researchers have tailored the SERVQUAL instrument to meet their specific company's and/or industry's situation.

Such studies are on healthcare (Brown and Swartz, 1989; Reidenbach and Sandifer-Smallwood, 1990; Nelson *et al* 1992; Vandamme and Leunis, 1993), on banking (Howcroft, 1993); Blanchard and Galloway, 1994) and on local government (Scott and Shieff, 1993). Howcroft (1993) and Blanchard and Galloway (1994) also adapted the SERVQUAL instrument to fit their specific needs in the banking industry. The reason these researchers altered SERVQUAL is because they felt that the banking industry (in the U.K.) was sufficiently different from the industries examined by Parasuraman, et al (1988). U.K. banks faced growing competition after they were deregulated. These changes caused banks to become more homogenous in the consumers' eyes. Hence, U.K. banks sought differentiation via service quality improvements.

Other variations/extensions/alternatives to SERVQUAL include Beach and Burns' (1995) Quality Improvement Strategy (QIS "kiss" model), Bolton and Drew's (1991) multi-stage model of customers' assessments and Haywood-Farmer's (1988) conceptual model of service quality. Johnston (1995) and Liljander and Strandvik (1993) discuss the concept of a "zone of tolerance." This zone represents a range of disconfirmation, within which a customer will still be willing to remain a customer. That is, if the expectations perceptions gap becomes too large, the customer will find himself/herself outside this zone of tolerance and will be dissatisfied to the point that they will no longer be willing to remain a customer.

No matter which adaptation of SERVQUAL researchers' use, they should remember that assessing service quality is performed so that improvements can be made in order to attract new customers and retain existing customers. These improvements should only be made, however, if they are profitable from a cost-benefit point of view. This idea, Return on Quality (ROQ), was formally discussed in Collier (1995) and Rust, *et al* (1995). Although Rust, Zahorik and Keiningham's (1995) ROQ idea was stated in terms of a percentage return instead of a more appropriate net present value amount, the concept is still valid.

A firm should view potential service quality improvements as a capital budgeting decision. If the present value of future benefits is greater than the present value of the costs associated with making the service quality improvement, the firm should improve that particular aspect of service. That is, any project with a net present value greater than zero increases the value of the firm. Service quality can be viewed as one such project.

2.4 Empirical Studies

2.4.1 Introduction

In this section relevant studies done by other researchers in the areas of quality service in the telecommunication industry are reviewed.

2.4.2 World Related Studies

In dynamic business environment, the role of customer is changing (Prahalad and Ramaswamy, 2000). The changing paradigm of business has made the provision of quality of services as top priority for organizations. Customer-focused strategy has

become a means of competitive advantage and survival for organizations (Taylor and Baker, 1994). Perceived service quality and its measurement has become essential focus for the organization in designing and implementing a customer oriented strategy (MacStravic, 1977). Reichheld and Sasser (1990) concluded that customer satisfaction is vital in attracting new customer and retaining the existing customers.

Researchers have emphasized distinct conceptualizations of quality (Holbrook, 1994). In operation management, reliability and fitness of use define quality, whereas in marketing and economics, attributes of products constitute quality. In services, quality is concerned with the overall assessment of the services (Parasuraman *et al.*, 1988). Garvin (1988) identified performance, features, conformance, reliability, durability, serviceability, aesthetics, and customer perception of quality based on service provider's image.

Also, measuring and determining service quality enables an organization to know its position in the market and provides a strategic advantage to enhance its competitiveness. Measurement of service quality presents areas of strengths and weaknesses that offer opportunities to the organizations to initiate appropriate response to focus and improve salient attributes of customer perceived service quality. Through formal surveys of customers in different industries and focus group, Parasuraman *et al.*, (1988) developed a list of characteristics that define service quality in general. They combined these attributes into five major dimensions of service quality, namely; tangible, assurance, responsiveness, empathy, and responsiveness. These authors subsequently tested these dimensions through SERVQUAL; a 22-items scale measuring customers' expectations and perception on

five dimensions to evaluate service quality. Berry *et al.*, (1994) argued that SERVQUAL is an effective tool to steer organization in its pursuits of quality improvement by focusing on those areas that significantly contribute toward improvement.

Quality of services from mobile phone users' perspective need to be studied with a view to facilitate its measurement. Numerous studies have investigated the perspective of mobile phone users with regard to the quality aspects. These have been discussed in succeeding paragraphs. These studies provide insight to the quality dimensions that mobile phone operators need to consider remaining competitive in a changing environment.

Global System for Mobile Communication (GSM) Association identified a list of indicators for mobile phone quality of services. These indicators included network access, service access, service integrity, and service retain ability (Sutherland, 2007). Power and Associates Survey (2009) studied the mobile phone users' satisfaction in the United Kingdom. The study used a sample of 3325 mobile phone customers throughout the United Kingdom. Important dimensions of service quality included in the survey were coverage, call quality, promotions and offerings of incentives and rewards, prices of service, billing and customer, bundled services. The study revealed rising customer expectations with regard to the additional features and services from the mobile operators.

Based on the survey of 22052 users of wireless phone in the United States in 2008, the Wireless Phone Users' Satisfaction Index of United States of America indicated

that important dimensions of service quality included customer satisfaction, billing, brand image; call quality, cost of service and options for service plans (Customer Satisfaction Index, 2009). A qualitative (focus groups) and quantitative (consumer surveys) research study about consumer satisfaction was undertaken by Australian Communications and Media Authority, (ACMA, 2008). The study reported highest levels of dissatisfaction with mobile phone services (35 per cent), citing problems such as drop-outs, poor call quality and interference.

Accenture (2008) carried out a survey of 4189 consumers in Australia, Brazil, Canada, China, France, Germany, India, United States, and the United Kingdom. More than 67% respondents confirmed poor customer services as the core reason for leaving the operators. The survey also found the rising expectations of customers in mature and growing markets.

In 2008, Telecom Regulatory Authority India carried out quality of service survey of mobile operators based on users' satisfaction. The sample consisted of 1318 mobile phone users. The important dimensions of regulatory services benchmark dimensions of service quality included billing, customer care, availability of network, value-added services and pre-sales and sales dimensions. Out of 11 operators, only five operators achieved the 90% service quality benchmark (Survey, 2008). Souki and Filho (2008) carried out a study based on 434 customers in Brazil. The study focused on satisfaction of mobile phone users. The results of the study indicated high rating of customers' services, quality of connections, ambience of outlets, and the coverage provided.

A study of 10 regions in Japan measured the customer satisfaction among 7500 individual mobile telephone service users. The important dimensions of service quality of mobile service providers included handset, price, quality of call, coverage of area, non-voice functions and services, and customer contact strength in that order of priority (Mobile Phone Survey, 2004). The analysis found that more than 80% of the subscribers were unsatisfied with the services.

Barnhoorn (2006) carried out a study in 2008 in South Africa. The findings indicated the ever increasing expectations of customers with regard to the services of mobile phone operators. The salient dimensions of quality of service accorded priority by mobile phone users included courteous and facilitating role of front-line personnel, ease of availability for cards and recharge services, availability of products and services at the company outlets, accurate information and facts about services, affordable prices of the packages, and customized services. Barnhoorn in this study found that more than half of the subscribers were not happy with the services.

A study by Sukumar (2007), using a sample of 104 mobile phone subscribers, measured the mobile phone users' preferences for selection of an operator. The result of the study found important dimensions as brand image, customer care, services availability, credit facility for connection, deposit amount, and prices in that order of priority. In Canada, the consumers' satisfaction survey in 2007 based on the responses of 6000 mobile phone users indicated the essential elements of service quality of mobile operators as quality of calls, prices, billing, customers' services, and diversity of bundled options of services (Customer Satisfaction, 2007).

A study was undertaken in 2007 on Consumer Satisfaction in Telecommunication markets in the Organization of Economic Cooperation and Development (OECD) countries by the Directorate for Science, Technology, and Industry (DSTI) Committee on Consumer Policy. The study found imperfect information on quality and price, lack of transparency in roaming charges for international in service and contractual binding in changing the operators affect consumer behavior. The study focused on mobile phone users and identified and found that quality of service and price were two major factors for switching over to new operators. The study further highlighted that the major factors affecting mobile phone users' dissatisfaction included lack of differentiation in the United Kingdom, prices and quality of services in Portugal, early termination fee and unsolicited calls and inaccurate billing in the United States, and lack of meeting and exceeding customer's satisfaction in Australia (DSTI, 2007).

Sigala (2006), in a study of mobile phone users in developing countries noted that customization of service, pleasing interaction of staff and customers company's image and differentiated features were the important dimensions of service quality of mobile phone users. In Egypt, a study was undertaken to determine the National Customer Satisfaction Index of mobile phone users based on a sample of 1950 mobile phone subscribers. The dimensions that emerged in customer satisfaction included meeting customers' pre-purchase expectations, perceived quality (coverage, responsiveness to customers complaints, value-added services, promotional activities and their fulfillment), and complaint handling (Ozer and Aydin, 2005). Consumer Surveys (McKinsey Quarterly, 2004; Cap Gemini, 2005; Consumer Reports, 2005)

found that network quality based on data services and voice services strongly influence customer satisfaction and loyalty with regard to the use of mobile phone.

2.4.3 Tanzania Related Studies

It's over ten years now since the introduction of GSM and other mobile network services in Tanzania. This gave birth to a number of operators in the industry. The Telecommunications authority in Tanzania has largely succeed in selling communication licenses to different operators and existing ones. However it has not met equal success in regulating the quality of networks being rolled out. This have subjected the industry to a number of speculations, bad and poorly designed networks hence, flooding the market with the poor quality of services, leaving the subscribers to the mercies of these operators whose only goal is profit, profit and more profit.

The Tanzania telecom market is characterized with poor grade of service, poor call completion rate, poor service delivery, charging problems and poor customer service units. Each and every one of this brings with it the frustration experienced to subscribers. Unfortunately, no network is immune from these ills. Currently; all appear to be in the same cup of tea with varying degrees of the ills. These network segments need to be discussed (Tanzania telecom market, 2011).

The refusal of services requested by customer's handset in all cases in Tanzania is based on inadequate radio resources or channels. Normally, it is attributed by poor Access of Network. This refusal of request impacts greatly on the grade of service of the network (GOS). Usually, during planning on services delivery level, the grade of

service of a network is chosen between 2% to 5%. This is the internationally accepted standard. The GOS simply represent the number of refused calls in every 100 calls. So, if 100 calls are made and only 80 out of that are successful, then the GOS of the network is 20%. In Tanzania today, particularly at busy hour, the average grade of service is 20% and in some networks as bad as 50% and this is obviously unacceptable. These problems could be solved simply by keeping to an acceptable level of GOS. This means that operators cannot take in more subscribers in a particular area or region than what they have the capacity to absorb.

Overload on the network switch itself comes with a number of problems including denial of service, faulty connections, faulty call releases, cross talk (a common situation where a caller is connected to someone different from the one he/she is calling), dropped calls and many others. Typically, traffic loads on the switch should not exceed 70% by all standards. Operators simply load their networks and do not care much about the attendant service quality. Therefore, normally these poor services are not a result of vandalism or power problems as it is alleged, but purely a result of poorly planned and poorly managed networks designed to exploit and not to render effective service.

2.5 Conceptual Framework

Many studies have found that the instrument must be changed to fit different firms in different industries and that different factors may be formed for different industries. In addition, Carman (1990) explains that new factors specific to the service industry being measured may need to be added or previous dimensions may need to be deleted, as service quality is adapted to various industries. Similarly, Taylor and

Baker (1994) demonstrate that the service quality relationship will vary from industry to industry. Reynoso and Moore (1995) state that while the SERVQUAL dimensions are somewhat applicable; researchers should keep some of the more generic SERVQUAL dimensions, but then add others that are particular to a specific situation. The important components for mobile services in the context of developing countries, as derived from theoretical considerations and the data structure, are as shown in figure 2.1.

These factors are hereby explained to broaden the scope of understanding. The first is communication. Communication with subscribers is vital to delivering service satisfaction because when call center agents take the time to answer questions of concern to subscriber, it alleviates many feelings of uncertainty on the customer's side. In addition, when problems arise and solutions are clearly explained, it alleviates the customer's sense of vulnerability. Three items are used to measure this. These are call quality, call drop rate and geographical coverage.

The second factor is related to call services; the literature identifies quality of call services as an important component of service quality and characterizes it as the willingness of the staff to be helpful and to provide prompt services. Two items were used to delineate and measure the construct. These are call forwarding and service quality. Facility is another important factor, having facilities related to the service provided such as service entertainments, improved technology and even short message services is important to the service provider as it increases level of customer satisfaction.

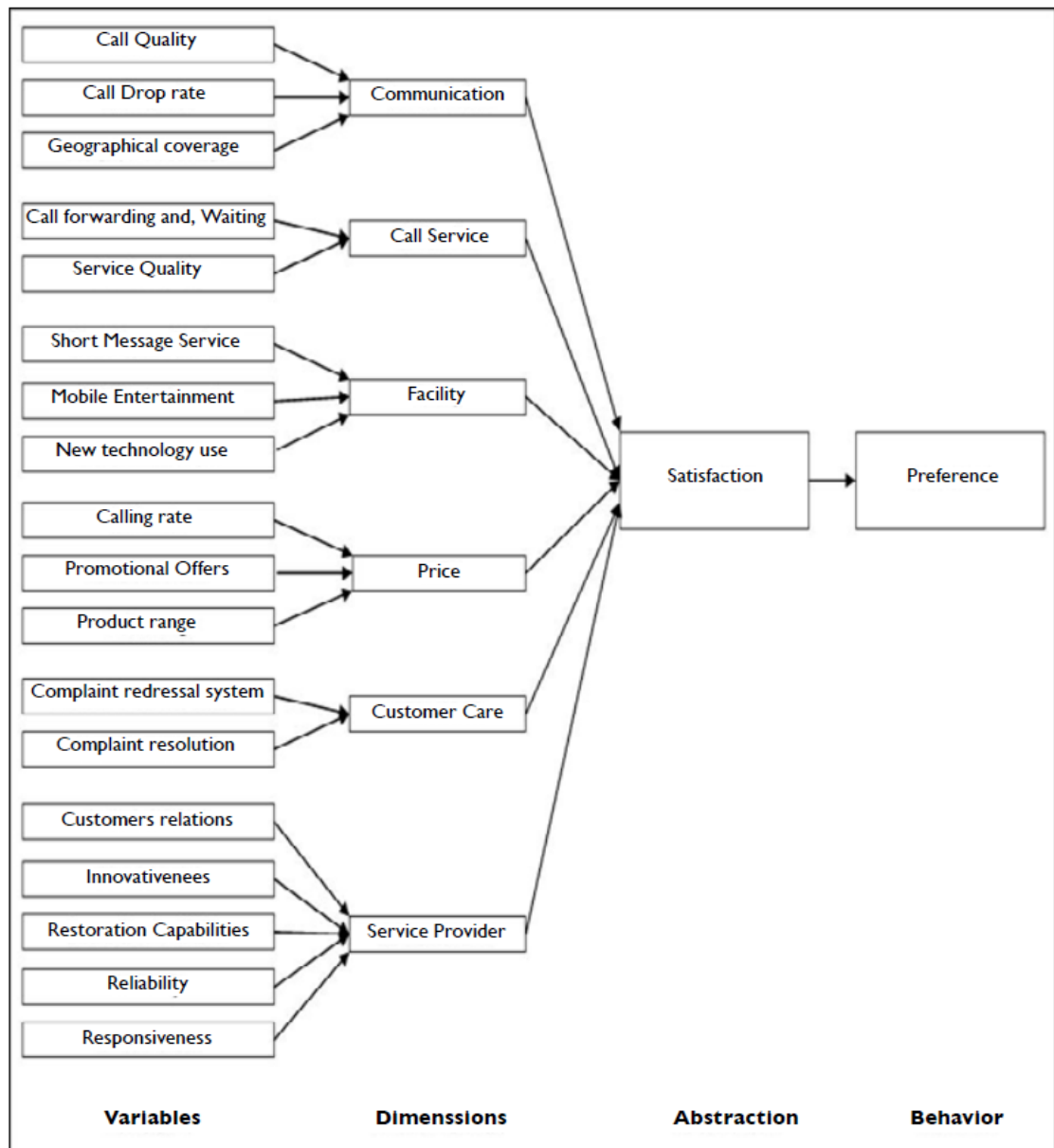


Figure 2.1: Factors which determine the quality of service in the telecommunication industry

Source: Rajkumar, (2011)

Price is another aspect which is one of the primary factors that attract customer. Having low prices can influence customer in the beginning even if services are poor. Calling rates, promotional offers and product ranges can be used to measure pricing behavior of a service provider by looking at the pattern these three aspects follow.

Customer care is another factor which determines the quality of service in the telecommunication industry. Measurement of subscriber's satisfaction stands poised to play an increasingly important role in the growing push toward accountability among service providers, by readdressing customer complain and finding resolutions to them on time customer satisfaction could be achieved.

CHAPTER THREE

3.0 RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter presents the research design and methodology used in the study. The chapter begins by addressing the research design employed in the study, the sampling plan and area of the research, the population and the sampling design. It further presents the sources of data used in the study and the way data was analyzed.

3.2 Research Philosophy

Research philosophy depends on the way that a researcher thinks about the development of knowledge as well as the philosophical orientation of the researcher and the nature of the problem being studied (Saunders *et al*, 2007). Some researchers tend to be positivists, others ascribe to the interpretive paradigm, while others may be called realists. All the three views are different but have an important part to play in research. The study applied interpretive as this requires the researcher to grasp the subjective meaning of social action and because of its credence to exploratory and qualitative methods of research.

Saunders *et al*, (2007) define interpretive as a research philosophy that requires the researcher to seek in order to understand the subjective reality and meanings of participants. This approach had been adopted since this study investigates a phenomenon as a subjective and there are multiple realities. Proctor (1998) suggests that among the various factors that influence reality construction, culture, gender, and cultural beliefs are the most significant. This view holds that all social phenomena depend on the environmental context in which they occur and can

therefore only be interpreted for that context and according to the observer's perceptual framework. Generalization are therefore of little importance. Emphasis was placed upon the subjective meanings that the respondents were attached to social phenomena. Ideas were developed through induction from data and each situation was looked upon in its totality.

3.3 Research Design

According to Tull *et al*, (1990), research design is a specific procedure for collecting, analysing the data necessary to help identify or react to a problem or opportunity such that the difference between the cost of obtaining various levels of accuracy and the expected value of information associated with each level of accuracy is maximized. Research design is also defined as a framework or plan for a study, used as a guide in collecting and analyzing data, it is the blueprint that is to be followed in completing a study (Churchill and Iacobucci, 2002).

The research design chosen in this study was descriptive. It involved both qualitative and quantitative approaches, and it was based on the cross sectional study, where a survey was conducted. Active customers and service providers (Tigo officials) in the selected customer centres were asked to provide information so as to generate answers to the research questions.

3.4 Selection of a Sample (Sampling plan)

Selection of the sample for study was based on the opportunity to learn. According to Stake (1998), when selecting case studies, balance and variety are important but opportunity to learn is of primary importance. That is, the case selected enables the

researcher to get the kind of information needed and can manage to do this with the people concerned in the time available. Thus validity, reliability and feasibility of the information to be collected are important criteria for case study selection and methods (Allan, 1993).

In order to be more objective and get sensible results, the study considered the presence of two major groups in the population; the pre-paid mobile telecom customers and the postpaid customers. The study also focused mostly on individual mobile telecom end users rather than the major corporate customers with whom the satisfaction criteria may be different from those identified in this study framework. From these two groups, the study aimed at gathering data, which helped the researcher to come up with strong conclusion on the level of customer's satisfaction in both, pre-paid customers who constituted the majority of Tigo customer base and the postpaid customers who were relatively few.

3.5 Area of the Research

The study was conducted in Dar es Salaam, region for the purposes of simplifying and convenience in data collection. The study was restricted in Dar es Salaam region in difference Tigo offices and different areas where Tigo operates. Also, Dar es Salaam was chosen because of being the head quarters of Tanzania, the center of Tanzania's economy and almost all the head quarter of the public sectors are located in this city. Second, the selection was based on the researcher's accessibility to the data required. Moreover, Dar es Salaam region was chosen for this study due to limited time and fund, which restricted the researcher to collect data countrywide. In order to achieve the study objective with convenience and cost justification, only two

customer centers run by Tigo were used as representatives. These are Tigo Premium Customer Center located at Mlimani City Shopping Malls, Sam Nujoma Road and Tigo Customer Centre along Ohio/Ghana Street, in Dar es Salaam's Central Business District - City Centre.

3.6 Description of the Population of the Study

There are 3 municipals in Dar es Salaam region. These are Kinondoni, Ilala and Temeke. All the municipals are within mobile phone network coverage. These municipals all have full coverage of Tigo network which means a number of Tigo subscribers are found in these municipals. A total of 100 customers representing both, pre-paid and postpaid customers were administered with questionnaires. Some had been reached electronically through their personal and group e-mail addresses from MBA Evening Program student database. At the same time, to get more information for analysis, 45 MIC Tanzania Limited (Tigo) officials, both frontline service providers and the management officials, were approached to fill questionnaires and 5 officials from TCRA were interviewed. This Made a total of n = 150 individuals who participated as respondents in the study.

Table 3.1: Summary of the sample size

No.	Source of Data	Number of respondents
1	TIGO Tanzania staff	45
2	TIGO subscribers	100
3	TDRA Official	5

Source: Field Data, (2011)

3.7 Sampling Design

Sampling Technique is a procedure used to select some elements of a population in such a way that it represents actual characteristics of the total popular (Cohen, 2000). In this study, purposive, simple and stratified random sampling techniques were used. **Tigo** staffs were purposively selected by virtue of their positions. Simple and stratified random sampling techniques were employed to obtain information from other type of respondents.

3.8 Sources of Data

Sources of data in a research were classified into primary and secondary sources. The study applied both primary and secondary data collection methods.

3.8.1 Primary Data

Primary data are those data collected specifically for the research project being undertaken (Saunders *et al*, 2007). Primary data were collected through simple survey, direct observation and interviews. Simple survey is the method of collecting and gathering information from part of the population by using a structured questionnaire (Mann, 1995) Questionnaire comprising open and close ended question were used to obtain views from different respondents.

On the other hand Direct Observation is another method which involves a systematic observation, recording description, analysis and interpretation of peoples' behavior (Saunders). It was employed to assess how customers perceive to the kind of service quality delivered by Tigo.

Interviews are questions asked orally. Collecting data using the interview method requires the researcher to identify respondents and request them to answer certain questions. In this study respondents were identified and were requested to answer questions related to the study.

3.8.2 Secondary Data

Secondary data are those which have been collected for purposes other than the immediate study (Churchill and Brown, 2007). These data may be published or unpublished data. Different published studies, reports, operation guidelines and articles with regard to customer satisfaction, customer care and product development procedures from mobile operator under study, mobile telecom bulletins and journals as well as the relevant reports and publications from Tanzania Communication Regulatory Authority (TCRA), were used to capture secondary data.

3.9 Data Analysis

The filled questionnaires were analyzed using the Statistical Package for Social Scientists (SPSS). This is a special computer package for data analysis because of its many advantages. This package can be used to analyze questionnaires with many questions including closed ended questions and open ended questions (Kothari, 1985). This package was used to determine frequency in order to analyze the number of respondents belonging to each variable. This analysis technique involves determining whether a change in one variable is associated with changes in another (s) plus the degree to which such changes are associated (Mwaipopo, 2004). The main reason for the selection of this technique is due to the fact that, it was easy to

verify the strength and direction of relationship between independent and dependent variables under study.

CHAPTER FOUR

4.0 STUDY FINDINGS AND ANALYSIS

4.1 Introduction

This chapter analyses and presents the findings the results in accordance with the research objectives posed in chapter one. The chapter comes up with observations and findings which are grouped into two sections. The first sections is on the general findings of the study while the second section covers the specific findings in which different issues are analyzed in relation to the study objectives.

4.2 Descriptive Findings

The respondents were drawn from various Dar es Salaam municipals. The respondents were familiar with the subject of this study. This gives much confidence on the respondent's knowledge about the study. These respondents included Tigo Staffs, Tigo subscribers and some TCRA officials. Their characteristics' such as education level, gender, and age are analyzed in the general findings.

4.2.1 Age of Respondents

Respondents were asked to indicate their age as part of the data collection process. The age of respondents was ascertained as provided in Table 4.1.

Table 4.1: Distribution of the respondents by their age group

	Frequency	Percent	Cumulative Percent
Below 25 yrs	8	8.0	8.0
25 to 39 yrs	66	66.0	74.0
More than 39 yrs	26	26.0	100.0
Total	51	100.0	

Source: Field Data Analysis, (2011)

4.2.1.1 Age of Tigo Customers

The analysis reveals that almost all respondents under this group attained the maturity age. 66 (66%) respondents under this group were aged between 25 to 39 years, 26 (26%) respondents were those with age of more than 39 yrs, and the remaining 8 (8%) respondents were aged below 25 yrs. This shows that the study incorporated all age groups during data collection and the information collected was representative of all age diversities among Tigo customers.

4.2.1.2 Age of other Respondents (TIGO and TCRA officials)

On checking the composition of the other types of respondents, the age composition of Tigo employees and TCRA officials was checked. The analysis further reveals that most of the respondents attained the age of maturity as shown in Figure 4.1.

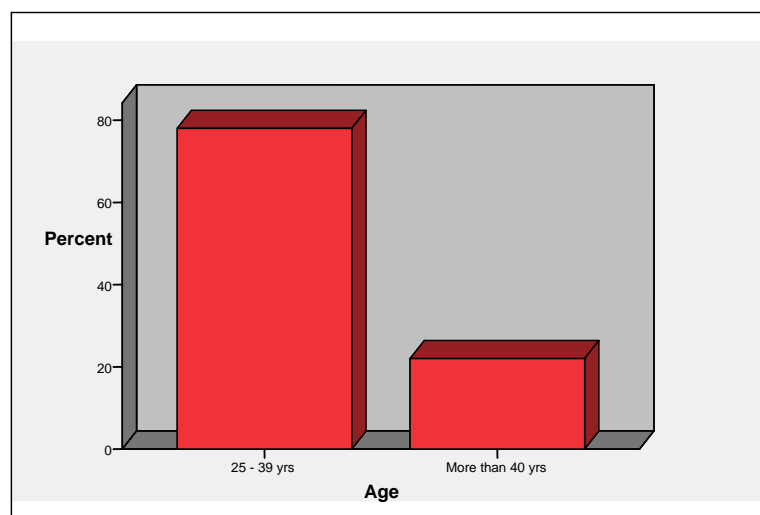


Figure 4.1: Distribution of the respondents based on their age

Source: Field Data, (2011)

The analysis reveals that 45 (45%) respondents were those aged between 25 – 39 yrs old and 5(5%) respondents were aged above 40 yrs as shown in the figure 4.1. To the study, this composition proves that employees of both institutions have attained ages that allowed them to be mature enough to handle challenges that present themselves within the telecommunication industry including the aspect of customer satisfaction.

4.3 Gender of the Respondents

4.3.1 Gender of Tigo Subscribers

Respondents were asked to identify their gender as part of the data collection process. The analysis in figure 4.2 presents the collected data on the gender of respondents.

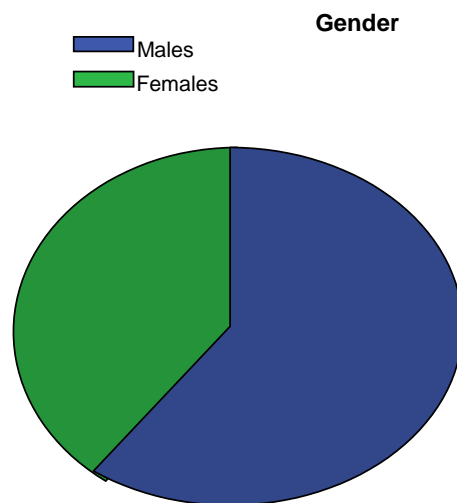


Figure 4.2 Distributions of the respondents based on their gender

Source: Field Data, (2011)

Figure 4.2 show that the male respondents formed majority of the target population with a total of 60 (60%) respondents, while 40(40%) respondents were females. This gives evidence that gender balance was considered during collection of data.

4.3.2 Gender of Tigo and TCRA Officials

Table 4.2 further reveals that there were no major differences between male respondents and female respondents on the side of Tigo and TCRA officials.

Table 4.2: Distribution of the respondents by their gender

	Frequency	Percent	Cumulative Percent
Male	30	58.8	58.8
Female	20	41.2	100.0
Total	50	100.0	

Source: Field Data, (2011)

The findings in Table 4.2 indicate that 30 (58%) respondents were male while only 20 (41.2%) respondents were female. In general, the analysis shows that almost all of the respondents attained the age of maturity which gives much confidence on the reliability of the data obtained.

4.4 Levels of Income of the Respondents

Respondents were asked to indicate their level of income in the questionnaires as illustrated in Table 4.3

Table 4.3 Distribution of the respondents by their level of income

	Frequency	Percent	Cumulative Percent
below 200,000 Tshs	5	5.0	5.0
200,000 - 500, 000 Tshs	42	42.0	47.0
More than 500, 000 Tshs	53	53.0	100.0
Total	100	100.0	

Source: Field Data, (2011)

The finding in Table 4.3 show that 5 (5%) respondents were those with income below Tsh 200,000 and 42 (42%) respondents had income between Tsh 200,000 and Tsh. 500,000 while only 53 (53%) had income above Tsh. 500,000. From these findings, it is clear that Tigo subscribers are of different income classes, which ensures that the data collected was drawn from respondents with income diversities and different social economic bearings.

4.5 Educational Level

To determine the literacy level among the stake holders in the telecommunication industry, respondents indicated their formal levels of education during data collection.

4.5.1 Educational Level of Tigo Customers

In the questionnaires the respondents were asked to identify their levels of education as shown in Table 4.4.

Table 4.4 Distributions of the respondents by their educational level

	Frequency	Percent	Cumulative Percent
Secondary Certificate holders	21	21.0	21.0
diploma/Degree holders	73	73.0	94.0
Masters and Above	6	6.0	100.0
Total	100	100.0	

Source: Field Data, (2011)

From Table 4.4 it can be seen that respondents hold a range of educational qualifications from certificate holders to Masters Degrees holders. 21 (21%) respondents had secondary education certificates, 73 (73%) respondents were

graduates with diplomas and bachelor degrees, 6 (6%) respondents had masters degrees and above. This suggests that people of different educational qualifications constitute the telecommunication industry's customer base, which is likely to affect their needs and preferences from the telecommunication service providers.

4.5.2 Educational Level of Tigo and TCRA Officials

Respondents were asked to identify their levels of education as shown in the findings in Figure 4.3

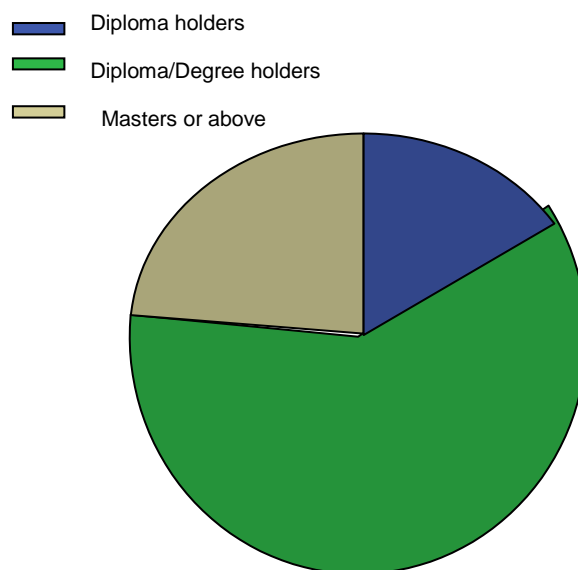


Figure 4.3 Distribution of Respondents by Education level

Source: Field Data, (2011)

The findings on educational levels of Tigo and TCRA officials show that 60.8 per cent were Degree or Advanced Diploma holders, 23.5 per cent had Master degrees and 15.7 per cent were Diploma holders. This implies that employees within the telecommunication industry are well educated hence, trainable to cater for the diverse needs of their customers.

4.6 Experience

To determine respondents experience in the telecommunication sector, Tigo employees as well as TCRA employees were requested to state their years of working and/or being customers within the industry during data collection.

4.6.1 Period on use of Tigo Services

Tigo subscribers were asked to state the period they have been using Tigo as their service provider. Table 4.5 summarizes the results of the finding:

The analysis shows that most of the Tigo Subscribers have been using Tigo services for 2 to 5 years. This contributes 60 (60%) of all the respondents, 24 (24%) of respondents had been using the services for more than 5 years and the rest of the respondents which constitute 16% had been Tigo customers for less than 2 years. This diversity in respondent's experience as Tigo customers gives different perspectives from customers who have been with the service provider for different time frames.

Table 4.5 Distribution of the respondents by their experience

	Frequency	Percent	Cumulative Percent
less than 2 yrs	16	16.0	15.6
2 to 5 yrs	60	60.0	75.6
more than 5 yrs	24	24.0	100.0
Total	100.0	100.0	

Source: Field Data, (2011)

4.6.2 Experience of Tigo Officials

Respondents were asked to identify their experience in working within the telecommunications industry. The findings summarized in Table 4.6 illustrate experiences of Tigo staff in working in the telecommunications industry.

Table 4.6 Distribution of the Respondents by their experience

	Frequency	Percent	Cumulative Percent
less than 2 yrs	7	15.6	15.6
2 to 5 yrs	27	60.0	75.6
more than 5 yrs	11	24.4	100.0
Total	45	100.0	

Source: Field Data, (2011)

The analysis further reveals that the majority of Tigo officials worked in between 2 to 5 years. These constituted 60% of all the respondents, 15.6% of respondents are those worked for less than 2 years and the rest of the respondents, who constituted 24.4%, had the experience of more than 5 years. Generally, this analysis implies that Tigo has experienced and skilled staff to support their customers.

4.6.3 Experience of TCRA Officials

The working experience of TCRA officials was also analyzed and the findings show that 40 (40%) respondents had less than 2 years work experience. The other 40 (40%) respondents had experience of 2 to 4 years, and the remaining 20 (20%) respondents were those with experience of more than 4 years of service in the telecommunication industry proving that the staffs are skilled and experienced in their field of work.

4.7 Findings as per Research Objectives

This section analyzes the findings of the study in relation to the research objectives and questions presented in the first chapter of this study.

4.7.1 Effects of effective communication to the quality of service provided by telecommunication service provider

To establish the relationship between effective communication and quality service, three aspects were looked at. These aspects were call quality, call drop rates and network coverage.

4.7.1.1 Call Quality

Respondents were asked if they were satisfied with the quality of calls offered by the service provider. The analysis reveals that most of the Tigo subscribers were not satisfied with the quality of calls offered by their service provider. The subscribers asserted that most of the calls being made are not successful. The analysis shows that out of 10 calls only 3 (30%) calls were successful on the first trial and the remaining 7 (70%) calls were unsuccessful on the first trial. Messages such as ‘network busy’ and ‘user busy’ were common to Tigo subscribers specifically during pick hours. Figure 4.4 summarizes the results of the findings based on the respondent’s opinions.

Figure 4.4 shows that 33 (33%) respondents were not satisfied with Tigo services, 29 (29%) respondents contended the services were average, 10 (10%) respondents were indifferent, 11 (11%) were satisfied and only 17 (17%) respondents were highly satisfied. This implies that the majority of the customers are not satisfied with the level of communication effectiveness offered by Tigo and also that there is a direct relationship

between the level of effective communication and the quality of service offered by a telecommunication service provider. Customers associate quality of service to how effectively they can communicate through the network. They are more satisfied when their service provider offers good call quality and effective communication.

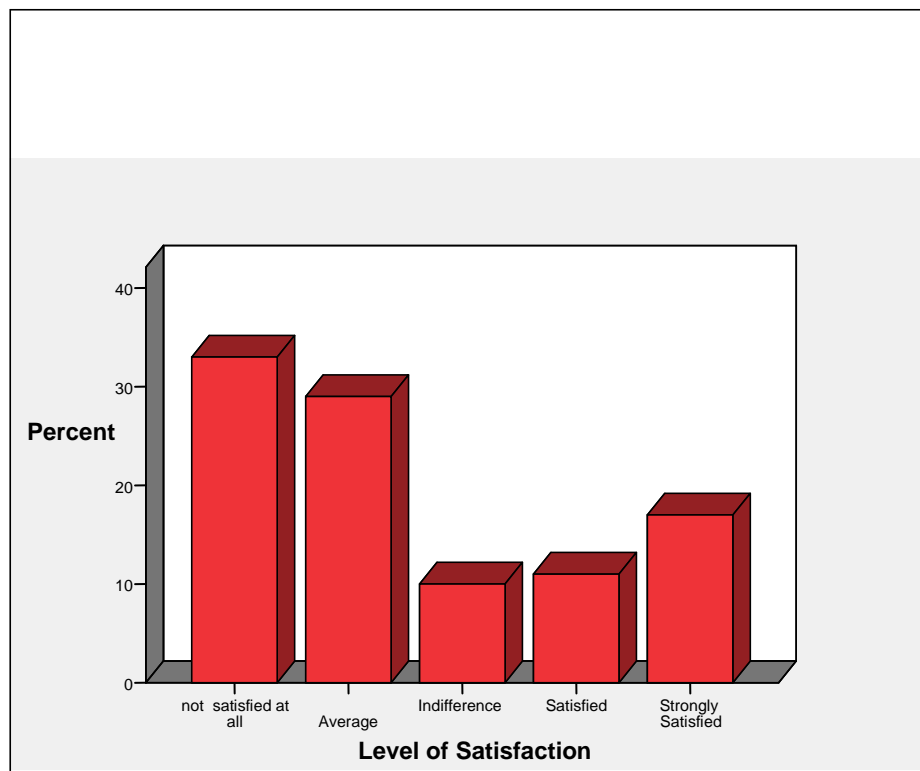


Figure 4.4: Distribution of the respondents on level of satisfaction

Source: Field Data, (2011)

4.7.1.2 Call Drop Rates

Respondents were asked to comment on the rate of dropped calls they experienced with their service provider as shown in Figure 4.5

Respondents complained that most of the calls made were dropped without being connected. 58 (58%) respondents said the drop rate was high, 29 (29%) respondents

said the drop rate is normal while 13 (13%) respondents said Tigo had low call drop rates.

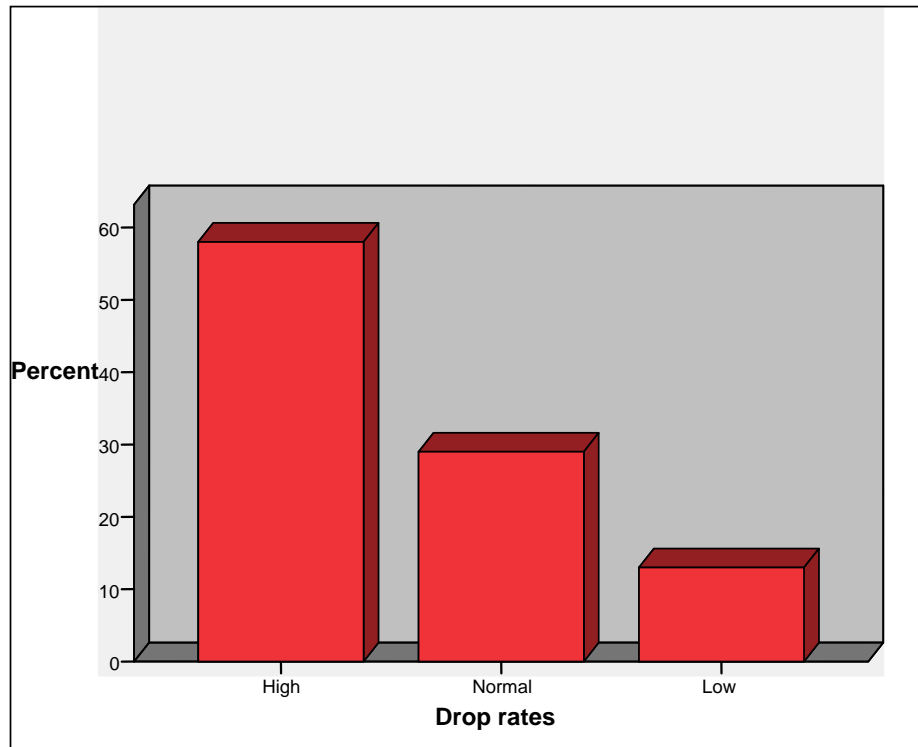


Figure 4.5: Distribution of the respondents on drop rates

Source: Field Data (2011)

Respondents were asked how the call drop rate affects them. Though most of the subscribers were not ready to unsubscribe to Tigo, most of them said as a result of these communication inconsistencies they have been forced to have alternative service providers. This means that Tigo loses some of the income previously generated from these customers as a result of poor call quality.

Table 4.7 shows that 16 (16%) respondents stopped using Tigo as their service provider, 60 (60%) respondents have found alternative/ additional service providers and 24 (24%) respondents remained with the same service provider (Tigo).

Table 4.7: Distribution of the respondents on the measures taken

	Frequency	Percent	Cumulative Percent
Stop subscribed to Tigo	16	16.0	15.6
Find alternative line i.e. Vodacom/Airtel	60	60.0	75.6
Nothing done	24	24.0	100.0
Total	100	100.0	

Source: Field data: (2011)

4.7.1.3 Network Coverage

The findings further reveals that almost all Dar es Salaam areas were covered by Tigo network but as one moves further away from the city, the network becomes weaker and the coverage poorer. Respondents were asked to explain the status of network coverage in places they had reached outside Dar es Salaam and most of them mentioned poor networks converge in those areas. Figure 4.6 summarizes the findings.

Figure 4.6 show that the majority of the areas outside Dar es Salaam with Tigo network has poor network coverage while other areas had no Tigo network coverage all. The findings show that 54(54%) respondents said the areas had poor network coverage, 21 (21%) respondents said the areas they visited had no network coverage at all and 25 (25%) respondents said they experienced good or normal network coverage in areas outside Dar es Salaam.

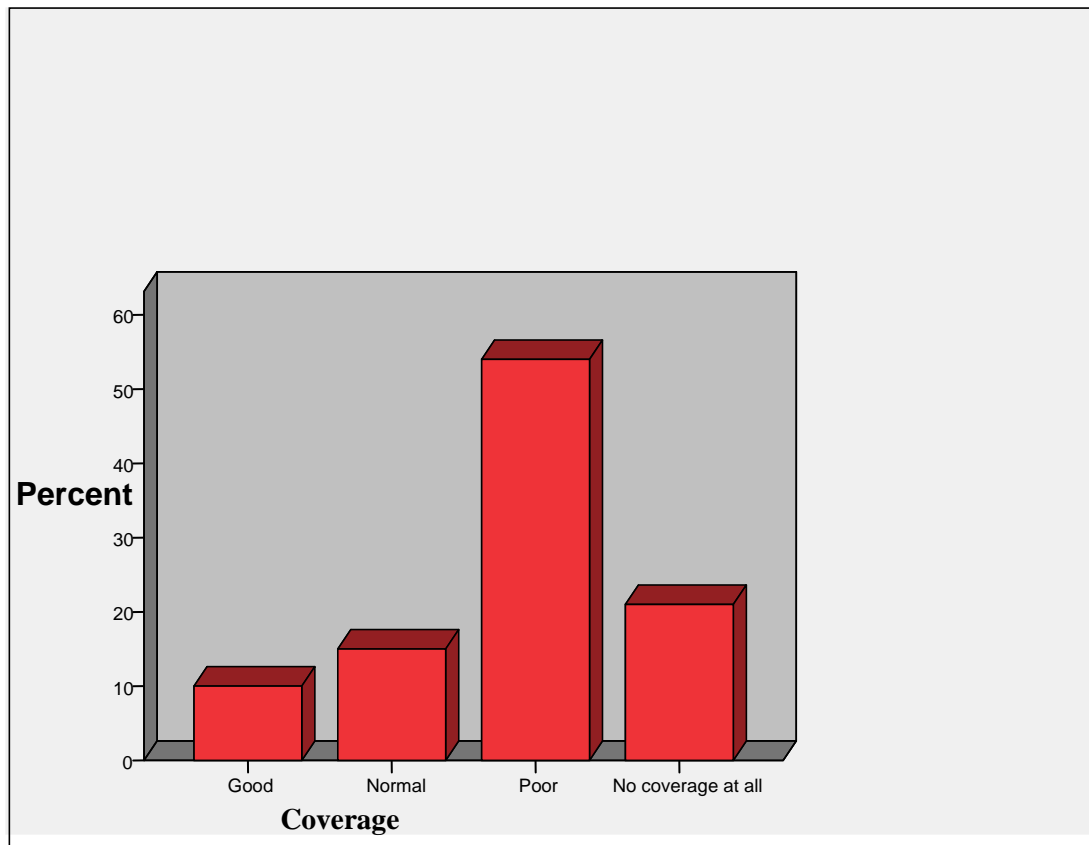


Figure 4.6 status of Tigo coverage in areas outside Dar es Salaam

Source: Field Data, (2011)

When asked if they switched service providers when they are away from Dar es Salaam, 65 (65%) respondents said they do not switch to other service providers when they were away from Dar es Salaam while 35 (35%) respondents said they used alternative service providers when traveling to areas outside Dar es Salaam with poor Tigo network coverage. Figure 4.7 further illustrates.

4.7.2 Effects of prices charged for services on the quality of service provided by telecommunication service providers

Respondents were asked whether rates charged for services reflect the quality of the service itself.

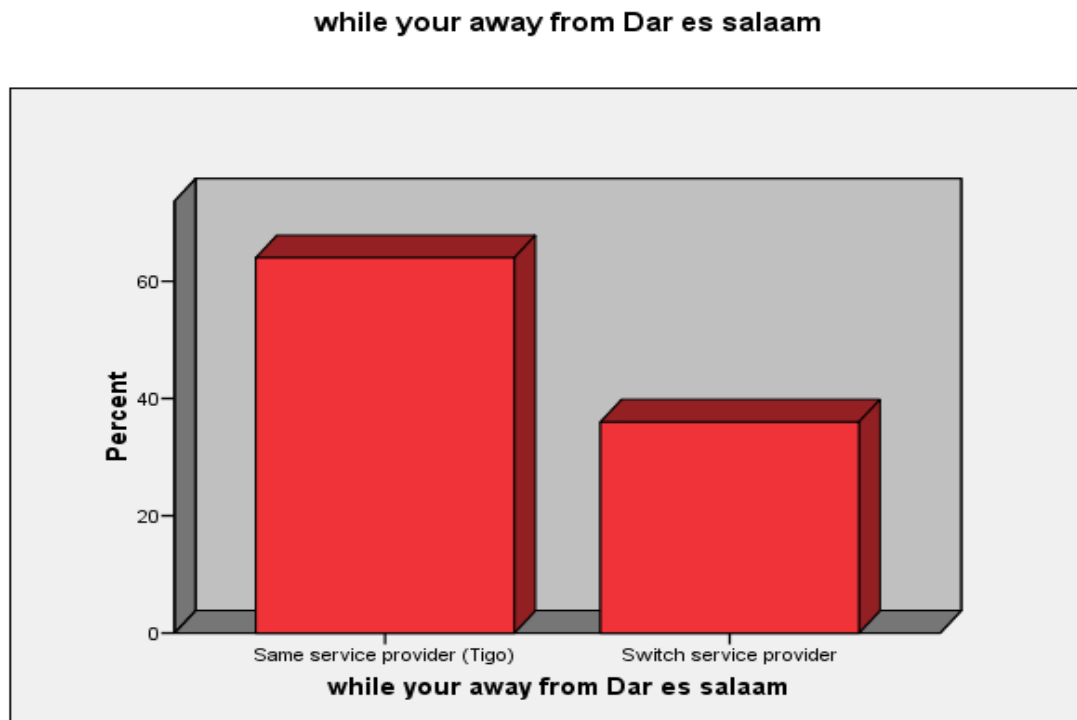


Figure 4.7 Distributions of respondents on service usage outside Dar es Salaam

Source: Field Data, (2011)

4.7.2.1 Calling Rates

Customers were asked to explain whether they were satisfied with Tigo charges in relation to the quality of the service the company provided. Most of them said they were highly satisfied with the charges, in terms of calling rates as illustrated in Figure 4.8:

The analysis shows that 48 (48%) respondents were highly satisfied with Tigo charges, 21(21%) respondents were averagely satisfied, 14 (14%) were indifferent to the charges and only 17 (17%) respondents were not satisfied with the charges. The analysis further revealed that Tigo rate of 1.0Tsh/sec makes customers very comfortable with the service provider, especially to the students and average income

segment of the market and also serves as a unique acceptance feature for the company in the market compared to other service providers. From the findings it is obvious that prices are highly influential in customer's perception of quality service. Customers tend to view reasonable prices as indicative of a service providers dedication. quality service.

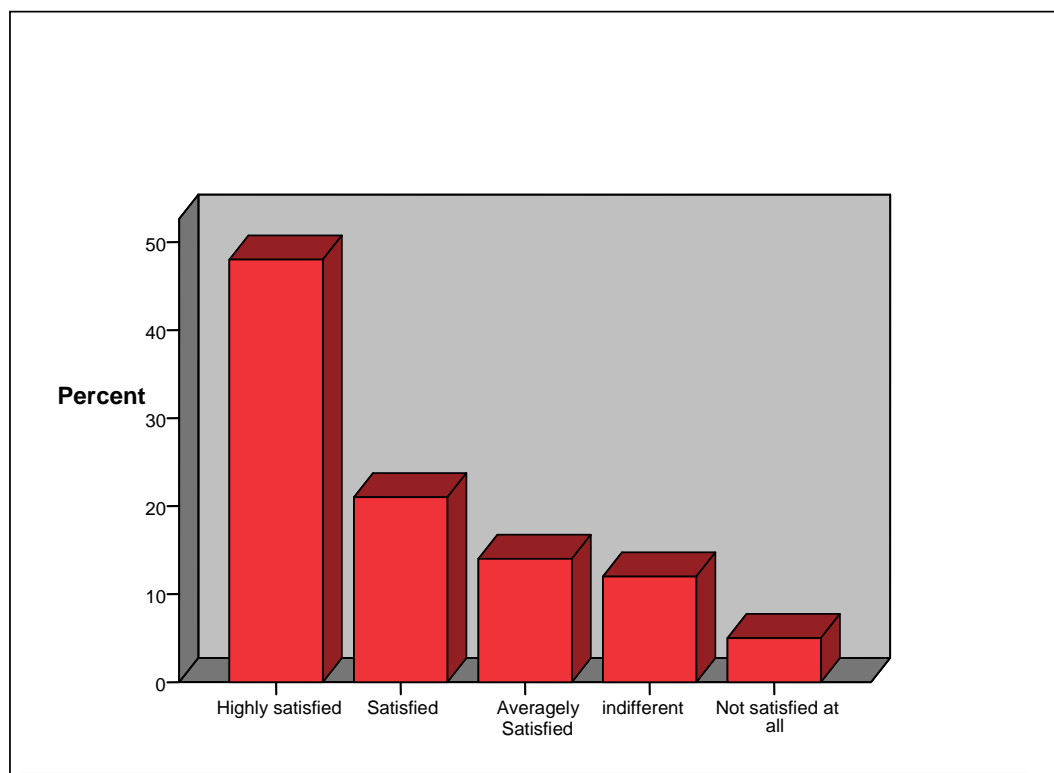


Figure 4.8: Distribution of the respondents on calling rates

Source: Field Data (2011)

4.7.2.3 Promotional Offers

Since promotion is among the fundamental elements in the marketing mix, it was used it in testing the effects of promotional offers related to service prices on quality of service from the customers perspective.

Table 4.8: Distribution of the respondents on influence of Tigo promotions

	Frequency	Percent	Cumulative Percent
Strongly agree	25	25.0	25.0
Agree	21	21.0	46.0
Indifference	28	28.0	74.0
Disagree	16	16.0	90.0
Strongly disagree	10	10.0	100.0
Total	100	100.0	

Source: Field Data, (2011)

Table 4.8 illustrates that 46 (46%) respondents were influenced only by promotions when selecting Tigo as their service, 26 (26%) respondents were not at all influenced by promotions and 28 (28%) respondents cited promotions as well as other factors to have influenced their choice of service provider.

4.7.2.4 Product Range

The price of Tigo devices also seems to have impacts on service provider's service quality. The findings show that this mainly affects those using service provider's devices (physical devices) i.e. internet modems. Most of them consider the prices of these devices as one of the main factors when reviewing the quality of service they were offered. Though the analysis shows there were few respondents using Tigo internet, most of them were satisfied with the price range of their internet modems.

Figure 4.9 shows that 78 (65%) respondents who used multiple services offered by Tigo said the product price range was affordable while 22 (35%) respondents said they could not afford the prices for the different products.

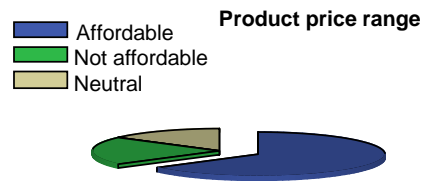


Figure 4.9: Distributions of the respondents on product price range

Source: Field Data, (2011)

4.7.3 The impacts of customer care to the quality of service provided by telecommunication service providers

Respondents were asked to explain whether the customer care offered by service providers in any way contributed to the quality of service they received.

4.7.3.1 Customer Complaint Resolution Rates

The findings in figure 4.10 indicate that most of the respondents were not satisfied with the rate at which their complaints were being resolved. They ascertained that calls placed to the call centers take too long to be answered which in turn delays the resolution of the problems or complaints that customers have. Generally, the respondents were not satisfied with the time it takes the call center agents to answer their calls and respond to their queries as shown in figure 4.10.

The analysis shows that it takes more than 60 minutes to be connected to the first call centre agents; This was proved by 71(71.0%) respondents. 21 respondents (21.0%) said it took between 20 to 60 minutes to be connected to the first call centre

agents while 8 (8%) respondents said it took less than 20 minutes to connect to call center agents.

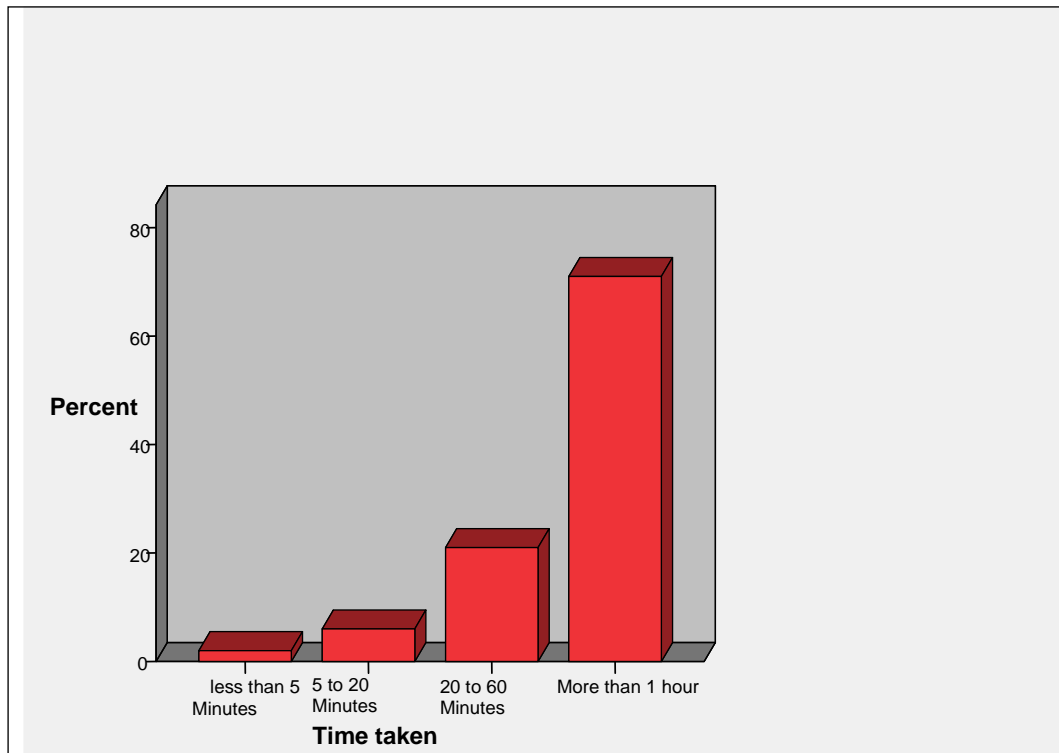


Figure 4.10: Distribution of respondents on problem resolving rates by Tigo

Source: Field Data, (2011)

4.7.3.2 Availability/Accessibility of Customer Service Center

The findings of the study proved that most Tigo subscribers prefer using call centers as their main means for help because it is easier to call a call center for help even if one has to wait a long time before the call is answered than to visit customer service centers which were not necessarily found in areas convenient for most customers to reach. Table 4.9 show the distribution of the respondents on the accessibility of the center where they get help.

Table 4.9: Distribution of the respondents on the accessibility of customer service centers

	Frequency	Percent	Cumulative Percent
highly accessible	12	12.0	12.0
Not easily accessible	73	73.0	85.0
Averagely accessible	8	8.0	93.0
don't know	7	7.0	100.0
Total	100	100.0	

Source: Field Data, (2011)

The analysis shows that 3 customer care centers are common to Tigo subscribers these are Mlimani City, city centre and Buguruni. 73 (73%) respondents said the service centers were highly inaccessible and that most were located in areas that were not easily accessible to a regular Tigo customer. 12 (12%) respondents said the centers were highly accessible and 8(8%) respondents said the accessibility was average while 7 (7%) respondents had no knowledge of the existence of such service centers.

4.7.3.3 Call Centre Services

Though most of the respondents preferred using Tigo call centers almost all respondents complained of the poor services offered by the centers including poor call response rates, inconsistencies in call center agents responses and unfriendly responses from the agents as illustrated in Figure 4.11. According to figure 4.11 only 18(18%) respondents said that Tigo call center services were good in terms of the quality of service offered. The remaining 82 (82%) respondents complained of poor quality of service offered by the centers.

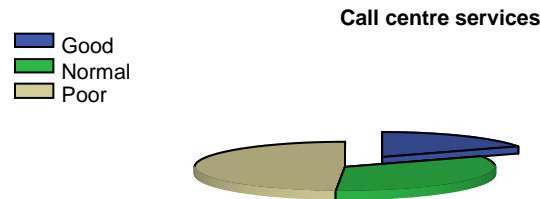


Figure 4.11: Distribution of the respondents on call centre services

Source: Field Data, (2011)

4.7.3.4 Convenience of Operation Hours

The analysis reveals that apart from the management's office, Tigo customer care offices are open Monday to Saturday from 0700 to 1800hours, Sunday and public being operated from 1000hrs to 1800hrs. Respondents had different views on the convenience of the operating hours of the customer care offices as shown in the figure 4.12. With reference to figure 4.12, 25 (25%) respondents who visited customer care centers agreed that the operating hours were convenient, 42 (42%) found them satisfactory, 10 (10%) said they were indifferent and 28 (28%) respondents said the hours were not convenient and did not take into consideration the customer who needed their services but could not access the centers during working hours.

The general feeling was that customer care had direct effect on service quality and good customer care is related to good service quality and vice versa. There was a lot of dissatisfaction about the level of customer service with the Tigo subscribers.

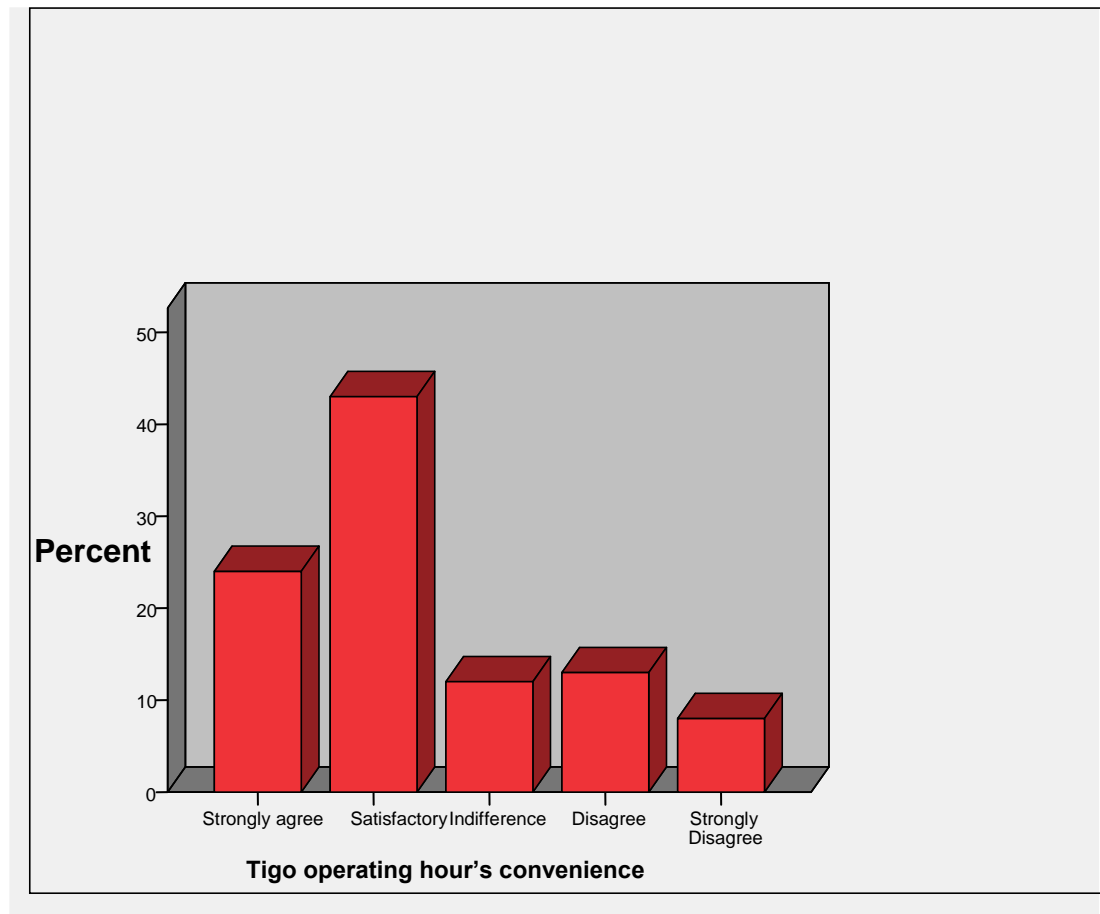


Figure 4.12: Distribution of the respondents on Tigo operating hours

Source: Field Data, (2011)

4.7.4 The Effects of Call Services and Facilities on Service Quality offered by Service Providers in the Telecommunication Industry

Respondents were asked to ascertain the effects of call services and facilities on the quality of service they received as subscribers to the Tigo network.

4.7.4.1 How Tigo Call Services and Facilities Affect Service Quality Provided by Service Provider

The analysis shows that most of the respondents are not highly influenced by call services and facilities compared to other factors such as price, quality of calls and

network coverage which were more influential factors. Table 4.11 summarizes the findings.

Table 4.10: Distribution of the respondents on influence of service facility on service quality

	Frequency	Percent	Cumulative Percent
Highly influence	12	12.0	12.0
Normal/ average	24	24.0	36.0
Not influenced	13	13.0	49.1
very little influence	51	51.0	100.0
Total	100	100.0	

Source: Field data, (2011)

From Table 4.10, 64 (64%) respondents said service facilities do not highly influence their view on their service provider's quality of service and only 12(12%) respondents said it was an influencing factor.

4.7.4.2 The Availability of Multiple Services

Currently, most of the mobile phones subscribers are looking for a service provider who provides multiple services on their network, services such as Tigo internet, Tigo blackberry and even Tigo Pesa add values to the brand and level of customer satisfaction. The findings show that despite the numerous facilities other than call services offered by Tigo, only a few customers use the different facilities as shown in Figure 4.13.

From the analysis the majority of the respondents 50 (50%) do not use other Tigo services apart from making calls. The findings reveal that among the value adding

services being offered, Tigo internet and Tigo Pesa are the most popular being used by 45(45%) respondents. These two products have added a lot of value to Tigo as a brand and have increased customer's preference to Tigo as a network. The other 5(5%) respondents are divided between blackberry services and other recreational services such as cinema schedules, horoscope, and sports schedules.

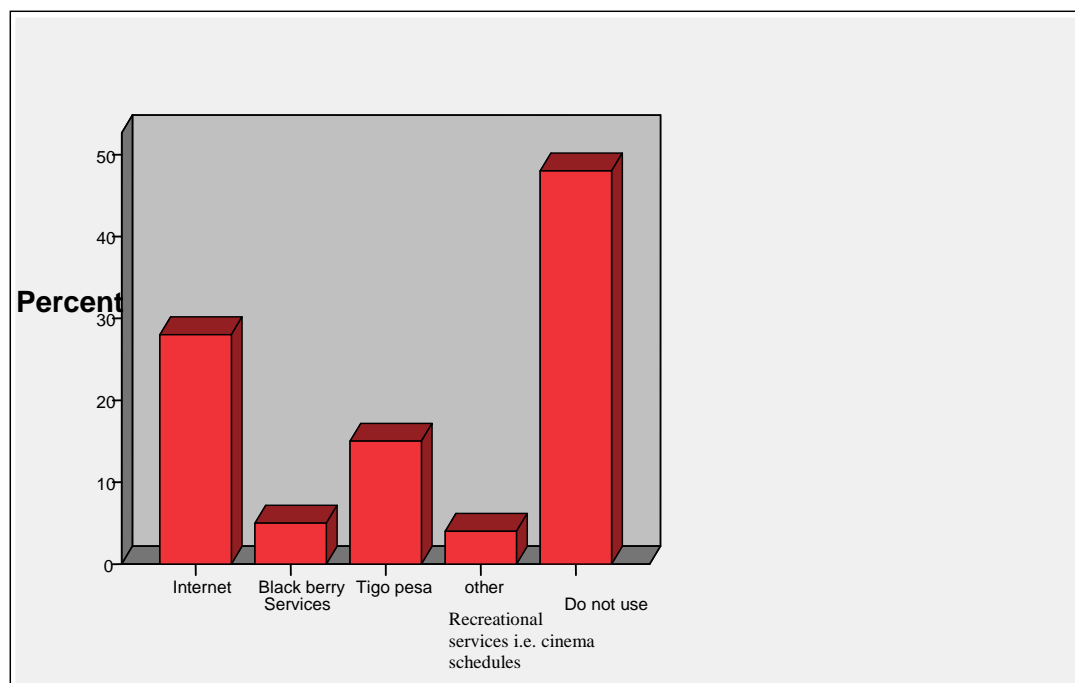


Figure 4.13: Distribution of the respondents on kind of service used

Source: Field Data, (2011)

CHAPTER FIVE

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter concludes the study. It furthermore provides some recommendations based on the findings analyzed in the preceding chapter.

5.2 Summary

The results of analysis in Chapter Four indicate that price, convenience and network quality are the most dominant dimensions in affecting the customers' perception of mobile phone service quality. The results further indicate that convenience, network quality, assurance, responsiveness and empathy are dimensions that have positive and significant impact on how customers' perceive service quality of mobile phone service providers.

For mobile phone users, consistency in service delivery and dependable service is extremely important. In competitive environment, mobile phone service providers need to ensure that the right service is provided, it is thus critical for mobile phone companies to honor their promises in fulfilling users' requirements.

Lack of significant relationship with service quality is a cause of concern for mobile operators because reliability directly affects the credibility and reputation of mobile operators and results in dissatisfaction of customers with its strategic significance once trustworthiness of the service provider is compromised, the organization suffers from reduced market share, diminished revenues, and profitability.

5.3 Conclusions

An evaluation of relative importance of mobile phone service quality dimensions is essential to identify the effects of these dimensions on customer preference of mobile phone service quality. This would enable service providers to identify and undertake necessary initiatives to improve those aspects that customers value the most.

5.4 Recommendations

- i. The competitive environment in the mobile phone industry in Tanzania has become intense. Mobile operators are vigorously investing in network coverage, upgrade and quality, competitive pricing and diversified offers to attract new customers and retain the existing customers. The findings of this study substantiate the response strategy of mobile phone operators to enhance quality of network and convenient dimensions of services that are vital to affect the customers' perception of quality of service.
- ii. The findings of the study reflect that the issue of provisioning of promised service, timely, accurately and dependably will need highest priority. Earlier researches indicate Mobile phone operators will need to pursue two pronged strategies, that is internal focus on improved processes and external focus on customers' needs. An aggressive strategy is needed to enhance the trustworthiness of mobile phone operators by keeping customers' best interest at heart, providing customized services and exemplary behavior of contact personnel to make the interaction a memorable experience, since it is evident that service provider's interaction with customers enhances customer's

satisfaction and acceptance of the mobile telecommunication service provider.

- iii. Since customer care leads to improved customer satisfaction, employees in the telecommunication industry are vital in ensuring quality service delivery. The role of frontline staff becomes extremely important in making the interaction with customers pleasing. Employees need to understand the importance of their role in service delivery and managements should ensure that human resources and staff welfare dimensions are addressed to optimize the quality service delivery by staff.
- iv. The findings of this study also concur with the findings of earlier researches in mobile phone industry that dimensions such as service prices, product facilities and new technologies as discussed in the study have positive and significant effect on mobile phone users' perception of service quality and choice of service provider. Changing customers interests have made service quality a fluid phenomenon. The competitive environment demand constant assessment of service quality to meet rapid changes in customers' demand. It is essential that service quality of mobile phone users be evaluated on regular basis to identify weaknesses and emerging trends in the industry. The regular service quality assessment enables organizations to align to the changing customers needs.

5.5 Limitations and Future Research

Despite the contribution of the study, it has several limitations. The study was based on a convenience sample. Though data collection procedures produced reliable and valid results, the use of random sample is essential to determine the way general

results are. Because service quality dimensions primarily deals with customer handling, additional features and items need to be included and examined for their relevance to the mobile services. It is therefore recommended that further researchers should be done on the following areas:

- i. The impacts of telecommunication industry on improving people's living standard.
- ii. The role of government agencies in making sure it regulates the quality service on the telecommunication industry and related industry.

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