INSTITUTIONAL FACTORS INFLUENCING CUSTOMER SATISFACTION IN WARID TELECOM VOICE SERVICES

 \mathbf{BY}

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JULY, 2013

DECLARATION

I, ARMELLA MUKORAKO decla	re that this	dissertation	is my	own	original	work	and	has
never been submitted for academic a	ward to any	y institution o	f learni	ng or	universi	ty.		
Sign_								
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APPROVAL

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submitted for the award of Masters in Mana	agement Studies of Uganda Management Institute.
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DEDICATION

I dedicate this piece of work to my parents Mukorako Georges and Baranyizigiye Salomé who deserve special thanks for being supportive throughout this project.

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LIST OF ABBREVIATIONS

ACSI: American Customer Satisfaction Index

GSM: Global System for Mobile Communications

MTN: Mobile Telephone Networks

PQ: Perceived Quantity

PV: Perceived Value

RDC: Resource Development Centre

UCC: Uganda Communications Commission

UPTC: Uganda Posts and Telecommunications Corporation

UTL: Uganda Telecommunications Limited

WTU: Warid Telecom Uganda

ITU: International Telecommunication Union

ABSTRACT

The study investigated the institutional factors influencing customer satisfaction in Warid Telecom Uganda Voice Services. It was guided by the following objectives; to examine to which extent reliability of network affects customer satisfaction, to find out how billing affects customer satisfaction and to examine how complaints resolution influences customer satisfaction. The study used cross sectional survey design where both qualitative and quantitative approaches were used. The sample size (N=384) consisted of subscribers of Warid telecom of which 38 were postpaid while 346 were prepaid users. Data was collected through questionnaires and interviews. Pearson's correlation coefficient analysis was used for analyzing the hypotheses and results obtained showed a statistically significant positive relationship between the independent variables (the network reliability, billing, complaints resolution) and the dependent variable (customer satisfaction). Network reliability was found lacking. Billing was revealed to be reasonable due to the many promotions however it influences satisfaction of prepaid users to a very small extent while postpaid users were found to be less concerned about billing. Complaints resolution process was identified to be an area that satisfies mostly postpaid users. The study concludes that the reliability of network, billing and complaints handling influence customer satisfaction. It is recommended that further research be conducted to reveal more factors influencing customer satisfaction because of the weak strength of relationships between the independent and dependent variables. Also it is recommended that new capacity sites should be acquired to improve on the network reliability and that the customer care helpline should be less congested this can be done by offering multiple lines to callers or by recruiting more agents.

CHAPTER ONE

INTRODUCTION

1.1.Introduction

This study investigated the institutional factors influencing customer satisfaction in Warid Telecom Uganda (WTU). The factors were conceived as the independent variable while customer satisfaction was the dependent variable. This chapter presents the background of the study, the problem statement, the purpose of the study, the objectives of the study, the research questions, the research hypotheses, the scope of the study, the justification and significance of the study and the definition of terms and concepts.

1.2.Background of the Study

1.2.1 Historical background

The history of telecommunication began with the use of smoke signals and drums in Africa, America and parts of Asia. In the 1790s, the first fixed telegraph systems emerged in Europe; however it was not until the 1830s that the first telephone appeared in America. In Africa before independence, telecommunications networks were developed by the colonial masters mainly to serve their administrative and economic purposes (ITU, 2003). Telegraphs were used to share information between the capital and other major towns. In the 90's, cellular communications were introduced in Africa and subscriber connections grew rapidly. By 2000, Africa as a continent had more mobile subscribers than fixed lines and Uganda became the first country in Africa to have more cellular subscribers than fixed lines and a third in the world after Finland and Cambodia (ITU, 2003). Until recently in East Africa, telecommunications services providers

were state owned, state operated and often monopolistic (Akkas, Ucar et al., 2010) telephone services in East Africa were shared among Uganda, Kenya and Tanzania. In 1977, Uganda established its own services namely the Uganda Posts and Telecommunications Corporation (UPTC). It was a state owned company that had monopoly. The service quality was poor, finances were not flourishing and there was little innovation (Econ One Research Inc, 2002).

In July 1993, Celtel Uganda was issued a license for provision of telecommunication services in Uganda. The license was given for a period of 15 years by the Ministry of Works, Housing and Communications. Celtel Uganda began providing services in 1995 using the Global System for Mobile Communications (GSM) technology. Despites the start up problems, Celtel Uganda attracted more than 5,000 customers within three years (www.ucc.co.ug). Aware of the lack of performance of UPTC, in 1996 the Government decided to divide UPTC into Uganda Post Limited (UPL) and Uganda Telecommunications Limited (UTL). In 1997, the Communications Act was promulgated whereby UTL was to be privatized. The telecommunications industry was open to competition and a regulatory agency; Uganda Communications Commission (UCC) was established to regulate the sector.

It is in April 1998 that Mobile Telephone Networks (MTN) Limited Uganda was licensed as the second national operator (www.ucc.co.ug). The parent company is MTN South Africa it's also present in Swaziland, Rwanda, and Nigeria. MTN Uganda started operating in October 1998 with fixed lines, mobile, payphone and data services. MTN became quickly popular as it offered some of the services that were not yet on the market that is; access to information about prices, weather and exchange rates. Besides voice and data services, MTN introduced Mobile Money services for users to send and receive money.

Starting with 2000, UTL was fully privatized and presently offers voice services (fixed lines and mobile telephony), data services and mobile money services.

In 2006, Warid Telecom International, an Abu Dhabi based mobile telecommunication firm providing telephony services in Congo, Pakistan; joined the Ugandan Telecom industry. WARID Telecom Uganda (WTU) Limited was awarded a Public Infrastructure Provider and Public Service Provider license in November 2006. The License incorporated Fixed & Mobile Telephone, Internet, email and International Communication Services. The company was officially launched in Uganda on 9th January 2008. On 7th February 2008, the commercial services were launched simultaneously in a number of towns and districts. According to the Head of Resource Development Centre at WTU, Warid users are estimated to be more than 5 millions as per January 2012; the network covers the whole of Uganda except for the districts of Kotido and Karamoja.

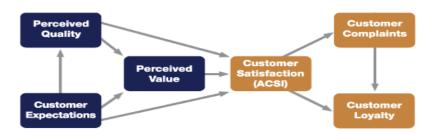
Warid Telecom as a company emphasises the need to offer the best customer services with the help of franchises and customer care centres all over the country. These offices are an extension of WTU. They insure the availability of the products, services and solve the customers' complaints. The telecom industry in Uganda was later on expanded with more players that is Orange and Smile.

1.2.2 Theoretical background

This study adopted and modified the American Customer Satisfaction Index (ACSI). The ACSI model predicts that as both perceived value (PV) and perceived quality (PQ) increase, customer satisfaction should also increase (Anderson et al., 1994). It is based on the assumptions that customer satisfaction is caused by some factors such as perceived quality (PQ), perceived value

(PV) and expectations of customers. These factors are the antecedents of overall customer satisfaction. The model also estimates the results when a customer is satisfied or not. These results of customer satisfaction are consequences factors such as complaints or loyalty of customer (Johnson et al., 2001). The American Customer Satisfaction Index (ACSI) measures the customers' perceptions of quality, value, satisfaction, expectations, complaints and future loyalty (Zeithmal and Bitner 2003). This theory provides a basis to the research as it identifies the factors influencing customer satisfaction. ACSI model measures the overall satisfaction and can be used in all industries including the telecom industry. It is a cause and effect model with indices for drivers of satisfaction on the left side, satisfaction in the centre and outcomes of satisfaction on the right side.

Figure: 1 ACSI Model



Source: www.theacsi.org

Previous researchers such as Biljana and Jusuf (2011) have used the ACSI to measure customer satisfaction with service quality in the Macedonian telecom industry. Biljana and Jusuf (2011) used three ACSI core questions to find out the overall customer satisfaction, expectations and desire disconfirmation.

This study reveals the actual satisfaction level of WTU users in Uganda in regards to reliability of network, billing and complaints handling.

1.2.3 Conceptual background

In the telecom industry, there are many determinants of customer satisfaction like price, call quality, perceptions, values, network coverage and network availability (Iqbal et al. 2010). All the mentioned determinants are secondary but the main factor determining customer satisfaction is the customer's own perceptions (Zeithamal & Bitner, 1996).

In this study, the key variables are the factors which are the independent variables and Customer Satisfaction which is the dependent variable. Customer Satisfaction is the customer's evaluation of a product or service in terms of whether that product or service has met their needs and expectations (Bitner and Zeithaml, 2003). The factors defining customer satisfaction are derived from the American Customer Satisfaction Index (ACSI) which measures the customers' perceptions of quality, value, satisfaction, expectations, complaints and future loyalty. However this research will focus on three measure aspects of the ACSI that is; quality, value and complaints. These three aspects were selected basing on the customers regular feedback to Uganda Communications Commission (QoS Snapshot, UCC January 2012).

Quality will imply the reliability of the network and is a parameter of perceived quality. The Uganda Communications Commission (UCC) defines reliability of the network as the perceptions of users on network coverage, quality of calls and dropped calls (UCC QoS, April 2007). Therefore those are the indicators assessed under reliability of the network.

Perceived value is described as the customer's opinion of a product's worth to him or her. It may have little or nothing to do with the product's market price, and depends on the product's ability to satisfy his or her needs or requirements (Business Dictionary.com, 2012). In terms of value the indicators to be evaluated in this study are timeliness and fairness in billing. These were

identified through Critical Incident Approach (Flanagan 1954) by UCC (2009), it was determined that the dimensions of value are fairness and timeliness in billing.

According to JD Power and Associates (2011), expectations are the customers' anticipations on the services to be received in terms of reliability, quality and price. It is often influenced by the customer services received before, during and after purchase of the goods or services (Fornell, 1996). Customer services include attracting the customers, selling to them, insuring maintenance and technical support during usage. Customer service being a too wide area, this study will focus on complaints resolution. Complaints resolution is measured in regards to the accessibility of the help desk, time taken to resolve complaints and the correctness of the information given.

1.2.4 Contextual background

The context of the research is the factors influencing customer satisfaction of Warid Telecom users, looking at the nature and impact on the satisfaction of customers. The study was conducted in Uganda whereby the customers of WTU are more or less 3,000,000 (WTU Resource Development Centre, 2012). WTU mission is to provide simple experiences that remain attractive enough to keep customers purchasing more, while providing a fun environment for all Warid employees. According to Akkas, Ucar et al., (2010) customers purchasing more depend highly on the satisfaction they derive from the product or service. Customer satisfaction always implies good quality services in fact "in communication services contexts, evaluation of customer satisfaction is similar to overall evaluation of service quality: a good quality of service gives better customer satisfaction and bad quality of service leads to dissatisfaction" (UCC June 2011).

Uganda Communications Commission (UCC) established parameters to evaluate the quality of services provided by the different communication companies in the market. The parameters touch all the aspects of customer satisfaction that is perceived value, perceived quality and expectations and they include billing, complaints handling and reliability of network and services (UCC, 2009). In terms of billing UCC looks at the level of accuracy and timeliness in issuing bills. Warid Telecom has introduced revolutionary tariffs plans such as Pakalast that give a chance to customers to make calls at lower rates, these new tariffs have contributed to the popularity of the network. However, the researcher is also interested in establishing whether the customers are satisfied with the parameters of accuracy and timeliness in billing.

Complaints handling involves quality and timeliness in handling complaints. In this context, Warid has a set of service centers and a helpline to receive and solve complaints. This research reveals the extent to which the customers are pleased with the way their complaints are being attended to.

Reliability of network and services is about insuring network availability at all times, services should not be interrupted or if they are, they should be restored very fast without inconveniencing the users. UCC registers a number of complaints in regards to the poor signals across all the network companies in Uganda, this study establishes the level of satisfaction of Warid users in regards to the reliability of the network.

Despite the evident efforts of Warid to offer competitive tariffs and avail complaints desks all over the country, there is still a knowledge gap as to what extent the customers are satisfied and what elements drive their satisfaction.

1.3. Problem Statement

Ideally telecommunication companies are expected to provide satisfactory services to their users. According to the Uganda Consumer Satisfaction Survey conducted on the overall quality of services offered by telecommunication companies in Uganda (UCC, June 2009) and the Market Review (UCC, 2011), voices services are mostly used in Uganda and more than 45% have at least two simcards from different networks to avoid inconvenience and minimise cost. The ownership of more than one simcard is a sign that customers are not fully satisfied and therefore cannot rely on one network. The inconveniences experienced by users range from lack or poor network causing dropped calls or failure to connect, unresolved complaints and wrong billing of services (UCC, June 2009).

In 2009 when UCC conducted the survey, Warid Telecom Uganda was only one year old in the market and was rated by 69% of users as having the best network coverage and 17.2% affirmed to be satisfied with the voice quality. Four years later, Warid Telecom Uganda (WTU) has grown in terms of market share though the level at which the users are presently satisfied is not clear. In May 2012 in Nigeria, after evaluation of the customer satisfaction performance of Telecom companies, penalties were imposed for poor services. A fine of 2 million dollars for MTN and 1 million dollars for Airtel were paid (BBC, May 2012). If customer satisfaction is not given priority a similar scenario or worse is likely to occur to Warid Telecom and the Uganda telecom industry in general. Thus this study evaluated the factors influencing customer satisfaction of Warid Telecom Uganda voice services users using the parameters of billing, reliability and complaints resolution and it also measured to what extent they affected the satisfaction of users.

1.4. Purpose of the Study

The purpose of the study was to investigate the institutional factors that influence customer satisfaction in Warid Telecom Uganda Voice Services.

1.5. Objectives of the Study

The objectives included the following;

- 1 To examine to which extent reliability of network affects customer satisfaction in Warid Telecom Uganda Voice Services
- 2 To find out to which extent customer satisfaction affects in Warid Telecom Uganda Voice Services
- 3 To examine to which extent complaints resolution influences customer satisfaction in Warid Telecom Uganda Voice Services

1.6.Research Questions

The following research questions guided the study;

- To which extent does reliability of network affect customer satisfaction in Warid Telecom Uganda Voice Services?
- 2. To which extent does billing affect customer satisfaction in Warid Telecom Uganda Voice Services?
- 3. To which extent does complaint resolution influence customer satisfaction in Warid Telecom Uganda Voice Services?

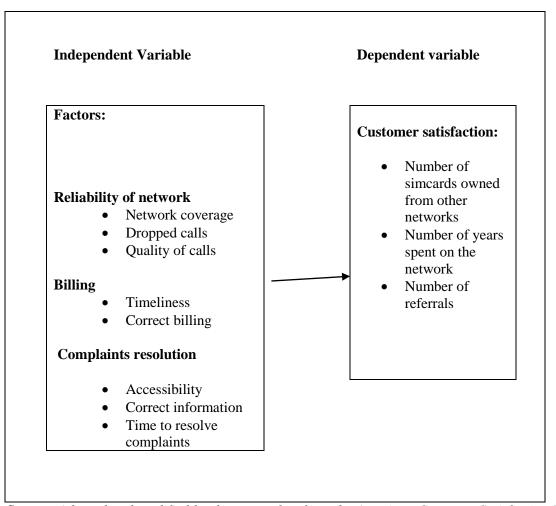
1.7. Hypotheses

The study was guided by the following hypotheses:

- Reliability of network significantly affects customer satisfaction in Warid Telecom Uganda Voice Services
- Billing significantly affects customer satisfaction in Warid Telecom Uganda Voice Services
- Complaints resolution significantly influences customer satisfaction in Warid Telecom Uganda Voice Services

1.8. Conceptual Framework

Figure 2: Conceptual diagram showing the relationship between factors influencing customer satisfaction and customer satisfaction



Source: Adopted and modified by the researcher from the American Customer Satisfaction Index (ACSI) model (Fornell, 1994)

The above conceptual framework describes the relationship between the variables of the study. The independent variable of the study is the Factors influencing customer satisfaction with its variables of network reliability, billing and complaints resolutions. They are studied to establish how they influence loyalty and referrals among Warid Telecom voice services users.

1.9 Significance of the Study

The study generates relevant information on the factors influencing customer satisfaction in Warid Telecom Uganda. The findings of the study add to the existing knowledge regarding the factors influencing customer satisfaction of Warid Telecom Uganda users. The study particularly provides a valuable source of information on factors influencing customer satisfaction through reliability of network, complaints resolution and billing. It also empirically verifies the influence of customer satisfaction factors. This forms a basis for subsequence research to explore other factors that could affect customer satisfaction in Warid Telecom Uganda.

1.10. Justification of the Study

Given the fact that no similar study has been carried out within Warid Telecom Uganda on voice services, the study gives an in-depth understanding of the factors influencing Customer satisfaction.

1.11. The Scope of the Study

1. Content scope

This study investigated the factors that influence customer satisfaction. The study specifically was seeking to determine the effect billing, complaints resolution and reliability have on customer satisfaction of Warid Telecom voice users. These variables were selected since they cover the majority of complaints received by the Uganda Communication Commission (UCC,

December 2011). This method is called critical incidental approach (Flanagan 1954) and involves customers in determining the dimensions to be studied.

2. Time scope

The study was seeking to examine the institutional factors affecting customer satisfaction at Warid Telecom. It was conducted in 2012 from April to December 2012.

3. Geographical scope

In terms of geographical scope, the study covered the active customers of Warid Telecom Uganda voice services. By April 2012, they were estimated to be 3,000,000 all over Uganda (Warid Telecom Resource Development Centre, April 2012). The study targeted customers in Kampala since it is the district with the highest percentage of subscribers i.e 27% of the total Warid users.

1.12. Operational Definitions

Customer satisfaction is the degree of fulfillment of expectations, perceived quality and value towards the services offered. It is also defined as *an evaluation between what was received and what was expected* (Oliver, 1977, 1981; Olson and Dover, 1979; Tse and Wilton, 1988). In simpler words customer satisfaction is the customers' evaluation of a product or service in terms of whether that product or service has met their needs and expectations. (Bitner&Zeithmal, 2003)

Pricing/Billing is attaching monetary value to a service or a product

Reliability is the level at which a service is consistent at all times to accomplish its role. **Complaints resolution** involves the assistance offered to clients to solve their problems in regards to the services or products before, during and after purchase.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the review of the relevant literature about the factors that influence customer satisfaction. Views from the studies carried out by other scholars are presented providing understanding and insight on the problem of the study. While reviewing literature, gaps and trends on factors affecting customer satisfaction are evaluated.

2.2 Theoretical Review

The theory underpinning this study is the American Customer Satisfaction Theory (ACSI). The ACSI model predicts that as both perceived value (PV) and perceived quality (PQ) increase, customer satisfaction should also increase (Anderson et al., 1994). It is based on the assumptions that customer satisfaction is caused by some factors such as perceived quality (PQ), perceived value (PV) and expectations of customers. These factors serve as a basis for this study. They are the antecedents of overall customer satisfaction. The model also estimates the results when a customer is satisfied or not. These results of customer satisfaction are consequences factors such as complaints or loyalty of customer (Johnson et al., 2001). In the case of Warid Telecom Uganda, this implies that once customers lack loyalty by being on more than one network or not giving referrals, they are not satisfied. The American Customer Satisfaction Index (ACSI) measures the customers' perceptions of quality, value, satisfaction, expectations, complaints and future loyalty (Zeithmal and Bitner 2003).

This theory points out important issues for the study, that there is need to investigate the factors influencing customer satisfaction in Warid Telecom Uganda so as to improve on loyalty,

referrals and reduce complaints which are the current problems among WTU users. The suggested variables to study while measuring customer satisfaction are value, quality and expectations. More specifically this study focuses on the elements of billing, complaints resolution and reliability of services. These were selected since they cover the majority of complaints received by the Uganda Communication Commission (UCC, December 2011).

2.3. Customer Satisfaction

Customer satisfaction is one of the most important issue concerning organization of all types which is justified by the customer oriented philosophy and principles of continued improvement in modern enterprise. For that matter, customer satisfaction should be measured. Customer satisfaction measurement may be considered as the most reliable feedback, providing client's preferences in a direct and objective way. Thus, customer satisfaction may be considered as a baseline standard of performance and a possible standard of excellence for any business organization (Gerson, 1993).

There are two main interpretations of satisfaction within the literature of satisfaction, the first view satisfaction as a process while the second take it as an outcome (Parker and Mathews, 2001). Oliver 1980, Churchill and Suprenant, 1992; Bearden and Teel, 1983; Oliver and DeSarbo 1988 share the view that satisfaction is a post evaluation of a purchase decision. Swan and Comb (1988) consider satisfaction as a discrepancy between the observed and the desired. This implies that consumers could be satisfied by aspects for which expectation never existed (YI, 1990). Parker and Mathews (2001) go ahead to say that customers want a meeting between their values (need and want) and the object of their evaluation. The recent literature on satisfaction focuses on emotion, fulfillment and state (Parker and Mathews 2001). However

some traditional model recognises that customer satisfaction is the result of both effective and cognitive process (Fornell and Warnerfelt1987; Westbrook 1987, Wesbrook and Oliver, 1991).

Also, satisfaction has to be viewed as a judgment base on the cumulative expectations made with a certain product or service rather than a transaction-specific phenomenon (Wilton and Nicosia, 1986). Customer satisfaction is generally agreed to be a person's feelings of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his or her expectations (Kotler, 2003, P.36). In the information industry, Lin and Wang (2006) revealed that customer satisfaction is the consumer's total response to the purchase experiences in a mobile commerce environment.

Operationally, customer satisfaction is the degree of fulfillment of expectations, perceived quality and value towards the services offered. As a process it is also defined as *an evaluation* between what was received and what was expected (Oliver, 1977, 1981; Olson and Dover, 1979; Tse and Wilton, 1988). In simpler words customer satisfaction is the customers' evaluation of a product or service in terms of whether that product or service has met their needs and expectations. (Bitner and Zeithmal, 2003).

As seen earlier, the ACSI model identifies loyalty and complaints as results of customer satisfaction. On the other hand, this study was prompted by the problem of poor loyalty among voice users in Uganda. Ossel, Stremersh and Gemmel (2003) state that customer satisfaction affect customer loyalty and as loyalty may eventually result in referrals, it is advised to measure three aspects: overall satisfaction, customer loyalty and referrals.

Overall satisfaction

Looy, Gemmel and Drierdonck (2003) make a distinction between relationship satisfaction and transaction satisfaction. Transaction satisfaction refers to satisfaction with respect to usually the most recent interaction with sharp focus on the core part of the service. Relationship transaction refers to a more general feeling of satisfaction with the organisation as a whole. For this study, focus is on voice services and overall satisfaction is measured both at the transaction and relationship levels.

Customer loyalty as a consequence of customer satisfaction

Oliver defines loyalty as "A deeply held commitment to re-buy or re-patronize a preferred product or service in the future despite situational influences and marketing efforts having the potential to cause switching behaviour" (cited by Kotler, 2000). Thus, a customer is loyal when he is frequently repurchasing a product or service from a particular provider. In the case of this research, a customer who is loyal only uses Warid Telecom Uganda voice services and this implies that he is satisfied.

The significance of customer loyalty is that it is closely related to the company's continued survival and to strong future growth (Fornell, 1992). Customers that are very satisfied with a company are very likely to remain with that company which leads to future revenue for the company.

However there are instances where customers continue to stay loyal because there is no better alternative. This could be regarded as *apathetic* loyalty; other researchers like Jones and Sasser (1995) have called such customers *hostages* (cited by Little and Marandi, 2003). While loyal customer advocates may spread good words about the company's services and make excellent

referrals, apathetic customers often take the opportunity to complain and criticise. This increases the cost of complaints handling and damages the corporate image (Little and Marandi 2003).

Customer referrals as a consequence of customer satisfaction

Delighted customers may refer others to your services. It is therefore intriguing to link satisfaction and loyalty measurements to these referrals. However, since it is very difficult, if not impossible, to link these measures to actual referrals, it is common to measure the intent to refer instead (Looy,Gemmel and Drierdonck 2003). Consequently this study considered the intent to refer when measuring the satisfaction of Warid Telecom users.

2.4. Reliability of Services and Customer Satisfaction

According to Parasuraman, Zeithmal and Berry (1998, 1990) model, reliability of services is a dimension of service quality. As quoted by Ojo (2010), service quality vary in wording but typically involves determining whether perceived service delivery meets, exceeds or fails to meet customer expectations (Cronin and Taylor, 1992; Oliver,1993; Zeithaml, Berry and Parasuraman, 1993). Spreng and Machoy (1996) found out that service quality is an important indicator of customer satisfaction. In particular, consumers prefer the reliability of services when the price and other cost elements are held constant (Turban, 2002). Reliability involves the ability to perform the promised service dependably and accurately (Parasuraman, Zeithmal and Berry 1988, 1990).

There is a difference between actual quality of services and customers perceived service quality. According to Palkar (2004) perceived quality is the factor that has greater influence on the customer satisfaction. In this study, focus is on the consumers' perceptions of reliability of voice services. Reliability of services as perceived by the customers depends on past experience, word

of mouth and the future anticipation of quality of the cellular service (Iqbal et al., 2010). Cellular users require the best quality. Accordingly, companies need continuous improvement in quality through latest technology, installing costly equipments, trying to improve call clarity and coverage (Kim et al., 2004).

Basing on the above views, the researcher assesses the dimensions mentioned by Kim et al., (2004) that is; the network coverage, dropped calls and the quality of calls as perceived by customers.

2.5. Billing and Customer Satisfaction

Billing is the monetary value attached to a service. For a customer to be satisfied the actual billing of the voice services has to match the perceived billing (Iqbal et al. 2010). The customer's perceived value is the difference between the highest price that consumers are willing to pay for a product or a service and the amount practically paid. The Monetary perspective indicates that value is generated when less is paid for goods or services (Bishop, 1984).

Fornell (1992) attests that there are many benefits for a company from a high customer satisfaction level since it captures a high market share and is able to maintain and sustain it: a basic and core policy of every business that heightens customer loyalty and prevents customer switching behaviour, increases customer price tolerance while reducing marketing cost.

Under this variable, the study analyses the timeliness and accuracy of billing as perceived by customers.

2.6. Complaints Resolution and Customer Satisfaction

Complaints resolution is concerned with service recovery which is the practice of rectifying mistakes, either by restoring the service, compensating the customer or merely apologising for the failure (Little and Marandi, 2003).

Complaints largely influence customer satisfaction. Ossel, Stremersch and Gemmel (2003) insist on the importance of complaints since they are the expression of dissatisfaction, the way the organisation deals with the complaints will determine whether it will lose or retain the customer. Besides, complaints give an opportunity for continuous improvement of services as they provide information on what products are essential for the customers.

As a rule; customers dislike complaining because it costs them time, effort and emotional stress. Little and Marandi (2003) propose four principles for effective service recovery:

- Make it easy to complain by setting clear and flexible channels for customers' complaints.
 Complaints handling staff should be skilled and be able to put the customers at ease.
- Establish the grounds for complaint. Customers are more willing to complain if they are confident they will be successful. The publication of a simple guarantee of acceptable service levels will provide such confidence.
- Offer immediate redress where possible to avoid grievance of customers. For purpose of being prompt, it's advisable to empower customer- facing staff to handle the problems as they arise.
- Communicate: Seiders and Beery (1998) note that customers negative perceptions of a service failure are intensified if they feel that the failure could have been prevented. Often

all that is needed is an apology with an explanation of why the failure occurred and the steps that have been taken to ensure that it does not occur again.

In summary Little and Marandi (2003) highlight the key elements that characterise effective complaints handling. Basing on the above principles, this research looks at the following aspects: accessibility of the complaints desk, the time taken to resolve complaints and the correctness of the information received by a customer. The correctness/accuracy of the information or help given is measured according to whether the complaint was resolved or not.

2.7. Summary of the Literature

The literature review covers the concepts of the study that is; the factors influencing satisfaction as an independent variable and customer satisfaction as the dependent variable. The review is based on the conceptual framework development for the study which is shown in Figure 1 in chapter one. Also the review covers theories that are related to the study. The discussion identified gaps in the previous researches that gives the basis for carrying out this study. Reviewed literature shows that without identifying and measuring factors affecting customer satisfaction it can greatly affect loyalty, increase complaints and bad referrals hence failing the company. Although this seems to apply to all kinds of industries, not much research has been conducted on the Ugandan Telecom Industry and most especially Warid Telecom Uganda hence the need to carry out this study.

CHAPTER THREE

METHODOLOGY

3.1. Introduction

This chapter presents the methodology that the researcher used in the study. It includes the research design, study population, sample size and selection, sampling techniques, study instruments and analysis, reliability and validity.

3.2. Research Design

A cross sectional design was used for both quantitative and qualitative data collection methods. This was used because of its capacity to rely on set items, oral or written, through personal interviews in soliciting responses basing on a representative sample to obtain people's feelings and views on issues (Burns, 2000). To access and document adequate data and information on the topic, the researcher selected Warid Telecom Uganda and applied different methods to acquire the required information. Qualitative research was applied in order to describe current conditions, or investigate relationships (Creswell et al, 2003). On the other hand quantitative approaches were used as they have the merits of eliminating or minimising subjective of judgement and achieving higher levels of reliability of gathered data (Schwartz, 2008).

Quantitative methods were used to establish presence of relationships between factors influencing customer satisfaction and customer satisfaction while qualitative research was also applied in order to describe current conditions, or to investigate relationships (Creswell et al, 2003).

3.3. Study Population

The study population comprised of customers of Warid Telecom Uganda as well as the management of the company. The study population was comprised of both female and male customers in Kampala. The access population was 800,000 and the sample size was 384. This was determined by using Krejcie and Morgan table obtained from Amin (2005), which states that, a population of 800,000 the appropriate size would be 384 respondents. The inclusion of all these categories of respondents was to ensure that all the different viewpoints about the various aspects of customer satisfaction are tapped.

3.4 Sample Size and Selection

A total number of 384 customers were considered for the research, using simple random sampling gave all members of the population equal chance of being selected. Among the customers 38 were postpaid users and 345 were prepaid users.

Table 1: Showing Sample Size and Selection Methods

Category of Respondents	Study Population	Sample Size	Sampling Technique
Head of CS Department WTU	1	1	Census
Head of Call Center WTU	1	1	Census
WTU customers in Kampala	800,000	382	Stratified and Simple Random
TOTAL	800,002	384	

Source: Adopted from Warid Telecom Resource Development Centre 2012

3.5 Sampling Techniques and Procedure

Simple random sampling and stratified approach were used in the study. The random sampling was used that all the customers in a given category have equal chances of being selected to

participate in the study. The population was divided into strata basing on postpaid and prepaid users. The researcher then sampled from each strata to get an appropriate sample size using random sampling techniques.

3.6 Data Collection Methods

The Researcher used different methods to collect qualitative and quantitative data. Qualitative data was collected through semi – structured interview for key informants using interview guide. The key informants were selected from the sample and these were staff that held key positions such as heads of departments. Semi – structured interviews were more flexible and they allowed for additional comments and avenues to be explored. These interviews provided in depth data guarded against confusion caused by unclear questions and enabled the researcher to collect more information. Quantitative data was collected through a structured (closed ended), four – Likert scale questionnaire. This method was easy to administer, simple to code and analyze.

3.7. Data Collection Instruments

The questionnaires were administered to customers. The questionnaire was preferred as an instrument of research because it has identical set of items for all respondents, produce fewer errors, ensure confidentiality, respondents feel free from the influence of the researcher and respondents had the chance to answer in their convenient time (Burns, 2000). Most of the items in the questionnaire were short requiring direct answers. The questionnaire was designed and sectioned according to the themes of the study. In the initial stage the respondents were asked and replies to them informed the researcher of the perspective of the customers.

Interviews were also conducted; they can be structured or unstructured and conducted either face to face or by telephone. Face to face and telephone interviews were conducted targeting heads of departments and customers. The researcher recorded responses to the questions asked using an interview guide. The reason for using the interview was because some respondents have tight schedules and so cannot get time to fill the questionnaire (Amin, 2005). The method enabled the researcher to get intimate feelings of the customers, which the questionnaires could not elicit.

3.8.Quality Control

The developed data collection instruments were tried on selected respondents who are considered to be in situation similar to the actual study sample. An assessment of the data obtained helped the researcher to revise, refine and improve the instruments before they were used to collect the actual data.

3.8.1 Validity of Instruments

The researcher looked at content related validity. This was through consultations with colleagues to cross check and see if they were appropriate. For the instrument to be accepted as valid the CVI (Content Validity Index) should be greater or equal to 0.7. CVI = No of items rated valid divided by the total No. of items in the questionnaire. The computation of CVI was done by summing up the two judges rating and dividing by two to get the average.

Judge 1
$$CVI = (n)/N = 17/20 = 0.85$$

Judge 2
$$CVI = (n)/N = 15/20 = 0.75$$

Where; n= Number of items declared valid, N= Total number of items in the instrument

Overall content validity index = (0.85+0.75)/2 = 0.80

CVI obtained (0.80) is greater than 0.7 which makes the questionnaire valid for use.

3.8.2 Reliability of Instruments

Table 2: Reliability for Research Instruments

Variables	Reliability coefficient	No of Items
	(alpha)	
Reliability of network	.798	4
Billing	.084	3
Complaints resolution	.920	4
Customer satisfaction	.833	9
Overall (all variables)	.877	20

Source: Primary Data

A pilot study was carried out to determine the reliability of the instruments. The questionnaires and interview guide was subjected to peer review (by groups of students and the researcher) so that the content is analysed to ensure reliability. 15 respondents were requested to give answers to the comments on clarity, interrelation, adequacy and relevancy of instrument and the results were subjected to cronbach alpha method which gave overall alpha of 0.877 which is a good test of internal consistency.

The table 2 above shows cronbach alpha of 0.877 which is acceptable and makes the questionnaire relevant for use. According to Sekaran (2005), if the Cronbach's alpha is above 0.7 the instrument used has a high reliability.

3.9 Procedure of Data Collection

After a successful proposal defense before a Committee and approval of the research proposal, the research was given an introductory letter to go to the field work (See Appendix IV). The researcher then tested the instruments and proceeded to make appointment with the management of Warid for interviews. Thereafter the researcher started administering the questionnaires and interviews to both postpaid and prepaid users. The researcher requested the addresses of the postpaid users based in Kampala and was able to administer the questionnaires and interviews.

3.10 Data Analysis

3.10.1 Qualitative Data Analysis

After data collection, the data was sorted by checking for any errors, grouped into themes and analyzed as postulated in the conceptual framework and research objectives. Patterns and connections within and between categories were identified. Data was interpreted by drawing averages, percentages, explanations and substantiating them using the respondents open responses. Qualitative data analysis helped to determine useful conclusions and recommendations of the study.

3.10.2 Quantitative Data Analysis

Quantitative data was processed and analysed using three processes namely; editing, coding and tabulation. Quantitative data generated from questionnaires was edited to ensure completeness. It was then coded using SPPSS, cleaned and analysis was done. The analysis was done using Pearson's Rank Correlation to establish relationships between the independent variables and

dependent variables. The magnitude of the relationships between the variables was also measured using regression analysis.

3.11 Measurement of variables

The variables of the study were rated on a 4 point likert scale. The four categories of response are strongly agree, agree, disagree and strongly disagree. These were used in the questionnaire so as to investigate the relationship between the independent and dependent variables. In the study three levels of measures were used that is; the nominal scale, the ordinal scale and the interval scale. The nominal scale was used for categorizing the variables in the questionnaire, the ordinal scale was used to measure responses to the statements and the interval scale was used to measure the age bracket. Interviews with open ended questions were conducted to measure opinions and perceptions. The statements used in the questionnaire were all adopted from previous studies done on customer satisfaction (see references). The statements to measure the reliability of the network were adopted from Kim et al (2004), the statements to measure billing were adopted from Wang and Shiesh (2005) and the statements to measure complaints resolution were adopted from Biljana and Jusuf (2011).

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, AND INTREPRETATION OF FINDINGS

4.1 Introduction

This chapter is a presentation and discussion of the findings of this study. The purpose of the study was to establish the institutional factors influencing customer satisfaction of Warid Telecom users. The findings were derived from responses obtained by use of questionnaires and interviews to the respondents.

4.2.Response Rate

A total of 800,000 customers of Warid Telecom were identified in Kampala and a sample of 384 was selected for the study of which 345 are prepaid users and 38 are post-paid. Out of the total respondents of 384, customers who gave feedback were 376 among which 30 were post paid users. The response rate was of 97 %.

Category of Respondents	Expected	Actual	Percentage Response
	Respondents	Respondents	
Head of CS Department WTU	1	1	100
Head of Call Center WTU	1	0	0
WTU Prepaid customers	344	345	100.3
WTU Postpaid customers	38	30	78
TOTAL	384	376	97

4.3. Demographic Characteristics

This section presents the demographic characteristics of the participants of the study. It focuses on the age range, gender and occupation of respondents.

4.3.1 Age Composition

The age composition of the respondents was explored. It was deemed necessary to investigate this area because the results would be more accurate by considering the maturity of the respondents who raised the views. The results are presented in Table (3).

Table 3: Frequency and Percentage Distribution on age of the respondents (Prepaid)

		Frequency	Percent
	10-30	281	81.4
	30-50	46	13.3
Valid	Over 50	18	5.2
	Total	345	100.0

The statistics in Table 3 above indicate that majority number of the prepaid customers was between 10 - 30 that is 281, followed by respondents amid 30 - 50 years who were 46. The lowest number was of the respondents above 50 who were only 18. These statistics show that the predominance was the youth meaning that the majority of subscribers in Warid are young people probably because of the many offers and promotions available.

Table 4: Frequency and Percentage Distribution on age of the respondents (Postpaid)

		Frequency	Percent
	10-30	12	40.0
37.11.1	30-50	14	46.7
Valid	Over 50	4	13.3
	Total	30	100.0

The majority of Post paid customers happen to be between 30 - 50. This can be explained by the fact that Post paid customers are often senior people in organisations hence the age range. Overall we can say that the majority of customers of Warid Telecom are young people below 30. This is also explained by the fact that the population in Uganda is dominated by the youth.

4.3.2 Occupation of respondents

The respondents were classified under student, employed, self employed and others. This was necessary for the researcher to understand and draw conclusions on some fundamental issues pertaining to customer satisfaction basing on occupation of respondents.

Table 5: Frequency and Percentage Distribution on occupation of respondents (Prepaid)

		Frequency	Percent
	Student	15	4.3
	Employed	269	78.0
Valid	Self employed	42	12.2
	Others	19	5.5
	Total	345	100.0

Source: Questionnaire Prepaid Data

The statistics in Table 5 show that the majority of respondents are employed at 78 % followed by self employed 12.2%, others 5.5 % and students were 4.3%. This shows that the researcher was more interested in those who are employed or self employed since they have more power to decide what network to adhere to. Students on the other hand are often dependants and may not be bothered as much about certain parameters such as billing for instance.

Table 6: Frequency and Percentage Distribution on occupation of respondents (Postpaid)

		Frequency	Percent
	Student	2	6.7
Employ	Employed	27	90.0
Valid	Self employed	1	3.3
	Total	30	100.0

Source: Questionnaire Postpaid Data

90% Post paid users are employed this because Postpaid services are mostly requested by companies for their staff.

4.4.Empirical Findings

The study was to investigate the factors influencing customer satisfaction of Warid Telecom Uganda Voice Services. Factors were operationalized into reliability of network, billing and complaints resolution while customer satisfaction was operationalised into number of simcards owned from other networks, number of years spent on the network, number of referrals and overall satisfaction. The researcher used descriptive statistics and made comparisons of the frequencies and percentages.

In this section data collected from questionnaires, interview guides is presented, analyzed and interpreted objective by objective.

4.4.1 Reliability of Network and Customer Satisfaction in Warid Telecom Voice services

This item of the study sought to establish the effect of the reliability of network on customer satisfaction. The researcher administered questionnaires to see if the reliability of network influences customer satisfaction. The relationship was explained by both qualitative and quantitative analyses. The qualitative analysis involved the use of descriptive statistics in which frequencies and percentages were applied to examine the behaviour of the variables. The results were then tested with the Pearson product moment correlation coefficient and the regression analysis to generate the strength of the relationships established.

The dimensions of reliability of network entail network coverage, dropped calls and quality of calls. The respondents were asked to agree or disagree with the statements and below are their feedback.

Table 7: Showing the responses on reliability of network in Warid Telecom (Prepaid users)

	SA	A	D	SD
	Freq	Freq	Freq	Freq
	(%)	(%)	(%)	(%)
Most of the times I have network coverage	112(32.5)	164(47.5)	17.7(61)	8(2.3)
Most of the times my calls go through and are not cut off during	85(24.6)	166(48.1)	78(22.6)	16(4.6)
communication				
Most of the times my calls are clear	75(21.7)	169(49)	88(25.5)	13(3.8)
I am satisfied with the quality of the network	54(15.7)	111(32.2)	153(44.3)	27(7.8)

The above table 7 indicates the response from respondents in regards to network reliability and satisfaction. The majority of respondents agreed that there is network coverage (80%), calls go through and are not cut off during communication (72.7%) and most of the times calls are clear (70.7%). However, the customers are not satisfied with the quality of the network 62.1%. This contradicts the agreements because if customers affirm to be having clear calls and network coverage, why are they not satisfied with the quality of the network?

This can be clarified by some of the customers interviewed, one of them said: "Often I call and I am told the number I am calling is not on. Frequently the same happens when others try to reach me as well. I never know if it's the Warid network or if it is my phone." This feedback explains the confusion of customers when it comes to network. According to the customers, clarity of calls, network coverage and calls going through does not guarantee the quality of the network. It

means that users have other expectations as per the reliability of the network. They compare Warid to other networks they use in order to determine the quality of the network. This was aired out by some users, one of them said: "Warid is not having the best network compared to other telecoms that is why I maintained my UTL line, when the network fails, I am able to switch."

Table 8: Showing the responses on reliability of network in Warid Telecom (Postpaid users)

	SA	A	D	SD
	Freq	Freq	Freq	Freq
	(%)	(%)	(%)	(%)
Most of the times I have network coverage	5(10)	14(46.7)	13(43.3)	0
Most of the times my calls go through and are not cut off during	3(10)	12(33.3)	17(56.7)	0
communication				
Most of the times my calls are clear	5(15.6)	12(40)	15(44.4)	0
I am satisfied with the quality of the network	7(21.8)	4(12.5)	21(65.7)	0

The above table 8 shows the response from respondents. The majority of respondents agreed that there is network coverage (56.7%), calls go through and are not cut off during communication (43.3%) and most of the times calls are clear (55.6%). However, the customers are not satisfied with the quality of the network (65.7%). One interviewee said "I use my Warid line mainly for work so I find it highly frustrating not to be able to call or even receive calls sometimes because the network is not so good yet I am in Kampala. My work is disrupted as I am unable to get in touch with my clients."

In relation to this feedback, the researcher consulted the management of Warid Telecom who admits to having network challenges due to capacity sites being fewer. In regards to this

problem, upgrades of the network are run every now and then often disrupting the quality of the network even in Kampala where network is expected to be at its best.

Table 9 Showing correlations on reliability of network and customer satisfaction (Prepaid users)

		Network Reliability	Satisfaction
	Pearson Correlation	1	.390*
Network Reliability	Sig. (2-tailed)		.000.
	N	345	345
	Pearson Correlation	.390**	
Satisfaction	Sig. (2-tailed)	.000	
	N	345	34:

The above table 9 gives a Pearson correlation (r) of 0.390 and p-value of 0.001 which is significant at the 0.01 level. This indicates a positive relationship between the two variables network reliability and satisfaction. This means that changes in one variable are correlated with changes in the second variable; therefore if the network reliability is improved the satisfaction of prepaid customers will increase.

Table 10: Showing correlations on reliability of network and customer satisfaction (Postpaid users)

		Network reliability	Satisfaction
	Pearson Correlation	1	.489**
Network reliability	Sig. (2-tailed)		.006
	N	30	30
	Pearson Correlation	.489**	1
Satisfaction	Sig. (2-tailed)	.006	
	N	30	30

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Table 10 above indicates there is a positive relationship between reliability of network and satisfaction given by Pearson correlation of 0.489 and P= 0.006. Since Pearson correlation of 0.006 is lower than 0.05, this implies that when network is fully enhanced the satisfaction of postpaid customers highly improves.

Table 11: Showing the regression analysis between reliability of network and customer satisfaction (Prepaid users)

	Coefficients ^a							
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.		
		В	Std. Error	Beta				
1	(Constant)	2.461	.091		27.081	.000		
1	Network Reliability	.197	.030	.331	6.486	.000		

a. Dependent Variable: Satisfaction

The results on prepaid customers in the table 11 give a regression of 0.331 at significance level less than 0.001 hence a positive relationship. This indicates that the model is significant (p less than 0.001) and meaningful (R=0.331 and R square = 0.10) meaning 10 % of satisfaction can be predicted by network reliability.

Table 12: Showing the regression analysis between reliability of network and customer satisfaction (Postpaid users)

POST	ГРАІD		Coefficients a			
Model		Unstandardized Coefficients		Standardized Coefficients	Т	Sig.
		В	Std. Error	Beta		
1	(Constant)	2.381	.285		8.366	.000
	Network reliability	.314	.106	.489	2.970	.006

The results on postpaid customers in the table give a regression of 0.489 at significance level less than 0.001 hence a positive relationship. This indicates that the model is significant (p less than 0.001) and meaningful (R=0.489 and R square = 0.240) meaning 24 % of satisfaction can be predicted by network reliability. The researcher accepted the hypothesis that network reliability influences customer satisfaction. In postpaid customers this influence is higher (24%) than in prepaid customers (10%). This can be explained by the fact that postpaid lines are normally acquired for business purposes hence used on a daily basis for calling, the inability to do so even for an hour is likely to cause a lot of dissatisfaction.

4.4.2 Billing and Customer Satisfaction in Warid Telecom Voice Services

This section included different dimensions of billing and how they influence customer satisfaction. These entailed timeliness and correct billing.

Table 13: Showing the responses on billing and customer satisfaction (Prepaid users)

	SA	A	D	SD
	Freq	Freq	Freq	Freq
	(%)	(%)	(%)	(%)
At anytime I am able to check how much credit I have used	134(38.8)	163(47.2)	44(12.8)	4(1.2)
on my phone				
I am always charged the exact amount I have used. Not	132(38.3)	143(41.4)	58(16.8)	12(3.5)
more and not less				
I feel I am getting excellent call services at an affordable	135(39.1)	150(43.5)	49(14.2)	11(3.2)
price				

The above table 13 shows the response from respondents. The majority of respondents agreed that they are able to check their credit anytime (86%); they are charged the exact amount they use (79.7%) and feel they are getting excellent call services at an affordable price (82.6%). The management of Warid attests that their strategy was to penetrate the market by offering affordable services. Warid supports the idea that every user should be able to make calls regardless of the amount one has on their phone hence offers a number of promotions that highly appeal to their users. Several views were given by prepaid customers to support these statements and these include; "Warid offers a number of promotions which allow me to communicate regardless of the amount I have on my phone for example now if I have five hundred shillings and I am going to request for Kawa minutes. This will give me 7 minutes which I can use to call any line on the Warid network".

Table 14: Showing the responses on billing and customer satisfaction (Postpaid users)

	SA	A	D	SD
	Freq	Freq	Freq	Freq
	(%)	(%)	(%)	(%)
At anytime I am able to check how much credit I have used on my	22(63.3)	10(36.7)	0	0
phone				
I am always charged the exact amount I have used. Not more and not	19(54)	13(42)	0	0
less				
I feel I am getting excellent call services at an affordable price	20(60)	12(40)	0	0

Table above shows the postpaid customers feedback on billing. In general, all postpaid customers did agree with all the statements. A post paid customer said "well I do not clear my own bills the company I work for does, but I do believe post paid tariffs at Warid are the best as compared to other networks". Postpaid users are clearly not concerned about billing, all those who were asked did not know the cost of the service they were using, simply because they are not clearing their bills but their employer is. In regards to whether they are able to check how much credit they have used some postpaid customers confessed not to know how to check their balance. "I do not know how to check my balance and why would I? I have never had to. I simply call if I fail to call I inform my assistant who sorts the issue." This statement clearly shows that postpaid customers are corporate and some of them are too busy to bother about learning even how to check their credit. However some the postpaid users know the procedure and claim to be able to check their bill.

Table 15: Showing Correlations between billing and customer satisfaction (Prepaid users)

		Billing	Satisfaction
	Pearson Correlation	1	.278**
Billing	Sig. (2-tailed)		.000
	N	345	345
	Pearson Correlation	.278**	1
Satisfaction	Sig. (2-tailed)	.000	
	N	345	345

^{**.} Correlation is significant at the 0.01 level (2-tailed).

The above table gives Pearson correlation (r) of 0.278 and p-value of 0.001 which is significant at the level of 0.01. This indicates a positive relationship between the two variables billing and customer satisfaction. This means that changes in one variable are correlated with changes in the second variable.

Table 16: Showing Correlations between billing and customer satisfaction (Postpaid users)

		Billing	Satisfaction
	Pearson Correlation	1	.096
Billing	Sig. (2-tailed)		.614
	N	30	30
Satisfaction	Pearson Correlation	.096	1
	Sig. (2-tailed)	.614	
	N	30	30

The above table 16 gives Pearson correlation (r) of 0.096 and p-value of 0.614 which is insignificant at 99% level of confidence for post paid users. This indicates that there is no relationship between billing and satisfaction of post paid users. The hypothesis is rejected.

A regression analysis was done to determine the strength of relationship between the two variables. This is demonstrated in the tables below.

Table 17: Showing the regression analysis of billing and customer satisfaction (Prepaid users)

Coefficients^a

Model		Unstandardize	d Coefficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	2.622	.083		31.412	.000
1	Billing	.126	.025	.266	5.105	.000

a. Dependent Variable: Satisfaction

Table 17 gives the regression coefficient of 0.266 at significance level of 0.000 hence a positive relationship. This indicates that the model is significant (p is 0.000) and meaningful (R=0.266 and R square =0.070) meaning 7% can be predicted by billing for prepaid customers.

Table 18: Showing the regression analysis of billing and customer satisfaction (Postpaid users)

Coefficients^a

Model		Unstandardize	d Coefficients	Standardized Coefficients	Т	Sig.
		В	Std. Error	Beta		
	(Constant)	3.151	.131		24.040	.000
1	Billing	.014	.028	.096	.510	.614

a. Dependent Variable: Satisfaction

The results in table show a regression coefficient of 0.096 at significance level of 0.614. This indicates that the model is meaningful (R=0.096 and R square = 0.0092) meaning 0.9% of satisfaction can be predicted by billing. It is very much negligible and billing does not predict customer satisfaction for post paid users.

4.4.3 Complaints Resolution and Customer Satisfaction in Warid Telecom Voice Services

This section looks at the third independent variable i.e complaints resolution and how it influences customer satisfaction. Complaints resolution entails accessibility, correct information and time to resolve complaints.

Table 19: Showing the Descriptive Statistics responses on complaints and satisfaction (Prepaid users)

	SA	A	D	SD
	Freq	Freq	Freq	Freq
	(%)	(%)	(%)	(%)
I can easily access customer care when I have a	74(21.4)	129(31.9)	110(37.4)	32(9.3)
problem				
The people who help me know what to do and	75(21.7)	206(59.7)	52(15.1)	12(3.5)
my issue is always resolved				
My problem is solved within the promised time	36(10.4)	145(42)	144(41.7)	20(5.8)
I am satisfied with the way I am helped	44(12.8)	221(64.1)	68(19.7)	12(3.5)

The table 19 above summarizes the feedback of prepaid users on each of the items under complaints handling. Majority agreed with that they can easily access customer care when they have a problem (53.3 %), affirm that the people who help them know what to do and their problem is always resolved (81.4%), their problem is solved within the promised time (52.4 %) and they are satisfied with the way they are helped (76.9%).

This is in line with the data collected in the interview with the management of Warid Telecom. They have put in place a Customer Satisfaction Tracker (CSaT) for all customers who call the helpline so as to get their instant feedback after calling in. Whoever calls in is promptly asked about the experience immediately after the service in a Yes or No format. From the reports in the last months the feedback of customers is positive when asked if they have been helped the majority say yes in September 79% were helped.

However on the issue concerning solving the problem within the time promised during interviews someone said "I have a case where I called the helpline and my problem took almost a week to be solved I was really inconvenienced". The delay in solving some of the complaints is explained by the fact that some issues are complex and may need to be escalated to other departments.

Table 20: Showing the Descriptive Statistics responses on complaints and satisfaction (Postpaid users)

	SA	A	D	SD
	Freq	Freq	Freq	Freq
	(%)	(%)	(%)	(%)
I can easily access customer care when I have a problem	16(50)	16(50)	0	0
The people who help me know what to do and my issue is	14(43.8)	15(46.9)	2(6.3)	0
always resolved				
My problem is solved within the promised time	13(40.6)	16(50)	1(3.1)	0
I am satisfied with the way I am helped	46.9(15)	46.9(15)	2(6.3)	0

The table above is a summary of the postpaid customers' feedback on complaints resolution. All postpaid users affirm to easily access customer care when they have a problem. This positive feedback can be explained by this customer who said "There is a special helpline for postpaid, it is never congested and my queries are immediately addressed". The customers 6.3% who disagreed probably had a case where they were not helped the way they expected. But overall postpaid users are satisfied with the way their complaints are handled.

Table 21: Showing Correlations on complaints and customer satisfaction (Prepaid)

		Complaints	Satisfaction
	Pearson Correlation	1	.488**
Complaints	Sig. (2-tailed)		.000
	N	345	345
	Pearson Correlation	.488**	1
Satisfaction	Sig. (2-tailed)	.000	
	N	345	345

^{**.} Correlation is significant at the 0.01 level (2-tailed).

The above table gives Pearson correlation (r) of 0.488 and p-value of 0.0001 which is significant at 0.01 level. This indicates a strong positive relationship between the two variables complaints and satisfaction. This means that changes in one variable are correlated with changes in the second variable.

Table 22: Showing Correlations on complaints and customer satisfaction (Postpaid)

		Complaints	Satisfaction
	Pearson Correlation	1	.469**
	Sig. (2-tailed)		.009
Complaints	N	30	30
	Pearson Correlation	.469**	1
Satisfaction	Sig. (2-tailed)	.009	
	N	30	30

^{**.} Correlation is significant at the 0.01 level (2-tailed).

The above table gives Pearson correlation (r) of 0.469 and p-value of 0.009 which is significant at 0.01 level. This indicates a strong positive relationship between the two variables complaints and satisfaction. This means that changes in one variable are correlated with changes in the second variable.

A regression analysis was done to determine the strength of the relationship between the two variables complaints and satisfaction.

Table 23:Showing regression analysis of complaints resolution and customer satisfaction (prepaid users)

Model Unstandardized		ed Coefficients	Standardized	t	Sig.
			Coefficients		
	В	Std. Error	Beta		
(Constant)	2.144	.094		22.840	.000

.464

9.710

.033

Coefficientsa

.316

a. Dependent Variable: Satisfaction

Complaints

a. Predictors: (Constant), Complaints

.000

The results in the table above give a regression coefficient of 0.464 at significance level of 0.000 hence a positive relationship. This indicates that the model is significant (p less than 0.001) and meaningful (R= 0.464 and R square= 0.216) meaning 21% of satisfaction are predicted by complaints among prepaid users

Table 24: Showing regression analysis of complaints resolution and customer satisfaction (postpaid users)

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Model		Unstandardize	d Coefficients	Standardized Coefficients	t	Sig.
				Coefficients		
		В	Std. Error	Beta		
1	(Constant)	1.952	.450		4.334	.000
1	Complaints	.363	.129	.469	2.813	.009

a. Dependent Variable: Satisfaction

The results in the table above give a regression coefficient of 0.469 at significance level of 0.009 hence a positive relationship. This indicates that the model is significant (p less than 0.001) and meaningful (R= 0.469 and R square= 0.220) meaning 22% of satisfaction are predicted by complaints among postpaid users.

Table 25: Correlation matrix on all variables (Prepaid users)

		Network Reliability	Billing	Complaints	Satisfaction
	Pearson Correlation	1	.265**	.326**	.390**
Network Reliability	Sig. (2-tailed)		.000	.000	.000
	N	345	345	345	345
	Pearson Correlation	.265**	1	.235**	.278**
Billing	Sig. (2-tailed)	.000		.000	.000
	N	345	345	345	345
	Pearson Correlation	.326**	.235**	1	.488**
Complaints	Sig. (2-tailed)	.000	.000		.000
	N	345	345	345	345
	Pearson Correlation	.390**	.278**	.488**	1
Satisfaction	Sig. (2-tailed)	.000	.000	.000	
	N	345	345	345	345

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Results from the above table indicate that complaints resolution has the highest correlation of 0.488, followed by network reliability with 0.390 and billing 0.278 and p-values of 0.000 which is significant at 0.01 level. This indicates a moderate relationship between the independent and the dependent variables. This means that once any improvement is made to complaints handling, network reliability and billing, it will lead to improvement in satisfaction.

Table 26: Correlation matrix on all variables (Postpaid users)

		Network reliability	Billing	Complaints	Satisfaction
	Pearson Correlation	1	.135	.365*	.489**
Network reliability	Sig. (2-tailed)		.476	.047	.006
	N	30	30	30	30
	Pearson Correlation	.135	1	.305	.096
Billing	Sig. (2-tailed)	.476		.101	.614
	N	30	30	30	30
	Pearson Correlation	.365*	.305	1	.469**
Complaints	Sig. (2-tailed)	.047	.101		.009
	N	30	30	30	30
	Pearson Correlation	.489**	.096	.469**	1
Satisfaction	Sig. (2-tailed)	.006	.614	.009	
	N	30	30	30	30

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Results from the above table indicate that network reliability has the highest correlation of 0.489, followed by complaints handling with 0.469 and billing 0.096 and p-values of 0.000 which is significant at 0.01 level. This indicates a very strong relationship between the independent and the dependent variables. This means that once any improvement is made to complaints handling, network reliability and billing, it will lead to improvement of satisfaction in postpaid customers.

Table 27: Regression output summary on all variables (Prepaid users)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	1.748	.113		15.514	.000
L	Network Reliability	.141	.030	.232	4.783	.000
1	Billing	.062	.023	.127	2.687	.008
	Complaints	.266	.034	.382	7.943	.000

^{**.} Correlation is significant at the 0.01 level (2-tailed).

The results in the above table show that complaints handling has the largest beta coefficient 0.382 at significance level 0.000 followed by network reliability 0.232 at significance level 0.000 and billing at 0.127 at significance level 0.008. The meaning of the results is that one standard deviation increase in complaints handling leads to 0.382 increases in satisfaction of prepaid users with the other variables held constant. For network reliability the results mean that one standard deviation increase in network reliability leads to 0.232 increases in satisfaction of prepaid users with the other variables held constant. For billing the results mean that one standard deviation increase in billing leads to 0.127 increases in satisfaction of prepaid users with the other variables held constant. In few words, prepaid customers are mostly concerned about complaints handling and network reliability, if those two domains are improved their satisfaction will also increase. Billing also influences satisfaction to a smaller extent as compared to network and complaints. However billing cannot be overlooked since when used alone it is an important factor with a beta value of 0.266 at significance level of 0.000.

Table 28: Regression output summary on all variables (Postpaid users)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	1.676	.449		3.736	.001
	Network reliability	.236	.110	.369	2.154	.041
1	Billing	009	.024	062	369	.715
	Complaints	.273	.138	.354	1.985	.058

a. Dependent Variable: Satisfaction

The results in the above table shows that network reliability has the largest beta coefficient 0.369 at significance level 0.041 followed by complaints handling 0.354 at significance level 0.058 and billing at - 0.62 at significance level 0.715. The meaning of the results is that one standard deviation increase in network reliability leads to 0.369 increase in satisfaction of postpaid users with the other variables held constant. In regards to complaints resolution the results mean that one standard deviation increase in complaints resolution leads to 0.354 increases in satisfaction of postpaid users with the other variables held constant. For billing the beta coefficient is negative – 0.062. This means that one standard deviation increase in billing leads to 0.062 decreases in satisfaction of postpaid customers with the other variables held constant. This means that network reliability and complaints at significance level of 0.041 and 0.058 respectively are important factors in predicting customer satisfaction while billing at significance level of 0.715 seems to indicate that billing is not an important factor in predicting customer satisfaction when all three variables are used in combination. This indicates that if customer satisfaction is to improve network and complaints should be given very high attention. However billing should not be neglected since when used alone it is an important factor with a beta value of 0.096 at significance level of 0.000.

4.4.4 Summary of hypothesis results

Table 29: Summarized results (prepaid)

No	Hypothesis	Results of hypothesis
H1	Reliability of network significantly affects customer	Accepted
	satisfaction	
H2	Billing significantly affects customer satisfaction	Accepted
Н3	Complaints resolution significantly influences customer	Accepted
	satisfaction	

Table 30: Summarized results (postpaid)

No	Hypothesis	Results of hypothesis
H1	Reliability of network significantly affects customer	Accepted
	satisfaction	
H2	Billing significantly affects customer satisfaction	Rejected
Н3	Complaints resolution significantly influences customer satisfaction	Accepted

CHAPTER FIVE

SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings as well as the discussion, conclusion and recommendations based on the study objectives. It also presents the areas that require further research.

5.2 Summary of findings

5.2.1 Network reliability and customer satisfaction

The analysis of the research results indicated that network reliability has a statistically significant effect on customer satisfaction with a correlation coefficient of 0.390 (prepaid) and 0.489 (postpaid) and significance levels respectively of 0.000 and 0.006. The R/beta and R ² values indicated that network reliability is an important factor in predicting customer satisfaction.

The descriptive results from prepaid customers show that the majority of respondents agreed to have network coverage and that their calls go through and are not cut off during communication. Majority also agreed to have calls clarity. However, more than 50% disagreed to be satisfied with the quality of the network. This contradiction could mean that there is another element of network reliability that is being under looked. It was confirmed with the interview comments whereby respondents expressed their incomprehension when trying to make calls and being answered that the lines they are calling are off some customers wondered whether this was to do with their telephones or poor network. This high rate of disagreement could also mean that users are not satisfied because they compare Warid Telecom network to other networks present in Uganda. This means that the competitors of Warid could have set the standards very high hence

raising the expectations of customers in terms of network quality. On the other side the management of Warid Telecom recognises having challenges with the network this because capacity sites are few and upgrades are being run on a regular basis hence disrupting the quality of network.

5.2.2 Billing and customer satisfaction

The analysis of the research results indicated that billing has a statistically significant effect on customer satisfaction with a correlation coefficient of 0.278 (prepaid) and 0.096 (postpaid) and significance levels respectively of 0.000 and 0.614. The R/beta and R ² values indicated that billing is an important factor in predicting customer satisfaction.

The descriptive results from prepaid customers show that the majority of respondents agreed to be able to check the credit they have used, they also agreed to being charged the correct amount and confirm getting excellent call services at an affordable price. This is justified by the many promotions on calls availed to the public. Postpaid users also agreed at more than 90% to all the statements and said to be satisfied. The high percentage is simply explained by the fact that postpaid users do not clear their bills since the postpaid services are contracted by employers. During interviews it was also noticed that most of the postpaid customers do not even know the cost of the service they are using. Overall, billing satisfies the majority of Warid Telecom users.

5.2.2 Complaints resolution and customer satisfaction

The analysis of the research results indicated that complaints resolution has a statistically significant effect on customer satisfaction with a correlation coefficient of 0.488 (prepaid) and 0.469 (postpaid) and significance levels respectively of 0.000 and 0.009. The R/beta and R ² values indicated that complaints resolution is an important factor in predicting customer satisfaction.

The descriptive results from prepaid customers show that the majority of respondents agreed to be able to access customer care help desk, to be helped and their problem is solved within the promised time. The majority also agreed to be satisfied with the way they are helped. The postpaid users agreed at more than 90% to all the statements and said to be satisfied with the process of complaints resolution. The high percentage of agreement is simply explained through the fact that postpaid users have a dedicated help line which is never congested unlike prepaid users and their queries are given priority. Also this can be explained by the fact that postpaid users are very few.

5.3 Discussion

5.3.1 Reliability of network and customer satisfaction

The objective was to establish the effect of network reliability on customer satisfaction of Warid Telecom voice services. The findings showed a significant positive relationship and that network reliability is an important factor in customer satisfaction. This implies that if network is improved, satisfaction of prepaid customers increases. Also postpaid customers feel strongly that network reliability should be improved so as to increase their satisfaction.

These findings place network reliability as a priority area that needs to be urgently improved for all users. This is in line with a number of scholars who state that network reliability is an element of service quality and has to meet and exceed the customers' expectations (Cronin and Taylor, 1992; Zeithaml, Berry and Parasuraman, 1993) and that it is an important indicator of customer satisfaction (Spreng and Machoy, 1996). The results of the findings agree with Chau and Kao (2009) who found a positive relationship between service quality and the satisfaction of the

customers. The service quality includes the system reliability which here refers to network reliability.

The current findings are opposed to the findings of Turban (2002) that the price of the service is more important than the quality of the service. This is not the case for this particular study considering the quality of network was ranked as number one in influencing satisfaction. Even prepaid users who clear their bills on a daily basis are more concerned with the stability and quality of the network more than anything else. However it's the postpaid users who feel more strongly about the quality of the network which was not a surprise considering most of them are corporate users with fewer constraints as compared to prepaid. Indeed Iqbal et al (2009) state that postpaid customers are even more satisfied with their services as compared to prepaid considering they do not face challenges for example while loading credit cards. But still the study findings align with that of Fornell, Johnson, Anderson, Cha and Bryant (1996) who found out that customer satisfaction is more quality driven than value or price driven.

5.3.2 Billing and customer satisfaction

In regards to billing, the scholars who researched on the relationship between billing and user's satisfaction claim a positive relationship between the two variables as found in this study. That is the case of Parvez (2005) who identified a strong relationship and even recommended that in order to increase the share; the call rate and connection fee should be reduced. Sindhu (2002) adds to the same saying that billing is a great factor of satisfaction and customers can switch if price is high or deemed unfair.

The view of the prepaid respondents suggested that billing was an important driver of their satisfaction. There is a significant and positive relationship between the two variables. On the

other hand postpaid users proved not to be concerned by billing. This contradicts the findings of Sindhu (2002) since for postpaid users increase of price may not necessarily result in switching to another provider. Considering the current findings, we can say that although billing is one of the elements that influence satisfaction there are other factors that have deeper impact on satisfaction of users.

5.3.3 Complaints resolution and customer satisfaction

The findings of this study revealed that improved complaints resolution is the second most important cause to satisfaction. The better the complaints are handled the more the users are satisfied. The response rate in regards to the state of complaints resolution shows that most respondents agree to be satisfied with the way their complaints are handled hence increase in overall satisfaction. Palkar's (2004) findings fall in line with the findings of this research. In fact Palkar determined that the service support or complaints handling appeared to be an important element of cellular service if we are to improve customer satisfaction.

5.4 Conclusions

5.4.1 Network reliability and customer satisfaction

The results of this study suggest that the network of Warid Telecom is not often reliable even in the vicinity of Kampala where this study was conducted. The significant positive relationship between network reliability and customer satisfaction for both prepaid and postpaid proves that the reliability of the network has a lot of influence on customer satisfaction. Network should be given uttermost urgency if customer satisfaction is to be achieved. There is need for improved technology so as to meet the customers' expectations this will create a sense of loyalty considering users will be able to entirely rely on the Warid network to make their calls.

5.4.2 Billing and customer satisfaction

The significant positive relationship between billing and customer satisfaction for both prepaid and postpaid proves that billing has weak influence on customer satisfaction and the users are satisfied with the affordability of the voice calls thanks to the many promotions offered. Although postpaid users are not bothered with the element of billing their employers are definitely careful hence need to maintain competitive charges.

5.4.3 Complaints resolution and customer satisfaction

The significant positive relationship between complaints resolution and customer satisfaction for both prepaid and postpaid proves that complaints resolution has a moderate influence on customer satisfaction. The study established that the complaints handling system seems to be highly appreciated by both prepaid and postpaid users although the congestion of the helpline at times makes it challenging for prepaid callers as well as the time taken to solve the issue.

5.5. Recommendations

Based on the findings of this survey, the following are recommended.

5.5.1 Network reliability and customer satisfaction

Management should invest in the latest technology and if possible acquire new capacity sites all over the country to cover and retain the ever growing number of subscribers. In addition management should give clear communication to customers whenever there is a network outage to avoid confusion.

5.5.2 Billing and customer satisfaction

Warid is known for having the most affordable on net (Warid to warid) tariffs coupled with a variety of innovative promotions. It is therefore recommended that more research be conducted to evaluate how the many offers influence the satisfaction of users.

5.5.3 Complaints handling and customer satisfaction

The complaints handling system should be given even more attention considering its one way the company interacts with the subscribers. The management should ensure that the helpline is not congested by offering multiple lines to callers or recruit more agents if this can make the traffic less busy.

5.6. AREAS OF FURTHER RESEARCH

There is need to research on other factors affecting customer satisfaction of WTU other than network reliability, complaints and billing.

It would be interesting to also conduct a comparative study on customer satisfaction of all telecom companies of Uganda and see how they can benefit from each other.

REFERENCE LIST

- Amin, M. E. (2005). Social Science Research: Conception, Methodology and Analysis. Kampala:

 Makerere University Press.
- Akkas, O., Ucar, B., et al (2010). Measuring Customer satisfaction in Turk Telekom using structural equation modeling technique. *Journal of Global Strategic Management*, 89
- Bell, J. (1999). *Doing your research project: a guide for first time researchers in education and social science (3rd ed.).* Buckingham, Philadelphia: Open University Press.
- Hayes, B.E. (1998). Measuring Customer Satisfaction. Survey Design, Use and Statistical Analysis Methods, 2nd Edition.
- Burns, R. (2000). Introduction to Research Methods. Sage, London
- Bishop, W.R.Jr. (1984). Competitive intelligence. Progressive Grocer, 63(3), 19-20.
- Churchill, G., and Suprenant, C. (1982). An investigation into the determinants of customer satisfaction, *Journal of Marketing Research*
- Communications Act 1997 (Ug.)
- Creswell, W J. Et al. (2004) Designing a Mixed Methods Study in Primary care. Department of Educational Psychology, University of Nebraska- Lincoln, Lincoln, Neb

Econ One Research, Inc. In association with ESG International (July 2002), Uganda

Telecommunications a case study in the Private Provision of Rural Infrastructure

- Fornell, C. (1996). *American Customer Satisfaction Index Model*. Retrieved June, 2012, from www.theacsi.org
- Fornell, C., Johnson, W.Anderson, Cha & Bryant (1996). The American Customer Satisfaction

 Index: Nature, Purpose and Findings. *Journal of Marketing* 60,4 pg.7
- Fornell, C. and Warnerfelt, B. (1987). Defensive marketing strategy by customer compliant management; a theoretical analysis. *Journal of Marketing Research*, 24 pp.337-346
- Gerpott, T., Rams, W., & Schindler, A. (2001). Customer retention, loyalty, and satisfaction in the German mobile cellular telecommunications market. Telecommunication Policy, 25(4), 249–269.
- Gerson, R.F. (1993). *Measuring customer satisfaction: A guide to managing quality service,*Crisp Publications, Menlo Park.
- Lee, J., & Freick, L. (2001). The impact of switching costs on the customer satisfaction loyalty link: Mobile phone service in France. *Journal of Services Marketing*, 15(1),35-48.
- Lee, M., & Cunningham, L. F. (2001). A cost/benefit approach to understanding service loyalty.

 **Journal of Services Marketing, 15(2), 113–130.
- Lool. B.V, Gemmel. P and Dierdonk R.V (2003), Services Management: An integrated Approach, 2nd Edition

- Lin, H.H., &Wang, Y.S. (2006). An examination of the determinants of customer loyalty in mobile commerce contexts. *Information & Management*, 43(3), 271-282
- Mugenda, O.M.&Mugenda, A.G (1999). Research methods: Quantitative and Qualitative Approaches. Nairobi: African Centre of Technology Studies.
- Moon-Koo, K, Myeong-Cheol, P. & Dong-Heon,J (2004) The effects of customer satisfaction and switching barrier on customer loyalty in Korean mobile telecommunication services
- Nitecki, D. A. and Hernon,P (2000), Measuring service quality at Yale University's libraries, *Journal of Academic Librarianship*, Vol. 26 (4), pp.259-273
- OJo, O. (2010), The Relationship Between Service Quality and Customer Satisfaction in the Telecommunication Industry: Evidence from Nigeria
- Oyeniyi, T. Omatayo, S. & Abiodun, A. (2008), Customer Service in the Retention of Mobile Phone users in Nigeria.
- Oliver, R.L. (1980) A cognitive model of antecedents and consequences of satisfaction decisions.

 **Journal of Marketing Research*, 17(4 November), 469-9
- Oliver R.L. & DeSabro, W.S.(1988). Response determinant in satisfaction judgement. *Journal of consumer research* 14 149-507

- Parasuraman, A., Zeithamal, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, Vol 64(1),pp.12-40
- Punch, K F. (1998). Introduction to Social Research. Sage, London
- Iqbal et al. (2010), Antecedents and Outcomes of customer satisfaction in using prepaid cellular service in Pakistan.
- ITU (2003), Assessment of Telecommunication and ICT Infrastructure in Africa, ITU Symposium, Doc 7-E. Arusha
- Kotler, P. (1997). Marketing Management. Prentice-Hall, Englewood Cliffs, NJ.
- Kotler, P. (1991). *Marketing Management*. Analysis, Planning, Implementation and Prentice-Hall, Englewood Cliffs, NJ
- Kotler, P & Clarke, T. (1987) *Marketing Management*. Analysis and practices, Prentice-Hall, Englewood Cliffs, NJ
- Kim, M.K.,Park, M.C.,and Jeong, D.H (2004)" The effects of customer satisfaction and the switching barrier on customer loyalty in Korean mobile telecommunication services." Telecommunication Policy.
- Palkar A. (2004) "Determinants of Customer Satisfaction for Cellular Service Providers"

 UDYOG PRAGATI Vol. 28, No.1

- Parker, C. and Mathews, B. P (2001) Customer satisfaction: contrasting academic and consumers interpretations, *Marketing Intelligence &Planning*, *volume19*, number 1,pp.38-44
- Rust, R. and Zahorik, A. (1993), Customer Satisfaction, Customer Retention and Market share.

 Journal of Retailing 69(2): 193-215
- Sekaran, U. (2003). *Research Methods for Business. A skill building approach*. Southern Illinois University at Carbondale, 4th edition.
- Spreng, R.A., & Mackoy, R.D. (1996). An Empirical Examination of a Model of Perceived Service Quality and Satisfaction. *Journal of Retailing*, 72(2), 201-214

Uganda Telecommunication Policy 1997 (Ug.)

- UCC, (December 2011). Public Notice Report on Mobile Voice quality and consumer complaints reports.
- UCC, (2011). Post and Telecommunications Market Review 2010/2011
- Wang I-M & Shiesh. C.J(April 2005), The relationship between service quality and customer satisfaction the example of CJCU library
- Westbrook, R.A. (1987). Product/ Consumption-Based Affective Responses and Post Purchase process. *Journal of Marketing Research*, 24
- Wesbrook, R. A. and Oliver, R.L. (1991). The dimensionality of consumption emotion pattern

and customer satisfaction. Journal of consumer research, 18(June), pp.84-91

Zeithaml V. A and Bitner. M (2003), Services Marketing: Integrating customer focus across the

firm, 3rd Edition

APPENDIX 1: QUESTIONNAIRE FOR CUSTOMERS OF WTU

Dear respondent,

My name is Armella Mukorako, a student pursuing a Masters degree in management studies (Project Planning and Management) at Uganda Management Institute. My study topic is: Factors influencing customer satisfaction in the telecom industry in Uganda with special focus on Warid Telecom voice services'. Your views as customers of WTU are essential for this study. Kindly provide accurate information on the following issues to the best of your ability following the instructions given. All the information given will be confidential and shall be used strictly for this study. Thank you.

Section A: Background information

Circle what you feel is the most appropriate answer for you

- 1. Age: (1) 0 30
 - (2) 30 50
 - (3) Over 50
- 2. Gender: (1) Female (2) Male
- 3. Occupation: (1) Student (2) Employed (3) Self employed (4) Others
- 4. Do you use any other simcards apart from Warid?
- 5. If yes, from which networks?
- 6. How many years have you spent on the Warid network?

Section B: Kindly indicate the extent to which you agree with the following statements in every section. Indicate your answers by ticking in the appropriate box. Key: 4-Strongly Agree (SA), 3-Agree (A), 2-Disagree (D), 1-Strongly Disagree (SD)

INDEPENDENT VARIABLES				
Section a: Reliability of network	SA	A	D	SD
	4	3	2	1
1.Most of the times I have network on my phone				
2.Most of the times my calls go through and are not cut off during communication				
3.Most of the times my calls are clear				
4. I am satisfied with the quality of the network				
Section b: Billing		T		_
1. At anytime I am able to check how much credit I have used on my phone				
2. I am always charged the exact amount I have used. Not more and not less				
3. I feel I am getting excellent call services at an affordable price				
Section c: Complaints resolution				
I. I can easily access customer care when I have a problem				
2. The people who help me know what to do and my issue is always resolved				
3. My problem is solved within the promised time				
4. I am satisfied with the way I am helped				
DEPENDENT VARIABLES				
Section d: Overall satisfaction and referrals	SA	A	D	SD
	4	3	2	1
Warid Telecom has the best network in Uganda				
2. I would recommend others to join Warid because of its network				
3. Compared to other networks, Warid has the most affordable tariffs on calls				
4. I would recommend anyone to join Warid because of their tariffs				
5. Compared to other networks, Warid has the best customer care in Uganda				
6. I would recommend anyone to join Warid because of their customer care				
7. Overall I am satisfied with Warid services				

8.I have spent more than 2 years on Warid		
9.Besides Warid I use other simcards from other networks		

APPENDIX II: TELEPHONE INTERVIEW QUESTIONS TO CUSTOMERS OF WARID TELECOM UGANDA

Section I: Reliability of voice services

- 1. Do you have network on your phone most of the time?
- 2. Do your calls go through and are not cut off during communication most of the time?
- 3. Are your calls clear when you call?
- 4. Are you satisfied with the quality of the network signal?
- 5. Compared to other networks how would you rate the network of Warid?
- 6. Would you recommend others to join Warid because of the quality of the network?

Section II: Billing

- 1. Most of the time, are you able to check how much credit you have used?
- 2. Are you charged the exact amount you have used?
- 3. Do you think you are getting excellent call services at a good price?
- 4. How would you rate the tariffs of Warid as compared to other networks?
- 5. Would you recommend others to join Warid?

Section III: Complaints resolution

- 1. Do you easily access the help desk when you have a problem?
- 2. When you called, was the person you spoke to helpful? Was your problem resolved?
- 3. Was your problem resolved within the stated time?
- 4. Are you happy with the way you were helped?

- 5. How would you rate the Warid help desk as compared to other networks?
- 6. Would you recommend anyone to join Warid because of its helpdesk?

APPENDIX III: INTERVIEW QUESTIONS TO MANAGEMENT AT WARID TELECOM UGANDA

Name: Position:

- 1. Do you have a structure in place to measure customer satisfaction? If yes, how does it work?
- 2. What is the overall satisfaction in % eg for last month?
- 3. How do you use the feedback collected?
- 4. What are the common areas of complaints? Why?
- 5. What are the measures put in place to correct them?
- 6. What is the process of complaints resolution in Warid?
- 7. Do you think that complaints resolution influences the satisfaction of users?
- 8. If yes, what measures have you put in place to maintain excellent complaints handling?
- 9. Is the Warid network available all over Uganda?
- 10. What are the challenges you face in regards to network?
- 11. How are you responding to those challenges?
- 12. In comparison to other networks, how would you rate the tariffs of voice services for both post and prepaid (lower, higher, similar)