ASSESSMENT OF THE GLOBAL SYSTEM MOBILE (GSM) SERVICE PROVIDERS PERFORMANCE AND CUSTOMER SATISFACTION IN NORTH-WEST, NIGERIA

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Ph.D/ADMIN/42352/12-13

A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DOCTOR OF PHILOSOPHY (Ph.D) IN BUSINESS ADMINISTRATION

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ZARIA,
2017

DECLARATION

I declare that the work in the thesis entitled "Assessment of the Global System Mobile Service Providers Performance and Customer Satisfaction in Northwest Nigeria" has been performed by me in the Department of Business Administration. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this thesis was previously presented for another degree or diploma at this or any other institution.

| --- | --- | --- |
| Nuhu Shagari JIBRIN | Signature | Date |

CERTIFICATION

This thesis entitled Assessment of the Global System Mobile Service Providers Performance and Customer Satisfaction in Northwest Nigeria by Nuhu Shagari JIBRIN meets the Requirements and Regulations Governing the Award of Doctor of Philosophy (Ph.D) of the Ahmadu Bello University, Zaria and is approved for its contribution to knowledge and literary presentstion.

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DEDICATION

This thesis is dedicated to Almighty Allah (SWT) for His divine guidance and mercy.

ACKNOWLEDGEMENTS

All thanks go to Almighty Allah for His kindness by sparing my life up till this moment. I also thank Almighty Allah (SWA) for His guidance, Mercy, Support, Wisdom, Love and Protection on all my affairs throughout the period of this programme. I sincerely thank Allah for His protection and guidance on the lecturers in the department who in one way or the other contributed to the successful completion of this programme.

I would like to express my profound gratitude and appreciation to all those who have in one way or the other contributed towards making this research a success. I wish to single out my supervisory team for special recognition, Dr. M. Y. Abubakar, Dr. A. J. C Onu and Dr. Musa Idris for their sound academic guidance and professional advice. Join me to appreciate Prof. Bello Sabo (Dean of the Faculty, Head of Department and internal examiner). They found time to patiently go through my work line by line and made useful suggestions for improvement, despite their busy schedules and other commitments. Their understanding and accommodating nature is beyond description, I remain most grateful and may Almighty Allah reward you abundantly and continue to shower His blessings on you and your entire family.

My gratitude also goes to all the Senior Lecturers in the Department for their advice and encouragement, also I appreciate Dr. Keston Odiwo for editorial, Prof. A. A. Ayuba external examiner and my internal examiners Prof. Sabo Bello, Dr Usman and Dr O. D. Y Malachy for their contribution to the quality of this work. My gratitude goes to my course mates may Allah reward them. My profound gratitude also goes to my colleagues at Federal University Dutsinma Katsina State and Research Assistants in Kano, Kaduna, Katsina and Sokoto state for their immense contributions, especially Ahmadu Abubakar, John Orinya O. and Monday Bello. I must sincerely thank my brothers and sisters, cousins, especially for their encouragement and advice, am truly indebted to you all.I appreciate my wife (Noor Al Haya) for her prayer and support. Am indebted to all my friends most especially Dahiru Sanni, Mohammed Sekiru, Muhammad

Lawal, My gratitude also goes to those who contributed in one way or the other but whose names are not mentioned here;, be convinced that I have you in mind.

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ABSTRACT

This study focused on telecommunication services and assessed the performance of GSM service providers and customer satisfaction in Northwest Nigeria. The objectives of this study is to assess the effect of tariff charged, network (coverage), customer care services, service quality and product development by GSM service providers on customer satisfaction. The following hypotheses are formulated in line with the objectives of the study. Tariff charged by GSM service providers has no significant effect on customer satisfaction in North Western Nigeria, Network coverage of GSM service providers has no significant effect on Customer satisfaction in North Western Nigeria, Customer care services provided by GSM operators have no significant effect on customer satisfaction in North Western Nigeria, Service quality has no significant effect on customer satisfaction of GSM service providers in North Western Nigeria and Product development by GSM service providers has no significant effect on customer satisfaction in North Western Nigeria. The study used survey method with questionnaire as the instrument for data collection. Analysis is done using descriptive and inferential statistics. To measure the variables, multiple regression was used and this forms the basis for using regression in hypothesis testing. Performance of GSM services were measured using tariff charge, network coverage, customer care, products development and quality of service. The study revealed that there are significant effects of tariff charge, network coverage, customer care, products development and quality of service of GSM service provders on customer satisfaction in Northwest Nigeria. The study therefore recommended that GSM service providers should charge low, moderate and accurate tariff on services offered to customers to strengthen customer satisfaction; widen coverage through buying and installing of state of the art technology to improve on network coverage; introduce more toll free lines; customer centres; training and re-training of care officials to handle customer requests; and introduce more products and packages useful to customers. Finally, they should monitor the services rendered to customers, ensuring that services are effectively and efficiently delivered in a manner that adequately meets customer expectations.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Mobile telecommunications have become an increasingly needed service with a very high penetration rate in most countries. With the extensive mobile telecommunications usage, the mobile services market is now recognized as the most competitive part of the telecommunications sector. The emergence of competitive markets have led to lower prices, which has also resulted in the widespread use, (coverage) greater variety (product development) and quality of mobile services (Naser , Salleh & Gelaidan, 2012).

Mobile telecommunications technologies have developed over successive generations. The first generation (1G) appeared in the 1950s. The second generation (2G) or GSM technology which was released in 1995 with enhanced supplementary services was used extensively, but was challenged globally by the next (third) generation (3G) technologies. This sequence of generations is characterized by increasing capacity and richer content of the message (product development). Further penetration of 3G depends on the integration of telecommunications and multimedia services, which turned out to be more complicated than most experts predicted (Dunnewijk & Hulten, 2007). In the 1990s, the rapid growth rate was accompanied by critical changes in the telecommunications markets. The usual way to call someone has changed from

using the telephone booth or a fixed telephone line to using a personal phone that is potable and movable. This growth is also responsible for the intense competition between service operators in the telecommunication industry. This competition is forcing the operators to adopt effective strategies in order to satisfy the customers. (Nasser, Salleh & Gelaidan, 2012).

Mobile service providers need to understand the importance of customer satisfaction and loyalty while planning strategies for user retention. The remarkable diffusion of mobile services has gone beyond experts' expectations. From a marginal industry ''in the shadow" of other telecommunications providers (e.g., fixed lines and the internet), it has become a leading segment, providing commodity services. As such, the penetration of mobile phones is almost twice as high as that of personal computers (International Telecommunication Union, 2003). Hence, today's customers are more concerned about having high quality telecommunication services that satisfy them. Quality of service is becoming increasingly important to differentiate between competing organisations (Turel & Serenko, 2006). This is a Key Performance Indicator (KPI) in return for customer satisfaction.

On the network coverage, return on investment and asset prior to 2001, the number of connected phone lines in Nigeria was 450,000 for an estimated population of 120 millions at the time and the level of investment in the telecommunication sector was just about US$50 million only (Ajala, 2005; Ajayi, 2006). Six years after, the Foreign Direct Investment (FDI) in the telecommunication sector has reached $9.5billion, the largest after the oil and gas industry and is still growing both in terms of subscribers' base and infrastructural development (Nigerian Communication Commission, (NCC) 2014). The telecoms sector has turned Nigeria into one of the preferred investment destinations in the world as foreign

investors now fall over themselves to establish presence in a country acknowledged as one of the most lucrative markets (NCC, 2014).

According to Roger (2010), there are five GSM and 13 CDMA-based network operators in Nigeria. The GSM operators include Airtel, MTN, MTEL, Globacom, and Etisalat while CDMA network operators include Multilinks, Starcomms, O'net, and Visafone amongst others. Consumers of telecommunications products and services in Nigeria varied in terms of taste, need and expectation. This has made user satisfaction very important in today's business world. According to Deng, Lu, Wie and Zhang (2009), the ability of service providers to create high degree of satisfaction is crucial for product differentiation and developing strong relationship with the user. Hanif, Sehrish and Adnan (2010), assert that user satisfaction makes the phone users loyal to one telecommunication service provider. Satisfying the user can help build long and profitable brand relationships with their users (Eshghi, Haughton & Topi, 2007).

It is costly to generate satisfied and loyal users of a product or service. However, according to Gustafsson, Johnson and Roos (2005) a telecommunication service provider needs to concentrate on the improvement of service quality and charge appropriate fair prices in order to satisfy its users. Ahn, Han and Lee (2006) noted that users get satisfied with a brand more if they get all the needed services accumulated in that very brand. User satisfaction according to Herrmann, Xia, Monroe and Huber (2007), is directly influenced by price perceptions while indirectly through the perception of price fairness. In today's market, the mobile technology has been extremely competitive and service providers are moving aggressively to attract versatile users by offering some meaningful attractive promotions and services (Rahman, Haque & Ismail 2010). The image of a service provider is also a consideration to a subscriber, thus according to Lambert (1980), brand plays an important role in user's selection of service.

The issue of customer satisfaction has received considerable interest or attention in recent years. It is one of the most popular research topics in marketing (Patterson, 1997; Naeem, 2010; Karna,

2004; Churchill, 1982; Spreng Mackezie & Olshavsky, 1996**;** Yoon, 2010) and has attracted significant attention from top management in many companies (Bernhardt, 2000). A customer is satisfied when an offer performs better than expected and is dissatisfied when expectations fall below performance (Bolton, 1991). Kotler (2006) points out that whether the buyer is satisfied after purchase or not depends on the offer's performance in relation to the buyers expectations. Similarly, customers have expectations with regard to the behaviour of service employees. When these are exceeded, the level of customer satisfaction with the service provider is positively influenced (Thurau, 2004).

Customer satisfaction can be derived from this product (Churchill, Gilbert & Carol (1982; Oliver, 1993; Homburg & Rudolph, 2001; Westbrook, 1980) which relates to the customer's evaluation of the product performance based on such characteristics as durability, dollar value, technical sophistication, and ease of use (Homburg & Giering 2001), consumption experience (Bearden & Teel, 1983) and price (Anderson, 1996). Moreover, customer satisfaction with salesperson performance has received considerable attention (Sheth, 1973) which relates to the interaction between the sales personnel and the customer and the ability of the sales representative to meet a customer's unique needs (Homburg. & Giering, 2001). In addition, service encounter plays a prominent role in customer satisfaction (Suprenant, 1987, Bitner, 1990).

Customer satisfaction is often seen as a the crucial link in establishing long term relationships (Patterson, 1997; Karna, 2004) and few businesses can survive without establishing solid relationships with their customers (Morgan & Hunt, 1994 Dwyer, Schurr, & Oh, 1987). According to Kotler (2006), One key to customer retention is customer satisfaction, a satisfied

customer stays loyal and longer‖ and loyalty drives profitability and growth (Heskett, 1994; Pugg, 2002). Loyal and satisfied customers are best achieved by loyal and satisfied employees (Heskett, 1994). It is widely recognized from literature that without satisfied and motivated employees it is impossible to produce world-class products and impossible to achieve satisfied and loyal customers (Eskildsen & Dahlgaard, 2000).

Customer satisfaction is the customer's feeling of pleasure or displeasure, which results from comparing a product's perceived performance (or outcome) in relation to customer expectations (Kotler, 2003). This expectation according to David (1999) is formed from past buying experience, advice of friends and associates and marketers and competitions, information and promises. Thus, if performance falls short of expectation, the consumer is dissatisfied. If however, the performance matches expectation, the consumer is satisfied. If the performance exceeds expectation, the consumer is highly satisfied or delighted (Thomas & Sasser, 2001).

North Western zone of Nigeria comprises of seven states i.e Kano, Kaduna, Katsina, Kebbi, Jigawa, Sokoto and Zamfara, with a total population of 24,939,821 (NPC 2006), the zone is one of the largest market of GSM service providers in Nigeria. GSM service providers are taking advantage of this zone because they are present in the zone and exploring market opportunities which will increase their market share and profitability. The Researcher has been staying in the zone for over twenty years now and considering the religious and conservative nature of the people in the zone, that usually affect their decision, it become very necessary to ascertain the level of their satisfaction with the GSM service providers.

History was made in the socio-economic life of this country on August 6th, 2001 when Econet Wireless Nigeria, as it was then called (now Airtel) became the first company to launch commercial GSM services in Nigeria. Other GSM service providers such as MTN, MTEL and GLOBACOM subsequently followed with the launch of their services respectively (Ndukwe, 2005). Nigerians were delighted and full of expectations of a break from the bitter past,with improved services, business transactions and generally, improved socio-economic well-being. However, the extent to which these expectations have been met is left to empirical study like this to unravel. Apparently, it is on the basis of the above understanding that since the emergence of GSM sector in Nigeria up till date, the operators have and are still investing huge amount of money on advertising, upgrading of facilities and coverage expansion to deliver superior quality services to the customers.

1.2 Statement of the Problem

Experts observed that consumers of telecommunication products and services in Nigeria are quite diverse in their attitudes, tastes, needs and expectations (Ndukwe, 2008). Arguably, these differences explain, in part, the reasons why consumers do not subscribe to the same networks. In the past few years, consumers of telecommunication services in Nigeria, as Shehu (2008) acknowledged were the

privileged few endowed with the economic power to enjoy telecommunication services. This was the period characterized by few but highly expensive available lines so that the choice of a GSM service provider was apparently, a matter of having the money and choosing whichever operator was available. However, analysts and even the most casual observers agree that the situation is quite different today (Ajayi, 2006). As at now, there are no less than five different GSM service providers in Nigeria, all of which operate in North Western Nigeria. These operators also offer varied services and enticements in addition to basic telecommunication services to attract and keep customers. Thus, consumers have the opportunity to evaluate, sometimes critically, these varied offerings (Product development) before selecting a GSM provider (Ajayi, 2006).

GSM service providers charge different tariffs for services offered to their subscribers depending on the packages a customer subscribes to. For instance, MTN has packages for tariff ranging from supersaver, mtn zone, family and friends, beta talk, weekends super talk, free night call, xtra value, awu4u, prestige, xtra special postpaid, pulse, start pack, diamond yellow, true talk, xtra pro, ipulse and specific tariff for internet users. GLOBACOM has packages for tariff ranging from infinito, bounce, overload, twin bash, free night calls and family and friends and specific charges for data users. ETISALAT has packages for tariff ranging

from easy starta, easy life, easy cliq, easy flexi, talk zone and different charges for data subscribers. AIRTEL also has packages for tariff ranging from smart value, smart connect, smart talk, smart trybe, smart trybe junior, premier and each data user are charges differently. On each of the these packages, the charges for calls, messages, and internet services differ. There is no permanent package on any network. New packages are designed almost on a monthly basis which makes tariff charges by service providers more competitive and these forces down tariff charged. The flexibility of tariff charges by service providers due to competitive market could have effect on customer satisfaction and the performance of GSM service providers. Based on the foregoing, it becomes necessary to carry out this study.

GSM Service providers have been trying to make network coverage available in every part of the Country. It is in the light of this that they keep investing in the state of the art technology by installation of max antenna, laying underground cables, hiring and training of personnel to make services available always. This is the reason why one network will be available in a certain area and another will not. Availability of network is what will determine subscription to certain service providers; availability of network signals the performance of the GSM service

providers as a result, ascertaining whether or not the network is available becomes necessary, hence, the need for this study.

Customer care services are channels by which GSM operators received complaints, suggestions and feedback from their customers. Based on this, improvement, amendments, clarifications can be made concerning the services offered. In the light of above, GSM operators keep training their staff in the units on how to properly address problems, complaints, suggestions arising from customers. They open more centers and create more avenues like toll free lines, websites, and others. Despite these aforementioned performances, experts observed that a lot still needs to be done. It was on that basis that this research was carried out.

Due to developments in technology, globalization has made product development one of the rapidly growing affairs for competing firms. As manufacturers of phone devices introduce the latest to the market, it becomes necessary for service providers to acquaint themselves with these innovations, so that facilities available in the new products can be harmonized with services rendered. In this view, today phones perform different functions aside making calls, and sending text messages that had been from the initial stage. Some phones come with added conveniences that enhance financial transactions, E-Commerce and different social media like

twitter, facebook, 2go, and whatsapp which aids service of marketers, journalist, and others. These widen the functions of GSM operators and create more profits for the companies. Again the study becomes fundamental due to changing space of technology and in turn varieties of products which require identification of target subscribers.

Quality of service is key to customer satisfaction. Over the years, there have been bitter complaints from customers of GSM companies, as acknowledged by experts, on the poor quality of services rendered by GSM operators ranging from call drops, call diversion, messages diversion, call interruption, and access to internet. The companies have been promising through different mediums to improve on the quality of services rendered, some providers have tried while others are still battling with this menace. Quality of service is a continual operation or activities; as a result an improved quality of service today may suffer downgrade in few weeks or months. As a result of this fluctuation in quality of GSM services, it was necessary to conduct a survey that will reveal the situation of quality of service.

Despite attempts by the GSM operators to woo customers in Nigeria, problems still linger such as: complicated tariffs, lower customer satisfaction, inefficient service delivery, interconnectivity problem, deceptive promotions, unsolicited

promotions, unsolicited short messages (SMS), call drops, and unfairly and unjustifiable billings. These are performance indicators. Therefore, the GSM providers in Nigeria are faced with the challenges of demonstrating customer-focused and continuous service improvement, as a way to ensuring customer satisfaction, brand supremacy and ultimately customer loyalty (Hashim, 2014).

Despite the high growth market of cellular phone communication, the research in customer satisfaction is still in its initial stages (Aydin & Özer, 2006; Sharma & Ojha, 2004; Woo & Fock, 1999). A survey of cellular phone customers in Hong Kong revealed that transmission quality and coverage of network are most important (Woo & Fock, 1999). Others have examined the link between loyalty, switching cost and switching behaviour (Aydin & Özer, 2006; Lee & Feick, 2001). An exploratory study of factors contributing to customer satisfaction of mobile user in India has resulted in the construction of three distinct constituents i.e., network base service performance, retailer related process performance, and network operator related performance (Sharma & Ojha, 2004). Delivering a service performance, which can satisfy customers, is critical for retaining customers and a tool to protect organizations from customer churn (Brown & Gulycz, 2001). Marketing scholars and practitioners equally emphasize on the issue of customer

satisfaction for generating loyalty among customers, which helps in maintaining existing cash flows and guarantee stable future (Teas, 1994; Zeithaml *et al*., 1996).

Hashed, Salniza and Hamid (2012) examined the relationship between perceived quality, perceived value, customer expectation and corporate image and discovered that there is significant relationships. Loke etal (2011) examines the impacts of reliability responsiveness, assurance emphathy and tangible aspects on customer satisfaction. The study revealed that these variables impact positively on the quality of services. Cengiz and Yayla (2000) tested the relationship between marketing mix, perceived value, perceived quality, customer satisfaction and customer loyalty. Marketing mix elements were found to have a significant effect on customer loyalty especially price.

As stated above, these studies were particularly conducted in countries such as Europe, Asia and America. The cultures and the advanced levels of technology in these areas might have played a crucial role in the findings of the studies in these countries. Hence, there is need for this study in a developing country like Nigeria and particularly North Western zone, Nigeria.

Study by Amusa (2005) on Consumer Behavior in the GSM market using University of Ibadan and the Polytechnic as a case study, examined the factors

affecting consumer behaviour in the GSM market and the factors that account for the demand and use of GSM facilities. In another study, Ojo (2005), considered Consumer Satisfaction in the GSM Industry in Nigeria and the various constraints against users satisfaction. Olatokun and Bodunwa (2006), in a related study, carried out a survey on GSM uses and benefits in University of Ibadan. Olatokun and Nwonne (2012) examined the significance of price, service quality, service availability, promotion and brand image as it affect users perception in selecting mobile telecommunication market. Hashim (2014) identified the determinants of customer loyalty among subscribers of GSM in Northwestern Nigeria. Oyeniyi and Abiodun (2010) examined switching cost and customer loyalty in the Nigerian mobile phone market. The study revealed that customer satisfaction positively affects customer retention and that switching cost affects significantly the level of customer retention.

Adegoke *et al* (2008) appraised the performance of GSM operators in Nigeria and discovered that as revolutionary as GSM may seem to be, many problems have bedeviled the sector. The problems identified were instability in power supply, security of infrastructure, menace of social miscreants in host communities, multiple regulations and taxation as well as inter-network connectivity. They stated

that all these factors contribute in one way or the other to the quality of services rendered by GSM operators in Nigeria.

None of these studies addressed the performance of GSM service providers and customer satisfaction. Moreover, many of these studies were conducted in the Southern zones covering only a particular state or an institution such as Lagos, Ibadan, University of Ibadan, Ibadan Polytechnic, Banks and Hotels. The findings from these studies, therefore, cannot be generalized; hence, the need for this study in North Western zone.

Some of the few studies that have made attempt in the direction of this study were the works of Hashim (2014), Adeiza (2005. 2010), Jibrin and Ahmad (2014), Olatokun and Nwonne (2012), and Adeleke and Aminu, (2012). These works had methodological problems: some concentrated in only one State or institution, while some dealt with isolated variable indicators. They also used small sample sizes selected from narrowly defined populations and, moreover, they failed to integrate the various independent variable sets. As a result, the findings and conclusions of the studies have limited relevance for broad generalizations. Therefore, this work is designed to overcome such deficiencies found in previous studies within the Nigerian context.

Historical experience of Nigeria since the launch of Econet Wireless Mobile (now Airtel) on August 6th, 2001 has been explosive. The trend has continued with much flux from which the big four (MTN, AIRTEL, GLOBACOM and ETISALAT) now dominate the GSM world in Nigeria. Whether these moguls are meeting the challenges of customer expectations has continued to draw researchers' interest and civil society. Apparently, it is on the basis of the above understanding that we also embarked on our study.

1.3 Research Questions

The following research questions were designed to guide the conduct of the study;

i. To what extent has tariff charged by GSM service providers affect customers' satisfaction?
ii. To what extent has network [coverage] by GSM service providers affect customers' satisfaction?
iii. To what extent has customer care services provided by GSM service providers affect customers' satisfaction?
iv. What is the effect of service quality on customer satisfaction of GSM services?

v. What is the effect of product development by GSM service providers on customer satisfaction?

1 1.4 Objectives of the Study

The main objective of this study is to examine the performance of GSM services and customer satisfaction in North Western Nigeria. The specific objectives are to:

i. assess the effect of tariff charged by GSM service providers on customers satisfaction.
ii. evaluate the effect of network (coverage) of GSM service providers on customers' satisfaction?
iii. examine the extent to which the customer care services provided by GSM operators have affected customers' satisfactions
iv. appraise the effect of service quality on customer satisfaction of GSM service provider.
v. ascertain the effect of product development by GSM service providers on customer satisfaction.

1.5 Hypotheses of the Study

The following null hypotheses are formulated based on the statement of the research problem and in line with the objectives of the study.

i. Tariff charged by GSM service providers has no significant effect on customer satisfaction in North Western Nigeria.

ii. Network coverage of GSM service providers has no significant effect on Customer satisfaction in North Western Nigeria.

iii. Customer care services provided by GSM operators have no significant effect on customer satisfaction in North Western Nigeria.

iv. Service quality has no significant effect on customer satisfaction of GSM service providers in North Western Nigeria.

v. Product development by GSM service providers has no significant effect on customer satisfaction in North Western Nigeria.

1.6 Significance of the Study

This study was conducted to bridge the gap existing in the customer satisfaction in the telecommunication industry and the changing nature of consumers of telecommunication due to different attitudes, tastes, needs and expectation. Availability of many networks and varieties of products enable consumers to select

from among the best, available, affordable, caring service providers that could satisfy them better.

The outcome of the study is expected to benefits the following stakeholders, GSM Service providers, Consumer Protection Council (CPC), Consumers of GSM, (Businesses and individual), Nigerian Communication Commission (NCC), Researchers/Academics, Marketing practitioners and Students.

The study is expected to assist the GSM service providers in knowing how well they are serving their customers in terms of quality of service, interconnectivity, responsiveness, reliability, variety of complementary services, offering and service charges with the intention of finding possible ways to build up customer satisfaction to a desirable level. The outcome will also help them to train their employees very well on how to relate with customers.

The study recommendation will also benefit the consumers, because it will help them enjoy more satisfactory services and effective communication. This will be translated into effective business transaction and improved socio-economic well-being. Customers, through their knowledge of Key Performance Index, can communicate with out another and demand for their rights through the responsible bodies.

Furthermore, the revelation of this study will assist NCC to perform their task very effectively. In measuring performance in the industry the outcome is expected to help NCC to monitor and sanction where applicable.

The recommendation will also assist Consumers Protection Council (CPC) to carry out its task and responsibility. In the area of collect complaints, it will facilitate how those complaints can be ratified, educate consumers on the services and products of GSM operators.

Finally, the outcome will serve as reference materials for researchers/academics; students and marketing practitioners in decision making most especially in the area of marketing research.

1.7 Scope of the Study

The study is basically concerned with the four (4) major mobile telecommunication service providers in Nigeria, these are MTN, Globacom, Airtel, and Etisalat and their subscribers within North Western Nigeria. The study covers a period of Eight years beginning from 2007 – 2014, and the key performance indicators set up by Nigerian Communication Commission in 2007, would be the standard or parameter upon which the services of GSM operators will be measured. The study does not deal with operators of other telecommunication service providers such as the Fixed

Line Telecommunication Service (FLTS) and Code Division Multiple Access (CDMA) Operators.

1.8 Limitations of the Study

One of the major limitations of this study lies with the other financial performance factors which accounted for variation of customer satisfaction that were not considered by this study and therefore cover fixed line telecommunication sector and CDMA operators.

Another important limitation of this study is the scanty nature of literature in area plus the level of subscribers' education about GSM. Finally and most importantly, the inability of operators and regulators to provides GSM subscribers population by each state made it difficult to get this figure, as a result, National population census figure 2006 was used.

1.9 Definition of Key Terms

Customer satisfaction: This refers to subscribers of GSM services providers. Customer satisfaction is the customer's feeling of pleasure or displeasure, which

results from comparing a product's perceived performance (or outcome) in relation to customer expectations.

Customer Services: system of activities that comprise the customer support systems, complaint processing, speed of complaint processing, ease of reporting complaint and friendliness when reporting complaint (Kim et al., 2004). GSM providers in Nigeria provide customer service through toll free customer care line, helpdesk and websites.

Performance: Performance is referred to as being about doing the work**,** as well as being about the result achieved. Or network coverage, customer care, product development and quality of services by GSM providers. It can be defined as the outcomes of work because they provide the strongest linkage to the strategic goals of an organisation, customer satisfaction and economics contributions.

Service Quality: Service quality is another dimensional property of service . Service quality thus, encompasses but is not limited to performance, reliability and conformity to service standards.

Tariff: Tariff is the amount of money charged for a product or service, or the sum of values that customers exchange for the benefits of having or using the product or service.

Nigerian Communication Commission, (NCC) government body responsible for monitoring and regulating activities of telecoms service providers in Nigeria.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

This chapter presents the existing body of knowledge and issues that directly or indirectly relate to the study. These issues include, concept of customer satisfaction, GSM services in Nigeria, concepts of customer services, concepts of performance, concept of service quality, the nature of customer satisfaction,, bases for evaluating customer satisfaction, components and requirement of customer satisfaction, models and measures of customer satisfaction, effects of customer satisfaction on customer loyalty and retention, consumer purchase decision process, GSM as an innovation, factors in the adoption of innovation, nature of services, , pertinent factors in the marketing of services, marketing of telecommunication services, network services, tariff or price, customer expectation, perception and loyalty. Others include review of empirical studies, and theoretical framework.

2.2. Concept of Customer Satisfaction

Customer satisfaction is the customer's feeling of pleasure or displeasure, which results from comparing a product's perceived performance (or outcome) in relation to customer expectations (Kotler, 2003). Satisfying customers is one of the main objectives of every business. Businesses recognize that keeping current customers is more profitable than having to win new ones to replace those lost. Management and marketing theorists underscore the importance of customer satisfaction for a business's success (McColl-Kennedy and Schneider, 2000; Reichheld and Sasser, 1990). Accordingly, the prestigious Malcolm Baldrige National Quality Award recognizes the role of customer satisfaction as the central component of the award process (Dutka, 1993). Some recent statistics demonstrate the benefits of good customer satisfaction and the costs of poor customer satisfaction on businesses.

Hanif *et al* (2010) found that whenever one company is providing a product or service, If the product or service is according to the requirement of the consumer, the consumer will get satisfaction and the higher the quality of product brand, the higher will be satisfaction of the consumers (Gerpott *el at*., 2001) and in coming future time, the company will have the opportunity to make more profit by keeping their customers satisfied. Hauser *et al* (1994) state that If the company wants to retain the consumers they should try to satisfy them. Guo *et al* (2009) reinterate that the Company unsatisfied customers quickly switched to other brands. Henkel *et al.* (2006) found that satisfied customers have high extent of usage and chances to repurchase in future. Good customer satisfaction has an effect on the profitability of nearly every business. For example, when customers perceive good service, each will typically tell nine to ten people. It is estimated that nearly one half of American business is built upon this informal, "word-of-mouth" communication (Gitomer, 1998; Reck, 1991).

Improvement in customer retention by even a few percentage points can increase profits by 25 percent or more (Griffin, 1995). The University of Michigan found that for every percentage increase in customer satisfaction, there is an average increase of 2.37% of return on investment (Keiningham and Vavra, 2001). Most people prize the businesses that treat them the way they like to be treated; they'll even pay more for this service. In the words of (Rust and Zahorik, 1993) Customers Satisfaction has become a corporate level strategy for business. Many researchers and authors have discussed the importance of customer satisfaction in their own words. According to Drucker (1973) customer satisfaction is to be considered the base of success for any business. For the relationship between marketing and management, customer satisfaction is corner stone (Claycomb and Martin, 2002), and for any sort of organization, customer satisfaction becomes a competitive advantage (Anderson *et al.*,1994).

However, a lack of customer satisfaction has an even larger effect on the bottom line. Customers who receive poor service will typically relate their dissatisfaction to between fifteen and twenty others. The average American company typically loses between 15 and 20 percent of its customers each year (Griffin, 1995). The cost of gaining a new customer is ten times greater than the cost of keeping a satisfied customer (Gitomer, 1998). In addition, if the service is particularly poor, 91% of retail customers will not return to the store (Gitomer, 1998). In fact, if the service incident is so negative, the negative effects can last years through repeated recollection and recounting of the negative experience (Gitomer, 1998; Reck, 1991).

The message is obvious - satisfied customers improve business and dissatisfied customers impair business (Anderson and Zemke, 1998; Leland and Bailey, 1995). Customer satisfaction is an asset that should be monitored and managed just like any physical asset. Therefore, businesses

that hope to prosper will realize the importance of this concept, putting together a functional and appropriate operational definition (McColl-Kennedy and Schneider, 2000). This is true for both service-oriented and product-oriented organizations (Sureshchander, Rajendran, and Kamalanabhan, 2001). In telecom sector satisfied customers have high usage of extent and have the possibility to repurchase in the future again. The greater the satisfaction level, the more will be the chances of repurchasing by customers (Iqbal *et al*., 2008), and reduce customer whip (Henkel *et al*, 2006; Serenko and Turel, 2004). Iqbal *et al* (2008) also found that a satisfied customer can pursue others to use the services provider.

Kim *et al* (2004) found that customers' satisfaction leads them to use current service and creates loyal customers for future. The customers who are loyal reported to produce higher retention rates, tend to commit a higher contribution of their category spending for the firm, and are more likely to pursue others to be a part of the customers of the firm. (Zeithaml, 2000; Keiningham, *et al*., 2007). Melisidou and Theocharis (n.d.) found that those customers who are satisfied from any celluler network, do not stay only as customers but also create for the organization new business as well. Loyal and satisfied customers become a higher source margins for an organization. One aspect of customer satisfaction literature which the researcher felt is missing is the Building of Trust in customers. There is need to dwell on that to enable customer feel He/She is part of an organisation and as a result can defends its services. Customer satisfaction (CS) has become a

major area of marketing that has received considerable publications from practitioners and scholars in the last two decades. CS has been recognized as an important element that drives customer retention, loyalty and post-purchase behavior of customers (Kotler& Keller, 2006; Reichheld, 1996; Rust *et al.*,1994; Heskett et al., 1994). Many studies confirm that the measurement of CS regarding the service quality of firms is a necessary means by which organizations delve into the minds of its customers for useful feedback that could form the basis for effective marketing strategy (Zairi, 1994). Since firms exist to satisfy customers by meeting their requirements, it is crucial for service providers that offer services to periodically and consistently measure the satisfaction of their customers. As customers use the services, it might be that they are not satisfied, to some extent, with certain dimensions of the service quality. For this reason this study examines customer satisfaction with service providers.

Customer satisfaction has been defined in different context by different authors. One, "Customer satisfaction is a "psychological concept that involves the feeling of wellbeing and pleasure that results from obtaining what one hopes for and expects from an appealing product and/or service" (WTO, 1985). Two, Customer satisfaction is seen "as an attitude-like judgment following a purchase act or a series of consumer product interactions." Youjae Yi, (1990 cited in Lovelock &

Wirtz, 2007). Three, customer satisfaction is "a consumer's post-purchase evaluation and affective response to the overall product or service experience." (Oliver, 1992). Four, "Satisfaction is merely the result of things not going wrong; satisfying the needs and desires of consumers." (Besterfield, 1994); and Five, satisfaction as pleasure; satisfaction as delight (Kanji and Sa Moura, 2002);

CS is "an experience-based assessment made by the customer of how far his own expectations about the individual characteristics or the overall functionality of the services obtained from the provider have been fulfilled." (Bruhn, 2003); "Satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a product's performance (outcome) in relation to his or her expectation." (Kotler& Keller, 2006 p. 144)."The process of customer overall subjective evaluation of the product/service quality against his/her expectation or desires over a time period." (Gyasi & Azumah, 2009). Parasuraman et al., (1985) noted that though satisfaction and service quality are treated as synonymous, the two terms are not the same.

A review of literature on customer satisfaction brings to lime light some significant concepts about satisfaction that may be necessary to clarify in measuring the construct. First, while some authors perceive satisfaction as a cumulative and

others view it as transactional. On the one hand from a transactional-specific perspective, customer satisfaction is based on a one time, specific post-purchase evaluative judgement of a service encounter (Hunt 1977; Oliver 1977, 1980, 1993 cited in Wang &Lo, 2002). On the other hand, in the cumulative CS perspective, CS is conceptualised as an overall customer evaluation of a product or service based on purchase and consumption experiences over a time period (Fornell, 1992; Anderson et al., 1994a, b; cited in Wang &Lo 2002). It is argued that since cumulative satisfaction is based on a series of purchase and consumption experiences, it is more useful and reliable as a diagnostic and predictive tool than the transaction perspective that is based on a one-time purchase and consumption experience. Therefore, in this study, customer satisfaction is measured from the last eight years of being a customer using GSM network, so CS is conceptualised as cumulative.

Again, CS may be described as a process or an outcome. One area that has received considerable debate in customer satisfaction literature is whether customer satisfaction should be defined as an outcome or a process. Many early definitions conceptualised satisfaction as a process which is currently the dominant view held by most scholars (Oliver, 1980, Parasuraman et al., 1988). The process perspective presupposes that customer satisfaction is a feeling of satisfaction that

results from the process of comparing perceived performance and one or more predictive standards, such as expectations or desires (Khalifa & Liu, 2002; Gyasi &Azumah, 2009). This perspective is grounded in the expectancy disconfirmation theory proposed by Richard Oliver (Oliver, 1980). The customer is satisfied if the performance of product/service is equal to his/her expectations and he/she is dissatisfied if the product/service performance is perceived to be below his/her expectation (negative disconfirmation). If expectation exceeds perceived performance, the customer is highly satisfied. By taking satisfaction as a process these definitions do not focus on satisfaction itself but things that cause satisfaction, the antecedents to satisfaction, which occur primarily during the service delivery process (Vavra, 1997).

Recent studies have found that satisfaction as an outcome or end result during the process of the consumption of a service; it is viewed as a post-purchase experience (Vavra, 1997). This view has its roots in motivation theories that postulate that people are driven by the desire to satisfy their needs (Maslow, 1954) or that their behaviour is directed at the achievement of relevant goals (Vroom, 1964). In this way satisfaction is perceived as a goal to be achieved and can be described as consumer fulfillment response (Rust & Oliver, 1994). In the context of this study, customer satisfaction is defined from process perspective because we believe that

in GSM network, customers' evaluation of GSM services takes place primarily during the service delivery process and continues, but not just an outcome that customers strive to achieve.

2.2.1 Customer Satisfaction Formation and Measurement

One of the most popular schools that seek to explain the satisfaction formation process is the disconfirmation theory. This theory was championed by Oliver (1980). Proponents of disconfirmation theory believe that satisfaction is formed as a result of the discrepancy between the perceived performance of a product/service and the customer's expectation. According to this theory, customers come to the service encounter with some expectation and by comparing their expectation with the perceived performance of the product they purchase or consume, they either confirm or disconfirm their expectation, which results in satisfaction or dissatisfaction; Expectation disconfirmation model of satisfaction formation has been empirically tested by Khalifa and Lui (2000), Bozorgi (2007} and Gyasi and Azumah (2009). They all found among other cognitive standards like desire, expectation disconfirmation has stronger impact on customer satisfaction. Therefore, expectation disconfirmation could be used to measure overall customer satisfaction.

In measuring customer satisfaction, three broad categories have been identified, which are performance scales are those that use scales such as poor, fair, good and excellent; disconfirmation scales are those that use scales such as worse than expected to better than expected; and satisfaction scales are those that use scales such as very dissatisfied to very satisfied (Danaher and Haddrell, 1996). Danaher and Haddrell (1996), Devlin *et al.* (1993) and Rust *et al.* (1994, pp. 61-2) have recommended the use of disconfirmation scales instead of the others for three reasons. "First in one disconfirmation-based single question, it captures succinctly Parasuraman*et al.*'s (1988) two-stage SERVQUAL measurement, i.e. much worse than expected to much better than expected. Second, it is shown mathematically that comparison with expectations will correlate higher with customer retention than either a quality question or a satisfaction question (Rust *et al.*, 1994, p. 61). Lastly, using disconfirmation scale is better because a customer rating service quality highly, for example as good or excellent, may not perceive it as 'better than expected'."

Danaher and Haddrell (1996) studied a comparison of several scales simultaneously on the same respondents. They concluded that the disconfirmation scale is a preferred method in measuring customer satisfaction, and that a five-point disconfirmation scale would be an improvement over the three-point scale if

high predictive validity is essential. They however noted that one setback of the five-point disconfirmation scale could be its use in telephone surveys, where respondents might have to be continually reminded of five rather than three scale points. In this study, since personal contact was to be used and high predictive validity was a major concern, a five-point disconfirmation scale was adopted from much better expected to much worse than expected. Therefore, overall customer satisfaction and customer satisfaction with various dimensions of internet banking service quality would be measured using five-point Likert disconfirmation scales.

Recent interpretations in the consumer domain now couch satisfaction as a fulfillment response. Fulfillment implies that a consumption goal is known, as in basic motives of hunger, thirst, and safety. However, observers of human behavior understand that these and other goals can be and frequently are modified and updated in various ways. Thus, consumer researchers have moved away from the literal meaning of satisfaction and now pursue this concept as the consumer experiences and describes it. In Oliver (1997, p. 13), the following definition has been proposed as being consistent with the conceptual and empirical evidence to date: satisfaction is the consumer's fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels

of under- or over-fulfillment. Here, pleasurable implies that fulfillment gives pleasure or reduces pain, as when a problem in life is solved. Thus, individuals can be satisfied just to get back to normalcy, as in the removal of an aversive state (e.g., pain relief). Moreover, fulfillment is not necessarily limited to the case of met needs. Over-fulfillment can be satisfying if it provides additional unexpected pleasure; and under-fulfillment can be satisfying if it gives greater pleasure than one anticipates in a given situation. Note that it has not been necessary to provide a separate discussion of dissatisfaction.

If the word displeasure is substituted for pleasure in the satisfaction definition the result is dissatisfaction. Thus, the displeasure of under-fulfillment typically is dissatisfying and, interestingly, over-fulfillment may be dissatisfying if it is unpleasant – the case of "too much of a good thing." A number of related, but important, concepts are frequently used interchangeably with satisfaction, although closer inspection reveals that they are actually distinct from satisfaction despite the fact that they may be related to satisfaction in various ways. Generally, they represent either the affective (liking/pleasure) or cognitive (thinking/judging) components of product and service experience although some are hybrids of the two. Within the antecedent categories, *moods* may play a role in satisfaction formation. These are positive or negative feelings of a largely non-thinking nature,

although certain events may have preceded their appearance. *Quality*, in contrast, is a cognitive judgment that summarizes the exceptionally good (or bad) elements of the product, especially when compared to other direct alternatives or offerings (brands). In a similar vein, *value* is a judgment that compares the likely outcomes of purchasing to the inputs forgone. Thus, value results when consumers compare what is to be received (e.g., performance) to the acquisition costs (e.g., financial, psychological, effort).

Another antecedent concept that is actually a hybrid affective-cognitive judgment is *attitude*. It is a relatively stable judgment that a product or service has desirable or undesirable properties. The judgment takes the form of a liking or disliking and is based on many separate evaluations of product features. Whereas moods can emerge as pure feeling states, attitudes result from deliberate processing of (product- or service-related) information. Unlike satisfaction, consumers do not have to experience consumption to have formed an attitude; hence attitudes can exist prior to purchase/usage. Satisfaction, in contrast, is a post-usage phenomenon, is purely experiential, and results from comparative processes, discussed next; attitudes do not require comparisons. To be discussed, *disconfirmation*, also known as expectancy disconfirmation, is the result of a comparison between what was expected and what was observed. In current

satisfaction parlance, it more commonly refers to an expectation-performance discrepancy. Consumers would describe this concept in terms of performance being better than or worse than expected with regard to a product or service. The first component of disconfirmation, *expectation*, is a predisposing prediction – sometimes stated as a probability or likelihood – of attribute or product performance. *Performance* itself is the perceived amount of product or service attribute outcomes received, usually reported on an objective scale bounded by good and bad levels of performance (e.g., courteous/discourteous service). This is frequently confused with quality, a judgment of performance excellence. Although frequently substituted for satisfaction, recent data suggest the concepts are separate and distinct.

In the domain of the consequences of satisfaction, a major concept is that of *loyalty*. Brand loyalty is a deeply rooted commitment to repurchase a product or repatronize a service in the future. It is not to be confused with repeat purchasing, which may involve constrained or happenstance (e.g., random) repetitive behavior. Although related to satisfaction, loyalty will be

2.2.2 Measurement Issues: Satisfaction Scales

Having defined and delineated satisfaction and related concepts, discussion proceeds to measurement more generally. This section will be necessarily brief because many reference sources are available (e.g., Chakrapani, 1998; Myers, 1999) and because measurement in general has been studied for some time. This section will also serve the purpose of a recapitulation of past research and as a prelude to the final section where measures are suggest based on the conceptual framework used here.

At this point, it will be helpful if the reader appreciates that, like attitude, satisfaction is a hybrid concept composed of both an affective component (pleasure) and a cognitive component (e.g., extent of need fulfillment) as in the previous definition – but after the purchase and use situation (i.e., after disconfirmation has been experienced). Thus, it is assumed that, when a consumer affirms that "I am satisfied (dissatisfied)," both of these components are inherent in the reply. This understanding is useful if one wishes to expand a satisfaction scale with the use of affect-related or cognition-related "cousins." Discussion begins with simple verbal (qualitative) statements of the form elicited when respondents are interviewed about their satisfaction or dissatisfaction with a product or service episode. Using a phone interview as an example, the respondent would be read the five categories of: (1) very satisfied, (2) satisfied, (3) neither satisfied nor

dissatisfied, (4) dissatisfied, and (5) very dissatisfied, and asked to select one. This question would usually be asked once per attribute, product, etc. up to the point of respondent fatigue, a critical factor in phone surveys. For this reason, many prefer printed questionnaires which can be completed at the respondent's leisure.

Whether measuring satisfaction with attributes or products, single item scales of this nature, while appearing to give discrete, unambiguous answers, have no inherent reliability unless they are readministered – an impracticality. Validity is also suspect if one were to test a single, five-point satisfaction response against many other factors thought to influence satisfaction. In the case of a negatively skewed distribution of satisfaction scores – the typical case with the bulk of data in the satisfied region – the variance in this variable would be very restrictive and validation would be compromised. At a level more reliable than that that of one-item scales, multi-item scales can be formed that include a satisfied/dissatisfied "anchor" along with items tapping related concepts. For example, the researcher could include feelings (pleasant/unpleasant), stronger emotions (anger/delight), attitude-based (like/dislike), and cognitive (high/low performance) descriptors. This method is frequently performed, but the scale produced (frequently through addition or weighted combination) is now one of a mixed nature. If carefully constructed, however, with the use of close relatives of satisfaction, the reliability

will be very good. Validity is also considerably improved because each item in the multi-item scale adds to the available variance for testing. At a still higher level, the companion descriptors can be composed of items reflecting conceptually-based antecedents and consequences of satisfaction.

2.2.3 Measurement Issues: Scaling the Number of Scale Points

For predictive purposes, a minimum of three scale points is recommended, particularly for phone surveys. As the number of points becomes large, exceeding ten for example, problems of interpretation are introduced. One reason is that consumers tend to use sub-intervals of very long scales, such as restricting responses to an interval of five points on a ten-point scale. Thus, one respondent's "7" may be another's "9" for the same perceived performance level. In effect, these consumers are interpreting the scale's meaning in a manner not known to the researcher. An exception is the “chances in 10” scale. When percentages have clear meaning in the context used, this 11-point scale (0 to 100%) is admissible. In particular, “50-50” – representing a true midpoint, is easily understood.

2.2.4 Odd or Even Number of Items: The Issue of a Midpoint

The previous discussion addresses the debate over whether there should be an even or odd number of items in a scale. Consider the following two alternatives:

(1) Bad 1 2 3 4 5 6 Good (2) Bad 1 2 3 4 5 6 7 Good

In (1), there is no midpoint and respondents who believe that the feature is neither bad nor good are forced to commit themselves to answering with a “3” or with a “4,” the first suggesting modestly negative feelings, the second modestly positive. In (2), this respondent can comfortably respond with a "4." Opponents of the second scale argue that there is no information in "fence-sitting" and that few, if any consumers are really neutral toward features and products. This author disagrees in that neutrality is information and the percentage of respondents who feel this way may provide the researcher with additional insight. For the above and other reasons, use five to seven points. Three is permissible if attention spans, brevity, or respondent fatigue operate, while 11-point scales work nicely for chances-in 10 responses.

Because consumers tend to rate products positively, particularly with regard to satisfaction, most ratings are skewed, with the bulk of responses in the positive half of the scale. This tendency is more pronounced for scales with a smaller number of points (e.g., three and four – the latter not recommended). In fact, this issue also answers the question of “what a good satisfaction score is.” The shape of the score distribution is a very revealing quality. Poor scores are represented by a “normal”

distribution peaking at the scale midpoint. Good scores peak near the upper (positive) extreme and then decline before reaching the extreme. Excellent scores, in contrast, rise continuously up to the upper extreme of the scale without falling.

2.2.4 The Performance of Features (Attributes)

In an all-too-familiar research scenario, much of satisfaction research is conducted according to the following format: A list of key product or service features is generated which, hopefully, contains an exhaustive set of factors thought to cause satisfaction and dissatisfaction. In a fairly direct manner, consumers are asked to retrospectively rate the product or service on the degree to which each of the features was delivered. At the same time, the consumer may be asked to rate the product on an overall basis or on satisfaction. An assumption of this technique is that those features which are more aligned with the overall score across consumers (high feature scores corresponding to satisfaction; low feature scores to dissatisfaction) are those which have the greatest impact.

Despite the ubiquity of this method, problems are inherent in its implementation. One problem is that the list of features cannot be exhaustive for all consumers. A second problem arises from the disparate goals of consumers (need fulfillment) versus those of designers, engineers, and manufacturing personnel. In part, this

problem can be addressed by using the proper level of feature abstraction when preparing the attribute list. Another after consumption (predicted or recalled – retrospective – expectations), and performance are compared to form an "objective" (or gap) disconfirmation level; objective disconfirmation provides the basis for a subjective interpretation of this expectation-performance difference; and subjective disconfirmation is direct cause of satisfaction. Additionally, the performance satisfaction link represents the direct effect of performance on satisfaction not channeled through problem, discussed next, is that of the relevance of features at different stages of decision making.

2.2.5 Satisfaction Drivers vs. Choice Criteria

In pursuing the reasons behind the consumer's satisfaction response, it should be borne in mind that the researcher's goal is to determine the correct feature list of satisfaction drivers, as opposed to product or service *choice criteria*. A common mistake is that of assuming the features consumers use in selecting a product from a list of alternatives are identical to the set of features that play into satisfaction and dissatisfaction judgments. Although many of the choice features will also be those used in forming satisfaction judgments, the *assumption* that the choice feature set and the satisfaction set are identical or even similar has been shown to be incorrect.

Consider summer vacation travel. Some features, such as the availability of travel and lodging, are used by the consumer only in the choice phase of decision-making. The combined cost of the travel package could be an example. A consumer may shop for the lowest total monetary outlay. Once found, this cost ceases to be a factor in satisfaction with the trip, which may be months away. As an example of a "pure" satisfaction driver, certain destination amenities such as air conditioning would provide an example of this situation. Brownouts and equipment failures could not have been predicted previously and any hotel stay in the destination locale is randomly subject to this effect.

Other features are examples of mixed or dual influence, affecting both choice and satisfaction to the same degree. Prevailing weather patterns in the chosen destination would be an example of this phenomenon. Although the vacation planner has no control over the actual weather encountered, destinations are chosen for their *expected* weather; mother nature is fickle in this regard. Thus, for all these reasons, researchers are advised to determine satisfiers and dissatisfiers independently of choice determinants. Additionally, the prior discussion illustrates why a satisfaction measure is preferred to one of attitude or quality if consumer satisfaction is, in fact, the goal of the firm. This is so because both attitude and

quality judgments are used in choice and thus may give a distorted picture of the features most strongly related to satisfaction

2 2.3 Nature of Customer Satisfaction

Today's companies are facing their toughest competition ever and the key to achieving competitive advantage in order to win and outperform competitors lies in organizations doing a better job of meeting and exceeding customer expectation, hence high customer satisfaction. Concept of Customer satisfaction (CS) is a term that has received considerable attention and interest among scholars and practitioners perhaps because of its importance as a key element of business strategy, and goal for all business activities especially in today's competitive market (Anderson, Fornell, and Lehmann, 1994; Gro¨nroos, 1984; Lovelock and Wirtz, 2007). The concept has been variously defined by many authors. ''Satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a product's performance (outcome) in relation to his or her expectation'' (Kotler and Keller, 2006). Satisfaction is a ''psychological concept that involves the feeling of wellbeing and pleasure that results from obtaining what one hopes for and expects from an appealing product and/or service'' (WTO, 1985). CS is "as an attitude like judgment following a purchase act or a series of consumer product interactions" Youjae (1990 cited in Lovelock and Wirtz 2007).

State that CS is ‘‘a consumer’s post purchase evaluation and affective response to the overall product or service experience’’ (Oliver, 1992). ‘‘Satisfaction is merely the result of things not going wrong; satisfying the needs and desires of consumers.’’(Besterfield, 1994); CS is ‘‘an experience-based assessment made by the customer of how far his own expectations about the individual characteristics or the overall functionality of the services obtained from the provider have been fulfilled’’ (Bruhn, 2003).

Admittedly, satisfaction is more complex to define to accurately fit every context and measure. In the words of Oliver (1997), “everyone knows what [satisfaction] is until asked to give a definition. Then it seems, nobody knows”. From marketing perspectives, customer satisfaction has multi-dimensionality. The object of customer satisfaction may be varied and can be related to different dimensions of multiple experiences with product/service provider (Surenshchandar *et al*. 2002 cited in Satari, 2007). Kotler (2003) asserted that whether the buyer is satisfied after purchase depends on the offer’s performance in relation to the buyer’s expectation. In general, Kotler (2003) argued that satisfaction is a person’s feeling of pleasure or disappointment resulting from comparing products, perceived performance in relation to his or her expectations. The question therefore, includes what bases are there for evaluating consumer satisfaction and how can this

satisfaction be measured? The services market is becoming ever more competitive, as price competition intensifies and the shifting of loyalty becomes an acceptable practice. Many industries have already experienced a rearrangement of marketing budgets in order to devote more resources to defensive marketing, namely customer retention (Patterson and Spreng, 1998). Several initiatives have been undertaken to improve retention, including value chain analysis, customer satisfaction and loyalty programmes (Gummerson, 1998). The customer satisfaction-retention link has received more attention among marketing and management practitioners and academics. Customer satisfaction has long been regarded as a "proxy" for a firm success since it is inextricably linked to customer loyalty and retention.

Several authors (Bloemer and Lemmink, 1992; Bloemer and Kasper, 1995; Sharma and Patterson, 2000) highlighted, however, that the link between customer satisfaction and customer retention is reliant, to some extent, upon other factors such as the level of competition, switching barriers, proprietary technology and the features of individual customers. The relationship between these two key constructs is considered to be far more complex than it might first seem (Fournier and Mick, 1999).

Satisfaction has a significant impact on customer loyalty (Sharma and Patterson, 2000) and, as a direct antecedent, leads to commitment in business relationships (Burnham *et al*., 2003), thus greatly influencing customer repurchase intention (Morgan and Hunt, 1994). Indeed, the impact of satisfaction on commitment and retention varies in relation to the industry, product or services environment. However, customer commitment cannot be dependent only on satisfaction (Burnham *et al.*, 2003). Relational switching costs, which consist of personal relationship, loss and brand relationship, costs and involved psychological or emotional discomfort due to loss of identity and breaking of bonds (Burnham, Frels and Mahajan, 2003), have a moderating effect on the satisfaction – commitment link (Sharma and Patterson, 2000). Since relational switching costs represent a barrier to exit from the relationship, they can be expected to increase the relationship commitment. High switching barriers may mean that customers have to stay (or perceive that they have to) with suppliers who do not care for the satisfaction created in the relationship on one hand. On the other hand, customer satisfaction is usually the key element in securing repeat patronage; this outcome may be dependent on switching barriers in the context of service provision (Jones, Mothersbaugh and Beatty, 2000). In fact, in certain conditions, a customer might be less than satisfied with a service supplier, but still continues to deal with it

because the costs of leaving are perceived to be too high. Thus, the so called loyalty programmes clearly are an example of programmes designed to weaken switching barriers. Indeed, if the firm is able to manage the customer switching costs, it can still retain the customer even though the satisfaction may be lower. The longer the relationship, the more the two parties gain experience and learn to trust each other (Dwyer, Schurr and Oh, 1987). Consequently, they may gradually increase their commitment through investments in products, processes, or people dedicated to that particular relationship.

Moreover, a switch in supplier involves set-up costs and termination costs; the former include the cost of finding another supplier who can provide the same or better performance than the current supplier or the opportunity cost of foregoing exchange with the incumbent, while the latter include the relationship of specific idiosyncratic investments made by the customer that have no value outside the relationship (Dwyer *et al*., 1987). Since a degree of social interaction between the provider and the customer is often required for the service to be "manufactured", the theoretical foundations for the study of switching costs in a service context can be found in social exchange theory (Emerson, 1976). In fact, service encounters can be viewed as social exchange with the interaction between service provider and customer being a crucial component of satisfaction and providing a strong

reason for continuing a relationship (Barnes, 2002). Social Exchange Theory attempts to account for the development, growth and even dissolution of social as well as business relationships. In other words, people (or businesses) evaluate their reward (cost) ratio when deciding whether or not to maintain a relationship. Rewards and costs have been defined in terms of interpersonal (e.g. liking, familiarity, influence), personal (gratification linked to self esteem, ego, personality) and situation factors (aspects of the psychological environment such as a relationship formed to accomplish some task).

In a services context, considering the level of interpersonal contact needed to produce services, there is a range of psychological, relational and financial considerations that might act as a disincentive for a hypothetic change of service providers. Consistently with the switching costs literature, social capital acts both as a barrier that makes it more difficult or costly (psychological, relational, economic) to change service provider (Patterson, 2004), and as an influence, created by the endogenous and contextual interactions, that is distinct in ways that consumers might be influenced by their social environments.

Indeed, social capital has been conceptualised in many different ways (for example, Coleman 1994; Serageldin, 1999). Putman (2000) defines it as a

representation of the norms of reciprocity and trustworthiness that arise from social relations, while the Organization for Economic Co-operation and Development (OECD) (2001) perceives social capital as "the resources gained through social ties, membership of networks and sharing of norms". Therefore, informal networks of social support, including relatives, friends and other extra household connections such as a supportive community, have value. These networks constitute a locus of access to resources; which in turn determine socio-economic outcomes (Collier, 1998). In the preceding section, we looked at the bases for evaluating customer satisfaction.

2.4 Bases for Evaluating Customer Satisfaction

Consumer satisfaction with the consumption of a particular good or service depends largely on the nature of the goods and the consumer's requirement. Leonard and Pascal (2001) have suggested several bases by which consumer satisfaction with GSM services can be assessed. These are quality; interconnectivity; reliability; responsiveness; variety of complimentary services; assurance; empathy; and service charge.

Subscribers would compare the perceived services with the expected service and if the perceived service falls below the expected service, they are most likely to be

disappointed. If however, the perceived services meet or exceed expected service: they are likely to continue to stay with the provider and will be willing to recommend it to others. It as a result of the above recommendations that this survey was done. The components and requirements of customer satisfaction is discussed in the next section.

2.5 Components and Requirements of Customer Satisfaction

The concept of customer satisfaction comprises of several components from distinct sources (McColl-Kennedy and Schneider, 2000). Customer satisfaction begins with clear, operational definitions from both the customer and the organization. Understanding the motivations, expectations, and desires of both gives a foundation in how to best serve the customer. It may even provide information on making improvements in the nature of business. This is the heart of research into customer satisfaction (Naylor and Greco, 2002). The importance of clearly defining the key concepts and elements of satisfaction provides a template by which information can be gathered about what is, and what is not, working. This includes both the hard measures – those that are more tangible and observable (i.e., number of complaints, average waiting time, product returns,) and the soft measures – those less tangible aspects (i.e., friendliness, helpfulness, politeness,)

(Hayes, 1998). These definitions often start with the most vague and general, and shift to the highly specified and precise examples. The bottom line is that in order to know about customer satisfaction, one needs to know what to look for (Mitchell, 1999). The organization needs to seek this information from both within and without.

The organizational requirements of customer satisfaction are the internally based processes, components, standards, and criteria that a business strives to achieve. These are the performance goals and benchmarks set forth by the business, for the business. These are the elements of corporate culture (Hayes, 1998). Meeting or exceeding these is often an indicator of success or failure. At times, these indigenous components of customer satisfaction may overlap with those set forth by the customer; at others they may be divergent.

Those processes, components, and standards that are deemed important by the customer are other important sources of information. In order for a business to meet the needs and desires of the customer, the business must know the needs and desires of the customer. This information is vital not only for successful business, but also for understanding and improving customer satisfaction. This important

component helps to set the standards and components of satisfaction from the perspective of the consumer (Hayes, 1998).

Satisfaction dimensions are developed from the previously identified requirements. These are the specific components that make up the requirements. For example, if a customer and organizational requirement is for customer service, the satisfaction dimensions may include interactions, timeliness, and responsiveness. These are the clusters that define the requirements (Hayes, 1998).

Critical incidents are the specific operations that relate to the satisfaction dimensions. These are often the concrete and measurable behaviours and actions of employees, groups, or organization. This may also include policies, procedures, and protocols in place within an organization (Hayes, 1998). From this continued definition and distillation of various sources of data, the actual development of a customer satisfaction instrument or tool can begin in earnest. As always, the planning of the research is the most important component in a successful information-gathering process. It is further helpful that a model of customer satisfaction that incorporates the organizational and customer requirements exists and is applicable in practice.

2.6 Models and Measures of Consumer Satisfaction

Given the intense competition in today's business environment, operators that would eventually win are those who could gain more customers' loyalty and customer satisfaction. However, such operators will have to constantly develop tools for tracking and measuring customer satisfaction.

One model of measuring customer satisfaction that has received considerable attention in the service industry is the Met-Expectations Model. This is also known as the Discrepancy Model, Disconfirmation of Expectations Model, or Gap Model for Managing Quality (Parasuraman, Berry and Zeithaml, 1985, 1993). The basic premise of the model is that quality can be defined by the differences between the customer and the organization in terms of service quality (Parasuraman, Berry and Zeithaml, 1985). This is true of perceptions, expectations, and actual service delivery from the two perspectives. These differences, or gaps, can be used to identify the relative strengths and weaknesses in service quality of an organization (Grapentine, 1999). Furthermore, this provides a measure of performance quality in an area that has been more difficult to operationalize (Patti, 1987).

The Met-Expectations Model of Customer Satisfaction is based upon a framework of five potential service quality gaps (Parasuraman, Berry, and Zeithaml, 1985). The first four are those on the provider side of service. The fifth relates to the customer side of service. These gaps are -

***Gap 1**: The difference between customer expectations and management perceptions of customer expectations*

Simply, this is the point of knowing what the customer expects. It is important for an organization to be clearly aware of what it is exactly that the customers expect. Failure to do so can lead to poor perceptions of satisfaction with service quality. This is the cornerstone of effective business – knowing one's customer (Dutka, 1993).

Gap 2: *The difference between management perceptions of customer expectations and service quality expectations*

This gap relates to the consistency between the organization's established specifications of service quality and expectations of its customers. The intended service must meet the expected service. The more exact these are, the more likely that the organization is measuring the important qualities of service anticipated by its customers. The customer must determine the standards of service delivery for satisfaction to be positive (Shostack, 1990; Takeuchi and Quelch, 1990).

Gap 3: *The difference between actual service quality specifications and the service actually delivered.*

This is referred to as the service performance gap. This is the difference between what an organization stipulates as service standards and practices and what employees actually deliver to customers. These differences could be due to either the inability or the unwillingness of staff to perform as the organization describes. An organization must be closely and carefully monitoring the provision of service. Failure to do so will lead to lower customer satisfaction (Gitomer, 1998).

Gap 4: *The difference between service delivery and what is communicated to customers.*

The consistency between organizational assurances of service delivery and actual service delivery is the issue of this gap. The premise is the follow through on promises made to customers by an organization. Failure to deliver as promised can lead to customer dissatisfaction, not only with the service, but the agency as well. This is identified as a significant reason for customer defection (Reichheld and Sasser, 1990).

Gap 5: *The difference between customer expectations and perceptions*

Another key difference that affects satisfaction is between customer expectations and perception. The service delivery that is perceived must meet or exceed anticipations. Failure to do so can lead to customer dissatisfaction – outrage in the extreme - while meeting or exceeding these can lead to satisfaction – or delight in the extreme. (Keiningham and Vavra, 2001). Obviously, happy customers help and angry customers harm business.

The model is appealing both in its simplicity and intuitive logic. Customer expectations of service that are closely matched with perceived actual services will be satisfied customers. If expectations exceed actual services, the client is dissatisfied (or worse). Conversely, if the actual services surpass expectations, the customer is very satisfied.

The Met-Expectations Model of customer satisfaction has been applied in a wide variety of service settings. These have included library usage (Cullen, 2001), tourist services (Swan and Bowers, 1998), public health services (Bryant, Kent, Lindenberger, Schreiher, Canright, Cole, Uccellani, Brown, Blair, and Bustillo-Hernandez, 1998), medical and dental services (Taylor and Cronin, 1994), and human services (Selber and Streeter, 2000).All the sectors above are in service industry, Applying this model in telecommunication (GSM service) no doubt will

work, because to the best of our knowledge no researcher has utilized the model in telecommunication sector and this give advantages to the researcher.

Stanton (2000) offers four (4) methods through which companies can use to track and measure customer satisfaction, they includes; Complaints and Suggestion System, Customer Satisfaction Survey, Ghost Shopping, and Lost Customer Analysis: Companies should contact customers who have stopped using their product or service to learn why this happened. The Researcher employs customer satisfaction survey as recommended to measure customer satisfaction with performance of GSM service providers.

2.7 Methods of Collecting Customer Satisfaction Information

There are several methodologies of research that can be utilized to collect information regarding customer satisfaction. Factors such as information need, resources, accessibility to customers, sample to be used, time, and so forth must be considered prior to selection of a methodology. As would be expected, each has its own strengths and weaknesses in relation to one another (Dutka, 1993; Leland & Bailey, 1995). The following is a brief overview of the more commonly selected methods.

3 *Written Surveys;* Using this common method, customers are asked to complete a document that poses a series of specific questions regarding specific dimensions and items of satisfaction. These are tailored to fit the identified needs of both the organization and the customer base. Questions or statements may be closed-ended or open-ended, and often involve Likert-type scales. These can be completed in person, through the postal system, or online. Advantages include a lower cost per completed survey and the lack of pressure on customers to provide quick answers. Disadvantages include poor response rates (average returns of 30 to 50%) (Leland & Bailey, 1995), incomplete surveys, poor quality control due to lack of monitoring, bias due to non-response, and respondents need to be reasonably literate to comprehend the survey (Dutka, 1998).

4 *Telephone Survey;* This method involves the utilization of interviews via telephone of customers that either follows a planned, specific series of questions, or involves the discussion of information based upon the responses given. Sometimes geographic distances or time constraints direct the adoption of this methodology. Advantages include monitoring of interviews for improved quality control, higher response rates, less bias due to non-response, shorter time requirements for completion, reasonably low cost. Disadvantages include sampling bias (telephone ownership), difficulty reaching respondents, and the quick responses to telephone surveys do not always allow for adequate thought. (Dutka, 1993; Leland & Bailey, 1995).

5 *Focus Groups;* This method involves bringing together eight or more customers by invitation to answer prepared specific questions presented by a moderator. The average group lasts about one to one and half-hours and the dynamics often provide a wealth of feedback in a short time. All comments are usually recorded and transcribed, and techniques such as content analysis may be used to identify themes. Advantages include the possibility to ask complex questions, more in-depth responses, and group interactions providing otherwise unavailable data. Disadvantages include the often-qualitative nature of data and the inability at times to generalize to larger populations. (Dutka, 1993; Leland & Bailey, 1995).

6 *In-Depth Interviews;* This method is utilized when the most anecdotal information is required regarding customer satisfaction. This often provides a more personal format in a one-on-one setting that can encourage a customer to discuss possible controversial or difficult issues. This includes customers who have stopped using an organization, use competitors, or employees discussing issues about the organization. This is a requisite for customized or individual client gap analyses – identifying the break between expectation and actual performance. Advantages include the possibility to ask complex questions, more in-depth responses, responses that may be viewed more negatively by a group are obtained, and a longer interview is often possible. Disadvantages include a greater cost than other methods, a greater time needed for completion, and the number of completed interviews is usually much less than other methods. (Dutka, 1993; Leland & Bailey, 1995).

7 **2.8 GSM Services in Nigeria**

On the 16th of May 2001, MTN Nigeria Limited became the first telecommunication company to make the first GSM call in Nigeria (MTN, 2007). Subsequently, on August 6th, the same year, Econet (as it was then called), now Airtel, achieved the feet of becoming the first company to launch commercial GSM services in Nigeria (Ndukwe, 2005).

Since the full launch of commercial GSM services in Nigeria, the sector has developed and expanded in terms of the number of players that have come on stream, the robustness of the regulatory framework and of course the variety of services being offered (Ajayi, 2004). Remarkably, the efforts of the Nigerian Communication Commission (NCC) in moving the GSM sector to its present enviable position cannot be overemphasized. Recognizing the benefits of the liberalized GSM market, NCC's strategies have been rather aggressive but phased, allowing for experiences to be developed, internal capacity built and adequate resources mobilized (Maria and Osagie, 2007). Similarly, there have been deliberate efforts to improve service quality as well as to promote sustainable development of core infrastructure (Emmanuel, 2007).

On the whole, as Ndukwe (2008) recounts, current GSM service sector of Nigeria is characterized by increased level of private sector participation, increased range

and quality of service available to citizens, effective lowering of cost of acquisition and using of the services, increasing level playing field for service providers via the removal of regulatory bottlenecks hitherto created, drastic reduction in the waiting time for telephone installation and service delivery, improved service penetration to a larger and growing number of under-served and un-served urban, semi-urban and rural areas alike, creation of direct and indirect employment opportunities for skilled, semi-skilled and unskilled citizens, generation of additional revenues for government through spectrum and numbering fees, import duties, VAT, etc. and increased participation of the banking sector in the financing of telecommunications network as well as the development and increased foreign investment from private companies, international and multilateral institutions that are based overseas.

Ndukwe (2008) explains further that the current installed capacity for mobile GSM is 77,545,308 lines and the total connected lines as at February 2008 stood at 57,720,782 lines, out of which 42,483,091 lines are active compared to just a mere 7,000,000 active lines in 2005. Consequently, tele-density has been greatly impacted, standing at 31.67 i.e. at least 31 active telephone lines per 100 people as compared to 0.73 in 2001. As a result of the revolution in the Nigerian Telecommunication industry, there is an exponential growth in recent years, going

from active subscriber lines of 400,000 and teledensity of 0.04% to active subscriber lines of over 90 million and teledensity of 64.88% as of July 2011. The Nigerian telecom market has been described as one of the fastest growing telecommunication markets in the world (Juwah, 2011). Furthermore, as at end December, 2013 the total moblie telephony in Nigeria is over 124 million subscribers (NCC, 2013). Like other parts of the world, GSM in Nigeria is based on the concept of frequency reuse. That is, the limited spectrum allocated to the service is partitioned into non-overlapping channels sets, which are then assigned in a regular repeated pattern to a hexagonal cell grid (Rahnema, 1993). This hexagonal cell grid is just a convenient idealization that approximates the shape of a circle but forms a grid with no gaps or overlaps.

Generally, there are five frequency bands designated by International Telecommunications Union (ITU) for the operation of the GSM mobile phone: GSM-400, GSM-850, GSM-900, GSM-1800, and GSM-1900. In Nigeria, GSM-900 and GSM-1800 are being used. The radio channels are based on a time division multiple access (TDMA) structure that is implemented on multiple frequency sub-bands (TDMA/FDMA). Each base station is equipped with a certain number of these pre-assigned frequency/time channels. The TDMA structure is applied in both the forward (mobile station to the base transceiver or network

station) and reverse (base transceiver or network station to mobile station) directions. On GSM-900, the forward or uplink direction uses 890 – 915 MHz while the reverse or downlink direction is on 935 – 960 MHz, providing 124 radio frequency channels spaced at 200 kHz and duplex spacing of 45 MHz. Also, in Nigeria, GSM-1800 uses 1710 – 1785 MHz to send information from the mobile station to the base transceiver station (uplink) and 1805 – 1880 MHz for the other direction (downlink), providing 374 channels at duplex spacing of 95 MHz.

Entry of new players, aggressive competition, increasingly discerning consumers and a dynamic and very responsible regulatory framework currently characterize the Nigerian telecommunication environment, where virtually every telecommunication service is available. Consequently, there are evidences of growth in the demand, usage, density and coverage of telecommunications nationwide (Ajayi, 2006; Maria and Osagie, 2007; Ndukwe, 2008). Evidence available shows that, a lot still needed to be done, if we (Nigerians) want to attain higher level of mobile communications. This is going to be the combine efforts of all stakeholders.

2.8.1 Major Brands in the Nigerian Telecommunication Industry.

The major brands in the Nigerian telecommunication industry include: Globacom (Glo), Airtel Mtel, Mobile Telecommunication Network (MTN), Multilinks, Etisalat, Starcomms, Reltel, Mobitel, Visafone and Etisalat. The most prominent and nationally recognized among the above listed are MTN, Globacom, Airtel and Etisalat (Ajayi, 2006). However, it is observed that other telecommunication service providers such as Starcomms, Reltel and Multilinks are gradually registering their presence in most major cities of the country. Visafone and Etisalat just came on stream in 2008, and given their aggressive marketing strategies and colorfully compelling advertising campaign, this researcher reasons that their presence will soon be felt across the nation and even beyond.

2.8.2 Relative Market Share of the Brands

Unfortunately, there is no comprehensive record of the relative market share commanded by the various brands of the telecommunication network (Ode, 2007). This is due to a number of factors. According to Maria and Osagie (2007), one of these factors is the lack of proper documentation of active subscribers by the operators; people simply obtain their telephone lines from the road side dealers. However, in their advertising campaign, the various operators have come up with different kinds of figures regarding their subscriber base. For example, Globacom

claims to have 25 million subscribers currently in its network, while MTN claims to have about 45 million. Starcomms on the other hand claims a humble base of 1 million subscribers and Airtel claims about 20 million. Thus, in spite of these doubtful figures, casual observations reveal that MTN is the clear market leader across the nation. Globacom is the major challenger matching and sometimes exceeding the leader's marketing spending (Ode, 2006). However, Ajayi (2006) notes that all the players are highly competitive and no one can be taken for granted. Everyone is constantly trying not only to create and steal market share from the other(s), but also to maintain the market share so created. Consequently, as it has been observed, customers have benefited immensely especially in terms of service charges. What is more, all the operators are constantly trying daily to improve the overall quality of their services, and there are complementary efforts from the regulatory body and other stakeholders to improve the infrastructural facilities that will enhance efficient telecommunication service delivery (Ndukwe, 2008; Ode, 2007). In fact, everyone seems to agree that the best of the Nigerian telecommunication industry is yet to come with a prospect of further reduction in service charges as well as superior quality of services.

2.8.3 Challenges of GSM Service Providers Customers in Nigeria

GSM service providers customer in Nigeria were face with problems such as: complicated tariffs, lower customer satisfaction, inefficient service delivery, interconnectivity problem, deceptive promotions, unsolicited promotions, unsolicited short messages (SMS), call drops, and unfairly and unjustifiable billings. These are performance indicators. Therefore, the GSM providers in Nigeria are faced with the challenges of demonstrating customer-focused and continuous service improvement, as a way to ensuring customer satisfaction, brand supremacy and ultimately customer loyalty (Hashim, 2014).

GSM service providers charge different tariffs for services offered to their subscribers depending on the packages a customer subscribes to. For instance, MTN has packages for tariff ranging from supersaver, mtn zone, family and friends, beta talk, weekends super talk, free night call, xtra value, awu4u, prestige, xtra special postpaid, pulse, start pack, diamond yellow, true talk, xtra pro, ipulse and specific tariff for internet users. GLOBACOM has packages for tariff ranging from infinito, bounce, overload, twin bash, free night calls and family and friends and specific charges for data users. ETISALAT has packages for tariff ranging from easy starta, easy life, easy cliq, easy flexi, talk zone and different charges for data subscribers. AIRTEL also has packages for tariff ranging from smart value,

smart connect, smart talk, smart trybe, smart trybe junior, premier and each data user are charges differently. On each of the these packages, the charges for calls, messages, and internet services differ. There is no permanent package on any network. New packages are designed almost on a monthly basis. The flexibility of tariff charges by service providers due to competitive market could pose challenges on customers.

GSM Service providers have been trying to make network coverage available in every part of the Country. It is in the light of this that they keep investing in the state of the art technology by installation of max antenna, laying underground cables, hiring and training of personnel to make services available always. This is the reason why one network will be available in a certain area and another will not. Availability of network is what will determine subscription to certain service providers; non availability of network has being one of the challenges faced by customers of the GSM service providers.

Customer care services are channels by which GSM operators received complaints, suggestions and feedback from their customers. Based on this, improvement, amendments, clarifications can be made concerning the services offered. In the light of above, GSM operators keep training their staff in the units on how to

properly address problems, complaints, suggestions arising from customers. They open more centers and create more avenues like toll free lines, websites, and others. Ability to access to customer care officials has been problems.

Advancement in technology, globalization has made product development one of the rapidly growing affairs for competing firms. As manufacturers of phone devices introduce the latest to the market, it becomes necessary for service providers to acquaint themselves with these innovations, so that facilities available in the new products can be harmonized with services rendered. In this view, today phones perform different functions aside making calls, and sending text messages that had been from the initial stage. Some phones come with added conveniences that enhance financial transactions, E-Commerce and different social media like twitter, facebook, 2go, and whatsapp which aids service of marketers, journalist, and others. These widen the challenges of GSM operators customers. Quality of service is key to customer satisfaction. Over the years, there have been bitter complaints from customers of GSM companies, as acknowledged by experts, on the poor quality of services rendered by GSM operators ranging from call drops, call diversion, messages diversion, call interruption, and access to internet. The companies have been promising through different mediums to improve on the quality of services rendered, some providers have tried while others are still

battling with this menace. Quality of service is a continual operation or activities; as a result an improved quality of service today may suffer downgrade in few weeks or months.

2.9 Concept of Performance

Performance is referred to as being about doing the work**,** as well as being about the result achieved. It can be defined as the outcomes of work because they provide the strongest linkage to the strategic goals of an organisation, customer satisfaction and economics contributions. The terms performances management and measurement refers to any integrated, systematic approach to improve organisational performance to achieve strategic aims and promote an organisation's mission and value. (Hanine 2003) He opined that, performance management systems borrow from or utilize some of the new approaches such as 'Balanced Scorecard', 'Total Quality Managemnet' (TQM), 'Best Practices Benchmarking' or 'Business Process Re-engineering '(BPR). Performance measurement must be considered as part of the overall performance management system and can be viewed as the process of quantifying the efficiency and effectiveness of the actions. In social science research there are three approaches to firm level performance, these are based on market prices, accounting ratios and total factors profitability. (Clandiu and Cataline 2005) Market values are readily obtained from National Stock Exchange for all listed firms.

According to Fisher (1995) organisational performance can be looked at from the perspective of financial and non financial performance. Financial management are always measured using some items which includes Return on Asset (ROA), Return On Investment (ROI), Operating

Efficiency (OE) while the non financial performance items are measured through Customer Satisfaction, Product and Market Development amongst others.(Abu-Khdra 2006) Therefore, this study was based on the non Financial performance which is the Key Performance Indicator used by the regulatory body NCC to determine services quality and customer satisfaction. Key Performance Indicators like American customer satisfaction index measures the standard of Service Quality of international standard which are consumer oriented. As a result, we looked at performance from non financial aspect.

Performance measurement is a process by which an organization monitors important aspects of its programs, systems, and care processes. Data is collected to reflect how its processes are working, and that information is used to drive an organization's decisions over time. Typically, performance is measured and compared to organizational goals and objectives. Results of performance measurement provide information on how an organization's current programs are working and how its resources can be allocated to optimize the programs' efficiencies and effectiveness. Performance measurement is well established throughout telecommunication sector in the core areas of financial and non financial.

Performance management is a process of setting goals and regularly checking progress toward achieving those goals. It includes activities that ensure organizational goals are consistently met in an effective and efficient manner. The overall goal of performance management is to ensure that an organization and its subsystems (processes, departments, teams, etc.), are optimally working together to achieve the results desired by the organization. Performance management has a wide variety of applications, such as, staff performance, business performance, or in health care, health outcome performance measures. Because performance management strives

to align all the subsystems to achieve results, the focus of performance management should also affect the management of an organization's overall performance.

An organization can achieve the overall goal of effective performance management by continuously engaging in the following activities:

- Identifying and prioritizing desired results
- Establishing means to measure progress toward those results
- Setting standards for assessing how well results are achieved
- Tracking and measuring progress toward results
- Exchanging ongoing feedback among those individuals working to achieve results
- Periodically reviewing progress
- Reinforcing activities that achieve results.

2.9 Concept of Customer Services

User do not expect the company to be perfect, customers always do expect from company to fix things when going wrong.(Gronroos. 1984).It is the responsibilities of the services provider staff to communicate everything with customers clearly and also the responsibility to solve the problems customers are facing. The staff also have the responsibility to inform their customers of the company's new services. Which are lunched by the company (Jawaria el tal, 2009). For every business customer loyalty a firm should provide good quality customer services (Han, 2009) One of many reasons for your enhancement of network-services

quality is actually which clients to get into your company's internet site through distinct locations worldwide as well as to assess your company's assistance with other people company's giving. Consequently, on-line customers' expectancy is actually greater than traditional clients. Cronin *et al.* (2000) found in which support good quality, support worth, and also full satisfaction are extremely straight ways to customers objectives involving consumption. (Omachanu *et al.* 2008) explained that the Quality experienced a long phrase influence on the actual fulfillment of consumers.

Kim *et al* (2004) indicated that network services including call quality and customer support play a key role in constructing customer satisfaction for telecom services provider, and then the satisfied customer becomes the loyal customer for the current services provider. (Baumann *et al*. 2006) expressed that a satisfied customer becomes a corridor for other users to use that services for which they find satisfaction. Service is a process that takes customer place between a buyer, a seller and third party and can influence demand in the market (Innis and la Londe, 1994). The third party may include companies that have been licensed by a marketing company to provide customer service. When Customer Care is used in a wider sense, it encompasses all the functions leading to the entire service delivery by an

organization. Katz et al., (1998) argue that customer care "encompasses all the functions along the entire service delivery value chain".

Customer service is a system of activities that comprises the customer support systems, complaint processing, speed of complaint processing, ease of reporting complaint and friendliness when reporting complaint (Kim et al., 2004). GSM providers in Nigeria provide customer service through toll free customer care line, helpdesk and websites. Because of its convenience, cost free and availability, majority of the subscribers in Nigeria are most likely to be served by their network providers through toll free customer care lines (Adeleke and Aminu, 2012). Hence, in Nigeria, the ease with which these toll free customer care lines can be accessed creates a more likelihood that customers will choose the network. Customer care is therefore an important factor of consideration by customers in all sectors of business including the GSM industry.

The GSM industry would be much sensitive to customer care because communication both in the official and private lives is vital especially when emergencies are concerned. So, the speed of complaint resolution, friendliness of customer care staff to customers, ease of access to customer care services etc, would have a strong influences on the choice of GSM service provider in Nigeria.

A GSM network reputed for good customer care is more likely to retain existing customers while attracting new ones. Specifically, the high levels of competition among service providers in Nigeria necessitate the adoption of different customer service techniques to satisfy and retain customers. The effectiveness of the level of customer service will enhance the customer retention and reduce switching between and among service providers (Oyeniyi and Joachim, 2008). McDougall and Levesque (2000) found that all telecommunication service providers in Malaysia differentiate themselves with a high level of customer service and this has become the most important and significant driver in customer satisfaction. Customer care service no doubt, is very important in any service industry especially because it is a medium that services offered if any anomaly can be corrected, as such, leading to customer satisfaction. Customer service is a system of activities that comprises customer support systems, complaint processing, speed of complaint processing, ease of reporting complaint and friendliness when reporting complaint (Kim, Park and Jeong, 2004).

Customer services are the opportunities for telecom service providers that are added to mobile network other than voice services in which contents are either self produced by service provider or provided through strategic compliance with service provider (Kuo, Wu and Deng, 2009). The improved customer services are

the focal point of the telecom service providers for social as well as for economic reasons. From a social point of view, services should be available to the customers on reasonable terms. As far as economic factor is concerned, services should satisfy the needs of the customers (Turel and Serenko, 2006; Melody, 1997). For developing satisfaction among customers, the telecom service providers need to be extra careful for the customer services they provide. Satisfaction of customer is determined by his evaluation of service provided by a brand (Gustafsson, Johnson and Roos, 2005).

The study of Ahn, Han and Lee (2006) shows that when the customers, do not get their complaints considered properly, they start looking for other brands. It happens because either the customer service centers do not handle the complaints or the customers are not able to address them properly. Sometimes, telecom service providers take considerably longer time to resolve the problems like network coverage or call quality, the customers do not wait for long and hence they lose satisfaction with that particular brand (Ahn, Han and Lee, 2006). Furthermore, the friendly attitude and courteous behavior of the service workers at service firms leaves a positive impression on the customer which lead towards customer satisfaction (Soderlund and Rosengren, 2008). On the other hand, if a telecom service provider lacks in providing services (call drops) to its customers it

experiences customer churn. Kim, Park and Jeong (2004) argued that service provider should provide customer oriented services in order to heighten up customer satisfaction. It was also found that the customers get satisfied to a brand more if they get all the needed services accumulated in that very brand (Ahn, Han and Lee, 2006).

2.10 Concept of Service Quality

Service quality is another dimensional property of service. Allen (2001) notes that service quality is largely a specific characteristic that can be viewed from two distinct perspectives. First, it represents the view of the service consumer that a service organization is sufficiently competent to provide a service. This perspective according to Stewart and Michael (2000), encapsulates the consumers' expectation or perceptions regarding the service. These expectations are sometimes based on past consumption of the service or from advertising information (Clemens, 2001). The second perspective is that of the service provider having a level of commitment to providing an excellent service. Service quality thus, encompasses but is not limited to performance, reliability and conformance to service standards (Allen, 2001).

The most notable work on measuring customer perception of service quality is SERVQUAL, a Model developed by Parasuraman, Valerie and Leonard (Allen, 2001). This work reduced a 22 item scale that measured perceived service quality along five dimensions, namely; reliability, responsiveness, assurance, empathy and tangibles. Reliability encompasses the dependability and accuracy of the service. Responsiveness connotes promptness and the willingness of staff to assist. Assurance is about attributes (such as knowledge and courtesy) of staff that conveyed trust and confidence to service users. Empathy signifies the level of caring and personalized attention provided to the customers and lastly, tangibles represent the concrete or physical aspects of the service that conveys quality and reduces customers' anxiety about the unknowns (Parasuraman, Valerie and Leonard, 1996) cited in Allen (2001).

Thus, to be a top service company, studies have shown that firms must necessarily have a strategic service concept, secure top management commitment to quality, set high quality standards, adopt self-service technologies, establish a credible system for monitoring service performance and customers' complaints and pay sufficient attention to employees satisfaction (Allen, 2001; Stewart and Michael, 2000; Justin, 2004; Parasuraman, Valerie and Leonard, 1996; Kotler and Keller, 2006).

Quality is conformance to requirements (Crosby et al, 2003). Quality is the comparison of perceived performance and expected performance (Kang, 2006). Service quality is the customer's overall impression of the relative inferiority/superiority of an organization and its service offerings (Bitner et al., 1990). The firm's ability to create and sustain competitive advantage depends upon the high level of service quality provided by the service provider (Yoo and Park, 2007). Therefore, providing a consistently superior service quality can differentiate one GSM provider from others (Adeleke and Aminu, 2012). According to Leisen and Vance (2001), service quality helps to create the competitive advantage by being an effective differentiating factor.

However, as the number of services and subscribers of GSM in Nigeria increases, the demand for good QoS has become an issue in the country. The agitation has become a national issue which had been brought before the country House of Representatives on July 18, 2007 and the Nigerian Communication Commission (NCC) (Adegoke *et al*., 2008). In finding the lasting solution to the problems, the NCC, a body responsible for the regulation of GSM in Nigeria, on 6th July 2007 issued out the threshold levels on the key performance indicators (KPIs) for ascertaining Quality of Service of all the GSM networks in the country. The KPIs on which the GSM networks were tested according to Kollár (2008) include: call

set-up success rates (CSSR), call drop rate (CDR), call completion success rates (CCSR), handover success rates (HSR) and traffic channel congestion rate (TCHR). Based on the above listed parameters, performance of GSM services and customer satisfaction can be assessed. Service quality (SQ) has received a great deal of attention in the literature from both scholars and practitioners in business. Many studies have established that SQ is a crucial driver of satisfaction (Grönroos, 2000; Hume & Mort, 2008; Lovelock & Wirtz, 2007; Zeithaml & Bitner, 2003), profitability (Heskett, Sasser& Schlesinger, 1997), and a key competitive advantage for modern business firms (Kotler& Keller, 2006; Grönroos, 2000, 2001; Voss, 2003; Voss, et al., 2004). Indeed SQ is not just a corporate offering, but a competitive weapon which is necessary for corporate profitability and survival (Newman & Cowling, 1996; Rosen, Karwan, & Scribner, 2003). Many authors agree that in today's dynamic market place and market space, organisations no longer compete only on cost but more importantly on service/product quality.

The nature of SQ is an abstract and elusive construct because of three features that are unique to service: intangibility, heterogeneity, and inseparability of product and consumption (Grönroos, 2000; Lovelock & Wirtz, 2007).SQ has been defined as the difference between customer expectations for service performance prior to

service encounter and their perception of the service received (Asubonteng et al., 1996). Gefen (2002) defined SQ as the subjective comparison that customers make between the quality of service that they wish to receive and what they actually get. Regarding the dimensions and aspects of SQ of firms, many past studies such as Grönroos (1984) and Parasuraman et al. (1988) have established different conceptualizations of the SQ construct. This has resulted in different instruments for measuring SQ. Grönroos (1984) maintains that SQ has both process and outcome dimensions that are critical to service context, which have been verified in some previous studies (Bozorgi, 2007; Gi-Du and James, 2004; Gyasi and Azumah, 2009). Parasuraman et al. (1985, 1988) develop the dimensions of SQ in their GAP and Extended GAP analyses based on which they developed that popular SERVQAUL model. The widely used SERVQUAL model consisted of five dimensions that were measured using a 22-item SERVQUAL scale.

The five SERVQUAL dimensions are: Tangibles, Empathy, Assurance, Reliable, and Responsiveness: Tangibles are the physical facilities, equipment, and appearance of personnel**.** Empathy refers to the caring, individualized attention the firm provides its customers. Assurance means knowledge and courtesy of employees and their ability to inspire trust and confidence. Reliability is the ability to perform the promised service dependably and accurately, and Responsiveness

refers to willingness to help customers and provide prompt service. The items for each of the dimensions have been modified in many previous studies to suit a particular context as noted by Parasuraman *et al*. (1988, p. 31) that the SERVQUAL instrument could be "adapted or supplemented to fit the characteristics or specific research needs of a particular organisation". However, due to the differences between traditional service and electronic service, obviously SERVQUAL scale is not suitable for measuring SQ in electronic or internet environment due to the absence of staff, absence of traditional tangible elements, and self-service of customers (Li and Suomi, 2009). It has been argued in many past studies that new scales need to be developed for e-service quality (Li and Suomi, 2009; Ho and Lin, 2010).

2.10.1 E-service Quality

With the advent of the internet, the growth of internet-based services has changed the way firms and consumers interact. E-service has been an interesting and important area to scholars and practitioners alike. E-service has been defined as a web-based service or an interactive service that is delivered on the internet (Ghosh et al., 2004; Zeithaml et al., 2000). Rowley(2006) conceptualises e-service as deeds, efforts, or performances whose delivery is mediated by information

technology. Generally, it can be defined as an interactive content-centered and internet-based customer service that is driven by customers and integrated with the support of technologies and systems offered by service providers, which aim at strengthening the customer-provider relationship. Given the technology quality dimensions of e-service quality that are different from the traditional service context, e-service quality has been regarded having the potential to not only deliver strategic benefits but also to enhance operational efficiency and profitability (Cronin, 2003).

A review of existing literature indicates that many past studies have found different dimensions for e-service quality that are useful for different research contexts (Li and Suomi, 2009; Ho and Lin, 2010). Dabholkar (1996) found the following Web these e-service quality aspects: site design, reliability, delivery, ease of use, enjoyment and control in the context of E-service. Zeithaml et al. (2000) found Efficiency, reliability, fulfillment, privacy, responsiveness, compensation, and e-service quality dimensions in the online retailing context. In Yoo and Douthu (2001) ease of use, aesthetic design, processing speed, and security were the e-service quality found in online retailing context. Cox and Dale (2001) identified six eservice quality aspects, while Wolfinbarger and Gilly (2002, 2003) found these four e-service quality aspects: web site appearance, communication, accessibility,

credibility, understanding and availability in online retailing. Again, Lee and Lin (2005) developed eservice model including web site design, reliability, responsiveness, trust, and personalization in the online retailing context. Furthermore, Field, Heim, Sinha (2004) identified web site design, reliability, security, and customer service e-service quality dimensions.

Kim et al (2006) identified 9 e-service quality items, being: efficiency, fulfillment, system availability, privacy, responsiveness, compensation, contact, information and graphic style in online retailing. Moreover, Zeithaml et al., (2000, 2002) proposed a 7-dimension instrument for measuring eservice quality called E-S-QUAL using the SERVQUAL in the traditional distribution channels in a study on internet service quality. Zeithaml et al (2002) again conducted a study in which they compared the SERVQUAL and the E-S-QUAL and concluded that though some traditional SERVQUAL dimensions can be applied to e-service quality, there are other unique dimensions of the e-service quality that related to technology. The original E-SQUAL consisted of 11 dimensions and later condensed into 7 by Parasuraman et al. (2005), which were split into core dimensions and the recovery dimensions. The core dimensions, termed E-S-QUAL, are: efficiency, system availability, fulfillment and privacy. The recovery dimensions, termed E-RecS-QUAL are: responsiveness, compensation and contact (Parasuraman et al., 2005).

Recent studies show a combination of traditional SERVQUAL and the web-interface quality dimensions. Li and Suomi (2009) proposed eight dimensions of e-service quality, which are: website design, reliability, responsiveness, security, fulfillment, personalization, information and empathy. Past studies on determinants of e-service quality adoption also indicate that eservice experience has impact on customers' perceptions and evaluation of e-service quality (Yang and Jun, 2002). Yen (2005) maintains that the importance of attributes of online customer satisfaction depends on technology readiness. Cristbal et al. (2007) opine that the perceived web site quality and customer satisfaction is relevant to customers' loyalty to the web site. In view of the above, e-service quality dimensions would be explored in the internet or e-banking context.

2.11 Customer Satisfaction, Loyalty and Retention

Bowen and Chen (2001) asserted that having satisfied customers is not enough, there has to be extremely satisfied customers. This is because customer satisfaction must lead to customer loyalty. Bansal and Gupta (2001) asserted that 'building customers loyalty is not a choice any longer with businesses: it's the only way of building sustainable competitive advantage. Building loyalty with key customers has become a core marketing objective shared by key players in all industries catering for business customers'.

The strategic imperatives for building a loyal customer base are:

i. Focus on key customers
ii. Proactively generate high level of customer satisfaction with every interaction
iii. Anticipate customer needs and respond to them before the competition does
iv. Build closer ties with customers
v. Create a value perception.

Sivadas and Baker-Prewitt (2000) opined "there is an increasing recognition that the ultimate objective of customer satisfaction measurement should be customer

loyalty". Fornell (1992) opined "high customer satisfaction will result in increased loyalty for the firm and that customers will be less prone to overtures from competition". This view was also supported by Anton (1996) who asserted that "satisfaction is positively associated with repurchase intentions, likelihood of recommending a product or service, loyalty and profitability".

Loyal customers would purchase from the firm over an extended time (Evans and Berman, 1997). Guiltinan, Paul and Madden (1997) said that satisfied customers are more likely to repeat and even become loyal customers. Sivadas and Baker-Prewitt (2000) stated that 'satisfaction also influences the likelihood of recommending a departmental store as well as repurchase but has no direct impact on loyalty. Thus, satisfaction in itself will not translate into loyalty. However, satisfaction will foster loyalty to the extent that it is a prerequisite for maintaining a favourable relative attitude and for recommending and repurchasing from the store. Once customers recommend a department store it fosters both patronage and loyalty towards that store'.

Thus the key to generating loyalty is to get customers to recommend a store to others. Also, customers are likely to recommend a department store when they are satisfied with that store and when they have a favourable relative attitude towards

that store". Evans and Berman (1997) opined that "Companies with satisfied customers have a good opportunity to convert them into loyal customers – who purchase from those firms over an extended period".

Clarke (2001) said a business that focuses exclusively on customer satisfaction runs the risk of becoming an undifferentiated brand whose customers believe only that it meets the minimum performance criteria for the category. Long-term customer retention in competitive markets requires the supplier to go beyond mere basic satisfaction and to look for ways of establishing ties of loyalty that will help ward off competitors attack. Sivadas and Baker-Prewitt (2000) also said that it is not merely enough to satisfy a customer.

According to Reichheld (1996), 65 to 85 percent of customers who defected to competitors' brands say they were either satisfied or very satisfied with the product or service they left. Therefore, in order to ensure that customers do not defect, Bowen and Chen are correct to say that customers must to be extremely satisfied. As far as organisations are concerned, they want their customers to be loyal to them and customer satisfaction does not guarantee this. According to Storbacka and Lentinen (2001), customer satisfaction is not necessarily a guarantee of loyalty. They said that in certain industries up to 75% of customers who switch

providers say that they were ‘satisfied’ or even ‘very satisfied’ with the previous provider. Customers may change providers because of price, or because the competitor is offering new opportunities, or simply because they want some variation (Storbacka & Lentinen, 2001). Clarke (2001) say that customer satisfaction is really no more than the price of entry to a category. For satisfaction to be effective, it must be able to create loyalty amongst customers. Sivadas and Baker-Prewitt (2000) say there is increasing recognition that the ultimate objective of customer satisfaction measurement should be customer loyalty”.

McIlroy and Barnett (2000) state that an important concept to consider when developing a customer loyalty programme is customer satisfaction. Satisfaction is a measure of how well a customer’s expectations are met while customer loyalty is a measure of how likely a customer is to repurchase and engage in relationship activities. Loyalty is vulnerable because even if customers are satisfied with the service they will continue to defect if they believe they can get better value, convenience or quality elsewhere. Therefore, customer satisfaction is not an accurate indicator of loyalty. Satisfaction is a necessary but not a sufficient condition of loyalty. In other words, we can have satisfaction without loyalty, but it is hard to have loyalty without satisfaction”.

McIlroy and Barnett (2000), “in a business context loyalty has come to describe a customer’s commitment to do business with a particular organisation, purchasing their goods and services repeatedly, and recommending the services and products to friends and associates”. Anderson and Jacobsen (2000) said customer loyalty is actually the result of an organisation creating a benefit for a customer so that they will maintain or increase their purchases from the organisation. They say that true customer loyalty is created when the customer becomes an advocate for the organisation, without incentive.

Clarke (2001) states that ‘The notion of customer loyalty may appear at first sight to be outmoded in the era of the Internet, when customers are able to explore and evaluate competing alternatives as well as checking reports from others – at the touch of a button. Yet the evidence shows that the old rules of successful and profitable management still hold good: customer retention is still a key to long-term profits, while on the other side of the coin, there is a high cost-penalty to low loyalty. Indeed, the very fact that customers can so readily assess the competing services and products on offer and then so easily make the new purchase does in itself give added weight to the importance of building strong ties of loyalty with customers’.

Bowen and Chen (2001) opine that ‘It is commonly known that there is a positive relationship between customer loyalty and profitability. Today, marketers are seeking information on how to build customer loyalty. The increased profit comes from reduced marketing costs, increased sales and reduced operational costs. Finally, loyal customers cost less to serve, in part because they know the product and require less information. They even serve as part-time employees. Therefore, loyal customers not only require less information themselves, they also serve as an information source for other customers’. McIlroy and Barnett (2000) say that loyalty cannot be taken for granted, that it will continue only as long as the customers feels they are receiving better value than they would obtain from another supplier. Similarly, Anton (1996): says When you can increase customer loyalty, a beneficial ‘flywheel’ kicks in, powered by: - Increased purchases of the existing product, Cross-purchase of your other products, Price premium due to appreciation of your added-value services, Reduced operating cost because of familiarity with your service system, and positive word-of-mouth in terms of referring other customers to your company”.

In order to ensure that there is customer loyalty, organisations must be able to anticipate the needs of their customers (Kandampully and Duffy, 1999). According to Kandampully and Duffy (1999), a customer’s interest in maintaining a loyal

relationship is dependent on the firm's ability to anticipate customer's future needs and offering them before anyone else. According to the study done by Bowen and Chen (2001), there is support for the contention that there is a positive correlation between loyal customers and profitability. According to Bowen and Chen (2001), "The result of our study supported the contention that there is a positive correlation between loyal customers and profitability.

Loyal customers indeed provide more repeated business and are less likely to shop around for the best deals than non-loyal customers. Day (1994) says that the identification and satisfaction of customers needs lead to improved customer retention. Clark (1997) opines that 'Customer retention is potentially one of the most powerful weapons that companies can employ in their fight to gain a strategic advantage and survive in today's ever-increasing competitive environment. It is vitually important to understand the factors that impact on customer retention and the role that it can play in formulating strategies and plans'. Literature proved that, satisfaction has significant effects on loyalty and retention, but there can never be loyalty and retention without satisfaction.

2.12 Consumer Purchase Decision Process

Consumer purchase decision process is referred to as the actions a person takes in purchasing and using products and services, including the mental and social processes that precede and follow these actions (Theodor, 2007) While some authors call it 'Consumer Buying Decision Process, William and McCarthy (2005) dubbed it 'Consumer Problem-Solving Process', arguing that consumers don't just buy, they buy products or services to solve their problems. Whatever descriptive term used however, there appear to be agreement among authors that consumers go through a step by step process in obtaining what they need and want. This process according to Mike (2006), consists of five stages namely: problem recognition, information search, evaluation of alternatives, purchase decision and post purchase behavior. The respective stages in the consumer purchase decision process are explained hereunder.

2.12.1 Problem Recognition

The recognition of a problem or need as acknowledged by Mike (2006) and Keller (2005), is the starting point of consumer buying process. At this stage, consumers become aware of and put a lot of interest in getting the problem solved (William and McCarthy, 2005). Indeed, as Armstrong (1994) believes, the need (or problem) could be triggered either by internal stimuli such as hunger and thirst or external

stimulus such as admiring a friend's wrist watch. In this regards thus, the implication is for marketers to identify circumstances that propel customers' needs or problems to such a level as to require solution. Apparently, this will enable them to position their products and attempt to secure quick customers attention (Stephen, 2004).

2.12.2.1Information Search

In the view of Keller (2005), once customers' needs are aroused, they move into the information search mode. The level of the search could be *heightened attention*, at which stage 'a person simply becomes more receptive to information about a product' (Kotler and Keller, 2006: 181), or *active information search* where people engage in a planned efforts to search reading materials such as books, magazines, the web, and even visit stores and friends for more information (Davies, 2004). Keller (2005) has categorized the sources from which consumers get their information into four namely: personal, commercial, public and experiential sources. Gardner (2002) seems to agree with Kotler and Keller (2006) that these different sources of information perform different functions in the buying process. While commercial sources such as advertising, salesperson, website and so on, perform information functions, personal sources such as

information from family members, friends, neighbors and acquaintances perform legitimizing or evaluating functions.

2.12.3 Evaluation of Alternatives

In the process of making purchase decision, usually consumers cannot evaluate all available alternatives in great depth and thus, they tend to use some form of processes or models to reach their final decision (Gerald and Valerie, 2000). One of these models is the two-stage process developed by Oscar and Lisa (2000). In the first stage, consumers typically screen a large group of available products/service and select some of them to be among the most promising alternatives. Subsequently, in the second stage, they evaluate the so-called promising alternatives in greater depth, perform relative comparisons across products on important attributes and make a purchase decision. Davies (2004) believes that the most current of this evaluation processes is the one that sees consumers as making judgments mainly on a conscious and rational basis. That is, consumers use a cognitively oriented process to evaluate alternatives.

Furthermore, to get a good grasp of consumer evaluation process, experts suggest that in addition to having a working knowledge of the above stated models, it must be understood that consumers are trying to satisfy a need, they are looking for

certain benefits from the product solution and that they see each alternative as a bundle of attributes having different capabilities to deliver the benefits sought (Oscar and Lisa, 2000; Gerald and Valerie, 2000; Kotler and Keller, 2006).

2.12.4.1Purchase Decisions

It has been observed that high quality and efficient purchase decision is often made possible by the availability of efficient evaluation tools (Gerald and Valerie, 2000). At the phase of purchase decision, experts note that a number of elements which impact on the ultimate decision on whether to purchase or not come into play. These elements are broadly divided into soft and hard elements. Soft elements include the consumers' emotions and beliefs while the hard elements include such things as the consumers wants, needs and company's actions (Theodor, 2007). Oscar and Lisa (2000) believe that these elements throw up three possibilities with regards to the ultimate purchase decision. First, the consumer is confronted with the question of whom to buy from, which depends on such considerations as past experience, terms of sale, return policy and so on (Davies, 2004). Second, there is the question of when to buy which according to Gerald and Valerie (2000), can be influenced by the store atmosphere, time pressure, pleasantness of shopping experience and so on. And lastly, there is a possibility of deciding not to buy

altogether, in which case the consumer has not made any purchase decision (Theodor, 2007).

2.12.4.2Post Purchase Behaviour

After buying a product or service, the consumer compares it with his expectations, which determine whether he is satisfied or dissatisfied with the purchase. It has been observed that satisfaction or dissatisfaction after purchase affects consumer value perception, consumer communication and the possibility of a repeat purchase (Theodor, 2007). Because of this understanding therefore, experts have suggested a number of measures that companies should take to create positive feelings among consumers in order to assure long-term relationships with them. Such measures include use of advertisement; follow up calls from sales people, survey of customer satisfaction and customer complaint system (Gerald and Valerie, 200; Oscar and Lisa, 2000; Davies, 2004; Theodor, 2007). People differ in their search for certain services and eventual usage, as a result, one way description of consumer purchasing and post purchasing behavior cannot always suits all situations because of consumer differences.

2.13 GSM as an Innovation

An innovation in the view of George (2004) is an idea, product, services, objects or practices that are perceived to be new Kotler (2003) adds that the idea may have a long history but it is an innovation to a person who sees it as new. Ray (1999) however, views innovation from a different perspective, that it is a process of applying a new idea to create a new product or process. Thus, it can be observed that all the definitions have one thing in common, newness. Newness can be said to

be the most important characteristic of innovation and therefore, it can be conveniently concluded that GSM service in Nigeria is an innovation. This is simply because it is an entirely new idea to the general populace.

2.13.1 Factors in the Adoption of Innovation

The process of innovation adoption starts with innovation diffusion. Innovation diffusion process as defined by Rogers (2004) is the spread of a new idea from its source of invention or creation to its ultimate users or adopters. In his view, the consumer-adoption process focuses on the mental process through which an individual passes from first hearing about an innovation to eventual adoption. These processes are identified by Stanton (1999) to be in five stages as follows: awareness, interest, evaluation, trial, and adoption.

However, in-between awareness and adoption of innovation several factors inter-play to influence the consumer's final adoption (or rejection) of a particular innovation. These are articulated by Roberts and Pick (2004) as relative advantage/usefulness, compatibility, complexity/ease of use, observability, and trainability.

2.13 Branding and its Significance in the Marketing of Goods and Services

There appears to be a consensus, among scholars and marketing practitioners alike as to how valuable a successful brand is to a firm. In fact, Kotler and Keller (2006) believe that such successful brand as Sony, Nike, Starbucks and a host of others are able to command a price premium mainly because of the value attached to them. Several definitions of branding have been offered. Williams and McCarthy (2005) define it as the use of name, symbol, term or design or a systematic combination of these to identify a product. American Marketing Association (2008) extends this definition by adding that the names, terms, symbol, design or a combination, are not only intended to identify a particular product/seller, but also to differentiate the seller or a group of sellers from the others. In essence, a brand is simply a product or service with dimensions that make it different from other products designed to meet the same need (Keller, 2005). These dimensions, Aarker (2000) observes, could be rational or emotional. Apart from these rational and emotional aspects, a brand has also been observed to be a complex symbol conveying such meanings as attributes of the product/service, benefits to be derived, values, culture (for example, Mercedes represents German culture of high quality, efficiency and performance); personality and users (Keller, 2005).

Evidence of the origin of branding is well documented (Brown, 2005). Farquhar (2004) cited in Chakravarti (2002) asserts that in those days, names and signs were often inscribed on such goods as bricks and major artworks to identify their maker. The Medieval Guilds requirement that craft people put trademarks on their products to protect themselves and consumers against inferior quality were the earliest signs of branding in Europe (Keller 2005).

What are the importance of branding to consumers and business firms? To Business firms, branding simplifies product handling and tracing. It also helps to properly organize inventory and accounting records (Keller, 2005). Indeed, this is often the case with a company carrying several product lines with different brand names. Davies (2000) submits that companies can reap enormous benefits from their brand assets through such legal protection as trademarks, patents and copyright. Further, experts agree that a good brand reduces marketers selling time and efforts as the brand must have secured customers' confidence and share of mind, often through advertisement and consistent high quality performances (McGill, 2001). Additionally, analysts have observed that good brand improves the overall image of the company, making acceptance of new products marketed under the same brand name a potential success (Kotler, 2004).

To Consumers, it has been observed that today, branding/brands perform a set of invaluable roles that improve consumers' lives. Studies have shown that well recognized brands make shopping a lot easier (Daniel, 2002). This researcher contends that this is quite an important role given the fact that in contemporary times, there is a lot of demand and pressures on consumers' time. So that they will be most pleased to reach out to the shelf and grab a known brand that has served them well before, rather than wandering around the mall filled with unknown/unbranded items. Aarker (2000) notes that branding protects consumers' rights, in the sense that it allows them to assign responsibility to a particular manufacturer or distributor and claim some reprieve in case of any problem with their product or service. In fact, consumers' craving to critically evaluate offerings in order to make informed choice is enhanced by branding (Kotler and Keller, 2006).

2.13.1 Branding and Consumer Choice

For successful marketing in an era of highly complex and well informed consumers, experts are of the opinion that extensive amount of information on consumer behavior is required (Hawkins, Best and Coney, 2001). Consequently, one area that marketers have constantly tried to explore and understand very well is

the choice making behavior of consumer (Keller, 2004). To put this in a perspective, many positions have been advanced. While some authority conclude that consumers' choice process is a highly rational one (Richard, 1997), others believe that it is an emotionally marred process and therefore highly psychological (Aarker, 2000). Yet other studies have shown that consumer choice process is both rational and emotional with either rationality or emotion dominating at times depending on the purchase situations (Davies, 2004). However, a review of several studies appear to show that consumer choice is fueled by a web of factors; some direct others indirect, some conscious others unconscious. Among all these factors, Davies (2004) has identified branding activities (for example, creation of product/service awareness, advertising, delivery of consistent performance, positioning and a host of others) as a major customer choice-influencer. Indeed, this view supports the conclusion of Stephen (2004) that the search-for-information phase of consumer purchase decision process (explained in Section 2.4) that a consumer goes through presents a brand with an excellent chance for influence. Specifically, by providing relevant information and reassuring communications, branding affects consumers' ultimate choice. 'Significantly, the probability of a brand being included during the information search phase is contingent on the consumers' brand awareness during the search phase' (Stephen, 2004:3). Evidently

therefore, creating a high level of brand awareness over time guarantees that some consumers will include the particular brand among the alternatives to be considered during their specific buying cycle (Rapier, 2005).

2.13.2 Measuring the Effect of Brand Associations on Customer Patronage

The key responsibilities of a brand manager are to design, maintain and strategically position the brand ahead of competitors by imprinting the brand firmly on the consumer's psyche (Aarker, 2002). Therefore, the manager of a firm needs to understand consumer perception of its brand(s) vis-à-vis those of competitors. This calls for the measurement of brand associations as it affects consumer patronage. The techniques used to achieve this objective can be grouped into two categories: unstructured and structured techniques (Rossiter, 2005).

Unstructured technique involves the presentation of an ambiguous and unstructured object, activity, or person that a respondent is asked to interpret and explain Campbell (2002). Aarker (2000) and Rossiter (2005) argue that this technique is used when it is believed that respondents will not or cannot respond meaningfully to direct questions about their reasons for certain behaviors or attitudes and what the act of buying, owning or using a brand mean to them. For example, unstructured techniques consist of asking subscribers whether the color,

sign, quality and other attributes of a brand actually influenced their patronage of the brand.

Structured technique on the other hand, involves scaling brands upon a set of dimensions (Aarker, 2000). It was argued that scaling approaches are more objective and reliable than qualitative approaches since they are less vulnerable to subjective interpretations. Scaling consumer perceptions involves the determination of perceptual dimensions, identification of the target segment and the interpretation of the brand profile (Nzuki, 2008). The perceptual dimensions may include product attributes, customer benefits, use and user of the brand and so on (Rossiter, 2005). Scaling methods that marketers have utilized include semantic differential, Likert scale, conjoint analysis and natural grouping (Campbell, 2000).

2.14 Nature of Services

Observably, services are everywhere. They are encountered throughout a consumer's daily life. Remarkably, the American Bureau of Labor Statistics (2008) reports that the service sector of most economies around the world (Nigeria inclusive) will dominate as the major employer of labor for several years to come. This report has more than anything else led to great interest in understanding the special challenges, problems, strategies and general framework for marketing

services (David, Claudio and Javia, 2001; Valerie and Marley, 1996; Kotler and Keller, 2006). Studies have shown that there are numerous facets to services, thus, making it somewhat difficult to define (Clemens, 2001). Service has thus been viewed in several ways.

Sullivan, Edmond and Hofs (2002) view service simply as an action performed by one entity on behalf of another. This action may involve the transfer of some sort of value (Justin, 2004). Also, the action could be deeds, processes or performances, which have such characteristics as intangibility, heterogeneity, simultaneity in production and consumption and perishable (Valerie and Marley, 2000). James, Baruch and Paquette (2004) similarly conclude that service performance is often directed at adding a higher-order value such as convenience, speed and satisfaction.

On the basis of the above conceptualization, several categorization of service have been offered by experts. For instance, Kotler and Keller (2006) have categorized service mix into five. This includes; pure tangible goods, tangible goods with accompanying service, hybrid, major service with accompanying minor goods and of course pure service. In addition, Clemens (2004) and Kotler (2004) believe that service could be designed to meet either personal or business needs; it could

require client's presence or not and it could be either equipment-based or people-based. Indeed, all these categorizations are necessary and need to be clearly understood by service providers as variation across the categorization requires the application of different marketing approaches to be successful (Justin, 2004).

2.14.1 Characteristics of Service

What makes service unique and quite different from physical goods is contained in its characteristics (Stewart and Michael, 2000; Valerie and Marley, 2000). Magnus and Claes-Robert (2003) note that a repeat-purchase customer who patronizes the same service provider over time is likely to experience both good and poor service performance since, by nature, service is inherently variable. Service has also been observed to be intangible, in the sense that it cannot be touched, smelt, felt and seen (Kotler and Keller, 2006). The production and consumption of service tend to happen simultaneously, making it difficult to separate service from its provider. In effect, service providers are often seen to be part of the service (Stewart and Michael, 2000; Justin, 2004). More so, service is said to be highly perishable (Valerie and Marley, 2000); meaning that the value of a piece of service exists only at a particular point in time. Once the value is lost, it cannot be recovered (Justin,

2004). And in this regard, the value of a hotel room not occupied on a particular day is lost forever.

Thus, these unique characteristics of service require marketers to think of unique strategies to market their services appropriately. Magnus and Claes-Robert (2003) suggest that one way for service providers to deal with service variability is to target variables that act as "forgivers", i.e. variables such as trust, which may reduce the negative impact of service variability. To overcome consumers' anxiety about the potential quality of service, given that services are essentially intangible, Kotler and Keller (2006) suggest that service providers must use place, people, equipment, communication materials, symbols and price that convey quality and assurances. It was similarly suggested that service firms should invest in good hiring and training programs for their workers, service demand and supply should be properly managed and of course, customer satisfaction should be constantly monitored (Stewart and Michael, 2002; Magnus and Claes-Robert, 2003; Justin, 2004; Valerie and Marley, 2004; Kotler and Keller, 2006).

2.15 Pertinent Factors in the Marketing of Services

Kotler (2003) has identified several factors pertinent to the successful marketing of services which include: Strategic Concept: Service companies must be "customer

obsessed". They must have a clear sense of their target customers and their needs. They must develop distinctive strategies for satisfying these needs.

Top Management Commitment: The top management team must be committed. They must not only look at financial performance but also be concerned about service performance on a regular basis.

Well-trained/employees: Recruiting the right employee and providing them with excellent skill is crucial, regardless of whether employees are highly skilled professionals or low-skilled workers.

Speedy and efficient delivery: A service company can market its services better by differentiating itself through designing a better and speedy service delivery system. Efficient delivery encompasses on-time delivery, order completeness, better way of handling emergencies, answering inquiries and so on.

2.16 Marketing of Telecommunication Services

In addition to considering the traditional '4ps' of marketing and the general characteristics of service explained above, marketing of telecommunication services requires intensive understanding of the dynamics of the market, their work habit, education, income, age and household make-up (Gary, 2002). Furthermore,

to market telecommunication services and be able to gain reasonable customer loyalty and high market share, the service providers have to answer such questions as, how does a consumer choose a telephone service provider? Can superior customer service make consumers more loyal, or will they switch carrier based solely upon price? What other services besides traditional telephone do they plan to buy and how does that correlate to their education and income level? Do consumers want one bill for all their communication services? What regional differences impact on career choice and so on (Jorwisky, 2004)? Jorwisky concludes that thoughtful and actionable answers to the above questions in addition to other important marketing considerations already discussed constitute the effective marketing of telecommunication services.

2.17 Network Coverage Services

According to Parasuraman et al. (1988), Aydin and Özer (2005), Ismail et al. (2006), A high and good service is a key factor to compete in the services market. Services provider firms give more attention to quality services because it has direct impact on customer satisfaction. Every customer having different expectation from the services provider firm when they get more and better services the customer may become satisfied and it will built the trust of the customer built on the services

provider too. Evaluation of the performance services firm quality services is a key factor in the telecommunication.

2.18 Tariff or Price

Price is the amount of money charged for a product or service, or the sum of values that customers exchange for the benefits of having or using the product or service (Kotler and Armstrong, 2010). In a competitive market, service providers are expected to compete on both price and quality of services and also it is necessary for the service providers to meet the customers' requirement and expectations in price and service quality (Melody, 2001). Nowadays, due to breathtaking competition, the telecommunication service providers tend to offer innovative services as well as competitive prices just to attract a handful of customers. Price plays a vital role in telecommunication market especially for the mobile telecommunication service providers (Kollmann, 2000). The price here is not limited to the price of SIM card, but also covers the price of recharge vouchers, call rates, SMS charge, the internet charge, and price of phones and so on. A network with lower prices has a higher tendency to attract a larger subscriber base leading to an impressive market and financial performance. (Adeleke and Aminu, 2012). When there is a thin line of difference in the service quality in a market

place, price plays a major role in influencing choice by customers. The Nigeria GSM market place it strongly tilting towards this and price could be a major factor of consideration by users in choosing GSM network. In the market where it is difficult to perceive any significant difference in the service quality of most GSM firms, price competition has become widespread and therefore, an important competitive tool. However, the reality of price competition in the market is the existence of price war with subscribers traversing from one network to another to take advantage of the latest price cut, thereby giving no room for any loyalty to be developed. (Adeleke and Aminu, 2012)

2.18.1 Price Fairness

According to Kotler and Armstrong (2010) price is the amount of money charged for a product or service, or the sum of the values that customers exchange for the benefits of having or using the product or service while Stanton, Michael and Bruce (1994) defined price as the amount of money or goods needed to acquire some combination of another goods and its companying services. But the marketing literature showed researchers' inclination towards price fairness in relation with customer satisfaction (Hermann et al., 2007; Kukar-Kinney, Xia and Monroe, 2007; Martin-Consuegra, Molina and Esteban, 2007). Price fairness refers

to consumers' assessments of whether a seller's price is reasonable, acceptable or justifiable (Xia et al., 2004; Kukar-Kinney, Xia and Monroe, 2007). Price fairness is a very important issue that leads toward satisfaction. Charging fair price helps to develop customer satisfaction and loyalty.

Research has shown that customer's decision to accept particular price has a direct bearing at satisfaction level and loyalty and indirectly (Martin-Consuegra, Molina and Esteban, 2007). In another study of Herrmann et al., (2007), it was concluded that customer satisfaction is directly influenced by price perceptions while indirectly through the perception of price fairness. The price fairness itself and the way it is fixed and offered have a great impact on satisfaction. According to Lommeruda and Sørgard (2003), telecommunication services are like undifferentiated products therefore, customers are not price sensitive all the times and sometimes brand loyalty takes part in brand preferences. This is the reason; some consumers are retained with old monopolists. Literature explored showed substantive role of price fairness and quality service with customer satisfaction

2.19 Customer Expectation, Perception and Loyalty

Expectation plays an important role in the satisfaction formation. The extent to which a product or service fulfils a customer's need and desire may play an

important role in forming feelings of satisfaction because of the impact of confirmation or disconfirmation that it has on satisfaction. Consumers expect to be delivered quality products and services; therefore companies try to offer quality products and services. The term expectations really matters to companies because they want to know what customers' expectations are. The term "expectations" has different uses, in the satisfaction literature, it is viewed as a prediction made by a consumer about what is likely to happen during an exchange or transaction. According to Oliver (1981), expectations are consumer-defined probabilities of the occurrence of positive and negative events if the consumer engages in some behavior". In contrast, in the service quality literature, it is defined as desires and wants, what a service provider should offer rather than would offer. Customers form their expectations from their past experience, friends' advice, and marketers' and competitors' information and promises (Kotler, 2000). Therefore, perceived service quality is viewed as the difference between consumers' perceptions and expectations for the service provided. For organizations to keep expectations from rising, they have to perform services properly from the first time (Parasuraman *et al*., 1988). Thus, customer expectations for the service are likely to rise when the service is not performed as promised. Expectations serve as reference points in

customer's assessment of performance (Cronin and Taylor, 1992). Thus, retailers can increase customer satisfaction by decreasing customer expectations.

Customer loyalty is a crucial factor in companies' growth and their performance. Loyalty is linked with the repeat business. Thus, a customer is loyal when he is frequently repurchasing a product or service from a particular provider. 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). The perceived value from the product and the service affects customer judgement about his/her satisfaction or loyalty with the product or the service. 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. It is now a widely accepted business theory that customer retention optimizes profitability; the cost of acquiring new customers is higher than the cost of retaining existing customers. Therefore, the aim of a service company is to satisfy their customers in order to stimulate them to retain and to repeat their service purchase.

Perception is an opinion about something viewed and assessed and it varies from customers to customers, as every customer has different beliefs towards certain services and products which play an important role in determining customer satisfaction. Customer satisfaction is determined by the customers' perceptions and expectations of the quality of the products and services. In many cases, customer perception is subjective, but it provides some useful insights for organizations to develop their marketing strategies. Providing high level of quality service has become the selling point to attract customer's attention and is the most important driver that leads to satisfaction. Therefore, customer perception and customer satisfaction are very closely linked together, because if the perceived service is close to customer's expectations it leads to satisfaction. Satisfied customers provide recommendations; maintain loyalty towards the company and customers in turn are more likely to pay price premiums (Reichheld, 1996).

2.**20 Review of Empirical Studies**

This chapter attempts to review of some previous studies that serve as empirical evidence for this study A study by Amusa (2005) on Consumer Behavior in the GSM market using University of Ibadan and the Polytechnic as a case study, examined the factors affecting consumer behaviour in the GSM market and the

factors that account for the demand and use of GSM facilities. In another study, Ojo (2005), considered Consumer Satisfaction in the GSM Industry in Nigeria and the various constraints against users satisfaction. Olatokun and Bodunwa (2006), in a related study, carried out a survey on GSM uses and benefits in University of Ibadan. These studies were carried out in different parts of Nigeria as stated above and the methodology adopted also differ which gave room to this researcher to undertake his study in the said area.

Despite the high market growth of cellular phone communication the research in customer satisfaction is still in its teething stage (Aydin and Özer, 2006; Sharma and Ojha, 2004; Woo and Fock, 1999). As acknowledged by different scholars, this limited research in the customer satisfaction field of telecommunication sector is one of the challenges faced over the time.

A survey of cellular phone customers in Hong Kong revealed that transmission quality and coverage of network are most important (Woo and Fock, 1999). Others have examined the link between loyalty, switching cost and switching behaviour (Aydin and Özer, 2006; Lee and Feick, 2001). An exploratory study of factors contributing to customer satisfaction of mobile user in India has resulted in the construction of three distinct constituents i.e., network base service performance,

retailer related process performance, and network operator related performance (Sharma and Ojha, 2004). Delivering a service performance, which can satisfy customers, is critical for retaining customers and serves as a tool to protect organizations from customer churn (Brown and Gulycz, 2001). Marketing scholars and practitioners equally emphasize on the issue of customer satisfaction for generating loyalty among customers, which helps in maintaining existing cash flows and guarantee stable future (Teas, 1994; Zeithaml et al., 1996). Even related studies outside Nigeria are not enough. While the manufacturing sector is concerned with the repurchase, most of the services depend on the continuity and thus focus on customer retention (Anderson et al., 1994). In a competitive environment with minimum or ignorable switching cost, such as in the telecommunications sector, the issue of satisfying customer thus becomes vital.

Also amongst studies on customer satisfaction is that of Olatokun and Nwonne (2012) which examines the significance of price, service quality, service availability, promotion and brand image as they affect users perception in selecting mobile telecommunication market. Hashim (2014) identified the determinants of customer loyalty among subscribers of GSM in Northwestern Nigeria. Hashed, Salniza and Hamid (2012) examined the relationship between perceived quality, perceived value, customer expectation and corporate image. Loke et al (2011)

examines the impacts of reliability responsiveness, assurance emphathy and tangible aspects on customer satisfaction. However, a search and review of relevant literature especially the most recent ones on the subject matter has revealed that little or no particular attention has been given to the potential Customer satisfaction and performance of GSM service provider (s). In fact, some of the earlier studies in this area such as Ndukwe (2005, 2008), Adeiza (2005. 2010), Jibrin and Ahmad (2014), Olatokun and Nwonne (2012), Amusa (2005), Ojo (2005), Oyeniyi and Abiodun (2010), Olatokun and Bodunwa (2006), and Hashim (2014) have acknowledged in their respective submissions of the inattention to customer satisfaction and performance of GSM services.

2.21 Theoretical Framework

2.21.1 Met-Expectations Model

Theoretical frameworks that were adopted for this study are the theories of measuring customer satisfaction that has received considerable attention in the service industry is the Met-Expectations Model. This is also known as the Discrepancy Model, Disconfirmation of Expectations Model, or Gap Model for Managing Quality (Parasuraman, Berry and Zeithaml, 1985, 1993). The basic premise of the model is that quality can be defined by the differences between the

customer and the organization in terms of service quality (Parasuraman, Berry and Zeithaml, 1985). This is true of perceptions, expectations, and actual service delivery from the two perspectives. These differences, or gaps, can be used to identify the relative strengths and weaknesses in service quality of an organization (Grapentine, 1999). Furthermore, this provides a measure of performance quality in an area that has been more difficult to operationalize (Patti, 1987). The Met-Expectations Model of Customer Satisfaction is based upon a framework of five potential service quality gaps (Parasuraman, Berry, and Zeithaml, 1985). The first four are those on the provider side of service. The fifth relates to the customer side of service. These gaps are - Gap 1: The difference between customer expectations and management perceptions of customer expectations. Simply, this is the point of knowing what the customer expects. It is important for an organization to clearly know of what exactly the customers expect. Failure to do so can lead to poor perceptions of satisfaction with service quality. This is the cornerstone of effective business – knowing one's customer (Dutka, 1993).

Gap 2: The difference between management perceptions of customer expectations and service quality expectations. This gap relates to the consistency between the organization's established specifications of service quality and expectations of its customers. The intended service must meet the expected service. The more exact

these are the more likely that the organization is measuring the important qualities of service anticipated by its customers. The customer must determine the standards of service delivery for satisfaction to be positive (Shostack, 1990; Takeuchi and Quelch, 1990).

Gap 3: The difference between actual service quality specifications and the service actually delivered. This is referred to as the service performance gap. This is the difference between what an organization stipulates as service standards and practices and what employees actually deliver to customers. These differences could be due to either the inability or the unwillingness of staff to perform as the organization describes. An organization must be closely and carefully monitoring the provision of service. Failure to do so will lead to lower customer satisfaction (Gitomer, 1998).

Gap 4: The difference between service delivery and what is communicated to customers. The consistency between organizational assurances of service delivery and actual service delivery is the issue of this gap. The premise is the follow through on promises made to customers by an organization. Failure to deliver as promised can lead to customer dissatisfaction, not only with the service, but the

agency as well. This is identified as a significant reason for customer defection (Reichheld and Sasser, 1990).

Gap 5: The difference between customer expectations and perceptions. Another key difference that affects satisfaction is between customer expectations and perception. The service delivery that is perceived must meet or exceed anticipations. Failure to do so can lead to customer dissatisfaction – outrage in the extreme - while meeting or exceeding these can lead to satisfaction – or delight in the extreme. (Keiningham and Vavra, 2001). Obviously, happy customers help and angry customers harm business. The model is appealing both in its simplicity and intuitive logic. Customer expectations of service that are closely matched with perceived actual services will be satisfied customers. If expectations exceed actual services, the client is dissatisfied (or worse). Conversely, if the actual services surpasse expectations, the customer is very satisfied. The Met-Expectations Model of customer satisfaction has been applied in a wide variety of service settings. These have included library usage (Cullen, 2001), tourist services (Swan and Bowers, 1998), public health services (Bryant, Kent, Lindenberger, Schreiher, Canright, Cole, Uccellani, Brown, Blair, and Bustillo-Hernandez, 1998), medical and dental services (Taylor and Cronin, 1994), and human services (Selber and Streeter, 2000).

2.21.2 Social Exchange Theory

Secondly, another theory that is relevant to this study since a degree of social interaction between the provider and the customer is often required for the service to be "manufactured", is the theoretical foundations for the study of customer satisfaction in a service context can be found in social exchange theory (Emerson, 1976). In fact, service encounters can be viewed as social exchange with the interaction between service provider and customer being a crucial component of satisfaction and providing a strong reason for continuing a relationship (Barnes, 2002). Social exchange theory attempts to account for the development, growth and even dissolution of social as well as business relationships. In other words, people (or businesses) evaluate their reward (cost) ratio when deciding whether or not to maintain a relationship. Rewards and costs have been defined in terms of interpersonal (e.g. liking, familiarity, influence), personal (gratification linked to self esteem, ego, personality) and situation factors (aspects of the psychological environment such as a relationship formed to accomplish some tasks).

In a services context, considering the level of interpersonal contact needed to produce services, there is a range of psychological, relational and financial considerations that might act as a disincentive for a hypothetic change of service

providers. Consistently with the switching costs literature, social capital acts both as a barrier that makes it more difficult or costly (psychological, relational, economic) to change service provider (Patterson, 2004), and as an influence, created by the endogenous and contextual interactions, that is, distinct ways that consumers might be influenced by their social environments.

2.21.3 Consumer Decision Making Model (CDMM)

Thirdly, there are several theories which attempt to explain the mysteries of customer satisfaction of one company or the others. Schiffman and Kanuk (2004) in their famous Consumer Decision Making Model (CDMM), identify among others, Cultural, Sociological, Psychological, Personal and Environmental explanations to customer satisfaction. They believe that consumer choice of a product or service is influenced by a combination of these factors and as a result affects the level of satisfaction. Also, Stavkova, Stejskal and Toufarova (2006) on their part, believe that consumer decision making is a highly cognitive process involving rationality and consciousness.

2.21.4 SERVQUAL Model

Finally, the most notable work on measuring customer perception of service quality is SERVQUAL Model developed by Parasuraman, Valerie and Leonard

(Allen, 2001). This work reduced a 22 item scale that measured perceived service quality along five dimensions, namely; reliability, responsiveness, assurance, empathy and tangibles. Reliability encompasses the dependability and accuracy of the service. Responsiveness connotes promptness and the willingness of staff to assist. Assurance is about attributes (such as knowledge and courtesy) of staff that conveyed trust and confidence to service users. Empathy signifies the level of caring and personalized attention provided to the customers and lastly, tangibles represent the concrete or physical aspects of the service that conveys quality and reduces customers' anxiety about the unknowns (Parasuraman, Valerie and Leonard, 1996) cited in Allen (2001).

Thus, to be a top service company, studies have shown that firms must necessarily have a strategic service concept, secure top management commitment to quality, set high quality standards, adopt self-service technologies, establish a credible system for monitoring service performance and customers' complaints and pay sufficient attention to employees satisfaction (Allen, 2001; Stewart and Michael, 2000; Justin, 2004; Parasuraman, Valerie and Leonard, 1996; Kotler and Keller, 2006).

This study adopts these theories: Met-Expectations Model, social exchange theory, Consumer Decision Making Model and SERVQUAL Model (mixed model) to underpin the work. The mixed model adequately captures the variables i.e service quality, customer care service, network coverage and product development under study and it is a useful framework for understanding the effect of GSM service performance on customer satisfaction of GSM service providers in Northwest Zone, Nigeria.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the procedures employed for the collection and analysis of the data relevant to the investigation. These include: research design, population of the study, sample size and technique, methods of data collection, method of data analysis, model specification and measurement of variables.

3.2 Research Design

Survey research design was used for this study. According to Asika (2005) survey design is most appropriate for gathering information that will enable a researcher describe the characteristics of a large population. Hence, in order to determine the nature of the subject of this study, survey research design was adopted. Large cross sectional samples of the population were chosen without being manipulated or controlled and data collected were studied and analyzed. According to Swain (2008), descriptive survey design is used when the objective of the study is to provide systematic description that is factual and accurate as possible. The

researcher also adopts this method because we do not intend to manipulate or control the sample that was chosen from the population of the study.

The main variables of the performance of GSM services that were measured in relation to customer satisfaction include: Tariff charges, product development, Network available, customer care service and service quality provided by GSM providers.

3.3 Population of the Study

Population of the study consists of the subscribers of GSM services offered by all the GSM services providers operating in North West Nigeria. The population is made up of different categories of individuals of GSM subscribers such as employees in the private and public sectors, businessmen and women, applicants and students who must be at least eighteen years old. The population of individuals within the study area is 24,939,821 (National Population Commission Census, 2006). The sample of respondents for the study was drawn from this. The confidence level of 3.5% was selected at 95% confidence interval. The respondents cut across the four major GSM service providers that have been operating in the Northwest of Nigeria.

3.4 Sample Size and Sampling Technique

For operational convenience a sample size of one thousand five hundred and sixty-eight (1568) respondents was chosen to represent the entire population of Northwestern zone which stood at 24,939,821 by National population commission census figure 2006. We derived this based on Research Advisors Table (2006) (see appendix 1) which is the revised version of Krejcie and Morgan (1970). Based on the table, 784 is adequate for a population size from 24,939,821 up to 100,000,000 (see appendix 1). In order to get at least the minimum sample required (i.e. 1,568) of responses, 100% copies of the questionnaire was added to the minimum sample

calculated. Cochran (1962) has opined that the amount of non-response can be handled by doubling the sample size. The analysis is presented in Table 3.1.

In each of the states in North Western zone, we have proportion of people of all walks of life from all parts of the country. However, in view of the fact that some of the states have a higher concentration of businesses and service organizations than others, there is thus a higher likelihood of unequal targets from each State. This ensured a high probability of the samples being representative of the population.

Table 3.1 Population of North Western Nigeria

S/N	STATE	POPULATION	SAMPLE SIZE
1	KANO	9,383,682	590
2	KADUNA	6,066,562	384
3	KATSINA	5,752,578	362
4	SOKOTO	3,696,999	232
	TOTAL	**24,939,821**	**1568**

Source; National Population Commission (2006 Census)

Stratified sampling method was adopted in this study, the technique ensured representativeness of the component States in the study area, and hence it was considered superior to both simple random and systematic sampling methods (Babbie, 1973; Asika, 1991 and Osuala, 2005). This sampling technique is similar to the two-stage stratified sampling method used by Olatokun and Bodunwa (2006). Accordingly, the sampling process was in two stages: first, states were analyzed according to population, which also reflected the diverse levels of businesses/service organizations. This was followed by the use of strata sampling method to determine the number of respondents required from each State thereby ensuring class structure and gender representation. The second stage involved a purposive sampling of individual respondents predetermined above from each state. The random selection of the respondents was accomplished by distributing the questionnaire to the available people. However, an attempt was made to achieve gender balance in the random selection of the respondents.

North Western Zone of Nigeria comprises seven states i.e. Katsina, Kaduna, Kano, Kebbi, Jigawa, Sokoto and Zamfara state but for the purpose of this study Kano, Kaduna, Katsina and Sokoto were selected to represent the entire zone. This is done because of the similar characteristics of demographic populations of some states like Kano and Jigawa, Sokoto, Kebbi and Zamfara state.

3.5 Methods of Data Collection

Questionnaire was used to collect data for the study. The questionnaire was administered to the respondents (GSM Subscribers) by research assistants. Data collection lasted for a period of eight weeks. Post coding and data clearing were then carried out prior to data entry. This helped to correct for missing entries, inconsistent responses, and outliers. The five-point Likert type rating scale was used to collect responses to the questions. Hence, the data was categorized and scaled.

3.6 Methods of Data Analysis

A combination of both descriptive and inferential statistics were used as techniques of data analysis for this study. Multiple regression was used to determine the effect of the variables (dependent and independent) of the study. These tools were chosen mainly because of the nominal nature of data collected. To further ensure validity and reliability of this instrument, a regression analysis was run with the same data. Data processing was done using the Statistical Package for Social Sciences (SPSS) 21 version.

3.7Model Specification

The effect of dependent variable and independent variables was expressed using the following model:

CS= f (TC+NC+CC+PD+QS)

Where:

CS = Customer satisfaction (Dependent Variable)

f= function

TC, NC, CC, PD, & QS = Independent Variables

TC= Tariff charges

NC= Network available

CC= Customer care service

PD= Product Development

QS= Service Quality

The customer satisfaction (CS) was regressed on tariff (TC), network coverage (NC), customer care (CC), products development (PD), and quality of service (QS) using the model specified thus:.

$$CS= a_0 + b_1TC + b_2NC + b_3CC + b_4PD + b_5QS + e_t$$

Where:

CS = Customer satisfaction

a_o = intercept

b_1, b_2, b_3, b_4, b_5 = slopes

et = error term

3.8 Measurement of Variables

The survey utilized questionnaire. Responses about the general features of the respondents such as sex, age group, marital status, educational qualification, employment status and annual income group were measured using a set of closed-ended multiple choice questions. A 5-point Likert type rating scale was used to rate a set of statements relating to the key variables of the study. Specifically, the variables were measured and rated as explained below.

Tariff Charges

Respondents were asked to indicate the level of satisfaction with the tariff charges by GSM service providers on a Likert scale of 1 to 5, with 5 meaning to very large extent and 1 meaning not at all. Seven (7) items proxies were used to measure tariff charges by GSM providers these are charges for calls within the network, ease of recharging, accurate billing, charges for calls to other networks, charges for international calls, and charges for text messages. Their responses were subsequently collapsed into a single index representing tariff charged by GSM services.

Network Coverage

Network coverage of the GSM service providers were rated using the 5 point Likert scale of 1-5 with 1 meaning not frequent at all to 5 meaning very frequent, in the area of their coverage. Five items proxies were used to measure network coverage of GSM providers, these are availability of network, reliability of network, ease of dialing and reaching telephone lines within the network, ease of dialing and reaching telephone lines outside the networks. Similarly, the responses were subsequently collapsed into a single index representing network coverage provided by GSM operators.

Customer Services

The level of customer satisfaction with customer care service provided by GSM services was measure by asking the respondents to indicate the extent on a scale of 1 to 5, with 1 meaning not at all and 5 meaning to a very large extent the subscribers are satisfied with customer care services of GSM providers. Five items proxies were used to measure customer care service of GSM providers these are response to complaints, addressing and redressing complaints, relationship between provider personnel and customers, effectiveness of officers, and friendliness of service personnel. The responses were subsequently collapsed into a single index representing customer care services provide by GSM providers.

Quality of Service

Some key aspects of service quality in GSM service delivery were identified such as calls completion without interruption, overall reliable of network, calls diversion, text messages diversion (hang) in measuring quality of service. Respondents were asked to indicate the extent (on a scale of 1 to 5, with 1 meaning not at all and 5 meaning to a very large extent) to which the quality of services satisfied subscribers. Similarly, the responses were collapsed into a single index representing quality of service of GSM providers.

Product Development

Some key aspects of product development by GSM service providers were identified, these are internet service, appeal through advertisement, sales promotional activities, optional internet and opportunity for free calls, messages and internet access. Respondents were asked to indicate the extent (on a scale of 1 to 5, with 1 meaning not at all and 5 meaning to a very large extent) to which the product offered satisfied subscribers. The responses were collapsed into a single index representing product development of GSM providers.

3.9. Validity and Reliability Analysis

The central consideration of validity concerning the process of data collection is that of reliability (Mouton & Marais, 1996). Reliability considerations are important in practically every data situation but they are especially more important when data compilations are made, and when data produced by several sources must be used together (Taylor & Cihon, 2004).

i). The questionnaire was examined and certified by four independent scholars. (see appendix viii)

The reliability research questionnaire is generally measured using Cronbach's alpha statistics. It is specifically aimed at measuring internal consistency of a questionnaire. The greater the degree of consistency and stability in an instrument, the greater is its reliability (Kumar, 2005). Cronbach's alpha is a consistency test of whether all items within the instrument measure the same thing. Cronbach's alpha is designed on a scale that varies between 0 and 1. Although a negative value is possible, such a value indicates a scale in which some items measure the opposite of what other items measure. The closer the alpha is to 1.00, the greater the internal consistency of items in the research instrument.

There is some debate about what score is regarded as an acceptable level of internal reliability. Score between 0.6 and 0.8 may be regarded as good (Bryman, 2004). Ideally, Cronbach's alpha coefficient of a research scale should be above .7 (Pallant, 2005). Hair et al (2010) have suggested that the lower limit for Cronbach's alpha may decrease to 0.60 in exploratory research. Cronbach's alpha value is very sensitive to a number of items in the scale. It is common for Cronbach's alpha value to be low. If the items are less than ten, it is possible to have a value as low as .5 (Pallant, 2001).

Croubach"s alpha of the instrument is reported in table below.

Reliability Statistics

Cronbach's Alpha	No of Items
.934	33

SPSS OUTPUT 2015

Reliability Analysis on Customer Satisfaction

Reliability Statistics

Cronbach's Alpha	N of Items
.861	8

SPSS OUTPUT 2015

The reliability analysis results shows that the dependent variable Cronbach's alpha value is 0.861 with numbers of 8 items which means the variable is reliable.

Reliability Analysis on Tariff Charges

Reliability Statistics

Cronbach's Alpha	N of Items
.795	6

SPSS OUTPUT 2015

The reliability analysis results shows that the independent variable Cronbach's alpha value is 0.795 with numbers of 6 items which means the variable is reliable.

Reliability Analysis on Network Coverage

Reliability Statistics

Cronbach's Alpha	N of Items
.873	4

SPSS OUTPUT 2015

The reliability analysis results shows that the independent variable Cronbach's alpha value is 0.873 with numbers of 4 items which means the variable is reliable.

Reliability Analysis on Customer Services

Reliability Statistics

Cronbach's Alpha	N of Items
.906	5

SPSS OUTPUT 2015

The reliability analysis results shows that the independent variable Cronbach's alpha value is 0.906 with numbers of 5 items which means the variable is reliable.

Reliability Analysis on Quality of Service

Reliability Statistics

Cronbach's Alpha	N of Items
.691	5

SPSS OUTPUT 2015

The reliability analysis results shows that the independent variable Cronbach's alpha value is 0.691 with numbers of 5 items which means the variable is reliable.

Reliability Analysis on Product Development

Reliability Statistics

Cronbach's Alpha	N of Items
.686	5

SPSS OUTPUT 2015

The reliability analysis results shows that the independent variable Cronbach's alpha value is 0.686 with numbers of 5 items which means the variable is reliable.

3.10 Multiple Regression Analysis

This method analyses the link between several independent (predictor) variables with a single dependent (criterion) variable. Multiple regression analysis was conducted for this study to verify the influence of independent variables (tariff charges, network coverage,, customer care, product development and quality of services) and the dependent variable (Customer satisfaction).

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents the summary of data generated from the investigation. Specifically, it presents the response rate and description of respondents that participated in the study, the results of the analysis of data as well as the interpretation. Answers to the research questions earlier posed for the study and the analysis of results of test of hypotheses as well. The chapter also contains a section that discusses the key findings of the study.

4.2 Response Rate

One thousand five hundred and sixty eight (1568) respondents participated in the study, informing the distribution of the same number of questionnaire. One thousand Five hundred and forty seven (1547) copies of the questionnaire, representing 98% (response rate) were returned; out of which one hundred and forty (140) were rejected because they were not properly completed. This means that 1407 (89%) copies of the questionnaire were found useful for the analysis.

Table 4.1: *Response Rate of the Questionnaires*

	Response
No. of distributed questionnaires	1568
Returned questionnaires	1547
Returned and usable questionnaires.	1407
Returned and excluded questionnaires.	140
Questionnaires not returned	21
Response rate	98%
Usable response rate	89%

Source: Field survey, 2015.

4.2.1 Description of Respondents

Virtually all the respondents 1407 (100%) subscribed to the services of one or more GSM Networks and data analysis revealed that 170 (12%) of the respondents had about 8 years' experience as subscribers, 1101 (78%) of the respondents had subscribed to GSM service since 5 years ago and 134 (10%) of the respondents had about 2 years subscription experience Determination of respondents' years of experience with use of GSM services was necessary as studies show that there is a correlation between customer experience and customer satisfaction.

Table 4.2: Year of Subscription

Year	Frequency	Percent
Above 5	170	12
3-5	1101	78
Below 3	134	10
Total	1407	100.0

Source: Field survey, 2015.

Specifically, data analysis revealed that 959 (68%) members of the respondents were male while female respondents were 448 (31%).

Table 4.3: Gender Distribution of Respondents

	Frequency	Percent
Male	959	68
Female	448	32
Total	1407	100.0

Source: Field survey, 2015.

Analysis of the respondents on the basis of age revealed that 430 (30%) were aged between 18 and 25 years; 580 (41%) were between the age of 26 and 35 years; 241

(17%) respondents were between 36 to 45 years of age and 156 (11%) respondents were above 46 years and above.

Table 4.4: Age Distribution of Respondent

	Frequency	Percent
18-25 years	430	30
26-35 years	580	41
36-45 years	241	17
46 years and above	156	11
Total	1407	100.0

Source: Field survey, 2015.

The number of respondents that were unmarried stood at 607 (43%), married respondents were 672 (48%), 113 (8%) of the respondents were divorced while only 15 (1%) respondent was a widow.

Table 4.5: Marital Status of Respondents

Frequency	Frequency	Percent
Single	607	43
Married	672	48

Divorcee	113	8
Widowed	15	1
Separated	0	0
Total	1407	100.0

Source: Field survey, 2015.

On the educational qualification of the respondents, data analysis revealed that 421 (30%) of the respondents had such educational qualification as GCE/SSCE or its equivalent; 370 (26%) had OND/NCE; 438 (31%) of the respondents had HND/B. Sc.; the respondents with M. Sc /MA/MBA were 144 (10%), those with Ph. D/DBA/D. Ed were 24 (2%) and 11 (0.78%) of the respondents had such professional qualifications as ACCA, CIBN, NIM and CIMN.

Table 4.6: Educational Qualification of Respondents

Levels	Frequency	Percent
GCE/SSCE or Equivalent	421	30
OND/NCE or Equivalent	370	26
HND/B. Sc./BA or Equivalent	438	31
M. Sc./MA/MBA or Equivalent	144	10
Ph. D./DBA/D. Ed or Equivalent	24	2
Professional Qualification e.g. ACCA, AIB etc.	11	1
Total	**1407**	**100**

Source: Field survey, 2015.

Data analysis also revealed that 570 (41%) of the respondents were students; 119 (8%) were unemployed and 718 (51%) of the respondents were gainfully employed. Analysis of those gainfully employed revealed that 408 (57%) were in the public sector while the remaining 310 (43%) respondents were employed in such private outfits as banks, restaurants, internet cafes, hotels and self-established businesses.

Table 4.7: Occupational Distribution of Respondents

	Frequency	Percent
Students	570	41
Applicant	119	8
Gainfully Employed (Public Sector)	408	29
Gainfully Employed (Private Sector)	310	22
An Apprentice	0	0
Total	**442**	**100**

Source: Field survey, 2015.

The levels of people's income affect their utilization of and satisfaction from GSM services, hence the respondents' monthly income was assessed. The results revealed that 696 (49%) of the respondents earned between N20, 000 to N100, 000; 556 (40%) of them earned between N101, 000 to N160, 000 and 155 (11%) of them earned a monthly income of N161,000 and above.

Table 4.8: Respondents Distribution by Income

Income Range	Frequency	Percent
N61,000 - N100,000	696	49
N101,000 - N140,000	556	40

N160,000 and above	155	11
Total	1407	100

Source: Field survey, 2015.

4.3 Discussion of Results

Regression Results

Table 4.9 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
	.723[a]	.523	.521	3.00413	1.428

a. Predictors: (Constant), QUALITY, NETWORK, PRODUCT, CHARGES, CARE

b. Dependent Variable: CUSSTFN

Table 4.10 ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13855.481	5	2771.096	307.054	.000[b]
	Residual	12643.724	1401	9.025		
	Total	26499.205	1406			

a. Dependent Variable: CUSSTFN

b. Predictors: (Constant), QUALITY, NETWRK, PROUCT, CHARGES, CARE

Table 4.11 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients			Correlations			Collinearity Statistics	
		B	Std. Error	Beta	T	Sig	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	4.212	.456		9.228	.000					
	CHARGES	.086	.025	.084	3.465	.001	.439	.092	.064	.586	1.708
	NETWRK	.756	.035	.456	21.857	.000	.636	.504	.403	.782	1.279
	CARE	.198	.032	.176	6.213	.000	.541	.164	.115	.424	2.360
	PROUCT	.147	.034	.100	4.319	.000	.461	.115	.080	.633	1.580
	QUALITY	.140	.038	.105	3.681	.000	.515	.098	.068	.415	2.409

a. Dependent Variable: CUSSTFN SOURCE: SPSS OUTCOME 2016

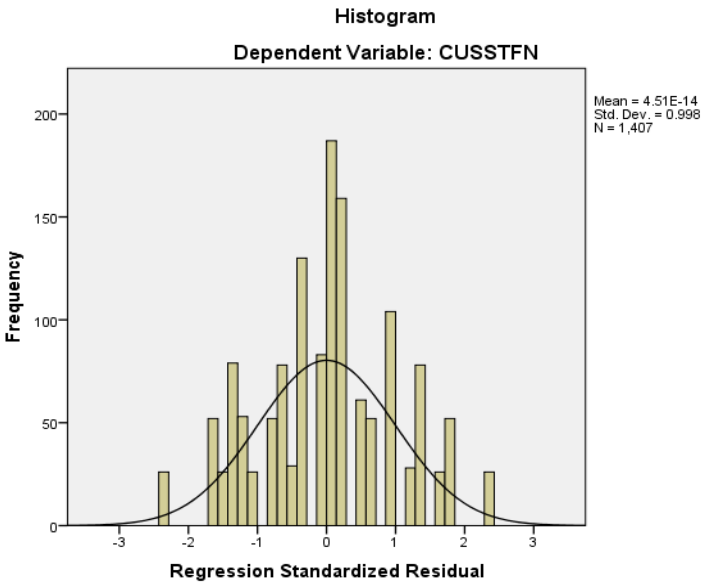
As presented in the model summary above, the analysis revealed that the adjusted R^2 is 0.52, signifying that 52 per cent of variation in customer satisfaction is explained or accounted for by tariff charges, network coverage, customer care, products development and quality of service. Thus, the goodness of fit embedded in the adjusted co-efficient of determination shows that the estimated model has high predictive power. The table also revealed that the Durbin-Watson statistics of 1.428 confirm non-auto correlation of random variables. The DW statistics can vary between 0 and 4 with a value of 2 or close to 2 meaning that the residuals are uncorrelated (Field, 2009; Swain, 2008).

Similarly, the ANOVA reveals that the F-statistics is statistically significant, as confirmed by p-value of 0.001; this is a testimony of joint significant of estimated co-efficient of tariff charges, network coverage, customer care, product development and quality of service. Moreover, the Variance Inflation Factor (VIF) are 1.708, 1.279, 2.360, 1.580 and 2.408 for tariff charges, network coverage, customer care, product development and quality of service respectively. The VIF values are all well below 10, the tolerance statistics all well above 0.2 and the average VIF is 1.867, which is very close to 2. We can therefore, safely conclude that collinearity is not a problem for this model. If the largest VIF is greater than 10 then there is cause for concern (Bowerman & O'Connel, 1990; Myers, 1990);

if the average VIF is substantially greater than 1 then the regression may be biased (Bowerman & O'Connel, 1990) and tolerance level below 0.2 indicates a potential problem (Menard, 1995). The correlation matrix in Appendix II (i) also confirms that the explanatory variables are not highly correlated, meaning that multi-collinearity does not exist.

In addition, Figure 4.1 reveals that the random variables are normally distributed as indicated by the bell –shaped curve histogram.

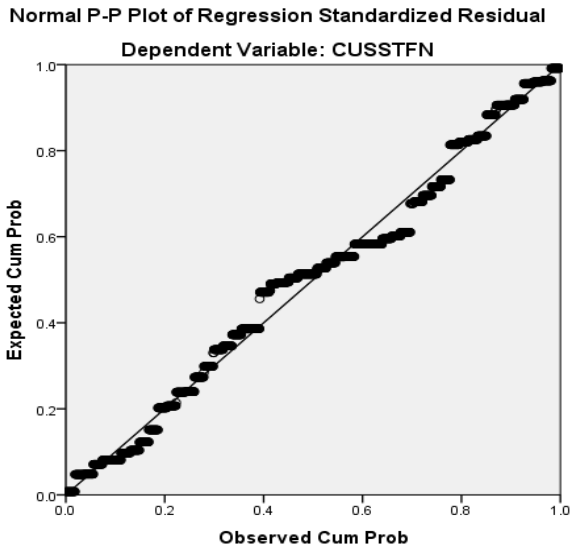
Figure 4.1: Normality of Standardized Residual



Source: Regression Analysis (SPSS21, 2015)

The low standard deviation of 0.998 in figure 4.2 (see Appendix IV) also confirmed that the residuals are normally distributed. The straight line in the normal probability plot in figure 4.2 (see Appendix IV) also represents a normal distribution.

Figure 4.1



Source: Regression Analysis (SPSS21, 2015)

4.4 Test of Hypotheses

The study tested five hypotheses using regression as shown in table 4.11 , hypotheses one, two, three, four and five which stated that tariff charges, network coverage, customer care, product development and quality of services provided by

GSM service providers has no significant effect on customer satisfaction were tested. The results reveals that the five hypotheses were significant, therefore, the study rejected null hypotheses one, two, three, four and five respectively. The following are the details of each tested hypotheses:

Hypothesis One: Tariff charged by GSM service providers has no significant effect on customer satisfaction in North Western Nigeria: Table 4.11 shows that there is significant effect of tariff charges by GSM service providers and customer satisfaction in North West Nigeria as it is confirmed by the regression co-efficient of 0.084. The t-value of 3.465 is highly significant as indicated by the P-value of 0.001. This shows the importance of tariff charges on customer satisfaction. The study therefore, rejects the null hypothesis and concludes that there is positive significant effect of tariff charges and customer satisfaction of GSM service providers in North West Nigeria.

Hypothesis Two: Network coverage of GSM service providers has no significant effect on Customer satisfaction in North Western Nigeria: Table 4.11 shows that there is strong positive effect of network coverage of the GSM service operators and customer satisfaction in the North West Nigeria as it is

confirmed by regression co-efficient of 0.456. The t-value of 21.857 is highly significant, as indicated by the P-value of 0.001. This shows network coverage of GSM providers is very important to customer satisfaction. The study therefore, rejects the null hypothesis and concludes that there is a strong positive significant effect of network coverage and customer satisfaction of GSM service providers in North West Nigeria.

Hypothesis Three: Customer care services provided by GSM operators have no significant effect on customer satisfaction in North Western Nigeria: Table 4.11 also demonstrates that there is significant effect of customer care service provided by GSM service providers and customer satisfaction in North West Nigeria as it is confirmed by the regression co-efficient of 0.176. The t-statistics of 6.213 is significant as shown by the P-value of 0.001. The study therefore, rejects the null hypothesis and concludes that there is significant effect of customer care and customer satisfaction in North West Nigeria.

Hypothesis four: Product development by GSM service providers has no significant effect on customer satisfaction in North Western Nigeria: Table 4.11 reveals that there is significant effect of products development by GSM service providers and customer satisfaction in the North West Nigeria. This is

confirmed by the regression co-efficient of 0.100. The t-value of 4.319 is also highly significant as indicated by the P-value of 0.001. This shows that products development by GSM operators is very important to customer satisfaction. The study therefore, rejects the null hypothesis and concludes that there is positive significant effect of products development on customer satisfaction of GSM service providers in North West Nigeria.

Hypothesis five: Service quality has no significant effect on customer satisfaction of GSM service providers in North Western Nigeria: Table 4.11 finally demonstrates that there is highly positive effect of quality of service of GSM service providers and customer satisfaction in North West Nigeria as it is confirmed by the regression co-efficient of 0.105. The t-value of 3.681 is highly significant as indicated by the P-value of 0.001. This shows that quality of service is one indicator of customer satisfaction. Hence, the study therefore, rejects the null hypothesis and concludes that there is positive strong significant effect of quality of service on customer satisfaction of GSM service providers in North West Nigeria.

4.5 Discussion of Findings

The aim of this study is to assess the performance of GSM service providers and customer satisfaction in the North West, Nigeria. The main objective of this study is to examine the performance of GSM services and customer satisfaction in North Western Nigeria. The specific objectives are to: assess the effect of tariff charged by GSM service providers on customers satisfaction; evaluate the effect of network (coverage) of GSM service providers on customers' satisfaction; examine the extent to which the customer care services provided by GSM operators have affected customers' satisfactions; appraise the effect of service quality on customer satisfaction of GSM service providers and ascertain the effect of product development by GSM service providers on customer satisfaction.

The results reveal that tariff charges, network coverage, customer care, products development, and quality of service jointly and significantly accounted for the variation in customer satisfaction of GSM service providers in North West Nigeria. This is confirmed by adjusted R^2 of 52 per cent and validated by significant F-statistics of 1 per cent. This implies that about 52 per cent of the variation in customer satisfaction can be attributed to tariff charges, network coverage, customer care, products development and quality of service. 48 per cent of the variance in customer satisfaction may be due to other factors or chance. This is a testimony of the significance of tariff charges, network coverage, customer care,

products development and quality of service in predicting customer satisfaction of GSM services in North West Nigeria.

i. The study established that there is positive effect of tariff charges on customers satisfaction by GSM service providers, the study reject the null hypothesis of hypothesis one, and concludes that there is significant effect of tariff charges on customer satisfaction of GSM services in North west, Nigeria. This means that tariff charges is a strong predictor of customer satisfaction of GSM services in North West, Nigeria. This finding is in line with the finding of Jibrin (2010) in Abuja metropolis.
ii. The study established that there is positive effect of network coverage on customers satisfaction by GSM service providers, the study also rejects the null hypothesis of hypothesis two, and concludes that there is positive effect of network coverage on customer satisfaction in North west, Nigeria. This means that network coverage is a very strong predictor of customer satisfaction of GSM services in North west, Nigeria. This finding also confirmed the outcome of Jibrin (2010).
iii. The study established that there is positive effect of customer care service on customers satisfaction by GSM service providers, another major finding of the study was that customer care had no significant effect on customer satisfaction

of GSM services in Nigeria. The study rejects the hypothesis three and concludes that customer care provided by GSM service providers is a strong indicator of customer satisfaction of GSM services in North west Nigeria The finding is contrary to the outcome of Jibrin (2010).

iv. The study established that there is positive effect of product development on customers satisfaction by GSM service providers, the study also rejects the null hypothesis of hypothesis four, and concludes that, there is strong effect of product development on customer satisfaction in North west Nigeria. This means that varieties of products are a very strong predictor of customer satisfaction of GSM services in North West Nigeria.

v. The study established that there is positive effect of quality of service on customers satisfaction by GSM service providers, the study rejects the null hypothesis five, and concludes that, there is also a strong effect of quality of service on customer satisfaction in North West Nigeria. This means that quality of service is a very strong predictor of customer satisfaction of GSM services in North West Nigeria.

vi. The study discovered that network coverage of the GSM service providers has the highest beta results of 0.456 and tariff charges has lowest results of 0.084 as shown in table 4.11. The means that, customers of GSM service providers

in the North West Nigeria were mostly satisfied with availability of network, reliability of network, ease of dialing and reaching telephone lines within the network, ease of dialing and reaching telephone lines outside the networks and not too satisfied with tariff charge by GSM service providers in the North West Nigeria.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The issue of customer satisfaction has become the most stressed global competitive strategic factor in the battle for winning and maintaining sustainable competitive advantage. Service firms harness emerging robust Information and Communications Technology (ICT) to drive their competitive edge. Global System Mobiles are ICT based services which have developed over successive generations. Since the first generation (1G) appeared in the 1950s, later generations (2G – 3G) have come with enhanced features in terms of capacity and convenience. New versions are still emerging, characterized by increasing capabilities and richer content. Contemporary innovations explore the integration of telecommunications and multimedia services, which tend to be more robust but with more complication than most experts predicted. This study focused on telecommunication services and assessed the performance of GSM service providers and customer satisfaction in Northwest Nigeria. Specifically, the study investigated tariff charges; network coverage; customer care; products development and quality of service. *Historical experience of Nigeria since the launch of Econet Wireless Mobile (now Airtel) on*

August 6th, 2001 has been explosive. The trend has continued with much flux from which the big four (MTN, AIRTEL, GLOBACOM and ETISALAT) now dominate the GSM world in Nigeria. Whether these moguls are meeting the challenges of customer expectations has continued to draw researcher interests and civil society. Apparently, it is on the basis of the above understanding that we also embarked on our study.

In chapter one, five specific objectives were developed. From these research objectives, five hypotheses were also formulated. The chapter explained the significance of the study, scope and limitations to the study. Relevant literature were reviewed.

The study used survey method with questionnaire as the instrument for data collection. Analysis is done largely using descriptive and inferential statistics. The reliability of the instrument was tested using Cronbach's alpha statistics. The instrument was found reliable. The population of the study was made up of different categories of individual GSM subscribers such as employees in the private and public sectors, businessmen and women, applicants and students who must be at least eighteen years old. The population of individuals within the study area is 24,939,821 (National Population Commission Census, 2006). of this the

potential respondents amounted to one thousand five hundred and sixty eight (1568). The sample of the respondents was arrived at using Research Advisor (2006) reversed version of Krejcie and Morgan (1970) sample size table. To measure the variables, multiple regression was used and this forms the basis for using regression in hypothesis testing.

Performance of GSM services were measured using tariff charge, network coverage, customer care, products development and quality of service. The study revealed that there are significant effects of tariff charge, network coverage, customer care, products development and quality of service of GSM services on customer satisfaction in Northwest Nigeria. The study therefore recommended that GSM service providers should charge low, moderate and accurate tariff on services offered to customers to strengthen customer satisfaction; widen coverage through buying and installing of state of the art technology to improve on network coverage; introduce more toll free lines; customer centres; training and re-training of care officials to handle customer requests; and introduce more products and packages useful to customers. Finally, they should monitor the services rendered to customers, ensuring that services are effectively and efficiently delivered in a manner that adequately meets customer expectations.

5.2 Conclusion

The main objective of this study was to examine the performance of GSM service providers and customer satisfaction in North Western Nigeria. Based on the major findings, the following conclusions are drawn:

The results reveal that tariff charges, network coverage, customer care, products development, and quality of service jointly and significantly accounted for the variation in customer satisfaction of GSM service providers in North West Nigeria. This is confirmed by adjusted R2 of 52 per cent and validated by significant F-statistics of 1 per cent. This implies that about 52 per cent of the variation in customer satisfaction can be attributed to tariff charges, network coverage, customer care, products development and quality of service. 48 per cent of the variance in customer satisfaction may be due to other factors or chance. This is a testimony of the significance of tariff charges, network coverage, customer care, products development and quality of service in predicting customer satisfaction of GSM services in North West Nigeria.

Tariff charges, network coverage, customer care, product development and quality of service substantially improves customer satisfaction with GSM services in North west Nigeria. On aggregate, the performance of GSM services variables

such as tariff charges, network coverage, customer care, products development and quality of service improved customer satisfaction of GSM services in North west Nigeria.

In addition, the study also concluded that tariff charges, network coverage, customer care, products development and quality of service had significant effects on customer satisfaction of GSM services in North West Nigeria., GSM service providers in Nigeria are utilizing the potentials of these variables in ensuring customer satisfaction in North west Nigeria.

5.3 Recommendations

This research has made findings which will enable us to make inference on customer satisfaction and GSM services. Based on the findings, the following recommendations are made for consideration by GSM service providers in Nigeria:

Tariff charges, network coverage, customer care, products development and quality of service are jointly responsible for customer satisfaction with GSM service providers in Northwest Nigeria. It is therefore, recommended that GSM service providers that wants to increase their customer satisfaction base should focus on the delivery its services through moderate low tariff charges, wider network coverage, frequent and available customer care services, varieties of

products and packages development and uninterrupted quality of service. Based on the study establishment, the following recommendations are offered.

1. GSM operators should charge low moderate and accurate tariff on the services offered to their customers in order to strengthen customer satisfaction.
2. GSM operators should widen their coverage through buying and installing of the state of the art technology in order to improve on the network coverage.
3. GSM operators should therefore, introduce more toll free lines, customer care centre , training and re-training of customer care officials to handle customers request friendly, timely, and appropriately.
4. GSM operators should therefore, introduce more products and package varieties found useful to their customers. This will lead to customer satisfaction with GSM services.
5. GSM operators should therefore, monitor the services rendered to customers ensuring that services offered are actually delivered and are the services expected by the customers.
6. Finally, the study recommended that GSM operators should give attention to network coverage by monitoring the available network to ensure it always

there and installs the state of the art technology in order to improve on the coverage.

5.4 Suggestions for Further Research

The findings of this study could be generalized given the procedure adopted, the researcher is of the view that there could be another study that investigates the effects of financial performance of GSM service providers, also a study to cover fixed line and CDMA telecommunications sector. There could also be a similar study for other industries like Banking, Food and Beverages, Retail Industry, Aviation and so on.

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Required Sample Size†

Population Size	Confidence = 95% Margin of Error				Confidence = 99% Margin of Error			
	5.0%	3.5%	2.5%	1.0%	5.0%	3.5%	2.5%	1.0%
10	10	10	10	10	10	10	10	10
20	19	20	20	20	19	20	20	20
30	28	29	29	30	29	29	30	30
50	44	47	48	50	47	48	49	50
75	63	69	72	74	67	71	73	75
100	80	89	94	99	87	93	96	99
150	108	126	137	148	122	135	142	149
200	132	160	177	196	154	174	186	198
250	152	190	215	244	182	211	229	246
300	169	217	251	291	207	246	270	295
400	196	265	318	384	250	309	348	391
500	217	306	377	475	285	365	421	485
600	234	340	432	565	315	416	490	579
700	248	370	481	653	341	462	554	672
800	260	396	526	739	363	503	615	763
1,000	278	440	606	906	399	575	727	943
1,200	291	474	674	1067	427	636	827	1119
1,500	306	515	759	1297	460	712	959	1376
2,000	322	563	869	1655	498	808	1141	1785
2,500	333	597	952	1984	524	879	1288	2173
3,500	346	641	1068	2565	558	977	1510	2890
5,000	357	678	1176	3288	586	1066	1734	3842
7,500	365	710	1275	4211	610	1147	1960	5165
10,000	370	727	1332	4899	622	1193	2098	6239
25,000	378	760	1448	6939	646	1285	2399	9972
50,000	381	772	1491	8056	655	1318	2520	12455
75,000	382	776	1506	8514	658	1330	2563	13583
100,000	383	778	1513	8762	659	1336	2585	14227
250,000	384	782	1527	9248	662	1347	2626	15555
500,000	384	783	1532	9423	663	1350	2640	16055
1,000,000	384	783	1534	9512	663	1352	2647	16317
2,500,000	384	784	1536	9567	663	1353	2651	16478
10,000,000	384	784	1536	9594	663	1354	2653	16560
100,000,000	384	784	1537	9603	663	1354	2654	16584
300,000,000	384	784	1537	9603	663	1354	2654	16586

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$$n = \frac{X^2 * N * P * (1-P)}{(ME^2 * (N-1)) + (X^2 * P * (1-P))}$$

Where :

n = sample size

X^2 = Chi – square for the specified confidence level at 1 degree of freedom

N = Population Size

P = population proportion (.50 in this table)

ME = desired Margin of Error (expressed as a proportion)

APPENDIX II

A. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
CUSSTFN	1547	11.29	29.71	20.4338	4.32915	-.292	.062	-.553
CHARGES	1495	7.50	25.83	16.1409	4.12548	.180	.063	-.614
NETWRK	1547	4.50	16.25	11.9011	2.65062	-.953	.062	.460
CARE	1521	4.20	19.00	12.0479	3.81658	.100	.063	-1.167
PROUCT	1513	4.20	19.60	12.4168	2.98581	.200	.063	-.697
QUALITY	1506	4.20	19.80	12.7120	3.23756	-.050	.063	-.566

Valid N (listwise)	1407							

B.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.723[a]	.523	.521	3.00413	1.428

a. Predictors: (Constant), QUALITY, NETWRK, PROUCT, CHARGES, CARE

b. Dependent Variable: CUSSTFN

C.

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13855.481	5	2771.096	307.054	.000[b]
	Residual	12643.724	1401	9.025		
	Total	26499.205	1406			

a. Dependent Variable: CUSSTFN

b. Predictors: (Constant), QUALITY, NETWRK, PROUCT, CHARGES, CARE

D.

Notes

Output Created		26-JAN-2016 17:18:56
Comments		
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	Split File	<none>

	N of Rows in Working Data File	1547
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=CUSSTFN CHARGES NETWRK CARE PROUCT QUALITY /STATISTICS=MEAN STDDEV MIN MAX KURTOSIS SKEWNESS.
Resources	Processor Time	00:00:00.02

Elapsed Time	00:00:00.02

SOURCES: SPSS OUTCOME 2016

[DataSet3] C:\Users\HP 630\Documents\P OF GSM SERVICES AND CUSTOMER SATISFACTION IN NW NIG CODING.sav

E. Regression

Notes

Output Created	26-JAN-2016 17:23:45
Comments	

Input	Data	C:\Users\HP 630\Documents\P OF GSM SERVICES AND CUSTOMER SATISFACTION IN NW NIG CODING.sav
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	Split File	<none>
	N of Rows in Working Data File	1547
Missing Value	Definition of Missing	User-defined missing values are treated as missing.

Handling	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax	REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING LISTWISE /STATISTICS COEFF OUTS BCOV R ANOVA COLLIN TOL ZPP /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT CUSSTFN /METHOD=ENTER CHARGES NETWRK CARE PROUCT QUALITY /SCATTERPLOT=(*ZPRED ,*ZRESID) /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).

Resources	Processor Time	00:00:02.33
	Elapsed Time	00:00:02.51
	Memory Required	3348 bytes
	Additional Memory Required for Residual Plots	880 bytes

[DataSet3] C:\Users\HP 630\Documents\P OF GSM SERVICES AND CUSTOMER SATISFACTION IN NW NIG CODING.sav

F.

Descriptive Statistics

	Mean	Std. Deviation	N
CUSSTFN	20.4917	4.34134	1407
CHARGES	16.1753	4.21746	1407
NETWRK	11.8380	2.62140	1407
CARE	11.9311	3.86924	1407
PROUCT	12.3424	2.96665	1407
QUALITY	12.7082	3.27538	1407

G.

Correlations

	CUSSTFN	CHARGES	NETWRK	CARE	PROUCT	QUALITY

Pearson Correlation	CUSSTFN	1.000	.439	.636	.541	.461	.515
	CHARGES	.439	1.000	.329	.552	.429	.615
	NETWRK	.636	.329	1.000	.412	.376	.401
	CARE	.541	.552	.412	1.000	.566	.707
	PROUCT	.461	.429	.376	.566	1.000	.507
	QUALITY	.515	.615	.401	.707	.507	1.000
Sig. (1-tailed)	CUSSTFN	.	.000	.000	.000	.000	.000
	CHARGES	.000	.	.000	.000	.000	.000
	NETWRK	.000	.000	.	.000	.000	.000
	CARE	.000	.000	.000	.	.000	.000
	PROUCT	.000	.000	.000	.000	.	.000
	QUALITY	.000	.000	.000	.000	.000	.
N	CUSSTFN	1407	1407	1407	1407	1407	1407

	CHARGES	1407	1407	1407	1407	1407	1407
	NETWRK	1407	1407	1407	1407	1407	1407
	CARE	1407	1407	1407	1407	1407	1407
	PROUCT	1407	1407	1407	1407	1407	1407
	QUALITY	1407	1407	1407	1407	1407	1407

Variables Entered/Removed[a]			
Model	Variables Entered	Variables Removed	Method
1	QUALITY, NETWRK, PROUCT,	.	Enter

	CHARGES , CARE[b]		
a. Dependent Variable: CUSSTFN			
b. All requested variables entered.			

H.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients .			Correlations			Collinearity Statistics	
		B	Std. Error	Beta	T	Sig	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	4.212	.456		9.228	.000					
	CHARGE	.086	.025	.084	3.465	.001	.439	.092	.064	.586	1.708

	S										
	NETWRK	.756	.035	.456	21.857	.000	.636	.504	.403	.782	1.279
	CARE	.198	.032	.176	6.213	.000	.541	.164	.115	.424	2.360
	PROUCT	.147	.034	.100	4.319	.000	.461	.115	.080	.633	1.580
	QUALITY	.140	.038	.105	3.681	.000	.515	.098	.068	.415	2.409
b. Dependent Variable: CUSSTFN SOURCE: SPSS OUTCOME 2016											

I

Coefficient Correlations[a]

Model			QUALITY	NETWRK	PROUCT	CHARGES	CARE
1	Correlations	QUALITY	1.000	-.111	-.110	-.351	-.465
		NETWRK	-.111	1.000	-.158	-.059	-.124
		PROUCT	-.110	-.158	1.000	-.100	-.290
		CHARGES	-.351	-.059	-.100	1.000	-.154
		CARE	-.465	-.124	-.290	-.154	1.000

Covariances	QUALITY	.001	.000	.000	.000	-.001
	NETWRK	.000	.001	.000	-5.023E-005	.000
	PROUCT	.000	.000	.001	-8.400E-005	.000
	CHARGES	.000	-5.023E-005	-8.400E-005	.001	.000
	CARE	-.001	.000	.000	.000	.001

a. Dependent Variable: CUSSTFN

J

Coefficient Correlations

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	CHARGES	NETWRK	CARE	PROUCT	QUALITY
1	1	5.836	1.000	.00	.00	.00	.00	.00	.00
	2	.058	10.026	.15	.01	.13	.30	.00	.03
	3	.036	12.714	.01	.64	.07	.15	.14	.02
	4	.030	14.002	.01	.01	.44	.05	.66	.02
	5	.021	16.558	.40	.33	.27	.00	.09	.39
	6	.019	17.673	.44	.02	.09	.49	.11	.54

a. Dependent Variable: CUSSTFN

K

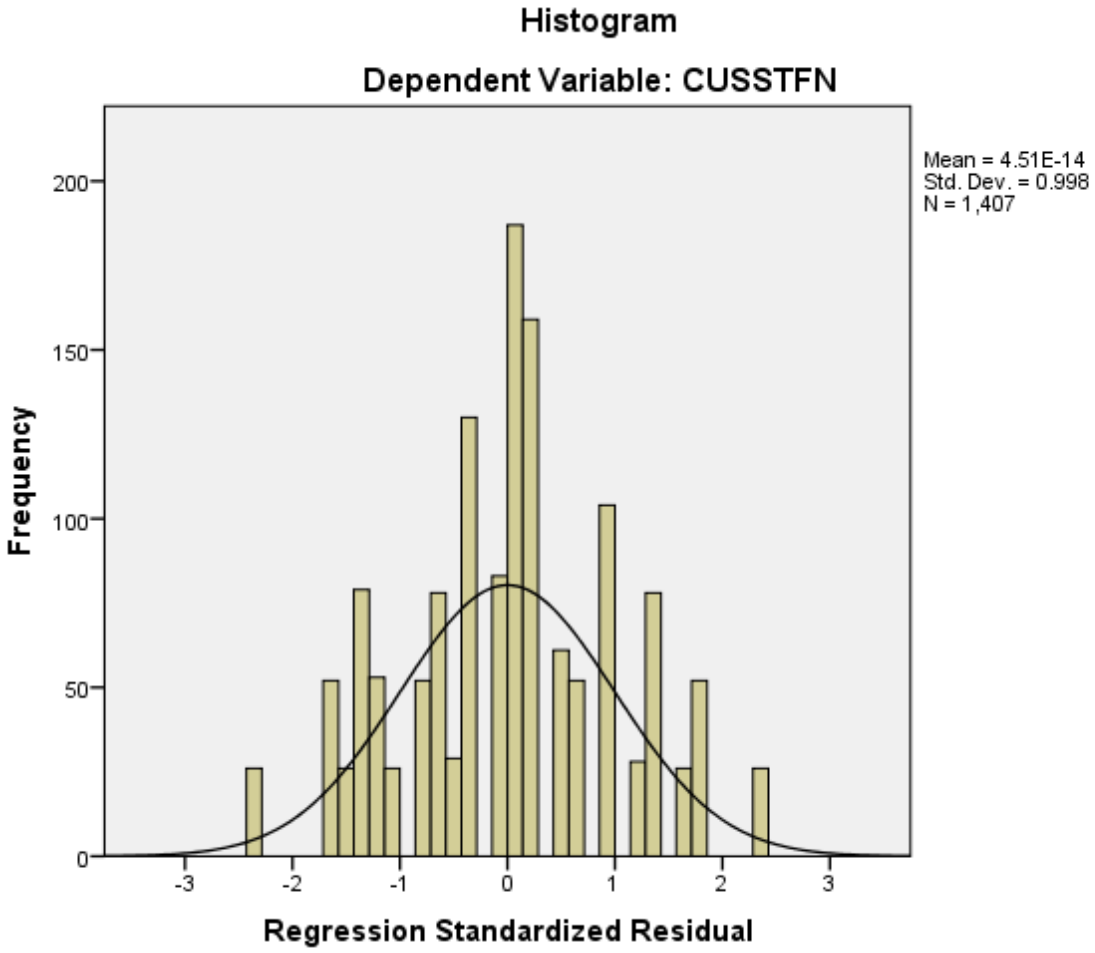
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	12.8820	25.6270	20.4917	3.13919	1407
Residual	-7.28927	7.17867	.00000	2.99878	1407
Std. Predicted Value	-2.424	1.636	.000	1.000	1407
Std. Residual	-2.426	2.390	.000	.998	1407

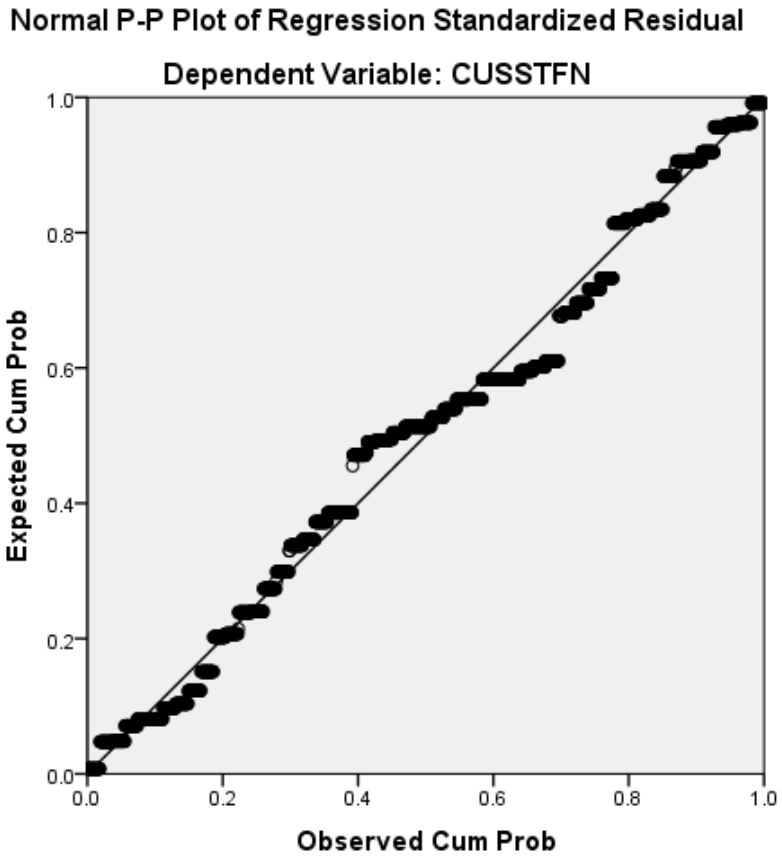
a. Dependent Variable: CUSSTFN

APPENDIX III

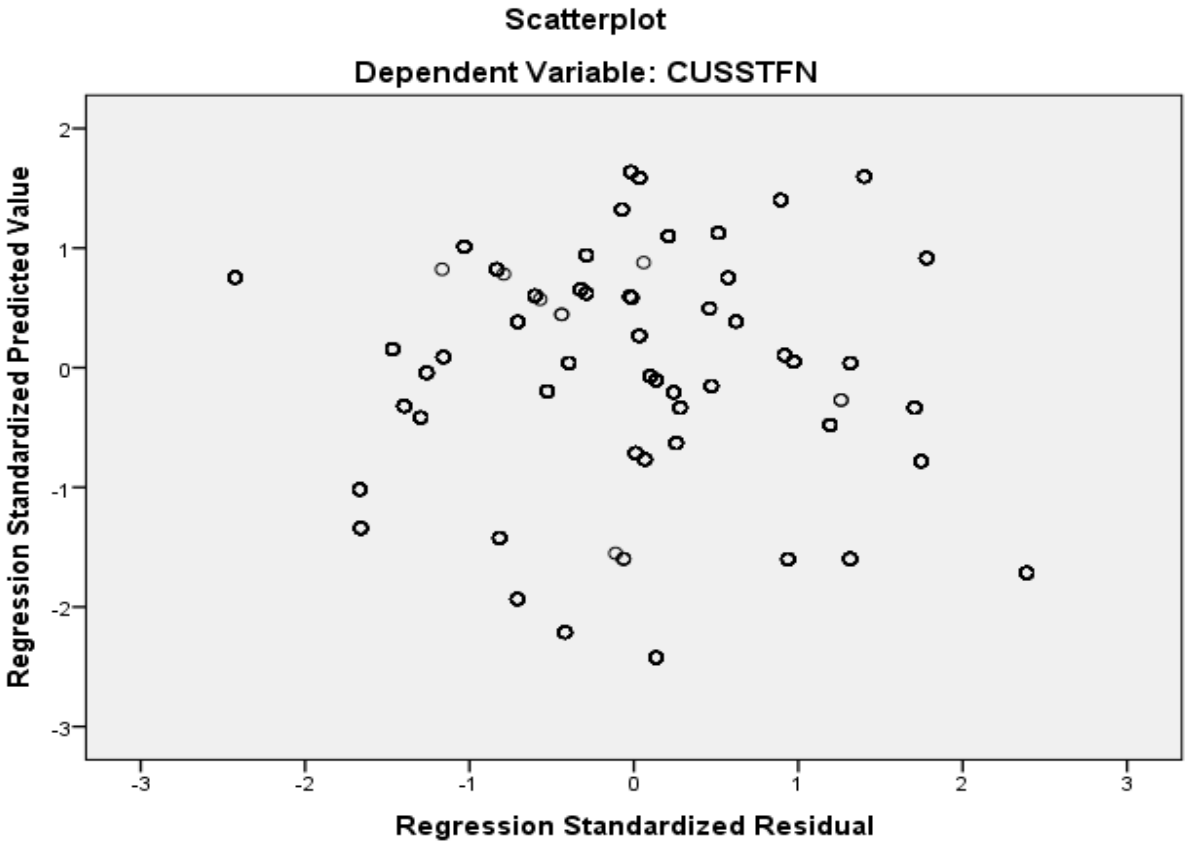
Charts



APPENDIX IV


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: CUSSTFN
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0

APPENDIX V



RELIABILITY/VARIABLES=GLSGSM GLSGSM1 GLSGSM2 GLSGSM3 GLSGSM4 GLSGSM5 GLSGSM6 GLSGSM7 CHGSERV CHGSERV2 CHGSERV3 CHGSRV4 CHGSERV5 CHGSERV6 NTWCOV NETWCOV1 NETWCOV2 NETWCOV3 CSRCSERV CSRCSERV1 CSRCSRV2 CSRCSERV3 CSRCSERV4 PRDTDEV PRDTDEV1 PRDTDEV3 PRDTDEV4 PRDTDEV2 QLTYSERV1 QLTYSERV2 QLTYSERV3 QLTYSERV4 QLLTSERV5 /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.

Appendix VI (A)

Reliability

Notes

Output Created		26-JAN-2016 17:38:37
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	Split File	<none>
	N of Rows in Working Data File	1547
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.

Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.

Syntax	RELIABILITY /VARIABLES=GLSGSM GLSGSM1 GLSGSM2 GLSGSM3 GLSGSM4 GLSGSM5 GLSGSM6 GLSGSM7 CHGSERV CHGSERV2 CHGSERV3 CHGSRV4 CHGSERV5 CHGSERV6 NTWCOV NETWCOV1 NETWCOV2 NETWCOV3 CSRCSERV CSRCSERV1 CSRCSRV2 CSRCSERV3 CSRCSERV4 PRDTDEV PRDTDEV1 PRDTDEV3 PRDTDEV4 PRDTDEV2 QLTYSERV1 QLTYSERV2 QLTYSERV3 QLTYSERV4 QLLTSERV5 /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.

Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

[DataSet3] C:\Users\HP 630\Documents\P OF GSM SERVICES AND CUSTOMER SATISFACTION IN NW NIG CODING.sav

B.

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	1407	91.0
	Excluded[a]	140	9.0
	Total	1547	100.0

a. Listwise deletion based on all variables in the procedure.

C..Reliability Statistics

Cronbach's Alpha	N of Items
.934	33

D. Bio – Data of Respondents

	Response
No. of distributed questionnaires	1568
Returned questionnaires	1547
Returned and usable questionnaires.	1407
Returned and excluded questionnaires.	140
Questionnaires not returned	21
Response rate	98%

Usable response rate	89%

Source: Field survey, 2015.

Table 4.2: Year of Subscription

Year	Frequency	Percent
Above 5	170	12
3-5	1101	78
Below 3	134	10
Total	1407	100.0

Source: Field survey, 2015.

Table 4.3: Gender Distribution of Respondents

	Frequency	Percent

Male	959	68
Female	448	32
Total	1407	100.0

Source: Field survey, 2015.

Table 4.4: Age Distribution of Respondent

	Frequency	Percent
18-25 years	430	30
26-35 years	580	41
36-45 years	241	17
46 years and above	156	11
Total	1407	100.0

Source: Field survey, 2015.

Table 4.5: Marital Status of Respondents

Frequency	Frequency	Percent
Single	607	43
Married	672	48
Divorcee	113	8
Widowed	15	1
Total	1407	100.0

Source: Field survey, 2015.

Table 4.5: Marital Status of Respondents

Frequency	Frequency	Percent
Single	607	43
Married	672	48
Divorcee	113	8
Widowed	15	1
Total	1407	100.0

Source: Field survey, 2015.

Table 4.6: Educational Qualification of Respondents

Levels	Frequency	Percent
GCE/SSCE or Equivalent	421	30
OND/NCE or Equivalent	370	26
HND/B. Sc./BA or Equivalent	438	31

M. Sc./MA/MBA or Equivalent	144	10
Ph. D./DBA/D. Ed or Equivalent	24	2
Professional Qualification e.g. ACCA, AIB etc.	11	1
Total	**1407**	**100**

Source: Field survey, 2015.

Table 4.7: Occupational Distribution of Respondents

	Frequency	Percent
A Student	570	41
Unemployed	119	8
Gainfully Employed (Public Sector)	408	29
Gainfully Employed (Private Sector)	310	22
Total	**442**	**100**

Source: Field survey, 2015.

Table 4.8: Respondents Distribution by Income

Income Range	Frequency	Percent
N61,000 - N100,000	696	49
N101,000 - N140,000	556	40
N160,000 and above	155	11
Total	1407	100

Source: Field survey, 2015.

APPENDIX VII

QUESTIONNAIRE

Department of Business Administration

Ahmadu Bello University, Zaria

Dear Sir/Madam,

PERFORMANCE OF GSM SERVICE AND CUSTOMER SATISFACTION IN NORTHWEST ZONE OF NIGERIA: A RESEARCH SURVEY

I am a post graduate student of Ahmadu Bello University, Zaria currently conducting a survey on the above subject matter. The exercise is part of the requirements for the award of Doctor of Philosophy (Ph.D.) degree in Business Administration. It is in view of this, that I humbly request you to complete the attached questionnaires as accurately as possible. Information supplied will be used strictly for the purpose of the said research work only.

Thank you for sparing your time to participate in the study.

Yours Faithfully,

Jibrin Nuhu Shagari

Research Student

QUESTIONNAIRE SCHEDULE

Please tick the appropriate box [√] and fill the gap where necessary

1. Sex: (a)Male [ ] (b)Female [ ]
2. Which of the following represents your age group?
   (a) 18-25years [ ] (d) 46-55years [ ]
   (b) 26-35years[ ] (e) 56 years and above [ ]
   (c) 36-45years [ ]
3. What is your marital status?
   (a) Single [ ] (b) Married [ ] (d) Widowed [ ] (e) Separated [ ]
   (b) Divorced [ ]
4. Which of the following represents your highest educational qualification?
   (a) Primary School Leaving Certificate or equivalent [ ]
   (b) GCE/SSCE or equivalent [ ] (e) OND/NCE or equivalent [ ]
   (c) HND/B. Sc./BA or equivalent [ ](f) M.Sc./MA/MBA or equivalent [ ]
   (d) Ph. D./DBA/D. Ed. or equivalent [ ] (g)Others (*Please Specify*)…… [ ]
5. Which of the following represents your current employment status
   (a) A Student [ ] (d) An Applicant [ ]
   (b) An Apprentice [ ] (e) Gainfully Employed (Full-Time worker)[ ]
   (c) Private business[ ](f) Gainfully employed (part-time worker) [ ]
6. If you are gainfully employed, please indicate the sector in which you are currently employed?
   (a) Private sector [ ] (b) Public sector [ ]
7. What is your current job designation? .....
8. Which one of the following represents your current monthly income?

(a) Less than N20, 000 [ ] (f) N181, 000 – N220, 000 [ ]

(b) N21, 000 –N60, 000 [ ] (g) N221, 000 and above [ ]

(c) N61, 000 –N100, 000 [ ] (d) N101, 000 –N140, 000 [ ]

(e) N141, 000 - N180, 000 [ ]

9. Do you currently subscribe to GSM services?

(a) Yes [ ] (b) No [ ]

10. If yes to the above, when did you acquire your first GSM line and which network?

(i) Time (year)…… (ii) Network……

11. Please list any of the GSM service networks (e.g. MTN, Globacom, Airtel or Etisalat) that you currently subscribe to in order of your preference for their services

(i)…….. (iii) ……

(ii)…… (iv)……

12. General level of satisfaction with the performance of GSM services, please tick appropriately from the likert 1-5 provided below how satisfied are youwith each one of the following?

S/N	Statements	Highly satisfied	Just satisfied	Not Sure	Not satisfied	Not satisfied at all
a.	Availability of network in your area	5	4	3	2	1

b.	Overall quality of GSM services	5	4	3	2	1
c.	Relative ease of recharging phone	5	4	3	2	1
d.	Accuracy of billing customers for services	5	4	3	2	1
e.	Prospect of getting calls completed without interruption	5	4	3	2	1
f.	General efficiency in the delivery of such services as sms mms and other on-line services	5	4	3	2	1
g.	Quality of the relationship between service provider and its customers.	5	4	3	2	1
h.	Timeliness of response to complaints	5	4	3	2	1
i.	Overall reliability of network service	5	4	3	2	1

13 In terms of charges for services provided to customers, please tick appropriately from the likert1-5 provided below to what extent are you satisfied with the followings irrespective GSM service providers

S/N	STATEMENTS	To a very large extent	To a large extent	Not sure	To a little extent	Not at all

1	Charges for calls within the network	5	4	3	2	1
2	Relative ease of recharging	5	4	3	2	1
5	Charges for calls to other networks	5	4	3	2	1
4	Charges for international calls	5	4	3	2	1
5	Charges for text messages	5	4	3	2	1
6	Charges for multimedia messages	5	4	3	2	1

14. In terms of network coverage across the Northwest zone, please tick appropriately from the likert 1-5 provided below how do you rate each of the following with regard to GSM service providers?

S/N	STATEMENTS	Very frequent	Just Frequent	Not sure	Occasionally	Rarely

1	Availability of network	5	4	3	2	1
2	Overall reliability of network	5	4	3	2	1
3	Ease of dialing and reaching lines within the same network	5	4	3	2	1
4	Ease of dialing and reaching lines outside the network other networks	5	4	3	2	1

.**15.** In terms of efforts to respond and redress customer complaints, please tick appropriately from the likert 1-5 provided below how do you rate each of the followings regarding to GSM services?

S/N	STATEMENTS	To a Very large	To a large extent	Not sure	To a little extent	Not at all

		extent				
1	Timeliness of response to complaints	5	4	3	2	1
2	Promptness in redressing customers' complaints	5	4	3	2	1
3	Quality of the relationship between service provider and its customers.	5	4	3	2	1
4	Effectiveness of customer care/service officers	5	4	3	2	1
5	Friendliness of services personnel	5	4	3	2	1

16. In terms of quality of services provided to customers, please tick appropriately from the likert 1-5 provided below to what extent are the followings GSM service satisfactory?

S/N	STATEMENT	To a Very	To a large	Not sure	To a little	Not at all

		large extent	extent		extent	
1	Prospect of getting calls completed without interruption	5	4	3	2	1
2	Overall reliability of network service	5	4	3	2	1
3	Possibility of Calls Diversion	5	4	3	2	1
4	Possibility of text message diversion	5	4	3	2	1
5	Accuracy of billing	5	4	3	2	1

17. In terms of products and packages available please tick appropriately from the likert 1-5 provided below what extent do you rate each of the followingwith regard to GSM service providers.

S/N	STATEMENTS	To a Very large extent	To a large extent	Not sure	To a little extent	Not at all
1	Internet service	5	4	3	2	1
2	Appeal to customers through advertising messages by GSM service providers	5	4	3	2	1
3	Sales promotional activities e.g. contest, raffle draws, by GSM service providers.	5	4	3	2	1
4	Availability of optional internet services	5	4	3	2	1
5	Opportunity for free calls,	5	4	3	2	1

	message and internet at specified time					