EFFECT OF SERVICE QUALITY ON CUSTOMER SATISFACTION IN 9MOBILE NIGERIA

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BY

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A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES AHMADU BELLO UNIVERSITY IN PARTIAL FULIFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE DEGREE IN BUSINESS ADMINISTRATION

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Declaration

I declare that the work in this dissertation entitled “Effect of Service Quality on Customer Satisfaction in 9mobile Nigeria” has been carried out by me in the Department of Business Administration, Ahmadu Bello University Zaria. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this dissertation was previously presented for another degree or diploma in this or any other institution.

Sahabi USMAN _____ _____

Signature Date

Certification

This Dissertation entitled "EFFECT OF SERVICE QUALITY ON CUSTOMER SATISFACTION IN 9MOBILE NIGERIA" by Sahabi USMAN meets the regulation governing the award of the degree of Master of Science (M.Sc.) in Business Administration of Ahmadu Bello University, Zaria and is approved for its contribution to knowledge and literary presentation.

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Prof. S. A. Abdullahi Dean, Postgraduate School	_____ Signature	_____ Date

Dedication

This research work is dedicated to my beloved parent, Alhaji Usman Ahmad Gizawa and Malama Baraka Sulaiman Runka, for all their parental support.

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All praises are due to Allah (SWT) for helping me and sparing my life to the end of this programme. May His peace and blessing be upon the prophet Muhammad (SAW), his entire household and companions. I want to specially thank my supervisors; Prof. S. A. Abdullah and Dr. M. Y. Abubakar for supervising this work and support throughout this study. It was a great pleasure working under their supervision, for their contributions have been very challenging and have served as a source of inspiration throughout the period of the study. My gratitude goes to MalamYazeed Muhammad for all his words of encouragement, motivation and support throughout this study. My appreciation goes to Dr. Ibrahim Mohammed, the M. Sc coordinator, Dr. Idris Bashir Bugaje, Dr. M.I. Aminu, Dr. Idris Ahmed, Malam Yusuf Shafa and all the staff of the department for their support.

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Abstract

Service oriented organizations are increasingly becoming the order of the day globally, hence there is increasing demand for the services of Telecommunication companies as well as increasing concern for the quality of the services provided especially as they affect customer satisfaction. This study investigated the effect of service quality on customer satisfaction in 9mobile Nigeria. Survey research design was employed in the study. Primary data was collected through self-administered questionnaire issued to the respondents using purposive sampling technique. The data was collected from a sample of 499 subscribers of 9mobile Nigeria. Partial Least squares – Structural Equation Model (PLS – SEM) was used to analyze the data collected. PLS - SEM was also used to test the hypotheses formulated for the study. The findings revealed that reliability and tangibility have positive and significant effect on customer satisfaction while assurance, empathy and responsiveness have positive but insignificant effect on customer satisfaction. The study recommended the need for 9mobile Nigeria to invest more in technology and training of staff to enhance high quality services and increase customer satisfaction.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Service oriented organizations are increasingly becoming the order of the day globally. Telecommunication service providers play an important role in socio economic development of any country in the world(Rajesh & Yadav, 2013). Customers are the life blood of any business and those businesses that fail to satisfy and retain customers usually end with a decline in the overall profit (Mishal, 2015).Satisfied customers form the foundation of any successful business as customer satisfaction leads to repeat purchase, brand loyalty and positive word of mouth promotion (Angelova&Zekiri, 2011). Success of a service provider depends on the high quality relationship with customers (Panda, 2003), which determines customer satisfaction and loyalty (Jones, 2002 as cited in Garga&Ja'afaru, 2016). Research has shown repeatedly that service quality influences organizational outcome such as performance superiority (Poretla&Thanassoulis, 2005), increase in profit (Duncan & Elliot, 2002) and market share (Fisher, 2001), improving customer relations, enhance corporate image and promote customer loyalty (Newman, 2001).

In Nigeria, for instance,the telecommunication sector contributed N1,399 billion to GDP in the third quarter of 2016 [National Bureau of Statistics (NBS), 2017].Nigeria is the largest telecom market in Africa (Nigerian Communications Commission, 2016). Therefore, there is increasing demand for the services of telecommunication companies as well as increasing concern for the quality of the services they provide especially as how they affect customer satisfaction. The market for these services has thrown up intense rivalry among the operators.

In this competitivetelecommunication market, customer satisfaction becomes the most important factor for business success (Abdullahi & Sanad, 2017).

Service quality is considered to be one of the main determinants of customer satisfaction in both manufacturing and service industries (Shafq, Ahmad, Muhammad, Nakeed& Hassan 2010). It has also been seen as a critical factor for the success of organizations because of its close link with customer satisfaction (Parasuraman, Zeithaml and Berry, 1985; Gilbert and Veloutsu, 2006). Therefore, much emphasis is placed on service quality as a main determinant of customer satisfaction. Service quality is multi-dimensional; it encompasses reliability, assurance, tangibility, empathy and responsiveness of service. All of these dimensions are related to customer satisfaction (Parasuraman *et al.*, 1985). Some other factors that may affect customer satisfaction in the telecommunication sector include price, call quality, call drop rate, geographical coverage, and data quality and speed while not actually affecting customers' perception of service quality. Delivering quality service to customers is a must for success and survival in competitive telecommunication industry. Moreover, the key to success in today's competitive environment lies in delivering quality services to increase the level of customer satisfaction (Shemwell, 1998). Organizations that provide competitive service qualities have a lot of satisfied and loyal customer base (Aaker& Jacobson, 1994; Gilbbert&Veloutsou 2006).

There are four major Global Systems for Mobile telecommunication (GSM) players within the Nigeria's telecommunication industry. These include Mobile Telecommunication Network (MTN), Airtel Nigeria, Globacom, and Emerging Market Telecommunication Services (9mobile Nigeria). With stiff competition within Nigeria's oligopolistic telecommunication industry, customer satisfaction is a necessity for survival in the market.

Also, with stiff competition, customers have got a variety choice, increased knowledge about services and prices with the possibility to switch from one company to the other. This has especially been made possible with the introduction of Mobile Number Portability (transfer of subscribers to different network carriers) by the NCC. In the light of this, telecommunication service providers strive to find ways to provide high quality services and respond to extremely demanding market to increase customer satisfaction. This study aims to find out the effect of service quality on customer satisfaction.

1.2 Statement of the Problem

Telecommunication service providers play an important role in socio economic development of any country (Rajesh & Yadav, 2013). Telecommunications provide a technological foundation for societal communications – from business to government to families, enable participation and development, provide vital infrastructure for national securityand contribute to Gross Domestic Product (GDP). However, in Nigeria, statistics has shown a decline in terms of number of subscribers of telecommunication industry over a certain period. Subscribers also frequently switch from one network carrier to the other in an effort to find better quality service and become more satisfied. For example, in March 2017, the total number of GSM subscribers was 151,999,197, which was 2,125,405 less than in December 2016, equivalent to a drop of 1.38% (NBS, 2017). Also, according to Nigerian Communications Commission, "Nigerias's $70 billion telecommunication industry ended year 2017 with 145 million active subscribers, after losing 10 million customers within the period" (cited in Guardian newspaper, 2018). 9mobile is not an exception as it particularly saw its subscriber numbers fell from 22,161,290 in December 2015 to 21,877,542 in March 2016 (a drop of 1.28%) and this trend continued through 2016 (NBS, 2016). In terms of

porting activities, there were a total of 47,871 outgoing porters (subscribers that moved across network carriers) in the fourth quarter of 2016 (NBS, 2017). This decline in subscribers and movement across networks in the industry might be connected to poor service quality.

Furthermore, an investigation by Guardian newspaper (2015) shows that customer complaints are widespread and such complaints include continued poor audio reception on phone, hidden charges passed to customers, unsolicited Value Added Services (VAS) such as caller ring back tune, alert services and so forth, unwanted renewal of data services, difficulty in reaching customer care unit, etc. In a similar investigation by the Punch newspaper (2018), subscribers lament airtime depletion and poor services. According to the newspaper, subscribers on Airtel, Globacom and 9mobile took to the social media to express displeasure over poor quality of service they have been experiencing. The dissatisfied subscribers lodged complaints such as data and airtime depletion, unauthorized automatic renewal, call drop, unresponsive customer care, and illegal deductions. Considering the above statistics and customer complaints, the researcher finds it worthy of conducting an empirical study to ascertain the true picture in terms of the effect of service quality on customer satisfaction.

Although, there are studies offering many interesting insights about the effect of service quality in other sectors of the Nigerian economy and other countries of the world which include that of Kazi (2011); Turel and Serenko (2006); Danaher and Gallaher (1997); Iddrisu, Nooni and Mensah (2015); Lily (2008) and Ahmed (2016) among others, there is however little in the telecommunication sector in Nigeria. Iddrisu*et al* (2015) conducted their study in cellular industry of Ghana in Accra and suggested for further studies in other locations as different outcome could be ascertained. Ebrahim and Masoud (2015) carried out a research

on the effect of service quality on customer satisfaction in Zagros Airlines of Iran and established positive relationship between customer satisfaction and service quality but however suggested that similar researches should be conducted in other industries. Tariq, Mohsin and Muhammad (2013) conducted a study on the effect of service quality on customer satisfaction in private colleges of Faisalabad, Pakistan and established a positive relationship between tangibility, reliability, responsiveness, assurance and customer satisfaction but empathy proved a negative relationship with customer satisfaction. They suggested that similar studies in other service sectors may show different results.

Similarly, in a meta-analytic paper on Service Quality (SERVQUAL) and Service Performance (SERVPERF) scales by Francois, Fernando and Jay (2007), they suggested that different results could be found about the effect of service quality on customer satisfaction when used in different countries, cultures or sectors. Thus, this study attempted to examine the effect of service quality on customer satisfaction in 9mobile Nigeria with respect to these service quality dimensions (reliability, assurance, tangibility, empathy and responsiveness).

1.3 Research Questions

In line with the problem, the following research questions were raised:

i. To what extent does reliability of services lead to customer satisfaction in 9mobile Nigeria?

ii. To what degree does assurance lead to customer satisfaction in 9mobile Nigeria?

iii. To what level does tangibility of services lead to customer satisfaction in 9mobile Nigeria?

iv. To what extent does empathy lead to customer satisfaction in 9mobile Nigeria?

v. To what degree does responsiveness lead to customer satisfactionin 9mobile Nigeria?

1.4 Objective of the Study

The aim of the study is to examine the effect of service quality on customer satisfaction and specifically to:

i. Examine the extent to which reliability of service leads to customer satisfaction in 9mobile Nigeria

ii. Examine the degree to which assurance of service leads to customer satisfaction in 9mobile Nigeria

iii. Examine the level to which tangibility of service leads to customer satisfaction in 9mobile Nigeria

iv. Examine the extent to which empathy of service leads to customer satisfaction in 9mobile Nigeria

v. Examine the degree to which responsiveness of service leads to customer satisfaction in 9mobile Nigeria

1.5 Research Hypotheses

To achieve the research objectives, the following hypotheses have been formulated:

H_{01}: Reliability has no significant effect on customer satisfaction in 9mobile Nigeria

H_{02}: Assurance has no significant effect on customer satisfaction in 9mobile Nigeria

H_{03}: Tangibility has no significant effect on customer satisfaction in 9mobile Nigeria

H_{04}: Empathy has no significant effect on customer satisfaction in 9mobile Nigeria

H_{05}: Responsiveness has no significant effect on customer satisfaction in 9mobile Nigeria

1.6 Scope of the Study

The study focused on 9mobile Nigeria as a telecommunication service provider, targeting the subscribers of the company as at the year 2018 in Nigeria.The decision to use 9mobile Nigeria as unit of analysis was informed by the fact that it is one of the four major players in the Nigeria's telecommunication industry providing telecommunication services for business and societal communication. The independent variable of the study is service quality; dimensions ofservice are reliability, assurance, tangibility, empathy and responsiveness; while the dependent variable is customer satisfaction.

1.7 Significance of the Study

The study is expected to contribute to the existing body of knowledge on service qualityby examining the impact of the various quality dimensions that is reliability, assurance, tangibility aspects, empathy and responsiveness on customer satisfaction in 9mobile Nigeria as a telecommunication service provider.It will therefore guide future researchers and readers in this field. Most studies have emphasized much on the use of SERVQUAL model while this study relied on service performance(SERVPERF) model.

The study is also useful to the Nigerian Communications Commission as the regulator of the telecommunication industry. The regulator can be able to formulate policies to protect subscribers and to ensure they get value for their money.

Moreover, 9mobile Nigeria may also find the study useful as a guide on service quality strategies to be developed in order to achieve high customer satisfaction and market share. The results will enable 9mobile Nigeria to focus more on those dimensions of service quality that subscribers were found to be more concerned about, it will also be able to improve on those dimensions of quality subscribers were found to be least satisfying based on the results.

1.8 Limitations of the Study

Some few limitations were discovered in the process of conducting this research. These include the following:

Firstly, there is only one Telecommunication Company in Nigeria included in this study. Therefore, the research outcomes are unable to represent the opinions of all subscribers as there are different telecommunication companies in the country.

Secondly, the research is cross sectional which suggests that the interpretation of the result is limited to a group examined at the point in time of the research. Hence, a longitudinal design for measuring dependent and independent variables at different times over an extended period of time would have been more revealing as it allows for the drawing of conclusions about the effect of service quality on customer satisfaction which is difficult under a cross sectional study.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

This chapter discusses concept of customer satisfaction, service quality and dimensions of service quality. It also reviews literature related to service quality and customer satisfaction. The theoretical framework is also presented in this chapter.

2.2 Customer Satisfaction

Customer satisfaction is a personal feeling of either pleasure or disappointment resulting from the evaluation of services provided by an organization to an individual in relation to expectations (Oliver, 1980). Rust and Oliver (1994) define satisfaction as the "customer fulfillment response" which is an evaluation as well as an emotion-based response to a service. Customer satisfaction is feeling or attitude toward a product or service after its use (Mohammed, 2013). Customer satisfaction is the result of a comparison between customer purchase of the expected performance with actual performance and perceived and payment expenses (Taghizadeh, 2012). Customer satisfaction is a physical concept that is due to personal comparison from understanding of product performance with the experience obtained of the performance (Chu, 2002).

Customer satisfaction is now becoming a corporate level strategy (Rust & Zahorik, 1993). Understanding customer satisfaction in the organization should be considered as a major issue. Various authors and researchers have discussed importance of customer satisfaction.Customer satisfaction is the corner stone for relationship between marketing and management (Claycomb& Martin, 2002), and the source of competitive advantage for organizations (Anderson, 1994). Empirically, researches support the concept that there is a positive relationship between customer satisfaction and financial performance (Rust &Zahorik, 1993; Anderson, 1994).

Henkel (2006) found satisfied customers of telecom sector have high extent of usage and intentions to repurchase in future. Greater the level of satisfaction of customers greater will be repurchase chances of customers (Iqbal *et al*, 2008) and reduced customer whip (Henkel, 2006; Serenko&Turel, 2004). Iqbal *et al*. (2008) also found that the satisfied customers will also recommend others to use the service provider. Kim (2004) found that customer 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 customers of the firm. (Zeithaml, 2000; Keiningham, 2007).

2.3 Service Quality

Service quality has been a hard-to-characterise concept that has stirred extensive interest and debate in the literature (Ahmed, 2016). There are different definitions of what quality entails. It is typically viewed from the customers' eyes. It was initially characterized by Gronroos (1984) as the affirmation (or disconfirmation) of a consumer's expectations of service

contrasted and the customers' perception of the service actually received. According to Parasuraman, Zeithaml and Berry (1988), service quality is seen as the difference between customers' expectations and perceptions of service with the view of building a competitive advantage. Service quality is the customer's overall impression of the relative inferiority/superiority of an organization and its service offerings (Bitner, 1990).

In Gronroos (1998) opinion the perceived quality of service meets two dimensions oftechnical (outcome) and operational (process-oriented). He believes that technical dimension of service is what the customer gets from service and is measurable so as objective, because it is what customers see in the end of serving process. On the other hand, the functional quality associated with how to get service and is not easily measured and also understood by the client mentally. In other words, the technical quality is the practical result of the service while the operational dimension of quality shows process of how service is provided. He expressed six specifications for the perceived quality of service to guidance for other empirical research and conceptual: expertise and skills, attitudes and behaviour, accessibility and flexibility, reliability and confidence, improved service and reputation.

2.4 Service Quality Dimensions

There are five service quality dimensions according to the latest study of service quality by Parasuraman, Zeithaml and Berry (1988). These are reliability, assurance, tangibles, empathy and responsiveness. These dimensions are individually discussed below.

2.4.1 Reliability

Reliability is defined as the ability to perform the promised services both dependably and accurately (Parasuraman *et al*., 1988). Reliable service performed is a customer expectation and means that the service is accomplished on time, in the same manner, and without errors every time (Parasuraman *et al*., 1988). Petruzzellis (2006) defined reliability as the ability to provide the exact required service according to given specifications and conditions. It is the ability to deliver the pledged or promised service. Reliability entails providing service as promised, dependability in handling customer service problems, performing service right at first time providing services at the promised time and maintaining error-free records.

2.4.2 Assurance

Shafie (2004) defines assurance as the knowledge and courtesy of employees and their ability to convey trust and confidence. It also includes verbal and written communication. Parasuraman *et al*. (1988) define assurance as the knowledge and courtesy of employees as well as their ability to convey trust and confidence. The assurance dimension includes competence to perform the service, politeness and respect for the customer, effective communication with the customer, and the general attitude that the service agent has the customer‘s best interests at heart. It also deals with feelings of trust and confidence in dealing with the organization. This reflects the workers' knowledge and experience and their ability to build self-confidence as well as confidence in the customers themselves (Singh, 2004). Assurance entails employees who instill confidence in customers, making customers feel safe in their transactions, employees who are consistently courteous and employees who have the knowledge to answer customer questions.

2.4.3 Tangibles

Danaher and Mattson (1994) define tangibles as the appearance of physical facilities, equipment, personnel, and communication materials. This entails modern equipment, visually appealing facilities, employees who have a neat &professional appearance as well as visually appealing materials associated with the service.

2.4.4 Empathy

According to Parasuraman *et al.* (1988), empathy is the provision of caring, individualised attention to customers. According to them, empathy includes the following features such as approachability, sensitivity and effort to understand the customer‘s needs. It simply means putting oneself in the shoes of the customers and sharing their feelings. Empathy entails giving customer individual attention, employees who deal with customers in a caring fashion, having the customers' best interest at heart, employees who understand the needs of their customers and convenient business hours.

2.4.5 Responsiveness

According to Liu (2005), responsiveness is the willingness to help customers and to provide prompt service. According to him, keeping customers waiting particularly for no apparent reason creates unnecessary negative perceptions of quality. If a service failure occurs, the ability to recover quickly and with professionalism can create very positive perceptions of quality. Responsiveness entails keeping customers informed as to when services will be performed, prompt services to customers, willingness to help customers and readiness to respond to customers' requests.

2.5 Service Quality and Customer Satisfaction - Review of Empirical Studies

The study by Munusamy, Chelliah, and Mun (2010) investigated the measurement of customer satisfaction through delivery of service quality. The results confirm that assurance, responsiveness, empathy, tangibles have positive relationship but have no significant effect on customer satisfaction. Also reliability has negative relationship but it has no significant effect on customer satisfaction. Kazi (2011) identified the most important attributes in bank settings, which may be used to review characteristics of the banks as experienced by customers and founded that all the service quality attributes are positively related to customer satisfaction and customer satisfaction is positively related to customer loyalty in the retail banking settings. It again revealed that empathy demonstrates the highest positive correlation with customer satisfaction and tangibility shows the least positive correlation with customer satisfaction. The study was conducted in a different sector. Cronin and Taylor (1992) said that the service quality leads to customer satisfaction. Omachonu*et al*. (2008) also found that perceived service quality was positively related to customer satisfaction in short terms, but expected quality was positively related in both short and long terms. All these studies were conducted in different parts of the world and also in different sectors.

Turel and Serenko (2006) empirically investigated customer satisfaction with mobile services in Canada. The results indicated that perceived service quality and perceived value are the key constructs affecting the customer's satisfaction with mobile services. Satisfaction in turn leads to customer loyalty. The study used service performance i.e. perceived serviced but was carried out in a different continent entirely. In their study in the New Zealand's telecom services industry Danaher and Gallagher (1997) identified that certain attributes of the personnel delivering the service, such as friendliness and competency, more strongly

influence the overall service quality than other factors. The study also proved that quality effects positively on satisfaction but was however conducted in a different country. In another study Wang *et al* (2004) investigated the effect of quality-related factors on customer value and customer satisfaction using structural equation modeling (SEM) in China. They used the SERVQUAL (Parasuraman *et al*., 1988) factors (reliable, tangible, responsive, assurance and empathy) to measure service quality, but added "network quality" as another antecedent of customers' perceived service quality. Results indicated that all the service quality factors had significant and positive effect on customer satisfaction. The study was carried out in Asia and could have given a different outcome if a different method was employed in different continent or country.

Similarly, Iddrisu, Nooni and Mensah (2015) investigated the relationship between service quality and customer loyalty in the Cellular industry of Ghana. The research was conducted after the introduction of the Mobile Number Portability (MNP) system. The SERVQUAL model was used to measure relationship between service quality and customer loyalty among cellular service providers with customer satisfaction mediating these variables. Survey questionnaire was used to collect 311 data from mobile users who are subscribers of 5 of the major cellular firms in Accra Metropolis of Ghana. The data was analysed using correlation and multiple regression analysis. The findings revealed that service quality variables such as Tangibles, Responsiveness, Reliability, Assurance and Empathy have a positive influence on customer loyalty through customer satisfaction. The study used a relatively small sample size; it might have given a different result if more sample size was used, different country or different method.

Lily (2008) conducted an exploratory study of customer satisfaction of fine dining restaurants in Singapore. The paper sought to find out the service dimensions of service quality, which lead to higher levels of customer satisfaction. The findings from the study indicated that the service dimensions of assurance, empathy and tangibles are the most important to customers' evaluation of service quality, and thus, may have a positive influence on customer satisfaction. This finding might have been something else if the study was conducted in a different sector or different region of the wordOjo (2010) investigated the relationship between service quality and customer satisfaction in the telecommunication industry with a focus on Mobile Telecommunication Network (MTN) Nigeria. A total of 230 respondents participated in the study. Regression analysis and Pearson product moment correlation coefficient were employed in analyzing the data. The study revealed a positive relationship between service quality and customer satisfaction. The researcher therefore recommended that organizations should focus more attention on service quality, because of its effects on customer satisfaction. To ensure that customer satisfaction level is high organization must first of all know the expectations of the customers and how they can meet such expectations. Customer satisfaction helps in customer loyalty and retention. It has been discovered that the cost of attracting new customer far exceeds the cost involved in retaining existing ones. The outcome could have been something different if more sample size was used or if a different company other than MTN in the industry was considered.

However, according to Arthur, Sekyere, KantanubahMarlle and Banuenumah (2016) service quality had a negative effect on customer satisfaction and concludes that the service quality deserves improvement in Obuasi Electricity Distribution Company of Ghana. Also according to Ahmed (2016), service quality delivery by mobile telecommunication industry in Nigerian

is low and not equal to or better than desired or expectation, as the subscribers are not satisfied with the availability of the desired service as well as the customer service of network service providers. This study might have also given a different result if the companies were studied individually to make it more specific.

Recently, Rakesh and Mohanned (2018), assessed the service quality for two majortelecommunication companies– Omantel and Ooredoo– in the Sultanate of Oman using the SERVQUALmodel and tested the effect of fiveSERVQUALdimensions on the attitudinal loyaltyof customers. The analysis of data using the partial least squared (PLS) based StructuralEquation Modeling technique reveals a positive effect of reliability and assurancedimensions on attitudinal loyalty. However, the outcomes do not reflect any significanteffect of tangibles, responsiveness, and empathy on attitudinal loyalty. The multi-groupanalysis does not reveal any significant difference between the Ooreedoo and Omantelcustomers pertaining to the effect of theSERVQUALdimensionsonattitudinal loyalty. Whilstthe study reveals the significance of reliability and assurance dimensions in affectingattitudinal loyalty of telecom customers for the long-term profitability, it also indicates thepossibility of tangibles, responsiveness, and empathy in affecting behavioral loyalty toprevent customers' switching in the short-run. By positioning their service quality focus onreliability and assurance, telecom companies can secure a higher attitudinal loyalty andprofitability in the long term. Hennayake (2017), examined how perceived service quality factorsimpact on Customer Satisfaction in public sector commercial banks in Sri Lanka. Data was collected through a sample of 210 respondents from Puttlam District. Survey method was followed for the data enumeration and SPSS 20 software package has been used for data analysis. The hypotheses were tested using Co-relations and Regression analysis.Findings

revealed that reliability and responsiveness are the most influential factors on customer satisfaction. Abdullah and Sanad (2017) investigated the impact of network service quality dimensions in telecom mobile companies in Yemen. Data was collectedfrom 356 respondents through an online and on-field survey. Using hierarchical regression, result shows that three dimensions of service quality (empathy, reliability and assurance) have revealed significant positiveimpact on customer satisfaction while tangibles and responsiveness have no impact on customer satisfaction. Muhammad, Maria and Rashid (2015) investigated the effect of service quality dimensions on customer satisfaction in Pakistan telecom sector. Data were collected through questionnaire administration on 400 respondents and later analysed using SPSS 20. They found out that service reliability and service empathy have a significant positive effect on customer satisfaction.

Anwar and Ali (2016) empirically examined the effect of service quality dimensions on customersatisfaction in telecommunication companies in Yemen.By using five Likert scale, a set of questionnaire was distributed to 400customers who are currently using the telecommunication companies' services in Yemen. Linear regression analysis was used to examine the association between the service quality dimensions and customer satisfaction. The resultsshowed that almost the majority of the customers were satisfied with services provided by telecommunication companiesand all the service quality dimensions are positively and significantly associated with customers' satisfaction.

Kumar, Rai and Dugar (2019) investigated the impact of service quality on customer satisfaction and loyalty in the sector of telecom service provider in Delhi, 200 customers of four telecom service providers in India were surveyed using a close ended questionnaire, in

Delhi. The findings of the survey indicated that quality services in telecom industry has not only positive however a very substantial impact on the customer's satisfaction and loyalty.

2.6 Theoretical Framework

Expectation disconfirmation theory, SERVQUAL and SERVPERF model have been used to guide the study. They are discussed below:

2.6.1 Expectation Disconfirmation Theory

Expectation disconfirmation theory is alternatively called expectation confirmation theory. It was profounded by Richard L. Oliver in 1977. It is a cognitive theory which seeks to explain post-purchase satisfaction as a function of expectations, perceived performance and disconfirmation of beliefs. The theory posits that expectations, coupled with perceived performance, lead to post-purchase satisfaction. This effect is mediated through positive or negative disconfirmation between expectations and performance. If a product outperforms expectations (positive disconfirmation) post-purchase satisfaction will result. If a product falls short of expectations (negative disconfirmation) the consumer is likely to be dissatisfied (Oliver, 1980; Sprenge*t al*. 1996).

The four main constructs in the theory are: expectations, performance, disconfirmation, and satisfaction.

Expectations reflect anticipated behavior (Churchill and Suprenant, 1982). They are predictive, indicating expected product attributes at some point in the future (Sprenge*t al*.

1996). Expectations define customer's anticipation about performance of products and services. EDT has ability to define multiple manners of customers in purchase process. First, the customers have an initial expectation according to their previous experience with using specific product or service. Expectation of this kind of customers which repurchase from a specific business is more near to reality. Second, the new customers that don't have a first-hand experience about performance of product or services and for the first time they purchase from a specific business. The initial expectation of this kind of customers consists of feedbacks that they received from other customers, advertising or mass media.

Perceived performance indicates customer's experience after using products or services that can be better or worse than customer's expectation. Both kind of these customers who has first-hand experience or don't have first-hand experience will use purchased products or offered services for a while and can realise actual quality of presented products or services by the business.

Disconfirmation is defined as the difference between customer's initial expectation and observed actual performance. According to literature, disconfirmation is divided to three types consist of positive disconfirmation, negative disconfirmation and simple disconfirmation.

When actual performance of specific product or services can't meet customer's expectation, negative disconfirmation will occur and leads to customer's dissatisfaction. Positive disconfirmation will lead to customer's satisfaction, if perceived performance of specific product or services are able to exceed customer's satisfaction. Finally, when there isn't any difference between customer's expectation and actual performance of specific product or

services, means perceived performance is equal with expectation and simple confirmation occurred.

Expectations serve as the comparison standard in EDT – what consumers use to evaluate performance and form a disconfirmation judgment (Halstead, 1999). Disconfirmation is hypothesized to affect satisfaction, with positive disconfirmation leading to satisfaction and negative disconfirmation leading to dissatisfaction.

A major debate within the marketing literature concerns the nature of the effect of disconfirmation on satisfaction. The root of the problem lies in the definition of predictive expectations as the comparison standard for perceived performance. In such case, the confirmation of negative expectations is not likely to lead to satisfaction (Santos and Boote 2003).

2.6.2 SERVQUAL Model

The most widely used model to translate theories of customer satisfaction into management practice is that of SERVQUAL (Soutar, 2001). It is an operational instrument used to measure the service quality variable. In this model service quality is defined as the difference between customer expectations and customer perception of service received. The "gap" in service quality occurs when the perception of service received is less than what is expected (Zeithaml *et al*, 1990).

According to the SERVQUAL model, service quality can be measured by identifying the gaps between customers' expectations of the service to be rendered and their perceptions of

the actual performance of service. SERVQUAL is based on five dimensions of service quality: reliability, assurance, tangibility, empathy and responsiveness.

However, though SERVQUAL has been generally robust as a measure of service quality, the instrument has been criticised on conceptual and methodological grounds. The main criticism of SERVQUAL has focused on the use of expectation as a comparison standard. It has been argued that expectation is dynamic in nature; it can therefore change according to customers' experiences and consumption, a situation which is true in the case of 9mobile as a network service provider.

2.6.3 SERVPERF Model

This is a performance based service quality model identified by Cronin and Taylor (1992). Cronin and Taylor proposed the SERVPERF instrument, which is a more concise performance-based scale; an alternative to the SERVQUAL model. The perceived quality model postulates that an individual's perception of the quality is only a function of its performance. Cronin *et al.* (1994) continue to debate between the effectiveness of SERVQUAL and SERVPERF for assessing service quality. The authors maintain that SERVPERF scale provides a more useful tool for measuring overall service quality and hence the model overcomes the limitations of SERVQUAL. SERVPERF measures service quality by measuring the perceptions of customers. Cronin and Taylor argued that measuring perceptions are sufficient for measuring service quality and therefore expectations should not be included as suggested by SERVQUAL.

The SERVPERF instrument is a derivative of the original SERVQUAL instrument, only measuring performance of service quality. The improvement offered by SERVPERF includes the absence of gap measurement issues, greater variance explained. It is therefore a refined and improved version of SERVQUAL. The dimensions of SERVPERF are the same as SERVQUAL that is reliability, assurance, tangibility, empathy and responsiveness.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter discusses method adopted in carrying out the research work. It includes research design, population of the study, sample size and technique, sources and method of data collection, data analysis technique as well as justification for data analysis technique.

3.2 Research Design

A survey research design which is cross sectional in nature was adopted. Primary data was collected from the population using survey questionnaire. This type of design was used because the information needed to explain the dependent variable and independent variable was collected from the respondents to report what is going on at that particular time. Data was collected on the service quality dimensions using SERVPERF model.

3.3 Population of the Study

The population of this study consists of subscribers of 9mobile Nigeria Telecommunication Company. The population figure stands at 22,210,315 as obtained from the official website of Nigerian Communications Commission as at 2017.

3.4 Sample Size and Sampling Technique

Cochran (1963) Sample Size Formula was used to determine the sample size from the population. Cochran's formula was used for its appropriateness for large populations.

Using$n_0 = Z^2pq/e^2$

Where:

n_0 = sample size

Z^2 = the abscissa of the normal curve that cuts off an area α at the tails (1 - α equals the desired confidence level)

e = the desired level of precision

p = the estimated proportion of an attribute that is present in the population, and

q = 1-p.

This study assumes 50% (0.5) for variability, 95% confidence level and 5% level of precision.

Hence,

z = 1.96

p = 0.5

q = 1-0.5 = 0.5

e = 0.05

The sample size is therefore computed as follows:

$$n_0 = \frac{(1.96)^2 (0.5)(0.5)}{(0.05)^2}$$

$$n_0 = \frac{(3.8416)(0.25)}{(0.0025)}$$

$$n_0 = \frac{0.9604}{0.0025}$$

$n_0 =$ 384 subscribers

For the purpose of anticipated non-response bias and non-return of questionnaire, the sample size was increased by 30% which was added to the minimum sample size given by the formula making it 499. This takes care of other unavoidable errors such as incorrect filling and failure of some respondents to return the questionnaire (Israel, 2013).

All the respondents were selected through purposive sampling. The researcher decides what needs to be known and sets out to find people who can and willing to provide information by virtue of knowledge and/or experience as well as availability (Ilker, 2015). Copies of questionnaire were administered to 9mobile network subscribers at 9mobile shops, other 9mobile service centres as well as 9mobile subscribers on the street. It is also important to note that all the questionnaires were self-administered.

3.5 Source and Method of Data Collection

Primary source of data was used to collect data for the study. This source of data was used to collect first hand responses from subscribers of 9mobile Nigeria through questionnaire administration. Questionnaire was adapted from and

3.6 Measurement of Variables

The dependent and independent variables in this study were measured using five-point Likert-scale with an option ranging from strongly agree to strongly disagree based on the previous studies of Parasuramman *et al* (1988); Gilbert *et al* (2004).

This study adopted customer satisfaction measurement developed by Gilbert *et al*, (2004). The variables consists of five items, with which the respondents were asked to select between strongly disagree and strongly agree using a five (5) likert-scale. Service quality was measured with 22 items adapted from Parasuramman *et al* (1988), with which the respondents were asked to select between strongly disagree and strongly agree using a five (5) likert-scale.

3.7 Technique of Data Analysis

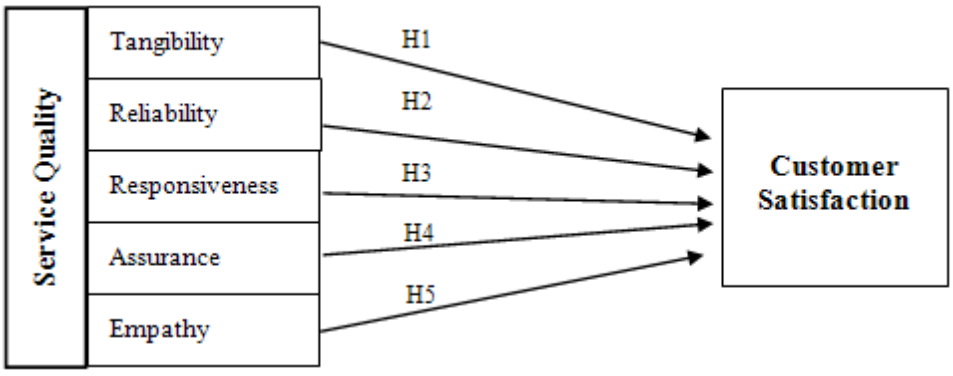
Statistical Package for Social Sciences (SPSS) was used for data screening while Partial Least Square – Structural Equation Model (PLS – SEM) was used for the analysis to test the hypotheses about the effect of service quality dimensions on customer satisfaction. PLS – SEM was also used to explain the level of reliability, assurance, tangibility, empathy, responsiveness as well as customer satisfaction.

3.8 Justification for Technique of Data Analysis

The choice of PLS - SEM analysis is justified by the researcher's objective to establish the relationship between the variables and to see how significant each of the individual independent variables influences the dependent variable. SEM analysis was employed to test the effect of service quality on customer satisfaction. Moreover, PLS has less restriction on assumptions. For example, normality of data distribution is not required. Also, PLS path modelling is more rigorous compared to correlations or regression analyses that assume error-free measurement (Arrègle*et al*., 2012). In addition, PLS path modelling method is relaxed in terms of sample size. The rule of thumb recommended is that the minimum sample size in PLS analysis is ten times the number of indicators of the scale with the largest number of indicators (Chin &Newsted, 1999). Finally, PLS path modelling can perform equally well in terms of statistical data analysis as the covariance-based SEM (Henseler*et al*., 2009).

3.10 Research Model

This is vital as it portrays the direction of the study. It is diagrammatically depicted below:



CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter presents the analysis performed and the findings that were obtained based on the data collected. First, data screening processes are presented. Then, it provides findings of the measurement model and the structural model. As indicated in the previous chapter, this study employed the component based on SEM (PLS-SEM) or the PLS path modeling to carry out a confirmatory research based on the responses obtained from the observations. The study applied PLS 2.0 (Ringle*et al*., 2005) to estimate the parameters of the model based on path weighting scheme (Henseler, 2012).

4.2 Response Rate

Table 4.1 Response Rate

Item	**No of Copies**	**Percentage**
Questionnaire Distributed	499	100
Unreturned Questionnaire	74	15
No of Returned Questionnaire	425	85
Rejected/Removed	12	2
Correctly Filled/Retained Questionnaire	413	83

From table 4.1 above, a total of 499copies of questionnaire were administered to subscribers of 9mobile Nigeria at different locations. Out of these copies of questionnaire, 425 were returned, resulting to 85% of response rate. In further examination of the collected copies of questionnaire, 12 were unengaged responsesand hence deleted as most questions were not answered. Hence, after considering the questionnaires based on responses to the items, 413copies of the questionnaire were valid and imputed for analysis.

4.3 Data Screening and Preparation

In conducting a multivariate analysis, it is fundamental to examine and screen the data in order to fulfill the required underlying assumptions related to the application of multivariate techniques (Hair, Black, Babin, Anderson, &Tatham, 2006). This also allowed the researcher to understand the nature of the data used for analysis. The process of the descriptive statistics of the data, as recommended by Tabachnick and Fidell (2001), and Hair *et al*., (2006) involves; the analysis of the missing values and analysis of outliers. These analyses were carried out by using the International Business Machines – Statistical Package for Social Sciences(IBM- SPSS) Statistics 20 software package.

4.3.1 Analysis of Missing Values

Missing values in data could result toa big problem in any data analysis (Tabachnick&Fidell, 2001). Therefore, in order to determine the extent of missing values for this study, all variables with missing values were examined. For the 27 variables in the SPSS output, 15 variables had missing data. For each variable, the percentage of missing data ranged from 0.2% to 3.3%, while for the entire data set, which had a total of 8178 data points and a total

of 45 missing points, the overall percentage of missing data was 0.6%. Based on a rule of thumb, Hair *et al*., (2006) recommended that missing data with less than 10% for an individual case or observation can be ignored. Hence, based on the missing value analysis, the data set was retained as there was no substantial case that warranted deletion. However, the missing values were replaced based on mean substitution. Mean substitution is the most widely used method, as mean is the best single replacement value (Tabachnick&Fidell, 2001).

4.3.2 Analysis of Outliers

Outliers are observations from a study with unique combination of characteristics that are identified as distinctly different from the other observations (Hair *et al*., 2006), which could distort statistics (Tabachnick&Fidell, 2001). To detect multivariate outliers in this study, the Mahalanobis distance measure was employed. The measure for Mahalanobis in this study with 27 variables, revealed a chi square value of 43.32 (at $p<0.001$). All generated values of Mahalanobis greater than the threshold of 43.32 were deleted. Hence, 2 cases (questionnaires with identity number 299 and 391) were deleted, leaving the study with valid cases of 411.

4.4 Results of Reliability and Validity Tests

The results of the reliability and the validity using the SmartPLS 2.0 software package (Ringle*et al.*, 2005) are presented in the following section. The composite reliability values for all the latent variables examined showed that they are all above the suggested threshold of 0.70 (Ringle, 2006; Henseler*et al.*, 2009; Hair *et al*., 2014). Specifically, as shown in Table 4.1, the values for the reflective multiple-items latent variables ranged from 0.88 to 0.95, thus, indicating higher level of reliability (Hair *et al*., 2014).

Next was the assessment of convergent validity, whereby the Average Variance Extracted (AVE) values were examined. All the AVE values in the results exceeded the threshold value of 0.50 (Ringle, 2006; Henseler*et al*., 2009; Hair *et al*., 2014). The least value was 0.62, and hence, convergent validity was established as shown in Table 4.1 below.

Table 4.2Item Loading, Internal Consistency and Average Variance Extracted (AVE)

Construct	Indicators	Loadings	AVE	Comp. Rel.
Assurance	ASS1_1	0.88	0.78	0.93
	ASS2_1	0.86		
	ASS3_1	0.89		
	ASS4_1	0.89		
Customer Sat.	CST1_1	0.83	0.62	0.89
	CST2_1	0.83		
	CST3_1	0.79		
	CST4_1	0.80		
	CST5_1	0.69		
Empathy	EMP1_1	0.88	0.67	0.91
	EMP2_1	0.81		
	EMP3_1	0.72		
	EMP4_1	0.83		
	EMP5_1	0.85		
Reliability	REL1_1	0.84	0.65	0.88
	REL2_1	0.86		
	REL3_1	0.74		
	REL4_1	0.77		
Responsiveness	RES1_1	0.86	0.74	0.93
	RES2_1	0.89		
	RES3_1	0.88		
	RES4_1	0.85		
	RES5_1	0.83		
Tangibility	TAN1_1	0.87	0.82	0.95
	TAN2_1	0.92		
	TAN3_1	0.93		
	TAN4_1	0.91		

In order to assess discriminant validity based on the indicator level, the cross-loadings were examined (Henseler*et al*., 2009). This study found that the loading of each of the indicator had been higher on its associated factor than any of its cross-loadings in other factors. This result is presented in Table 4.2 below. Again, this established the discriminant validity at the level of indicators.

Table 4.3Cross Loadings

Indicators	ASS	CST	EMP	REL	RES	TAN
ASS1_1	**0.88**	0.38	0.76	0.70	0.70	0.51
ASS2_1	**0.86**	0.34	0.63	0.63	0.75	0.41
ASS3_1	**0.89**	0.34	0.63	0.59	0.77	0.35
ASS4_1	**0.89**	0.36	0.74	0.68	0.71	0.44
CST1_1	0.27	**0.83**	0.41	0.43	0.29	0.55
CST2_1	0.31	**0.83**	0.38	0.42	0.36	0.54
CST3_1	0.34	**0.79**	0.34	0.43	0.33	0.26
CST4_1	0.31	**0.8**	0.39	0.51	0.34	0.34
CST5_1	0.4	**0.69**	0.34	0.42	0.37	0.25
EMP1_1	0.71	0.41	**0.88**	0.73	0.66	0.59
EMP2_1	0.81	0.41	**0.81**	0.69	0.72	0.47
EMP3_1	0.37	0.32	**0.72**	0.59	0.42	0.42
EMP4_1	0.56	0.38	**0.83**	0.64	0.53	0.57
EMP5_1	0.71	0.41	**0.85**	0.66	0.67	0.55
REL1_1	0.68	0.48	0.7	**0.84**	0.63	0.55
REL2_1	0.54	0.49	0.72	**0.86**	0.58	0.62
REL3_1	0.67	0.4	0.56	**0.74**	0.64	0.43
REL4_1	0.48	0.42	0.62	**0.77**	0.5	0.67
RES1_1	0.67	0.35	0.58	0.59	**0.86**	0.37
RES2_1	0.72	0.38	0.61	0.62	**0.89**	0.46
RES3_1	0.72	0.32	0.63	0.56	**0.88**	0.46
RES4_1	0.77	0.44	0.77	0.72	**0.85**	0.57
RES5_1	0.65	0.32	0.56	0.6	**0.83**	0.47
TAN1_1	0.43	0.43	0.56	0.63	0.44	**0.87**
TAN2_1	0.51	0.46	0.61	0.65	0.55	**0.92**
TAN3_1	0.42	0.47	0.56	0.65	0.48	**0.93**
TAN4_1	0.41	0.47	0.57	0.63	0.51	**0.91**

Note. The bold values indicate the items that belong to the column's construct.

ASS=Assurance, CST=Customer Satisfaction, EMP=Empathy, REL=Reliability,

RES=Responsiveness, TAN=Tangibility.

4.5 Results from Assessment of Structural Model

The part coefficients were estimated through bootstrapping procedure in SmartPLS 2.0 (Ringle*et al*., 2005). As suggested by Hair *et al*., (2014), the number of bootstrapping subsamples was set at 5,000 with 411 bootstrap cases in the data set and a no sign change. The bootstrapping procedure was carried out to obtain standard errors to determine the significance of the coefficients and for the test of hypotheses (Hair *et al*., 2014).

Table 4.4Results of Hypotheses Testing

Relationship	Beta Values	Std Dev	Standard Error	T Values	Pvalues	Decision	R^2
ASS -> CST	0.03	0.08	0.08	0.35	0.72	Accept	0.34
EMP -> CST	0.02	0.08	0.08	0.28	0.78	Accept	
REL -> CST	0.38	0.09	0.09	4.05	0.00	Reject	
RES -> CST	0.04	0.08	0.08	0.48	0.63	Accept	
TAN -> CST	0.22	0.08	0.08	2.90	0.00	Reject	

Note: ASS=Assurance, CST=Customer Satisfaction, EMP=Empathy, REL=Reliability, RES=Responsiveness, TAN=Tangibility.

Table 4.3 above presents the path coefficients, t-values, and p-values. On a significance level of $p < 0.05$, the results showed that REL and TAN were positive and significant while ASS, EMP and RES were all positive but insignificant.

Based on the results in table 4.3, the test of hypotheses is as thus: With regard to $H0_1$, there was a significant positive effect ofREL on CST ($t = 4.05$; $p < 0.05$). As for $H0_2$, the results showed there was no significant effect ofASS on CST ($t = 0.35$; $p > 0.05$). The result regarding $H0_3$ showed a significant positive effect of TAN on CST ($t = 2.90$; $p < 0.05$). However, the result regarding $H0_4$ showed a positive but no significant effect of between EMP on CST ($t = 0.28$; $p > 0.05$). Likewise H05 showed a positive but no significant effect of RES on CST ($t = 0.48$; $p > 0.05$)

Next is the examination of the coefficient of determination (R^2) of the endogenous latent variables (Henseler*et al*., 2009). Based on the threshold of acceptable values of R^2, as proposed by Chin (1998), 0.19, 0.33, and 0.67 indicated weak, moderate, and good respectively. Overall, the R^2 values of 0.34 obtained showed moderate predictive power of the exogenous latent variables on the endogenous latent variables. In other words, the amount of variance in the endogenous constructs, explained by the exogenous constructs, had been sufficient.

Table 4.5 Test for Effect Size

Relationship	Effect Size	Result
ASS -> CST	0.00	None
EMP -> CST	0.00	None
REL -> CST	0.04	Small
RES -> CST	0.00	None
TAN -> CST	0.03	Small

Note: ASS=Assurance, CST=Customer Satisfaction, EMP=Empathy, REL=Reliability, RES=Responsiveness, TAN=Tangibility.

In addition to determining the R^2 values of all endogenous constructs, is the f2 effect size. The effect size of a construct that is exogenous is determined when the construct is omitted from a model to determine its effect on the endogenous construct by means of the change in the R^2value (Hair *et al*., 2014). The effect size values represent different levels of effect, which were 0.02, 0.15, and 0.35 that represent small, medium, and large effects of the exogenous latent variables respectively (Cohen, 1988). Hence, in this study, the exogenous constructs ASS, EMP, REL, RES and TAN explained the endogenous latent variables CST with the effect sizes of 0.00, 0.00, 0.04, 0.00 and 0.03 respectively. These showed that the effect sizes, according to Cohen (1988), had been small for REL and TAN, but none for ASS, EMP and RES as shown in Table 4.4.

4.6 Discussion of Results

The present section discusses the findings regarding all the direct relationships that exist between: (1) reliability as independent variable and customer satisfaction as dependent variable; (2) assurance as independent variable and customer satisfaction as dependent variable; (3) tangibility as independent variable and customer satisfaction as the dependent variable; (4) empathy as independent variable and customer satisfaction as dependent variable and lastly (5) responsiveness as independent variable and customer satisfaction as the dependent variable

4.6.1 Reliability and Customer Satisfaction

H_{01}: Reliability has no significant effect on customer satisfaction.

This study does not supportthe hypothesis with the positive and significant effect of reliability as a dimension of service quality on customer satisfaction. The results indicate a ($ß$=0. 0.38; t =4.05 which suggest that the increase of reliability aspects of service quality will lead to a greater customer satisfaction. Furthermore, the findings also indicate a significant as well as positive relationship between reliability and customer satisfaction with the p-value of 0.00<0.05. Hence the present result justified and also rejected the null hypothesis.

Moreover, this finding is particularly supported by past literature such as Kazi (2011); Danaher and Gallagher (1997); Iddrisu, Nooni and Mensah (2015) and Lily (2008). However, it fails to support the finding of Munusamy, Chelliah and Mun (2010) who found reliability to have negative effect on customer satisfaction.

4.6.2 Assurance and Customer Satisfaction

H_{02}: Assurance has no significant effect on customer satisfaction

Based on the result obtained in this study assurance is positively related to customer satisfaction. The statistical finding shows the *ß*=0.03; t=0.35between the two variables. This indicates that, the higher the assurance aspect of service quality, the more customers become satisfied. However, the findings show insignificant relationship between assurance and customer satisfaction with the p value of 0.72>0.05. Hence the present result accepted the null hypothesis.

In addition, this finding is supported by findings of Munusamy*et al* (2010) whose findings revealed a positive but insignificant effect of assurance on customer satisfaction. It is also supported by Kazi (2011); Iddrisu*et al* (2015) and Ojo (2010). It is however inconsistent with that of Arthur *et al* (2016) who found assurance to have a negative effect on customer satisfaction.

4.6.3 Tangibility and Customer Satisfaction

H_{03}: Tangibility has no significant effect on customer satisfaction

The present study does not supportthe hypothesis with the positive and significant effect of reliability as a dimension of service quality on customer satisfaction. The results indicate a *ß*=0.22; *t* =2.90 which suggest that the increase of tangibles will lead to a greater customer satisfaction. Furthermore, the findings also indicate a significant as well as positive

relationship between tangibility and customer satisfaction with the p-value of 0.00<0.05. Hence the present result justified and also rejected the null hypothesis.

Moreover, this finding is also supported by Munusamy*et al* (2010); Kazi (2011); Lily (2008) and Iddrisu*et al* (2015) among others.

4.6.4 Empathy and Customer Satisfaction

H_{04}: Empathy has no significant effect on customer satisfaction

Based on the result obtained in this study empathy is positively related to customer satisfaction. The statistical finding shows the *ß*=0.02; t=0.28between the two variables. This indicates that, the more empathetic 9mobile staffs are, the more customers become satisfied. However, the findings show insignificant relationship between empathy and customer satisfaction with the p value of 0.78>0.05. Hence the present result accepted the null hypothesis.

Moreover, this is in line with the findings of Munusamy*et al* (2010) who found empathy to be positive but insignificant; Kazi (2011), Iddrisu*et al* (2015); Daneher and Gallagher (2015). It is however against the findings of Arthur *et al* (2016) who found it to have a negative effect on customer satisfaction.

4.6.5 Responsiveness and Customer Satisfaction

H_{05}: Responsibility has no significant effect on customer satisfaction

Based on the result obtained in this study responsiveness component of service quality is positively related to customer satisfaction. The statistical finding shows the *ß*=0.04; t=0.48between the two variables. This indicates that, the more responsive 9mobile is, the more customers become satisfied. However, the findings show insignificant relationship

between responsiveness and customer satisfaction with the p value of 0.63>0.05. Hence the present result accepted the null hypothesis and therefore not justified.

In addition, this is in line with the findings of Munusamy*et al* (2010) who found responsiveness to be positive but insignificant; Kazi (2011), Iddrisu*et al* (2015); Danaher and Gallagher (2015). It is however also against the findings of Arthur *et al* (2016) who found it to have a negative effect on customer satisfaction.

4.7 Implications of the Study

This study evaluated the effect of service quality (reliability, assurance, tangibility, empathy and responsiveness) on customer satisfaction. The study findings provide very important implication that can help the following; academicians, policy makers and regulators, decision makers, etc.

This implication can be divided into two major categories: theoretical and policy/practical implications.

4.7.1 Theoretical Implication

The study provides an additional insight in the existence of substantial number of literature that exists in the concept of customer satisfaction and the factors affecting it. As noted earlier, several studies have been conducted on customer satisfaction in different sectors and different parts of the world; therefore, conducting this study on customers of 9mobile Nigeria has contributed toward additional knowledge and literature in this area of study. The researcher believes that the study will ignite the need for similar study in other areas to serve as an extension to the overall body of knowledge as the need for understanding customer satisfaction.

4.7.2 Practical/Managerial Implications

The findings of this study provide insight to the government and the Nigerian Communications Commission for designing and setting quality standards for the telecommunication industry and ensure compliance to protect the right of customers.

This study also provides insightto academicians to expand the frontier of existing knowledge; the study empirically tested the direct effect of reliability, assurance, tangibility, empathy and responsiveness on customer satisfaction among customers of 9mobile Nigeria. The study has also empirically tested the combine effect/relationship of these service quality dimensions/components on/with customer satisfaction among customers of this telecommunication company.

It is apparent from this study that managers and decision makers in 9mobile telecommunication company should seek and improve the elements of service quality that make the most significant contributions oncustomer satisfaction. In making such an assessment, managers should examine customers' responses tothe five dimensions of service quality used in this study.

Finally, the general public can understand their roles as customers and potential customers in enhancing service quality and keeping the telecommunication sector at alert on their needs and possible demands to get more satisfied. This in turn ensures efficient and high quality service delivery to the telecommunication market.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

This study examined the effect of reliability, assurance, tangibility, empathy and responsiveness on customer satisfaction in 9mobile Nigeria.

The findings revealed that reliability characterized by providing service as promised, dependability in handling customer service problems, performing service right at first time,maintaining error-free records have significant positive effect on customer satisfaction.

Assurance characterized by employees who instill confidence in customers, making customers feel safe in their transactions, employees who are consistently courteous, and employees who have the knowledge to answer customer questions have however insignificant negative effects on customer satisfaction.

The finding suggests thattangibility characterized by modern equipment, visually appealing facilities, employees who have a neat, professional appearance and visually appealing materials associated with the service have a significant positive effect on customer satisfaction among customers of 9mobile Nigeria.

Empathy characterized by giving customers individual attention, employees who deal with customers in a caring fashion, having the customers' best interest at heart and employees

who understand the needs of their customershave a positive but insignificant effect on customer satisfaction.

Responsiveness characterized bykeeping customers informed as to when services will be performed, prompt services to customers, willingness to help customers, readiness to respond to customers' requests also have a positive but insignificant effect on customer satisfaction.

In addition, this study provides theoretical and managerial contributions as regards the effect of these service quality dimensions on customer satisfaction.

5.2 Conclusion

The aim of this study was to investigate the effect of service quality (reliability, assurance, tangibility, empathy and responsiveness) on customer satisfaction amongst customers of 9mobile Nigeria. To achieve this, five hypotheses standing for the constructs dimensional relationships were set, relevant data were collected and analysed, results were obtained and discussed. From the discussion of the results, the following conclusion was drawn:

The findings show an empirical supports for three hypotheses in respect of assurance, empathy, responsiveness and no support for two hypotheses in respect of reliability and tangibility.

5.3 Recommendations

This research has shown the effect of service quality on customer satisfaction among customers of 9mobile Nigeria. The results obtained confirm that all the service quality dimensions have positive effect on customer satisfaction though some proved to be insignificant. Based on the research findings the conclusion drawn, the following recommendations were put forth.

Reliability is the dominant service quality dimension which has the highest effect on customer satisfaction. 9mobile should therefore work on the indicators of this dimension that is it should invest on trainings and technology to enhance dependability in handling customer service issues, performing service right at first time among other things to ultimately increase customer satisfaction.

Tangibility dimension was also considered as one of the most important factors influencing customer satisfaction, hence investments should also be made to provide modern equipment, visually appealing service facilities and compel employees to dress neat and appear professionally.

However, the customers of 9mobile Nigeria were found less satisfied in terms of assurance, empathy and responsiveness dimensions being insignificantly effectual. In other words, the customers do not care much about these dimensions of service quality. A way of addressing this could be by trying hard to instill more confidence in customers, being more consistently courteous, being more knowledgeable about products and services to answer to customers inquiries satisfactorily, giving customers much individual attention, understanding their needs, dealing with them in a caring fashion and having their best interest at heart. In addition, employees should always be willing to help customers and be ready to respond to their requests promptly as well as keeping them informed as to when services will be performed.

5.4 Suggestions for Future Studies

Based on the limitations of this study, the following suggestions for future studies were put forward:

Future researchers should conduct a study to cover all the telecommunication companies in Nigeria in order to get higher coverage, accuracy and to make the findings more generalisable. As the data collected for this study was confined to 9mobile Nigeria customers, a replication of it in other telecommunication companies will enhance better generalization of findings.

Been the study a cross sectional one, conclusions about the directions of the effect in the study cannot be drawn; therefore, relationships among variables must be interpreted with caution. Thus, true causal inferences can only be drawn testing models using longitudinal data. This is especially important for a topic on customer satisfaction that is dynamic and tends to change over time especially with different service encounter and experience.

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APPENDICES

Appendix I: Questionnaire Introduction Letter

Department of Business Administration,

Faculty of Administration,

Ahmadu Bello University,

Zaria.

20th November, 2017

Dear Respondent,

REQUEST FOR ANSWER TO QUESTIONNAIRE

I am an M.Sc. Business Administration student in the department of Business Administration. I am conducting a research titled" Effect of Customer Satisfaction in 9mobile Nigeria" as part of the requirements for the award of M.Sc.in Business Administration of Ahmadu Bello University, Zaria.

This research is strictly an academic exercise, and I shall be grateful if you would please help provide answers to the questions as contained in the questionnaire attached. All information collected will be used for the research purpose only and will be kept confidential.

Thank you for your cooperation.

Sahabi Usman

P14ADBA8272

(Researcher)

Appendix II: Questionnaire

Part I: Demographic Section

Direction: Please tick on the appropriate box

1. Gender

a) Female ( )

b) Male ( )

2. Age

a) Below 18 ( )

b) 18-28 ( )

c) 29-39 ( )

d) 40-50 ( )

e) 51 and above ( )

3. Educational background

a) Uneducated ( )

b) Primary school graduate ( )

c) Secondary school graduate ( )

d) HND or university graduate ( )

e) Master's degree ( )

f) Above ( )

Part II: Survey on Service Quality Items

Direction: This part of the questionnaire intends to find your perception towards the servicequality of 9mobile Nigeria. Please circle the number which reflects your perception.

1= strongly disagree, 2=Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree.

S/N	Statement of service quality	Perceptions				
		Level of satisfaction with this item				
		1	2	3	4	5
1	Tangibles:					
	a. 9mobile Nigeria has up-to-date equipment and technology.					
	b.9mobile's physical facilities arevisually appealing.					
	c.9mobile's employees are well dressed and appear neat.					
	d. The physical facilities and technology of 9mobile Nigeria goes with the type of service provided.					
2	Reliability:					
	a.9mobile provide service at the time they promise					
	b. 9mobile's employees show sincere interest in solving a problem you face.					
	c. 9mobile's employees perform service right the first time (error free service)					
	d. 9mobile keeps your records accurately					
3	Responsiveness:					
	a.There are always adequate numbers of employees to respond to your needs.					
	b.9mobile'semployees tells you exactly when the service will be performed					
	c.You receive prompt service from 9mobile's employees					
	d.9mobile'semployees are always helpful					
	e. 9mobile's employees are never too busy to respond to your enquires/requests					
4	Empathy:					
	a.9mobile give individual attention to the customers.					
	b.9mobile service hours are convenient to all their customers					
	c.9mobile'sshops/service points are easily accessible to customers					
	d. 9mobile'semployees understand their customers' specific needs					
	e. 9mobile find out customers' needs and fill it					
5	Assurance:					
	a.The behavior of 9mobile's employees instills confidence/trust in customers					
	b.Customers feel safe in transaction with 9mobile.					
	c. 9mobile's employees are consistently polite					
	d.9mobile'semployees provide customers the adequate information on the service they requested.					

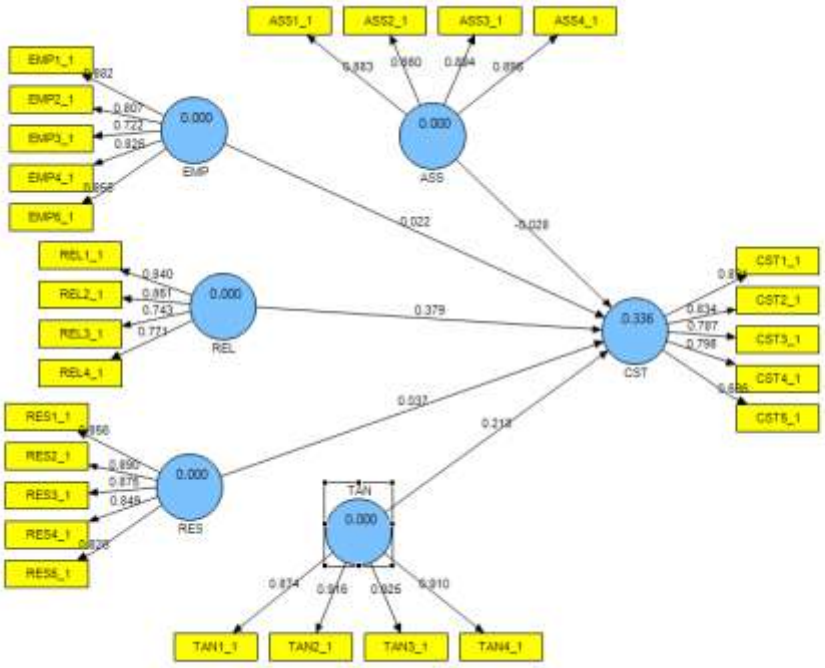
Part III: Level of Customer Satisfaction

Direction: This part of the questionnaire intends to find your level of satisfaction towards with9mobile Nigeria. Please circle the number which reflects your perception.

1= strongly disagree, 2=Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree.

S/N	Customer satisfaction	Level of satisfaction with this item				
		1	2	3	4	5
1	I am satisfied with 9mobile services					
2	Using 9mobile services satisfied me					
3	I enjoyed using 9mobile services					
4	I can easily recommend 9mobile services to my friends andfamily					
5	I will most probably use 9mobile services					

Appendix III: PLS Algorithm



Appendix IV: Bootstrap

