

Service Quality and Student's Purchase Satisfaction with Gsm Firms in Selected Tertiary Institutions

Maduko Chinweoke Lilian, Okoye-Chine Micheal Chinedu,
Mojekeh Michael. O., Ph.D.

Department of Marketing, Chukwuemeka Odumegwu Ojukwu University, Nigeria
Email: madukolilian@gmail.com, Email: mmojekeh2010@yahoo.com

To Link this Article: <http://dx.doi.org/10.6007/IJAREMS/v8-i2/5902> DOI:10.6007/IJAREMS/v8-i2/5902

Published Online: 14 June 2019

Abstract

This study evaluated the service quality components of GSM service providers and purchase satisfaction of students' of higher education institutions in Anambra state, Nigeria. Arguably, service quality and customer satisfaction are very essential in maintaining customer loyalty. The specific objectives of this study are to determine the effect of responsiveness, assurance, tangibility, empathy and reliability, respectively, on student's purchase satisfaction with GSM service providers, in selected higher education institutions in Anambra state, Nigeria. The study is anchored on Expectancy Disconfirmation Theory. The research design for this study was survey research design. 57,710 students of Nnamdi Azikiwe University, Chukwuemeka Odumegwu Ojukwu University and Nwafor Orizu College of Education, Nsugbe, formed the population for this study and Taro Yamane formula was used to determine the sample size. A total of 399 copies of the questionnaire were administered and 371 were dully completed and retrieved. Econometrics view (E-view) of version 9.0 was used to analyze the data generated for the study. The study concludes that service quality dimensions delivery process has a positive and significant effect on purchase satisfaction with GSM service providers in Anambra state. This study revealed that responsiveness and assurance have positive effect and are statistically insignificant. Tangibility is negative and statistically significant. The researcher recommend that customer-contact personnel should undergo periodic training on passion for service delivery, be continuously updated on and conversant with new packages/promotion, before such promotional activities are made public. GSM service providers must position and train their customer care representatives to provide prompt and courteous solutions to customer complaints. The GSM firms should design programs for continuous assessment of the service quality dimensions and customer satisfaction for effective performance evaluation.

Keywords: Service quality, Student's purchase, Satisfaction, GSM firms, Tertiary institutions

Introduction

Communication is a very crucial aspect of human life and forms an integral part of the human society. Communication is presumed to be one of the most essential tools for the ease of

business and efficient economic growth. In any economic system, the function of GSM Network is likened to that of a nervous system in a living organism. Without rapid and reliable exchange of information between all the parts, effective control and coordination of such system will be hampered. Succinctly stated, available resources will not be optimally utilized for the development of the system (Adewale, Adewuyi, & Ayinla, 2014).

The operations of the licensed GSM service providers in the country has created some macro-economic effects in terms of job creation, faster delivery services, reduced transportation cost, greater security and higher national output (Njoku, Kalu, Alexanda, & Okeke, 2015). GSM network investments guarantee development, which is both, geographically and culturally balanced. GSM Network provides a platform for economic growth by bringing buyers and sellers together; an indispensable function in a thriving market (Fakokunde, Iwarere, & Mustapha, 2014). It also facilitates the flow of information, which is essential in making a market work, acts as a feedback cycle between the suppliers and their customers and more importantly, promotes trade in services upon which modern economies are built (Fakokunde, 2010). GSM Network industry empowers firms to reach more customers with fewer resources and manpower. Current competitive environment induced by globalization and advances in information technology have forced companies to focus on managing customers' relationship and in particular, customer satisfaction and customers loyalty, in order to efficiently maximize revenue (Hui & Zheng, 2010). Thus, in this era of conscious consumers, delivering quality service is considered as an essential strategy for success and survival in today's competitive environment. However, no business organization can survive without building its customers' satisfaction and brand loyalty (Moses & John, 2015).

Customers and the organization are a two-way flow of value; this means that customer derives real value from the relationship which translates into value for the organization in the form of enhanced profitability and sustainability over a long period of time (Olu, 2010). The number of satisfied and loyal customers as a sign of market share, is more meaningful and significant than the total number of customers. Invariably, more loyal customers translate to high profits (Osotimehin, Hassan, & Abass, 2015) Satisfied customers will continue to purchase or receive the product or service from the same enterprises, and they will be willing to pay higher prices for quality products and first-class services, thereby increasing sales revenue. The marketing management strategy for the service provider therefore, is to improve customer satisfaction or customer loyalty, where expectations are exceeded.

Furthermore, service quality and customer satisfaction were found to be related to customer patronage through repurchase intentions (Sharma, 2014). Delivering quality service to customers is a must for success and survival in today's competitive GSM industry. When a consumer/customer is contented with either the product(s) or service(s), it is termed satisfaction. Satisfaction can also be a person's feelings of pleasure or disappointment that results from comparing a product's perceived performance or outcome with their expectations (Kotler & Keller, 2009). Satisfaction varies from one person to another because it is utility. It is an aphorism that one man's meal is another man's poison, thus, highlighting the fact that it is sometimes very difficult to satisfy everybody or to determine satisfaction among group of individuals. Customer satisfaction has been defined differently by different authors as "the consumer's response to the evaluation of the perceived discrepancy between prior expectations and the actual performance of the product or service, as perceived after its consumption" (Cote, 2013) hence, considering satisfaction as an overall post-purchase evaluation by the consumer. Schiffman & Kanun (2014) has it as "the individual's perception of the performance of the products or services in relation to his or her expectations".

Over the past decades, service quality and customers satisfaction has attracted significant attention from marketing and business development experts and have been debated extensively. Several studies were carried out on service quality dimensions, though with mixed findings. Studies carried out, such as, (Adrisua, Noonib, Flankoc, & Mensahd, 2016), studied the effect of physical evidence and customers satisfaction and the study found out that empathy have positive influence on customer loyalty through customers satisfaction. (Wali & Bright, 2012) studied the effect of E-service quality experience & customer's loyalty and the study revealed that it is essential to meet customer's expectation through reliable service. (Osotimechin, Hassan & Abss, 2014) studied the effect of customers perception of service quality in the Nigeria telecommunication sector, the study found out that quality of service customers received from their service providers in terms of prompt service delivery, reliability, improved service availability of effective and efficient customers care, to assist customers in assessing their rate of satisfaction. (Oraloyin & Olatoye, 2013) studied the effect of quality service on customers satisfaction in Nigeria and it was revealed that components to customers has a significant effect on real estate in Nigeria. Ahmed Nawaz, Usman, Shaukat, Ahmad & Iqbal (2015) examined the service quality of the mobile service providers and satisfaction of the customers and the result shows that there is no significant relationship between service quality and customers satisfaction. Agyapong (2016) examined the Relationship between service quality and customer's satisfaction in the utility industry (telecom) in Ghana and the result showed that the service quality items do not have significant effect on customers' satisfaction

The differences in finding might be because of model specification, geographical differences, the type of data used and type of method of analysis employed. Against this backdrop, the present study improves on the previous study on the following ground; firstly, this study used an updated literature on the effect of service quality and customers satisfaction using GSM Network providers as a case study. Secondly, it is carried out in Nigeria to ascertain the true situation since the results of some of the reviewed empirical studies done are conflicting. Thirdly, the study sought to adopt e-view package to critically examine the effect service quality of GSM network providers on purchase satisfaction of students' of higher education institutions in Anambra State Nigeria. The main objective of the study is to examine the effect of service quality delivery on Students' purchase satisfaction with GSM service providers in selected higher education Institutions in Anambra state, Nigeria. The specific objectives include to: determine the effect of responsiveness; assurance; tangibility; empathy and reliability on student's purchase satisfaction with GSM service providers, in selected higher education institutions in Anambra state, Nigeria.

Hypotheses

Ho1: Responsiveness has no effect on student's Purchase satisfaction with GSM service providers in selected higher education institutions in Anambra state, Nigeria.

H02: Assurance has no effect on student's Purchase satisfaction with GSM service providers in selected higher education institutions in Anambra state, Nigeria.

H03: Tangibility has no effect on student's Purchase satisfaction with GSM providers in selected higher education institutions in Anambra state, Nigeria.

H04: Empathy has no effect on student's Purchase satisfaction with GSM providers in selected higher education institutions in Anambra state, Nigeria.

H05: Reliability has no effect on student's Purchase satisfaction with GSM providers in selected higher education institutions in Anambra state, Nigeria.

Conceptual Framework**Service**

Service can be defined in many ways depending on which area the term is being used. (Kotler & Keller, 2009) defines service as “any intangible act or performance that one party offers to another that does not result in the ownership of anything”. In other words, service can also be defined as an intangible offer by one party to another in exchange of money for pleasure (Jenet, 2011). In service marketing literature, "service quality is generally defined as the overall assessment of a service by the customers, (Eshghi, Roy and Ganguli, 2008) or the extent to which a service meets customer's needs or expectations". For a company's offer to reach the customers there is need for services. These services depend on the type of product and it differs in various organizations. Service can be defined in many ways depending on which area the term is being used.

A service is a process that leads to an outcome during partly simultaneous and consumption processes (Gronroos, 2015). A service firm's ability to hang onto his customers depends on how consistently it delivers value to them. Perhaps, customer retention is the best measure of quality (Thomas and Page, 2002). Top service companies set high quality standards. They understand the service-profit chain which links service firm profit with employee and customer satisfaction. Parasuraman (2012) defined service quality as the results from the comparison of customer's expectation with perceived performance of services. Service quality can also be described as a rationale of differences between expectations and competence along the important quality dimension. It is commonly noted as a critical prerequisite and determinant of competitiveness for establishing and sustaining satisfying relationship with customers. However, service quality is harder to define than product quality; for example, it is harder to agree on the quality of hair cut than on the quality of hair dryer. Service quality is different from the quality of goods. Since services are intangible, perishable produce are consumed simultaneously and heterogeneously (Zeithaml, Parasuraman & Malhotra, 2016).

Quality

Quality is one of the things that consumers look for in an offer, which service happens to be One (Solomon, 2009). Quality is also defined as the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs (Kotler & Keller, 2009). It is evident that quality is related to the value of an offer, which could evoke satisfaction or dissatisfaction on the part of the user. Quality is one of the most important watchwords when managing for high performance and competitive advantage; it has become the theme of the day. Customers want quality whether they are buying consumer goods or receiving a service.

Crosby (2014) defines quality as conformance to specification, where the specification has been developed from the expressed needs of the consumers. One of the major ways a service firm can differentiate it is by delivering consistently, higher quality service than its competitors ((Kotler & Keller , 2009). Although quality is seen as an essential to corporate success, one must be able to measure it before being able to properly manage it. Consequently, a clear definition of quality is needed. However, adequate and commonly shared definitions of quality are rarely found within both academic and commercial circles. The construct “quality” is elusive and indistinct. Many researchers and practitioners therefore, found that quality is difficult to define and measure (Gronroos, 2015). The construct is often mistaken for or misrepresented with imprecise adjectives like superiority

or luxury (Crosby, 2014). Quality and especially, its underlying characteristics are difficult to pin down for both customers and suppliers of both products and services (Takeuchi and Quelch, 2016). Many academics and researchers argue that the complex construct of quality and its features, pose a serious challenge to operationalize.

Customer Satisfaction

Customer satisfaction has been defined differently by different authors as “the consumer’s response to the evaluation of the perceived discrepancy between prior expectations and the actual performance of the product or service, as perceived after its consumption” (Giese & Cote, 2000) hence considering satisfaction as an overall post-purchase evaluation by the consumer”. Schiffman & Kanun (2004) has seen it as “the individual’s perception of the performance of the products or services in relation to his or her expectations”. Customers are the key factors company’s existence and development on the market. It is obvious then, that firms, which are always faced with competition, need to provide valuable and unique terms to their customers that will satisfy their needs. The satisfaction includes not only the feelings associated with the purchasing process, but also the atmosphere before and after the execution of the purchases. Therefore, a vital factor of building a long-term success of the company is ongoing satisfaction of customers’ needs. Standard ISO 10004 specifies, that, “satisfaction is a judgement, an opinion expressed by a customer”. A state of satisfaction or dissatisfaction is a subjective feeling and is a result of specific experiences of individual perception and emotions. This satisfaction or dissatisfaction reflects a feeling completed or fulfilled or unfulfilled expectations, in relation to a particular positive impression, and conversely will be linked to dissatisfaction with the lack of positive incentive.

Dimensions of Service Quality

Responsiveness

Responsiveness, concerns the willingness or readiness of employees to provide service (Adebiyi, Shitta, & Olonade, 2016). This dimension is concerned with dealing with the customer’s requests, questions and complaints promptly and attentively. A firm is known to be responsive when it communicates to its customers how long it would take to get answers or have their problems dealt with. To be successful, companies need to look at responsiveness from the viewpoint of the customer rather than the company’s perspective (Zeithaml et al. 2016) Responsiveness is the ability to respond to customers’ requirement timely and flexibly.

Tangibility

Tangibles entail the physical evidence of the service. Specifically, the concept explores the physical facilities of the service provider; the appearance of personnel, the tools and equipment used to provide the service including other customers in the service facility. Tangibles are used by firms to convey image and signal quality (Anyadighibe, 2014).

The service quality aspects of tangibility are described by whether the physical resources linked to the service are visually attractive at the GSM Network centers. These are all features that clients observe prior to or upon using the network. Such graphic features assist customers shape their early impressions. A critical task in service marketing is that consumers cannot observe a service but be able to appreciate the numerous tangibles related to service. All these tangibles; the service capacities, devices and contact resources are clues about the intangible service (Caruana, 2012). When improperly managed, these cues can convey to the consumers incorrect meanings about the service and make the marketing strategy of the firm

unproductive (Colgate, Stewart, and Kinsella, 2015). Conversely, enhancing quality via tangibles requires care to the slightest details that challengers may contemplate unimportant. Nevertheless, these perceptible details can be comprehensible for consumers and communicate a message of care and competence.

Reliability

The service dimension of reliability measures the consistency of performance and the dependability of the service. Zeithaml & Baitner, 2016, are of the view that reliability is “the ability to perform the promised service dependably and accurately” or “delivering on its promises” Does the firm perform the service right at the first time? Does the firm honor its promises? These are some of the questions which need to be answered by service providers if they are to achieve reliability. The accuracy in billing, proper record-keeping and performing the service at the designated time, all constitute an attempt to achieve reliability. Zeithaml et.al (2016) discovered that the reliability dimension was a significant factor for customers who operated GSM Network Service. Moreover, Cooper and Schindler (2016) concurred with Zeithaml (2016) that reliability was definitely correlated to the application of network providers. They argued that, the extra-guaranteed that customers recognize network providers to be; the more probable they were to operate telecommunication. Reliability refers to the ability to deliver expected standard at all time, how the organization handle customer services problem, performing right services for the first time, providing services within promised time and maintaining error free record. Yang and Fang (2004), stated that reliability consists of accurate order of fulfillment, accurate record, accurate quote, accurate billing and calculation of commissions, which keep the service promising to the customer.

Empathy

Empathy entails caring and provision of individualized attention to customers by personnel of the firm (Zeithaml et al., 2016) .In this respect, the customer feels unique and special. In an attempt to develop empathy, personnel of the firm should endeavor to know the names of their customers, their preferences and needs and take steps to satisfy them. Small Scale enterprises through the provision of customized services to clients are in a better position to achieve empathy than large firms.

Assurance

Some researchers have revealed that assurance dimension of GSM Network is vital to the consumers’ acceptance of GSM services (Babatunde, and Olukemi, 2012). Additionally, Calhoun Pekar, Adali and Pearlson, (2001) established that the assurance dimension (like the confidentiality part that relates to GSM services) was linked to the practice of telecommunication. The literature on consumer behavior generally places emphasis on risk as an important dimension of the consumer decisions. Thus, risk and need as two dimensions of consumer involvement have been the focus of attention. Risk assessments are mostly considered as relating to unpleasant experiences that arise from unexpected or uncertain outcomes while buying products or services (Charlse, 2016). Risk and its correlation with involvement are crucial, as the two constructs perform influential task as motivational and explanatory variables in consumer behavior. Customers identify more risks while purchasing network services than physical products. Customers can hardly send back a service to the provider as they have previously used it, and others are so technical or specialized that

customers have neither the wisdom nor the proficiency to assess whether they are satisfied, even after they have used the service (Chaudhuri & Holbrook, 2001).

Customer Satisfaction

Laroche (2014) assessed the dimensionality of should-and-will service expectations. They used a survey measuring customers' post encounter expectations and vis-à-vis a well-known airline with a sample of 363 and examined the existence of hypothesized functional and technical dimensions of should and will expectations and determined the casual relationships between two types of expectations and hypothesized dimensions.

Oliver (1993) first suggested that service quality would be antecedent to customer satisfaction regardless of whether these constructs were cumulative or transaction-specific. Some researchers have found empirical supports for the view point mentioned above, where customer satisfaction came as a result of service quality.

In relating customer satisfaction and service quality, researchers have been more precise about the meaning and measurements of satisfaction and service quality. Satisfaction and service quality have certain things in common, but satisfaction generally is a broader concept, whereas service quality focuses specifically on dimensions of service. (Crosby, 2014). Although it is stated that other factors such as price and product quality can affect customer satisfaction, perceived service quality is a component of customer satisfaction (Zeithaml et al. 2016). This theory complies with the idea and has been confirmed by the definition of customer satisfaction presented by other researchers

Service Quality

Service quality is commonly noted as a critical prerequisite and determinant of competitiveness for establishing and sustaining satisfying relationships with customers. Previous study suggests that service quality is an important indicator of customer satisfaction (Spreng and Machoy, 2014). Attention to service quality can make an organization different from other organizations and gain a lasting competitive advantage (Appiah, 2016). Service quality has been measured by several models, but this research will consider SERVQUAL model.

Theoretical Framework

Oliver was the first to propose and develop the Expectancy Disconfirmation Theory in 1980. Disconfirmation theory argues that 'satisfaction is related to the size and direction of the disconfirmation experience that occurs as a result of comparing service performance against expectations. This theory has been tested and confirmed in several studies e.g (Satari, 2007). (Szymanski and Henard, 2004) found in the meta-analysis that the disconfirmation paradigm is the best predictor of customer satisfaction. (Ekinici, 2004) cites Oliver's updated definition on the disconfirmation theory, which states "Satisfaction is the guest'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". Positive disconfirmation occurs when the service quality perceived is better than expected; while negative disconfirmation is when the service quality perceived is below expectation. Customer satisfaction occurs by confirmation or positive disconfirmation of consumer expectations, and dissatisfaction is caused by negative disconfirmation of consumer expectations (Agbemabiese, Patrick and Adu, 2015).

Service Quality versus Customer Satisfaction

Previous studies have studied customer satisfaction and service quality and found an interaction between them (Gera, 2011). Ting (2004), stated that dimensions of service quality are specifically or directly connected with the rendering of the service, whilst satisfaction is based on many factors, both directly and indirectly, relating to the delivery of the service. For instant, Negi (2009), stated that overall service quality is significantly associated with and contributes to the overall satisfaction of customer.

Parasuraman (2015) contends that when perceived service quality is high, then it will lead to increase in customer satisfaction. They argue that service quality leads to customer satisfaction and this supports (Lee, 2000), who acknowledge that customer satisfaction is based upon the level of service quality provided by the service provider. This implies when fast foods restaurants (FFRs) can achieve or exceed the expectations of customers, the customer will be satisfied with the service. To achieve a high level of customer satisfaction, most researchers suggest that a high level of service quality should be delivered by the service provider as service quality is normally considered an antecedent of customer satisfaction. Newman (2013) also indicates that there is a connection between the quality of service and customer satisfaction. Based on this review, researcher has been able correlate the relationship between customer satisfaction and service quality as two distinct concepts that are closely related.

Empirical Review

Meshach (2017) studied the effect of service quality and financial performance of selected banks in Nigeria between the periods of 2006 to 2013. The variables were on responsiveness, assurance, tangibility, empathy and reliability and the population of the study were 23 banks in Nigeria as at the time of this study. The sample size was 10 banks, purposive sampling method was used to determine the sample size and primary type of data was sourced through structured questionnaire. The researcher employed survey design and chi-square method of data analysis, and statistical package for social science (SPSS) was used to analyze the data. The study shows the absence of a strong relationship between investment in service quality programs and financial performance in the Nigerian banking sector. The study recommends that commercial banks should re-strategize more on their bank relationship with their customers

Empirical Review: Webometrics

SN	Author/ Date	Topic	Variables	Methodology	Major findings
1	Anifowose, & Olaleye, 2016	Assessment of Customers' Satisfaction on Service Quality of Fast Food Restaurant in Akure Metropolis	Responsiveness, assurance, tangibility, empathy and reliability	Chi-square	customer satisfaction on service quality and its influence on customers' patronage to the best of my knowledge as not been focused on in Akure metropolis
2	Alabar Ode and. Gbande (2014)	Service Quality and Customer Satisfaction in Nigerian Mobile Telephony Nigeria	Responsiveness, assurance, tangibility; empathy and reliability,	. chi-square	The study confirmed that customer satisfaction has a significant relationship with customer loyalty in the telecommunication industry
3	Iddrisua, Noonib , Fiankoc, & Mensahd, 2016	Assessing the impact of service quality on customer loyalty: a case study of the cellular industry of Ghana	Customer satisfaction and loyalty, customer patronage and customer retention	chi-square	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
4	Wali & Bright (2012)	E-service quality experience and customer loyalty: An emphasis of the Nigeria airline operators	E-service quality experience and customer loyalty	. chi-square	Findings revealed that there is a positive correlation between website design of a company and customers repeat purchase
6	Ansar, & Lodhi (2015)	The impact of service quality on customer satisfaction in telecom sector of Pakistan: An empirical study of Pakistan	Responsiveness, assurance, tangibility, empathy, reliability	SPSS	Result shows that service rates are unable to manage the customer's needs because rapid changes in technology will give a relative decrease in telecommunication cost and increased in competition and service rates
7	Appiah (2016)	Effects of services quality on customer satisfaction: a case from private hostels in wa-municipality of Ghana	Responsiveness, assurance, tangibility, empathy, reliability :	SPSS	The study also revealed that, taking all the other factors constant at zero; a unit change in tangibility will bring 0.054 change in students satisfaction,

Methodology

The study adopted a descriptive research design. Data was obtained from primary sources with use of questionnaires. The target population for this study comprises of all the G.S.M users (students of the selected institutions) whose age group falls between 18years to 40years. The population for the study is 57,710 students of Chukwuemka Odumegwu Ojukwu, Nnamdi Azikwe University and Nwafor Orizu College of Education, all in Anambra state.

Name of Institution	No. of students	Source
Nnamdi Azikiwe University 2017	28,981	NAU Student Affairs Unit,
Chukwuemeka Odumegwu Ojukwu University 2017	13,250	COOU, Student Affairs Unit,
Nwafor Orizu College of Education, Nsugbe (2017)	15,479	NOCEN, Student Affairs Unit,
Total	57, 710 students.	

Statistical formula devised by Taro Yamane (1964) was applied to determine the sample size.

$$n = \frac{N}{1+N(e)^2}$$

Where

n= Sample size of the study=

N = Population

1 = Constant value

e = Error margin assumed to be (5%)

Applying this formula, we have

$$n = \frac{N}{1+N(e)^2}$$

$$n = \frac{57710}{1+57710(5\%)^2}$$

$$n = \frac{57710}{1+57710(0.0025)}$$

$$n = \frac{57710}{1+105.58}$$

$$n = \frac{57710}{144.2}$$

Sample size = 399

How the questionnaires were distributed

Questionnaires Distributed	Institutions	Campuses	
133	UNIZIK	University Main campus	67
		NAUTH Nnewi	66
133	COOU	Igbariam Campus	48
		Uli Campus	45
		UTH. Amaku	40
133	NOCEN	Main Campus	133
		Total	399

A total of three hundred and ninety-nine (399) copies of questionnaires were distributed to the respondents and three hundred and seventy-one copies were duly filled and were relevant for the study. 371 copies were properly filled and used for analysis. The reliability of the instrument was maintained through the test-retest method. The Spearman's rank correlation of coefficient was used and the coefficient of the reliability was found to be high at $R_s=0.79394$. This indicates a strong and positive correlation.

Analysis of Data and Discussion of Findings

Statistics such as frequency count and percentages were used in the analysis of personal characteristics while research hypotheses were tested using Simple Regression Analysis (SRA). The research hypotheses were tested at 0.05 level of significance. Analysis was carried out with the aid of Econometric view (E-view) version 9.0

Model Specification

The researcher developed five (5) models which each model addresses the corresponding objectives; this is to help us analyses the matter well and come out with a solution.

Model One

CS=F (REP)

Where

CS= Customers satisfaction

REP= Responsiveness

F=Functional Notation

Model Two

CS=F (ASS)

Where

CS= Customers satisfaction

ASS= Assurance

F=Functional Notation

Model Three

CS=F (TAN)

Where

CS= Customers satisfaction

TAN= Tangibility

F=Functional Notation

Model Four

CS=F (EMP)

Where

CS= Customers satisfaction

EMP= Empathy

F=Functional Notation

Model Five

CS=F (REL)

Where

CS= Customers satisfaction

REL= Reliability

F=Functional Notation

The above equation can be restated in a functional form as;

$$CS = b_0 + b_1RES + b_2ASS + b_3TAN + b_4 EMP + b_5 REL \mu$$

Where;

B0 = Autonomous or Intercept

B1 = Coefficient of Parameter RES

B2 = Coefficient parameter ASS

B3 = Coefficient parameter TAN

B4 = Coefficient parameter EMP

B5 = Coefficient parameter REL

μ = Stochastic variable or error term

Table 1

Summary of Respondents' Demographics

(n = 399)

Characteristics of Respondents	Frequencies	Percentage
Gender		
Male	129	32.4
Female	270	67.6
Total	399	100
Marital Status		
Married	89	22.3
Single	310	77.7
Total	399	100
Level of Education		
B.Sc	247	61.9
HND	56	14.0
OND	96	24.1
Total	399	100
Age Bracket		
18-25	282	70.6
26-33	79	19.8
34-40	38	9.6
Total	399	100
Institutions		
NAU	127	34.2
COOU	124	33.4
NOCEN	120	32.4
Total	371	100

Source: Field Survey, 2018.

Table 4.1

Summary of the Descriptive Statistics

Variables	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Obs
RES	123667.8	117870.3	159161.4	77888.80	26743.97	- 0.149058	371
ASS	3730.965	300.0000	19077.40	5.500000	5766.009	1.407295	371
TAN	343595.5	14072.00	2350858.	225.4000	582020.8	1.955468	371
EMP	50.88177	4.510000	331.1000	0.090000	84.33568	1.989272	371
REL	725677.2	123509.0	3535631.	17444.00	986611.3	1.508074	371

The table above shows that responsiveness, assurance, tangibility, and empathy, reliability has means value of 123667.8, 3730.965, 343595.5, 50.88177, and 725677.2 respectively for the period under review. The median series for responsiveness, assurance, tangibility, and empathy, reliability is 117870.3, 300.0000, 14072.00, 4.510000, and 123509.0 respectively. The maximum value for responsiveness, assurance, tangibility, and empathy, reliability was 159161.4, 19077.40, 2350858.0, 331.1000, and 3535631.0 respectively, while their respective minimum values were 77888.80, 5.500000, 225.4000, 0.090000, and 17444.00 during the same period under evaluation.

The standard deviation for the variables includes 26743.97, 5766.009, 582020.8, 84.33568, and 986611.3 respectively for responsiveness, assurance, tangibility, and empathy, reliability. Most of these variables recorded values of standard deviation that is higher than the values for their respective means. This indicates that these variables recorded fast growth within the period under study. This is also seen in the wide margins between their respective maximum and minimum values. The analysis of the skewedness shows that only industrial responsibility is negatively skewed while the remaining variables are positively skewed.

Hypothesis One

H01: Responsiveness has no significant effect on student's satisfaction with GSM service providers in selected higher education institutions in Anambra state.

Tables 4.4

*Regression Model for objective one***Model One**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.619216	0.649172	2.494279	0.0180
RES	0.464298	0.045508	10.20245	0.0000
R-squared	0.825844			
Adjusted R-squared	0.814959			
F-statistic	75.87149	Durbin-Watson stat		1.793585
Prob(F-statistic)	0.000000			

Sources: E-view 8.0

The R- squared which is the coefficient of determination or the measure of goodness of fit of the model, tests the explanatory power of the independent variables in any regression model.

It tests for the goodness of fit of the model. From our result in table 4.3 above, $R^2 = 82\%$, this shows that our model has a good fit, because the closer R^2 is to 100%, the higher the goodness of fit of the model. Hence the explanatory variables can explain up to 76% out of the expected 100% leaving the remaining 12% which would be accounted for by the other variables outside the model which will be captured by the error term. The adjusted R^2 is 81%, meaning that even with an adjustment in the independent variables it can still account for about 81% of the change in the independent variables.

The F-statistics measure the overall significance of the parameter estimates in the model. From table 4.3 above, the calculated value of F-statistics is 75.87149, while its probability is 0.0002, since the prob value is less than the desired 0.05 level of significance, we accept and state that there is a significant relationship between the variables; this means that the parameter estimates are statistically significant in explaining the relationship in the dependent variables.

The a priori criteria are determined by the existing marketing theory it also states the signs and magnitude of the variables. From the result report in table 4.4 above, and from the coefficient column we discovered that responsiveness has a positive sign given its value as 0.464298, this implies that an increase in responsiveness will increase customer satisfaction by 46%, this suggests that it conforms to a priori expectation.

The T-statistics help in measuring the individual statistical significance of the parameter in the model from the result report in table 4.4 above, responsiveness is 10.20245, and is statistically significant; this implies that it contributed to customer satisfaction.

Durbin-Watson statistics is used to test the presence or otherwise of autocorrelation in our model. Whenever the value of Durbin-Watson is closer or a little bit above (2), it means the absence of autocorrelation. From our model it is observed that our Durbin-Watson is (1.4) this implies the absence of autocorrelation in our model. Hence our model result can be used for prediction and inferences. From the result tables above the value for responsiveness is 10.20245 (0.0000) which is less than 0.05, this further suggests the rejection of the null hypotheses and rejection of alternative hypotheses which state that Responsiveness has a significant effect on student's satisfaction with GSM Network Providers in selected institutions in Anambra state.

Hypothesis Two

Ho2: Assurance has no significant effect on student's satisfaction with GSM Network Providers in selected Higher Education Institutions in Anambra state.

Tables 4.5

Regression Model for objective two

Model Two

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.014568	0.409113	12.25718	0.0000
ASS	0.299063	0.034348	8.706737	0.0000
R-squared	0.804550			
Adjusted R-squared	0.792335			
F-statistic	65.86257	Durbin-Watson stat		1.892980
Prob(F-statistic)	0.000000			

Sources: E-view 8.0

A close examination of the estimated model shows that the result is satisfactory from the high value of the R^2 given to as 0.804550 approximately 80% systematic variation in the dependent variable which is customers satisfaction using only one independent variable which is assurance, number of Only 20% is left unexplained and this is assumed to be captured by the error term,

The adjusted R^2 is given as 0.792335. This means that after adjusting for the degree of freedom, the adjusted R^2 explains approximately 79% systematic variation in the dependent variable. The higher the adjusted R^2 , the lower the residual variance error due to a one-on-one relationship between the both and this means our model have a better predictive ability. The F-ratio with the value of 65.86257 shows that the model easily passes the F-test at 1% significance level and this means that the hypotheses of a significant linear relationship between the dependent and independent variables taken together is validated.

The a’p priori criteria are determined by the existing marketing theory and state the sign and magnitude of the variables. From the result report in table 4.5, and from the coefficient column, we discover that assurance has a positive sign as 0.299063 this implies that increase in assurance increase the customers satisfaction by 29 %. It further conforms to apriori expectation.

T-statistic, this is the measure use to determine the individual statistical significance of the variables in the model. From the model, it is obtained that the level of assurance is statistically significant at 10% level of significant.

The Durbin-Watson statistics is used to test for the presence of autocorrelation in our model. From the result above, our Durbin-Watson result is (1.8), this does satisfy the above stated condition. This means that there is no presence of autocorrelation among the explanatory variables. It was discovered from the t-statistics Colum of the above table 4.4 Assurance valued at 8.706737 while its probability was at 0.000, which is greater than 0.05, however null hypotheses is rejected while the alternative is accepted, therefore Assurance has significant effect on student’s satisfaction with GSM Network Providers in selected institutions in Anambra state

Hypothesis Three

H03: Tangibility has no significant effect on student’s satisfaction with GSM Network Providers in selected Higher Education Institutions in Anambra state.

Tables 4.5 Regression Model for objective Three

Model Three

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	9.425971	0.613891	15.35447	0.0000
TAN	-0.033989	0.015277	-2.224874	0.0333
R-squared	0.429747			
Adjusted R-squared	0.394106			
F-statistic	12.05773	Durbin-Watson stat		1.602854
Prob(F-statistic)	0.000125			

Sources: E-view 8.0

The value of the R-square and the adjusted R-square show that the explanatory variables are robust in explaining variation in the dependent variables RGDP, given their values as 0.429747 and 0.394106 respectively.

The F-statistics measures the overall significance of the explanatory parameter. From the result report in table 4.6 above, our computed value of f-statistics is 12.02773, while its probability is 0.000125, given this value we reject the null hypothesis and accept the alternative hypothesis which state that there is a significant relationship between the variance of estimated regression model.

A' priori criteria which is used to determine the existing marketing theories and indicates the sign of the finance parameter under consideration from the estimated regression model it was obtained from the coefficient Colum it was observe that tangibility is negative given its value as -0.033989, this implies that increase in tangibility decrease the customers satisfaction. This does not confirm to a' priori expectation

T-statistics, this is the measure use to determine the individual statistical significance of the variables in the model. From the model it was obtained that the assurance is statistically significant at 5% level of significant

The Durbin-Watson statistics is used to test for the presence or otherwise of autocorrelation in our model when the value of Durbin- Watson is closer or a little bit above 2, it means the absence of autocorrelation amongst the explanatory parameter (Koutsoyannis 1997) from the table 4.6 above, it was obtained that our Durbin-Watson result is (1.6), this satisfy the above stated condition. From the table 4.4 above it was clearly discovered that tangibility pose the value of 2.224874, whereas it prob vale stood at 0.0333, this further expressed the rejection of null hypotheses and acceptance of alternate hypotheses which implies that Tangibility has significant effect on student's satisfaction with GSM Network Providers in selected institutions in Anambra state

Hypothesis Four

H04: Empathy has no significant effect on student's satisfaction with GSM Network Providers in selected Higher Education Institutions in Anambra state.

Tables 4.5 Regression Model for objective four

Model Four

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.462870	0.755453	8.554964	0.0000
EMP	0.197476	0.077648	2.543214	0.0160
R-squared	0.622248			
Adjusted R-squared	0.618014			
F-statistic	13.21031	Durbin-Watson stat		1.720671
Prob(F-statistic)	0.000066			

Sources: E-view 8.0

The R-Squared which is the co-efficient of determination or measure of goodness of fit of the model, test the explanatory power of the independent variables in any regression model. It tests for the goodness of fit from our result $R^2 = 62\%$. This shows that our model displayed a good fit because the closer the R^2 is to 100% the higher the goodness of fit of the model

hence, the explanatory variables can explain up to 62% out of the expected 100%, leaving the remaining 38% which would be accounted for by other variables outside the model as captured by the error term.

The f-statistics measures the overall significance of the explanatory parameters in the model. From our table 4.7 above the calculated value of the f-statistics is 13.21031, its probability is 0.000066 which is less than 0.05. We accept alternative hypothesis and state that there is a significance relationship between the variables. This means that the parameter estimates are statistically significant in explaining the relationship in the dependent variable.

The a’p priori criteria is determined by the existing marketing theory and states the signs and magnitude of the variables from the result report. In table 4.7 above and from the coefficient column we find out that empathy have a positive sign given its value as 0.197476 this implies increase in empathy increase the customer’s satisfaction. However, this conform to theoretical expectation.

The t-statistics helps in measuring the individuals’ statistical significance of the parameters in the model from the result report in table 4.6 above and using the probability test we find out that empathy is statistically significant at 10% because its low probability value it contributes significantly to customers satisfaction

The Durbin-Watson is used to measure the presence or otherwise of auto-correlation in the model. If there is auto-correlation in the model, it implies that it has lost its predictive power. From the report in table 4.7 above, our Durbin-Watson statistics is (1.7). This implies that there is no positive serial auto-correlation between the explanatory parameters of the model because the closer our DW estimates is to 2 than zero, the absence of auto correlation in our model. Consequently, our estimates can be relied upon for making predictions and inferences. It was discovered from the t-statistics Colum that empathy value is 2.543214 (0.0160) since is probability value is less than desired 0.05% level of significance, we conclude in favor of alternative hypotheses which state that. Empathy has no significant effect on student’s satisfaction with GSM Network Providers in selected institutions in Anambra state

Hypothesis Five

H05: Reliability has no significant effect on student’s satisfaction with GSM Network Providers in selected Higher Education Institutions in Anambra state.

Tables 4.5 Regression Model for objective five

Model Five

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.462870	0.755453	4.934904	0.0000
REL	0.507476	0.077648	3.235984	0.0780
R-squared	0.532098			
Adjusted R-squared	0.520914			
F-statistic	19.21031	Durbin-Watson stat		1.920671
Prob(F-statistic)	0.000066			

Sources: E-view 8.0

The R-Squared which is the co-efficient of determination or measure of goodness of fit of the model, test the explanatory power of the independent variables in any regression model. It test for the goodness of fit from our result $R^2 = 53\%$. This shows that our model displayed a good fit because the closer the R^2 is to 100% the higher the goodness of fit of the model hence, the explanatory variables can explain up to 53% out of the expected 100%, leaving the remaining 47% which would be accounted for by other variables outside the model as captured by the error term.

The f-statistics measures the overall significance of the explanatory parameters in the model. From our table 4.7 above the calculated value of the f-statistics is 19.21031, its probabilities is 0.000066 which is less than 0.05. We accept alternative hypothesis and state that there is a significance relationship between the variables. This means that the parameter estimates are statistically significant in explaining the relationship in the dependent variable.

The a priori criteria is determined by the existing finance theory and states the signs and magnitude of the variables from the result report. In table 4.7 above and from the coefficient column we find out that reliability have a positive sign given its value as 0.507476 this implies increase in reliability increase the customers' satisfaction. However, this confirm to theoretical expectation.

The t-statistics helps in measuring the individuals' statistical significance of the parameters in the model from the result report in table 4.8 above and using the probability test we find out that reliability is statistically significant at 10% because its low probability value it contributes significantly to customers satisfaction.

The Durbin-Watson is used to measure the presence or otherwise of auto-correlation in the model. If there is auto-correlation in the model, it implies that it has lost its predictive power. From the report in table 4.8 above, our Durbin-Watson statistics is (1.9). This implies that there is no positive serial auto-correlation between the explanatory parameters of the model because the closer our DW estimates is to 2 than zero, the absence of auto correlation in our model. Consequently, our estimates can be relied upon for making predictions and inferences. From the above analysis it was discovered that the t-value is 3.235984 with its prob value as (0.0780) however alternative is accepted against null hypotheses which further state that Reliability has no significant effect on student's satisfaction with GSM Network Providers in selected institutions in Anambra state.

Summary of the Findings

The results of our estimated model revealed the following important findings

- i. It was observed that responsiveness has a positive effect and is statistically insignificant
- ii. It was also observed that assurance shows positive effect and is statistically significant
- iii. Tangibility is negative and statistically significant.
- iv. Empathy is positive and statistically significant.
- v. Reliability is positive and poses significant effect on customer's satisfaction.

Conclusion

The research was able to determine the relationship between service quality/delivery and customer satisfaction, SERVQUAL reliability dimension and customer satisfaction and the relationship between customer satisfaction and among mobile phone users in the selected institutions in Anambra state. Based on the analysis conducted to test the various relationships, all five attributes had a significant relationship with customer satisfaction.

Service delivery and reliability dimension of service quality had a positive relationship with customer satisfaction, indicating that an increase in one will lead to an increase in the other. This means that an excellent service delivery along with an increase in how a company performs and completes its promised service, quality and accuracy within the given set of requirements will lead to an increase in customer satisfaction. However, the analysis also indicated a negative correlation between tangibility and customer satisfaction. This signifies that customer dissatisfaction will increase the desire to awake service providers. The results make obvious that the respondents would likely stay with their GSM service providers if the companies are able to satisfy their changing needs and meet customer requirements beyond the customers' expectations. The results have indicated that the two constructs Customer Satisfaction and Service Quality" are indeed independent but are closely related and indeed, potential partners, implying that an increase in one is likely to lead to an increase in another and similarly, a decrease in one will lead to a decrease in another.

Recommendations

The following recommendation were made based on the findings generated from this research

- i. Retaining customers should be a smarter option than attracting new customers since it is less expensive.
- ii. GSM service providers should erect physical buildings and masks etc that will enhance quality services being provided in Anambra state.
- iii. GSM service providers must position their firm and be consistent in providing their services; they should also train their customer care representatives to provide prompt and spot-on solutions to customers' complaints.
- iv. GSM service providers in Anambra state, Nigeria should endeavor to provide solutions to customers' needs and accord respect to them while discharging their duties
- v. GSM service providers should create a 24/7 functional customer complaints page on the website, wherein customers can interact with their staff where difficulties are experienced.

References

- Adebiji, S. O, Shitt, H. A. & Olonade, O. P. (2016). Determinants of customer preference and satisfaction with Nigerian mobile telecommunication services, department of business administration, University of Lagos, Akoka. Lagos. Nigeria
- Adepoju, A. (2012). The determinants of customer loyalty in Nigeria's GSM market *International Journal of Business and Social Science* 3(14): 14-25
- Adewale, O. Adewuyi, F. J. & Ayinla, A. (2014). Satisfaction with Mobile Services in Canada. *An Empirical Investigation of Telecommunication Policy*30, 314 – 331.
- Adiele, K. C, Miebaka, D. G. & Ezirim, A. C. (2015). Physical evidence and customer patronage:an empirical study of Nigeria Banking Sector, *British Journal of Economics, Management & Trade* 7(3): 188-199,
- Agbemabiese, G. C., Patrick, A. A. & Adu, A. G. (2015). Effect of customers' satisfaction of service delivery on customers' retention of tigo telecommunication network:A Case of Abokobi-Madina Locality. *The International Journal of Business & Management*. 3(1).67-77
- Ahmadu, A. (2015). Appraisal of customer satisfaction with GSM services in Dutsin-Ma, Katsina State, Nigeria, *European Journal of Business and Management*,6, (35) 78-88

- Ahu, B. (2006). An attribution theory of achievement, motivation and emotion. *Psychological Review* 92, 548 – 573.
- Akinyele, (2010). Internet banking-an empirical investigation of a trust and loyalty model for New Zealand Banks. *J. Int. Commerce*, 4(4), 101-118.
- Alaber, M. M. (2012). Impact of service quality, trust and customer satisfaction on customer loyalty. *ABAC Journal* 29, (1), 24-38.
- Anifowose, O. L. & Olaleye, O. O. (2016). Assessment of customers' satisfaction on service Quality of fast food restaurant in Akure metropolis, *Journal of Management and Corporate Governance Volume 2016 Cenresin Publications* 3 (8), 1-7
- Anyadighibe, J. A. & Awara, N. F. (2014). The relationship between customer satisfaction and loyalty: a study of selected eateries in Calabar, Cross River State
- Aralojin, S. (2013). Measuring Service quality in croatian hotel industry: a multivariate statistical analysis, *our economy*, 1 (2): 27-35.
- Anyadighibe, T. (2014). An empirical study of employee loyalty, service quality and firm performance in the service industry. *International Journal of Production Economics* 124(1) 10-19.
- Agyapong, G. K (2016). The Effect of service quality on customer satisfaction in the utility industry – A case of vodafone, *International Journal of Business and Management* 6 (5) 56-69
- Babatunde, A. and Olukemi L. (2012). Customers satisfaction and its implications for bank performance in Nigeria. *British Journal of Arts and Social Sciences* .5 (1). 30-45
- Baruah, D. & Nath, T. (2015). Impact of service quality dimensions on customer satisfaction in telecom sector. *International Journal of Engineering Trends and Technology* 27(2) 30-46
- Caruana, A. (2012). Service loyalty; The effects of service quality and the mediating role of customer satisfaction” *European Journal of Marketing*, 36(7/8), 811-828.
- Cooper, D. R., and Schindler, P. S., (2016). *Business Research Methods*, Seventh Edition, New York, McGraw-Hill Cronin
- Cote, F. (2013). Mobile Games: the fun and the fury’, *Tell magazine*; July 7, 2008: pp 50-51
- Colgate, M., Stewart, K., and Kinsella, R. (2015), Customer defection: a study of the student market in Ireland”, *International Journal of Bank Marketing*, 14(3), 23-29.
- Crosby, P. B. (2014), *Quality Is free: the art of making quality certain*”, New York: New American University
- Ehigie, B. O. (2016). Correlates of customer loyalty to their bank: a case study in Nigeria “*International Journal of Bank Marketing*, 24(7), 494-508
- Ehsan, (2012). Difference scores versus direct effect in service quality measurement”. *Journal of Service Research*: 9 (5) 89-97
- Eshghi, A., Roy, S., and Ganguli, S. (2008) Service quality and customer satisfaction: an empirical investigation in Indian mobile telecommunications Services”, *Marketing Management Journal*, 18, (2), 119-144.
- Fakokunde. E. (2010). Impact Of perceived service quality on banking customers’ loyalty. *Interdisciplinary Journal of Contemporary Research in Business*. 3(7) 637-645.
- Fakokunde, J. Iwavere, J. T., & Mustapha, S. C. T. (2014). An empirical examination of the relationships between service quality, satisfaction and behavioral intentions in higher education setting. *Serbian Journal of Management* 7 (2) 203 –218
- Garga, E. & Bambale, A. J. (2016). The Impact of service quality on customer patronage: mediating effects of switching cost and customer satisfaction, *International Journal of Global Business*, 9(1), 39-58,

- Garbarino, E. and Johnson, M (2016). Gender differences in the perceived risk of buying online and the effects of receiving a site recommendation," *Journal of Business Research* 57, (7): 768-775,
- Gera, D. (2011). Agency and trust mechanism in relational exchanges. *Journal of Marketing*, 66 (1),15-37.45.
- Gerpott, T. J., Rams, W. & Schindler, A. (2011). Customer retention, loyalty, and satisfaction in the German mobile cellular telecommunications market', *Telecommunications Policy* 25 (8) 249 –269.
- Gronroos C. A (2015). Service quality model and its marketing implications. *Eur. J. Mark.* 18 (4): 36-44
- Gustafsson, A., Johnson, M. D. & Roos, I. (2015). The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention", *Journal of Marketing*, 69, (6) 210–218.
- Howat, M. D., Crilley, G. R., Mcgrath, K., (2008), Customer Loyalty and Customer Loyalty Programs", *Journal of Consumer Marketing*, 20, (4), 294-316.
- Hui, B. and Zheng, Y. (2010). Measuring customer satisfaction with service quality using american customer satisfaction model (ACSI Model) *International Journal of Academic Research in Business and Social Science*, 1, (3) 3-8.
- Ahmed, I, Musarrat, N. M., Usman, A , Muhammad, Z. S., Naveed, A. & Hassan, I. (2015) Impact of service quality on customers satisfaction: Empirical evidence from telecom sector of Pakistan, *Journal of Contemporary Research In Business*
- Jani, D. and Heesup, H. (2011). Investigating the *Key Factors Affecting Behavioural Intentions: Evidence from Full-Service Restaurant Setting*, '*International Journal of Contemporary Hospitality Management*, 23. (7), 1000-1018.
- Jenet, P. G. (2011). Switching costs, alternative attractiveness and experience as moderators of relationship commitment in professional consumer services. *International Journal of Service Industry Management*, 11(5), 470-490.
- Jones, M. A. (2012), Switching barriers and repurchase intentions in services", *Journal of Retailing*, 70 (2), 259-274.
- Appiah, K. M. K (2016). Effects of services quality on customer satisfaction: a case from private hostels in Wa-Municipality of Ghana. *British Journal of Marketing* .4, 3, 48-54
- Kotler, P., Keller, G. (2009). *Principles of Marketing*. 11th ed., *New Jersey, Pearson Prentice Hall: 712 p*
- Koo, C. (2014). Cross-national assessment of service quality in the telecommunication industry: evidence from the USA and Germany, *Managing Service Quality*, 11(5): 11-22
- Kim, M., Park, M. and Jeong, D. (2012). The effects of customer satisfaction and switching barrier on customer loyalty in korean mobile telecommunication services' telecommunication policy,28, (6) 145-159.
- Levesque, T. J., and McDougall, G. H. G. (2013). Managing customer satisfaction: the nature of service problems and customer exit, voice and loyalty". *Asia Pacific Journal of Quality Management*, 2(2), 40-58.
- Lien, N. H. & Kao, S. (2010). The effects of service quality Dimensions on customer satisfaction Across different services types: Alternatives Differentiation as a moderator: *Journal of Advances in customers Research* 35, (1). 522 -527.
- Meshach, N. E. (2017). Factors influencing customer patronage of fast food restaurants; a study of selected customers of fast food in Anambra State, Nigeria., *International Journal of Economics, Commerce and Management*, 3(11).

- Moses, M., T. & John, L. (2015). The relationship between service quality and retention within the automated and traditional contexts of retail banking," *Journal of Service Management*, 20 (4), 455-72.
- Mustapha, D. K & Fakokude, S. T. (2014). Customer service quality in the Greek Cypriot banking industry, *Managing Service Quality*, 15 (1), 41-56.
- Ndukwe, Ernest, C. A., (2004), *An Overview of the Nigerian Telecommunications Environment*, Nigerian Communications Commission, ITU Telecom Africa
- Newman, H. (2013). *The International Business and Economics Research Journal*, 8(12), 99-107
- Njoku, W., Kalu, K., Alexandra, S. & Okeke, A. Z. (2015). A dynamic model of service quality: from expectations to behavioral intentions. *Journal of Marketing Research*. 30: 7-27.46.
- Oliver, R. (1980). Theoretical bases of consumer satisfaction research: review, critique, and future direction. In C. Lamb & P. Dunne (Eds), *Theoretical Developments in Marketing 206-210*. Chicago: American Marketing Association
- Olu, O. (2010). The Relationship between Service quality and customer satisfaction in the telecommunication industry: evidence from Nigeria. *Broad Research in Accounting, Negotiation, and Distribution*, 1(1): 13-19
- Olisa, R. A, Okoli, T. H. and Ekeke, R. D. (2015). An empirical examination of model of perceived quality and satisfaction. *Journal of Retailing* 72(2), 201-214
- Osothimehin, K. Hassan, B. A. & H. A. (2014). Customers perception of service quality in the Nigerian telecommunication sector department of business administration Olabisi Onabanjo University, Ogun State, Nigeria
- Oyeniya, Omotayo and Joachim, A. A. (2011), Customer service in the retention of mobile phone users in Nigeria *African Journal of Business Management*, 2 (2) 26-31.
- Parasuraman A., (2012): A conceptual model of service quality and its implications for future research, *Journal of marketing*, 49, (1). 41-50
- Paul Mensah Agye & James M. Kilika (2017). Relationship between service quality and customer loyalty in the Kenyan mobile telecommunication service industry, *European Journal of Business and Management*, 5 (4) 67-77
- Poku, K. Zakari, M. & Soali, A. (2013). Impact of service quality on customer loyalty in the hotel industry: An Empirical Study from Ghana, *International Review of Management and Business Research*, 5 (7) 90-101
- Reichheld, F., (2013). *The loyalty effect*, Harvard business school press, Boston.
- Rust, R. T and Oliver, R. L., (2014), Service quality: insights and management implications from the frontier, in Rust, R. and Oliver, R. R. (eds), *Service Quality: New Directions in Theory and Practice*, Sage Publications, Thousand Oaks, CA, 3(1). 1-20.
- Sargeant, and West, (2011). The role of price perception in an integrated model of behavioral intention. *J. sci. res.*, 3(3), 232-241.51
- Segero, C. (2013). A national customer satisfaction barometer: the Swedish experience" *Journal of Marketing*. 1, (10) 34-36.
- Sharma, D. (2014). Examining the influence of service quality on customer satisfaction and patronage intentions in convenience store industry. Institute of Management Ahmedabad India *Research and Publications*, 1 (9). 04-15
- Shanka, M. S. (2012). Bank Service Quality, Customer Satisfaction and Loyalty in Ethiopian Banking Sector, *Journal of Business Administration and Management Research*, 1(1)1-9.

- Shiakh, R. S. and Khan J. Y. (2011). Factors affecting branding loyalty: a study in an emerging market on fast moving consumer goods. *Indian Institute of Management Bangalore*.6 (1) 70-77
- Shankar, V., Smith, K. A., and Rangaswamy, A. (2012) Customer satisfaction and loyalty and offline environment', *International Journal of Research in Marketing*, 5 (5) 1-39
- Schiffman, L. G. & Kanuk, L. (2014). Consumer behavior 8th edition. *New Jersey Pearson Education Inc, Upper Saddle River Titus*
- Spreng, R. A, Mackenzie, S. B, (2014). A re-examination of the determinants of customer satisfaction, *Journal of. Marketing*. 6 (4) 10-21
- Taylor, S. A. (2014) Measuring service quality: A reexamination and extension", *Journal of Marketing*, 56, 55-68.
- Takeuchi, I. E., and Quelch, M. (2016). The importance of service quality in bank selection for mortgage loans. *Managing Service Quality*, 16(4), 365-379.
- Vavra, T. G. (2015). "Improving your measurement of customer satisfaction: a guide to creating, conducting, analyzing, and reporting customer satisfaction measurement programs, and quality press
- Wali, A. F. & Bright C. (2012). E-Service quality experience and customer loyalty: an emphasis of the Nigeria airline operators, *European Journal of Business and Social Sciences*, 1, (9),118-125
- Wali, A., & Opera, K. (2015). Customer loyalty: toward and integrated conceptual framework. *Journal of Academy of Marketing Services*, 22(2), 99-113
- Yang, Z., & Fang, X. (2014). Online service quality dimensions and their relationships with satisfaction: A content analysis of customer reviews of securities brokerage services". *International Journal of Service Industry Management*, 15(3), 302-326
- Zeithaml, V. A., Parasuraman, A., & Malhotra, L. L (2016). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing*, 67 (4), 420–451.

Dependent Variable: CS

Method: Least Squares

Date: 06/01/18 Time: 23:49

Sample (adjusted): 001 344

Included observations: 343 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.619216	0.649172	2.494279	0.0180
RES	0.464298	0.045508	10.20245	0.0000
R-squared	0.825844	Mean dependent var	8.058416	
Adjusted R-squared	0.814959	S.D. dependent var	2.285007	
S.E. of regression	0.982928	Akaike info criterion	2.885254	
Sum squared resid	30.91670	Schwarz criterion	3.018570	
Log likelihood	-47.49195	Hannan-Quinn criter.	2.931275	
F-statistic	75.87149	Durbin-Watson stat	1.793585	
Prob(F-statistic)	0.000000			

Dependent Variable: CS

Method: Least Squares

Date: 06/01/18 Time: 23:49

Sample (adjusted): 001 343

Included observations: 342 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.014568	0.409113	12.25718	0.0000
ASS	0.299063	0.034348	8.706737	0.0000
R-squared	0.804550	Mean dependent var	8.257901	
Adjusted R-squared	0.792335	S.D. dependent var	2.274164	
S.E. of regression	1.036343	Akaike info criterion	2.991090	
Sum squared resid	34.36822	Schwarz criterion	3.124405	
Log likelihood	-49.34407	Hannan-Quinn criter.	3.037110	
F-statistic	65.86257	Durbin-Watson stat	1.892980	
Prob(F-statistic)	0.000000			

Dependent Variable: CS

Method: Least Squares

Date: 06/01/18 Time: 23:47

Sample (adjusted): 001 344

Included observations: 344 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	9.425971	0.613891	15.35447	0.0000
TAN	-0.033989	0.015277	-2.224874	0.0333
R-squared	0.429747	Mean dependent var	8.257901	
Adjusted R-squared	0.394106	S.D. dependent var	2.274164	
S.E. of regression	1.770190	Akaike info criterion	4.061868	
Sum squared resid	100.2744	Schwarz criterion	4.195183	
Log likelihood	-68.08268	Hannan-Quinn criter.	4.107888	
F-statistic	12.05773	Durbin-Watson stat	1.602854	
Prob(F-statistic)	0.000125			

Dependent Variable: CS

Method: Least Squares

Date: 06/01/18 Time: 23:42

Sample (adjusted): 001 344

Included observations: 344 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.462870	0.755453	8.554964	0.0000
EMP	0.197476	0.077648	2.543214	0.0160
R-squared	0.622248	Mean dependent var	8.257901	

Adjusted R-squared	0.618014	S.D. dependent var	2.274164
S.E. of regression	1.734915	Akaike info criterion	4.021610
Sum squared resid	96.31772	Schwarz criterion	4.154925
Log likelihood	-67.37817	Hannan-Quinn criter.	4.067630
F-statistic	13.21031	Durbin-Watson stat	1.720671
Prob(F-statistic)	0.000066		

Dependent Variable: CS

Method: Least Squares

Date: 06/01/18 Time: 23:42

Sample (adjusted): 001 344

Included observations: 344 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.462870	0.755453	4.934904	0.0000
REL	0.507476	0.077648	3.235984	0.0780

R-squared	0.532248	Mean dependent var	8.257901
Adjusted R-squared	0.520914	S.D. dependent var	2.274164
S.E. of regression	1.734915	Akaike info criterion	4.021610
Sum squared resid	96.31772	Schwarz criterion	4.154925
Log likelihood	-67.37817	Hannan-Quinn criter.	4.067630
F-statistic	19.21031	Durbin-Watson stat	0.920671
Prob(F-statistic)	0.000066		

	RES	ASS	TAN	EMP	REL
Mean	123667.8	3730.965	343595.5	50.88177	725677.2
Median	117870.3	300.0000	14072.00	4.510000	123509.0
Maximum	159161.4	19077.40	2350858.	331.1000	3535631.
Minimum	77888.80	5.500000	225.4000	0.090000	17444.00
Std. Dev.	26743.97	5766.009	582020.8	84.33568	986611.3
Skewness	-0.149058	1.407295	1.955468	1.989272	1.508074
Kurtosis	1.718484	3.615181	6.309762	6.214172	4.400384
Jarque-Bera	2.236076	10.72130	33.90617	33.78963	14.28354
Probability	0.326921	0.004698	0.000000	0.000000	0.000791
Sum	3833701.	115659.9	10651461	1577.335	22495994
Sum Sq. Dev.	2.15E+10	9.97E+08	1.02E+13	213375.2	2.92E+13
Observations	344	344	344	344	344

Source: E-view 8.0