Leveraging Customers Loyalty in Telecommunication Industry: The Role of Service Quality and Customer Satisfaction a PLS Approach

Ahmad Aliyu Palladan  
School of Business  
FCET Gombe, Nigeria  
E-mail: zapalladan@live.com  
Tel: 08033004199

Muhammad Adamu Ahmad  
School of Business  
FCET Gombe, Nigeria

Abstract  
This study examines the moderating effect of customer satisfaction on the relationships between service quality dimensions and customer loyalty in mobile telecommunication industry in Nigeria. The study employed SmartPLS3 software for the analysis and hypotheses testing. The results of the study reveal that assurance, empathy, reliability and tangibility are positively related to customer’s loyalty. In addition, customer satisfaction had been found to moderate the relationship between customer loyalty and the five SERVQUAL dimensions with the exception of responsiveness and tangibility. Relationship between responsiveness and customer’s loyalty has been found to be negative. Finally, the study proposed some recommendations and implication for the study.

Keywords: Service Quality, Customer Satisfaction, Customers Loyalty, Telecommunication Companies.

1. Introduction  
Anecdotal and empirical evidences from the literature suggest that telecommunication industry plays tremendous role in economies of developing countries. For this reason, several governments and agencies in these nations focuses on extending telecommunication services to rural areas in their bid to alleviate poverty, assimilate economic growth, and overcome a perceived ‘digital divide’ (Chiu & Ttl, 2008; Ahmad A Palladan, 2017). In Nigeria, the successes achieved so far due to the deregulation of the telecommunication sector had multiplier effects on the nation’s economy, leading to the development in other sectors like education, agriculture, tourism and health (Chidozie, Odunayo & Olutosin, 2015). Furthermore, Chiu and Ttl (2008) posit that access to information is the key to the emergence of knowledge based economy that played a tremendous role in enhancing skills, empowering poor communities and link numerous institutions involved in economic development. To this effect, communication sector can play an essential role toward tackling this and other developmental challenges if manage and harness properly.

Some of the features of successful business organisations is constant improvement and delivery of qualitative services that meet the expectations it customers (Jasinskas, Streimikiene, & Svagzdiena, 2016). Literature suggest that the quality of services offered by an organization has a direct impact on customer’s decision to re-patronize the organization in the future (Dhar, 2015; Oña, Oña, Eboli, & Mazzulla, 2013). Also Kotler, Armstrong, Saunders and Wong, (2002) argued that whether an organization offers qualitative service or not depends on its customers’ feedback on the satisfaction they enjoyed from consuming its products or service, since higher levels of customers satisfaction is derived from higher level of quality service offered. In today’s competitive world, service quality and customer satisfaction are essential concepts that companies must understand if they want to remain competitive and grow (Ahmad A Palladan & Palladan, 2018). Delivering high quality service is crucial for sustainable competitive advantage (Olatokun & Ojo, 2014).

The study tries to determine the effects of service quality dimensions on customers loyalty in telecommunication industry in Nigeria, the sector that has been noted to have played a tremendous role in economic development of the country in the recent years (Chidozie, Odunayo & Olutosin, 2015). There are calls for more empirical studies on service quality as it relates to communication industry in Nigeria due to insufficient literatures in the area (Olatokun & Ojo, 2014). This couple with significant gap in services literatures on service quality evaluation in the context other than developed countries (Olatokun & Ojo, 2014; Paul, Mittall, & Srivastav, 2016). More so, the study considered customers satisfaction to moderate the relationship between service quality and customers loyalty because it is generally acknowledged by several researchers that customer
satisfaction is key driver to customer loyalty (Ajao, Uche, & Elizabeth, 2012; Tweneboah-kodua, Yuty, & Farley, 2016); and service quality leads to a higher satisfaction of customers and increase patronage of a good or service (Nayebzadeh, 2013; Oña et al., 2013). Extant literature is in supports of simultaneous investigation of the service evaluation variables like service quality and customers satisfaction on customers loyalty (Cronin, & Brady & Hult, 2000; Ostrom & Iacobucci, 1995); since service evaluation variables are key antecedents to customer’s loyalty (Babin & Attaway, 2000). Most of the studies conducted using these variables focused mainly on the direct effects between the variables, (Nyadzayo & Khajehzadeh, 2016); and that is tantamount of disguising their true relationships (Lai, Griffin & Babin, 2009). Jasinskas et al., (2016) argued that for organizations to survive and compete favourably in future, it is necessary for them to provide qualitative services through which old customers will be retained, and new customers attracted.

2. Conceptual Background

2.1 Customer Loyalty

Kincaid (2003, p.10) defines customer loyalty “as a consumer behaviour, built on positive experience and value, which leads to buying products, even when that may not appear to be the most rational decision.” Understanding the concept of customer loyalty is very essential to ensure customer loyalty and retention. There has been high interest on the concept of customer loyalty from both academicians and practitioners, and as such loyal customer base was found to be of great benefits to organizations (Ajao et al., 2012). Oliver, (1980) posits that customer satisfaction is the complete fulfillment of customer’s expectations. When a customer is satisfied with a product or service after having used it, there is tendency of increase in repeat purchase. The intentions to repeatedly purchase a product or service heavily rely on customer satisfaction (Taylor & Baker, 1994). The quite number of previous loyalty studies conceptualized loyalty behaviour as a form of recurrence purchase of a specific product or service over time (Homburg & Giering, 2001). Yoo and Bai (2013) argued that two main factors that influenced customer loyalty are internal factors and external factors. The internal factors include; the products (brand), service quality, promotion mix, and costs (Tweneboah-kodua et al., 2016). While the external factors that influence customers loyalty are: switching costs, situational factors, perceived value, satisfaction, commitment, as well as trust (Yoo & Bai, 2013).

2.2 Service Quality

Some of the characteristics of successful business organisations is constant improvement and offering of qualitative services to their customers. The main theme of this paper is based on the argument that service quality is essential in bringing more customers, retain the existing ones and create loyalty among customers to organizations. Parasuraman, Zeithaml and Berry (1988) defined perceived service quality as “the consumer’s judgment about the superiority or excellence of a product”. Tweneboah-kodua et al., (2016) posted that in the service literature, service quality is usually measured using multi-dimensional construct such as the SERVQUAL model proposed by Parasuraman and his colleagues in 2002. The current study uses the five dimensions of SERVQUAL model suggested by Parasuraman et al., (2002) to assess customers loyalty in Nigerian telecommunication industry. These five dimensions are tangibility, reliability, responsiveness, assurance and empathy. Numerous studies abound on customers satisfaction in the service industries such as telecommunication, tourism, hotel and health in Nigeria; recommends these five SERVQUAL dimensions for assessing service quality in the future researches (Olatokun & Ojo, 2014). These dimensions possess their unique features in the mobile phone industry in Nigeria. The industry that Soyinka, (2008) argued has successfully empowered the Nigerian poor by opening real windows of wealth generation.

2.3 Service Satisfaction

Customer satisfaction is defined by Homburg and Giering (2001) ‘as customers satisfaction due to the result of a cognitive and affective evaluation, where some comparison standard is compared to the actually perceived performance’. The judgment of the satisfaction is connected to all the experiences made because of the consumption of a service, it sales process, and it after-sales services. Service satisfaction is considered to serve as the moderating variable for this study because as customer satisfaction increase significantly, loyalty also increases dramatically, and vice versa (Oliver, 1992). More so, Homburg and Giering (2001) posited that marketing researches support the existence of positive links between satisfaction and loyalty. Thus, customers become loyal only when they are satisfied (Tweneboah-kodua et al., 2016). Szymanski and Henard, (2001) on their meta-analysis study suggested fifteen positive and significant relationships between service satisfaction and customer loyalty.

The five dimensions of SERVQUAL used by this study have been extensively researched in the marketing and management literatures to assessed customer satisfaction (c.f.Agyapong, 2013; Chakraborty & Majumdar, 2011; Kodua et al, 2016; Peprah & Atarah 2014 ). These studies suggests that service quality is in tandem with customer satisfaction. Yoo and Bai, (2013) also explain that customer satisfaction depends substantially on service quality. For example studies conducted by Kheng, Mahamad, Ramayah, and Mosahab, (2010) and Jasinskas et al., (2016) discovered that reliability has a positive correlation with customer loyalty . Furthermore, evidences available suggest that good service quality increases customer satisfaction that leads to the retention of existing customers and attract new ones (Keiser, 1993). Hence, service quality has becomes an issue of utmost essentiality since its leads to a higher customer satisfaction and consequently to customers loyalty (Oña et al., 2013). Based on the literature above, the framework of the study is presented below:
3. Material and Methods

3.1 Measurements
A structured self-administered questionnaire consisting of 40 closed ended multiple choice-questions was employed for the survey. The instrument comprises 35 questions related to the three constructs of this study and three (3) questions related to demographical variables. Thus, questionnaires were administered to the students from three (3) public tertiary institutions in Gombe metropolis of Gombe state, Nigeria. Service quality dimensions were measured using 20 items adapted from the works of (Gustafsson, Johnson, & Roos, 2005). For the moderating variable i.e customer satisfaction, 6 indicators were adapted from (Kim, Park, & Jeong, 2004), with little modification to suite the context of the study. The questions for measuring the dependent variable of customer loyalty was adapted from (Aydin & Özer, 2005).

3.2 Population and Sample
The population of the study consist of 20,299 students from the three tertiary institutions. Out of this number, 383 respondents were considered going by formula proposed by (Weaver, 2006).

3.3 Statistical Technique
The study used SEM- PLS 3 for the analysis of the study and Hypotheses are tested using the software. The PLS method is particularly interesting when studies include scales that previous works have validated, and when dealing with complex models (Joseph, Hair Jr, Tomas, Christain, & Serstedt, 2016). PLS-SEM is particularly deemed appropriate for this research because it enable the simultaneous estimation of several causal relationships between one or more independent variables and dependent variable (Hair et al., 2015). For the requirement of requisite sample size, the 383 responses in this study exceeds both the requirements of ten times the greater the number of indicators used to measure one construct and as well ten times the largest number of structural paths directed at a latent construct in the structural model as proposed by Hair et al., (2015). To derive path coefficients, the path weighting scheme algorithm is applied, which provides standardized regression coefficients. Statistical significance of structural paths is evaluated through the bootstrap procedure, using 5000 resamples.

4. Presentation of Result
4.1 Measurement Model
First-order for the latent variables were exposed to reliability, convergent validity, and discriminant validity assessments. Reliability test was measured at the construct and items level. Result from the assessment of Composite reliability and Cronbach
alpha values suggest that they were above the threshold of 0.70, indicating acceptable construct reliability (Nunally, 1978). Items reliability was established by assessing the construct item-loadings and making sure the loadings were from the threshold of 0.70. Indicators found to have lower loadings were deleted from the measurement model. More so, convergent validity was gauged by investigating whether the AVE was not below the lower limit of 0.50 (Fornell & Larker, 1981). This is shown table 4.1. Thus, the value of the AVE values ranges from 0.53 to 0.70, hence exceeding the stipulated threshold. The condition of composite reliability was also met. Again the communality level is also satisfactory because all the variables are above the threshold of 0.50 (Henseler & Sarstedt, 2013). On the other hand, discriminant validity was tested using two methods. The first method examined is whether square root of AVE from each construct was higher than its highest correlation with any other construct (i.e Fornell-Larcker criterion). The second issue checked was whether outer loadings for each construct was greater than its cross-loadings with the remaining constructs (Farrel, 2010). Considering the foregoing, these results support the suitability of the structural model and posits that all items are suitable for further analysis.

Table 4.1: AVE, CR, Cronbach Alpha and Communality

| Construct                  | AVE     | Composite Reliability | Cronbachs Alpha | Communality |
|----------------------------|---------|-----------------------|-----------------|-------------|
| ASSURANCE                  | 0.59268 | 0.853176              | 0.774597        | 0.592675    |
| CUSTOMER LOYALTY           | 0.54795 | 0.915603              | 0.89609         | 0.547948    |
| CUSTOMER SATISFACTION      | 0.50373 | 0.858287              | 0.80194         | 0.503732    |
| EMPATHY                    | 0.69567 | 0.871526              | 0.806333        | 0.695673    |
| RELIABILITY                | 0.53389 | 0.820254              | 0.707285        | 0.533894    |
| RESPONSIVENESS             | 0.53543 | 0.76732               | 0.561111        | 0.535425    |
| TANGIBILITY                | 0.52974 | 0.817636              | 0.703461        | 0.529738    |

Table 4.2: Variables Correlation

|          | ASS    | CL     | CS     | EMP    | REL    | RESP   | TAN    |
|----------|--------|--------|--------|--------|--------|--------|--------|
| ASSURANCE| 0.76985|        |        |        |        |        |        |
| CUSTOMER LOYALTY| 0.540699| 0.74024|        |        |        |        |        |
| CUSTOMER SATISFACTION| 0.60870| 0.722213| 0.709743|        |        |        |        |
| EMPATHY  | 0.317609| 0.114997| 0.251946| 0.834071|        |        |        |
| RELIABILITY| 0.602891| 0.600165| 0.578239| 0.185937| 0.73068|        |        |
| RESPONSIVENESS| 0.529258| 0.512778| 0.562521| 0.312247| 0.538921| 0.73173|        |
| TANGIBILITY| 0.543829| 0.499273| 0.552569| 0.180046| 0.579678| 0.46642| 0.72783|

Table 4.3 Cross Loadings

| ASSUR | CUS LOY | CUS SAT | EMP | REL | RES | TAN |
|-------|---------|---------|-----|-----|-----|-----|
| ASSUR |         |         |     |     |     |     |
| CUS LOY| 0.76985 |         |     |     |     |     |
| CUS SAT | 0.74024 |         |     |     |     |     |
| EMP   | 0.709743|         |     |     |     |     |
| REL   | 0.834071|         |     |     |     |     |
| RES   | 0.73068 |         |     |     |     |     |
| TAN   | 0.73173 |         |     |     |     |     |
4.2 Structural Model

Convergent validity for this study was examined using the average variance extracted measure as shown in the table 4.3. AVE is the average variance shared between a construct and its measures and that AVE for a construct should be greater than the variance shared between the construct and other variables in a model (Chang, Shen, & Liu, 2016).

### Table 4.4 Path Coefficients (Mean, STDEV, T-Values, Value) and Hypotheses Results

|    | Mean | STDEV | T-Values | Value |
|----|------|-------|----------|-------|
| AS1 | 0.798575 | 0.516129 | 0.533776 | 0.317193 | 0.541411 | 0.549113 | 0.4945 |
| AS2 | 0.800563 | 0.41096 | 0.501023 | 0.21896 | 0.441696 | 0.417324 | 0.41188 |
| AS3 | 0.731484 | 0.330281 | 0.402257 | 0.17101 | 0.413753 | 0.309523 | 0.39523 |
| AS4 | 0.74633 | 0.368284 | 0.410735 | 0.242352 | 0.436073 | 0.294506 | 0.35001 |
| CL1 | 0.361078 | 0.736771 | 0.52104 | 0.083787 | 0.430313 | 0.356139 | 0.33782 |
| CL2 | 0.38686 | 0.72167 | 0.498554 | 0.110415 | 0.422444 | 0.436891 | 0.38531 |
| CL3 | 0.412346 | 0.739232 | 0.575856 | 0.066184 | 0.456226 | 0.399214 | 0.40842 |
| CL4 | 0.452185 | 0.815648 | 0.571683 | 0.042313 | 0.511331 | 0.37223 | 0.43476 |
| CL5 | 0.4686 | 0.810447 | 0.619633 | 0.110969 | 0.493186 | 0.417283 | 0.40703 |
| CL6 | 0.297892 | 0.613992 | 0.340922 | -0.016015 | 0.326567 | 0.247596 | 0.23818 |
| CL7 | 0.410382 | 0.74638 | 0.544457 | 0.166189 | 0.469755 | 0.408361 | 0.35922 |
| CL8 | 0.372989 | 0.719867 | 0.503943 | 0.127167 | 0.392321 | 0.375509 | 0.39362 |
| CL9 | 0.409381 | 0.739622 | 0.577893 | 0.055635 | 0.462316 | 0.378052 | 0.37748 |
| CS1 | 0.492257 | 0.541878 | 0.709576 | 0.157562 | 0.477128 | 0.408347 | 0.39316 |
| CS2 | 0.539143 | 0.601096 | 0.779246 | 0.20482 | 0.482784 | 0.466297 | 0.38193 |
| CS3 | 0.439058 | 0.480273 | 0.696153 | 0.29244 | 0.38618 | 0.370207 | 0.36072 |
| CS4 | 0.324215 | 0.411989 | 0.616594 | 0.127054 | 0.322365 | 0.315923 | 0.32522 |
| CS5 | 0.356873 | 0.491638 | 0.759568 | 0.174641 | 0.392757 | 0.420764 | 0.38497 |
| CS6 | 0.405584 | 0.521088 | 0.685497 | 0.115247 | 0.375685 | 0.394105 | 0.5009 |
| EM1 | 0.238605 | 0.057321 | 0.201886 | 0.793635 | 0.137451 | 0.287581 | 0.1129 |
| EM2 | 0.295758 | 0.136801 | 0.222232 | 0.949093 | 0.163863 | 0.264049 | 0.16195 |
| EM4 | 0.27202 | 0.044114 | 0.23779 | 0.745913 | 0.190935 | 0.281405 | 0.20098 |
| RL1 | 0.419765 | 0.445287 | 0.40136 | 0.104441 | 0.719819 | 0.283735 | 0.41363 |
| RL2 | 0.452307 | 0.390175 | 0.369103 | 0.118954 | 0.70151 | 0.388469 | 0.40364 |
| RL3 | 0.397371 | 0.440242 | 0.443447 | 0.159172 | 0.685894 | 0.446525 | 0.39828 |
| RL4 | 0.4922 | 0.472119 | 0.468608 | 0.158224 | 0.806944 | 0.454211 | 0.4745 |
| RP1 | 0.391028 | 0.402601 | 0.470805 | 0.162707 | 0.418262 | 0.793184 | 0.35783 |
| RP2 | 0.481016 | 0.461539 | 0.474295 | 0.253893 | 0.462656 | 0.855569 | 0.43994 |
| RP4 | 0.255291 | 0.212042 | 0.246954 | 0.344766 | 0.280874 | 0.495112 | 0.16497 |
| TG1 | 0.409844 | 0.414205 | 0.468637 | 0.136788 | 0.464194 | 0.382322 | 0.8029 |
| TG2 | 0.38877 | 0.307894 | 0.327172 | 0.080491 | 0.412989 | 0.312362 | 0.66581 |
| TG3 | 0.415855 | 0.394366 | 0.425938 | 0.162316 | 0.419341 | 0.34683 | 0.73821 |
| TG4 | 0.370489 | 0.322845 | 0.370014 | 0.137133 | 0.390412 | 0.310746 | 0.69718 |

In PLS-SEM, the validity of structural model is assessed using the strength of regression weights, p-values for significance of t-statistics, t-values, and effect sizes of independent latent variables on the dependent latent variable (Ting, et al., 2019). Based on this, the results shown on Table 4.4 depicts the results of all the hypotheses from the research model.
|                                | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | Standard Error (STERR) | T Statistics | P. Value | Decision |
|--------------------------------|---------------------|-----------------|-----------------------------|------------------------|--------------|---------|----------|
| ASSURANCE -> CUSTOMER LOYALTY  | 0.259               | 0.168           | 0.062                       | 0.062                  | 9.939        | 0.000   | Accepted |
| ASSURANCE * CUSTOMER SATISFACTION -> CUSTOMER LOYALTY | 0.284          | 0.144           | 0.087                       | 0.087                  | 8.160        | 0.002   | Accepted |
| EMPATHY -> CUSTOMER LOYALTY    | 0.163               | 0.154           | 0.051                       | 0.051                  | 8.229        | 0.001   | Accepted |
| EMPATHY * CUSTOMER SATISFACTION -> CUSTOMER LOYALTY | 0.118          | 0.120           | 0.114                       | 0.114                  | 7.975        | 0.016   | Accepted |
| RELIABILITY -> CUSTOMER LOYALTY | 0.203              | 0.193           | 0.054                       | 0.054                  | 9.723        | 0.000   | Accepted |
| RELIABILITY * CUSTOMER SATISFACTION -> CUSTOMER LOYALTY | 0.051          | 0.036           | 0.060                       | 0.060                  | 6.989        | 0.323   | Accepted |
| RESPONSIVENESS -> CUSTOMER LOYALTY | 0.073         | 0.064           | 0.057                       | 0.057                  | 1.283        | 0.476   | Rejected |
| RESPONSIVENESS * CUSTOMER SATISFACTION -> CUSTOMER LOYALTY | 0.173          | 0.151           | 0.064                       | 0.064                  | 1.718        | 0.455   | Rejected |
| TANGIBILITY -> CUSTOMER LOYALTY | 0.074               | 0.051           | 0.061                       | 0.061                  | 9.101        | 0.009   | Accepted |
| TANGIBILITY * CUSTOMER SATISFACTION -> CUSTOMER LOYALTY | -0.029         | 0.023           | 0.091                       | 0.091                  | 0.320        | 0.555   | Rejected |

The results in Table 4.4 indicated that, the entire hypotheses with exception of three, were supported by the data. Unambiguously, the hypotheses testing suggest assurance ($t = 8.939$, $p < .000$), customer satisfaction ($t = 9.24$, $p < .000$),
empathy ($t = 8.229, p < .001$), reliability ($t = 9.723, p < .000$), tangibility ($t = 5.201, p < .009$), all had significantly positive effects on perceived customer loyalty. Among them all, service reliability, service empathy and service assurance are the strongest with $t$ value of 9.723, 9.240 and 8.229 respectively. While on the contrary, the study discovered that responsiveness yields negative effect on customer loyalty with $t$ statistics of 1.283 and $p$ value of 0.455.

Moreover, for the indirect relationships (moderation results), customer satisfaction has been found to moderate the relationship between assurance and customers loyalty. Also, the relationship between empathy and customer loyalty was found to be moderated by customer satisfaction. Ditto to the relationship between service reliability and customer loyalty. Surprisingly, this study found no moderating effect of customer satisfaction on the relation between customer loyalty and tangibility.

**4.3 Discussing the Results**

The object of this paper is in one hand to investigate the direct relationship between service quality dimensions and customer loyalty; and in the other hand, to ascertain the intervening effect of customer satisfaction between customer service quality variables and customer loyalty in the context of Nigerian telecommunication industry. To achieve that, a survey questionnaire comprising of 35 indicators was adopted and modified carefully to suite the context of the study. The study used a sample of total 383 respondents who are students from tertiary institutions situated in Gombe metropolis of Gombe state Nigeria. The results of the study had confirmed that five out of six dimensions (assurance, empathy, reliability and tangibility) as dimensions of service quality are distinct constructs. These dimensions had positive and significant effects on customer loyalty in telecommunication sector of Nigeria. This study is consistent with numerous studies (c.f. Auka et al., 2013; Ndubisi, 2006; Ndubisi, 2007; Kheng et al., 2010; Sayani, 2015). Thus, the findings suggest that the SERVQUAL four dimensions of our study has suitable reliability and individual dimension is significantly related to telecommunication companies service quality. More precisely, our estimations show that telecom customers are more satisfied with the assurance dimension. Hence, for every mobile telecommunication firm seeking to increase its customer loyalty should focus on improving their level assurance (Olatokun & Ojo, 2014; Palladan & Adamu, 2019). On the contrary, service responsiveness dimension has proved insignificant relationship with customer loyalty in this study. This also is in line with previous studies like (Ibrahim, Hafiez, & Hasaballah, 2018; Mohammed & Bostani, 2013). Again, customer satisfaction has been found to moderate the relationship between three service quality variables (i.e Assurance, Empathy, and Reliability) and customers loyalty. Thus, customer satisfaction has been found to boost the relationship between the aforementioned SERVQUAL variables and customer loyalty. This is also in congruent with the study conducted by Nyadzayo and Khajehzadeh, (2016) and Paul et al., (2016).

**4.4 Practical Implication of the Study**

Based on the findings highlighted in this paper; it suggests that there is room for improvement in the quality of service offered by mobile telecommunication companies in Nigeria. Today’s mobile phone customers have specific and well-defined needs. Mobile service providers should refrain from doing anything that will cajole their customers into switching to another service provider, since literature asserted that the cost of holding a customer is far less than the cost of getting new customer. This could be possible by providing services that are based on service assurance. This variable has the highest level of $t$-statistics of 9.9. hence emphasis should be place more on it. In addition to assurance, empathy, responsiveness and tangibility should also be taken into cognisance because they are the process components of service quality (Ali & Raza, 2015); and they played essential roles in providing qualitative services that ensure customers loyalty. From our study, responsiveness variable has shown negative relationship with customers loyalty. This might not be unconnected with attitude of some telecom companies, since in Nigerian context reports suggested that there are numerous horrid comments against mobile telecom companies of not being responsive to their customers plight (Editorial, 2018.). Service reliability being one of the variables confirmed to enhance customers loyalty. Thus, the firms should do whatever it will take to improve on this important variable due to its essentiality to their activities and their customers loyalty. Telecom companies should also focus more on offering high quality services by responding to specific and stated needs of their customers. This was further by the statistics of assurance, empathy, reliability and tangibility. Issues like staff “Appearance” in telecom offices, “Fast services” especially in the 4G networks data upgrade undertaking by the telecom companies, among others should go a long way in ensuring customers retention through loyalty.

**5. Recommendation**

In light of the findings discussed in this paper, the following recommendations were made. There is room for improvement in the quality of service for telecom companies in Nigeria. Nowadays, customers in the mobile phone industry have specific and well-defined needs. The companies should commence a strategy of “follow up” to acquaint themselves with the actual needs of their customers. This could be done through direct phone calls to the customers. A proactive measure is to obtain regular, periodic customer feedback and focus on removing specific problems addressed by the customers themselves. This strategy would help drive high customer loyalty.

In urban areas, mobile telecom customers are increasingly concerned with the time they spent trying to access the internet due to slowness of the network of the internet services. Hence “fast service” has become the highest consideration for most internet users nowadays. Telecom officials should take upbeat measures in improving customers loyalty by making it easy for their customers to connect whenever they want place calls or surf the net. This will ensure a pleasant calls and surfing experience. Prompt responding to customer questions and attending to their specific needs are equally very important. This is very essential...
because several if not all telecom companies had set their customers contact centres. Unfortunately, they fail to keep it up as it supposed to be. For example, complaints abound suggest that the call care agent that speak in Nigeria languages especially Hausa language find it difficult to respond to customers enquiries forward to them in Hausa because most of them don’t know how to speak the language fluently. This is causing a lot of uproar to native Hausa speakers who always find it frustrating any time they engage in tête-à-tête with the telecom customers care.

Again, mobile telecom companies need to establish a system that will ensure gaps between the needs of the customer, and the telecom companies’ efforts, are identified and promptly corrected. Such a system should preserve and publish figures and statistics of number of complaints collated from different concerned department and the duration taken to address them. These efforts will certainly enhance the quality of service provided by the telecom and reduce the time needed to resolve customers grievances. Importantly, telecom companies should place great emphasis on customer satisfaction through qualitative services rather than pushing undesired products to its customers. Finally, as we saw above, it is important to repeat that both anecdotal and empirical evidences attest to the complexity of managing customer loyalty in service industry such as mobile telecommunication companies especially in developing economies like Nigeria, taking cogent stance that will ensure customer retention through qualitative services that satisfied customer need is highly critical.

**References**

Ajao, R. G., Uche, I. I., & Elizabeth, A. O. (2012). Is Customer Satisfaction an Indicator of Customer Loyalty? *Australian Journal of Business and Management Research*, 2(07), 14–20.

Ali, M., & Raza, S. A. (2015). Total Quality Management & Business Excellence Service quality perception and customer satisfaction in Islamic banks of Pakistan: the modified SERVQUAL model. *Total Quality Management & Business Excellence ISSN: 3363(November)*. http://doi.org/10.1080/14783363.2015.1100517

Aydin, S., & Özer, G. (2005). The analysis of antecedents of customer loyalty in the Turkish mobile telecommunication market. *European Journal of Marketing*, 39(7/8), 910–925. http://doi.org/10.1108/03090560510601833

Babin, B.J., Attaway, J.S., . . . (2000). Atmospheric affect as a tool for creating value and gaining share of customer. *Journal of Business Research*, 49(2), 91–99.

Chang, S. E., Shen, W., & Liu, A. Y. (2016). Why mobile users trust smartphone social networking services? A PLS-SEM approach. *Journal of Business Research*. http://doi.org/10.1016/j.jbusres.2016.04.048

Chidozie, Felix Chidozie; Odumayo, L. P., & Olutosin, A. O. (2015). Deregulation of the Nigerian Telecommunication Sector: Interrogating the Nexus Between Imperialism and Development. *Academic Journal of Interdisciplinary Studies MCSER*, 4(1), 173–184. http://doi.org/10.5901/ajis.2015.v4n1p173

Chiu, R. W., & Ttl, P. S. (2008). *THE ROLE OF MOBILE PHONES IN*. Cronin, Jr, J.J., Brady, M.K., Hult, T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76(2), 193–218.

Dhar, R. L. (2015). Service quality and the training of employees: The mediating role of organizational commitment. *Tourism Management*, 46, 419–430. http://doi.org/10.1016/j.tourman.2014.08.001

Editorial. (n.d.). GSM operators and poor customer service. *Vanguard Newspaper*. Farrel, A. . (2010). Insufficient discriminant validity: A comment on Bove, Pervan, Beatty, and Shiu (2009). *Journal of Business Research*, 63(3), 324–327.

Fornell, C., & Larker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(3), 39–50.

Gustafsson, A., Johnson, M. D., & Roos, I. (2005). The Effects of Customer Satisfaction, Relationship Commitment Dimensions, and Triggers on Customer Retention. *Journal of Marketing*, 69(4), 210–218. http://doi.org/10.1509/jmkg.2005.69.4.210

Hair, J. F., Ringle, C. M., Sarstedt, M., Hair, J. F., Ringle, C. M., & Sarstedt, M. (2015). PLS-SEM: Indeed a Silver Bullet PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 6679(December), 139–150. http://doi.org/10.2753/MTP1069-6679190202

Henseler, J., & Sarstedt, M. (2013). Goodness-of-fit indices for partial least squares path modeling. *Computational Statistics*, 28(2), 565–580. http://doi.org/10.1007/s00180-012-0317-1

Homburg, C., & Giering, A. (2001). Personal Characteristics as Moderators of the Relationship Between Customer Satisfaction and Loyalty — An Empirical Analysis. *Psychology & Marketing*, 18(1), 43–66.

Ibrahim, S. B., Hafiez, A., & Hasaballah, A. (2018). The Impact of Service Quality on the Customer Loyalty in Sudanese Banking The Impact of Service Quality on the Customer Loyalty in Sudanese Banking sector. *Journal of Economic Sciences*, 18(2), 212–225.

Jasinskas, E., Streimikiene, D., & Svagzdienė, B. (2016). Impact of hotel service quality on the loyalty of customers. *ECONOMIC RESEARCH-EKONOMSKA ISTRAŽIVANJA*, 9664(June), 559–579. http://doi.org/10.1080/1331677X.2016.1177465

Joseph, H., Hair Jr, G., Tomas, M. H., Christain, R., & Serstedt, M. (2016). *A Primer on Partial Least Squares Structural
Equation Modeling (PLS-SEM).

Keiser, A. W. (1993). Keeping the customer satisfied begins with asking questions. Bank Management, 69(10), 48–51.

Kheng, L. L., Mahamad, O., Ramayah, T., & Mosahab, R. (2010). The impact of service quality on customer loyalty: A study of banks in Penang, Malaysia. International Journal of Marketing Studies, 2, 57–77.

Kim, M. K., Park, M. C., & Jeong, D. H. (2004). The effects of customer satisfaction and switching barrier on customer loyalty in Korean mobile telecommunication services. Telecommunications Policy, 28(2), 145–159. http://doi.org/10.1016/j.telpol.2003.12.003

Kincaid, J. (2003). Customer Relationship Management: getting it right. London: Prentice Hall Professional.

Kotler, P., Armstrong, G., Saunders, J., Wong, V. (2002). Kotler, P., Armstrong, G., Saunders, J., Wong, V. (2002). Marketing Management, 8th ed. Prentice Hall.

Lai, F., Griffin, M., Babin, B.J., . . . (2009). How quality, value, image, and satisfaction create loyalty at a Chinese telecom. Journal of Business Research, 62, 980–986.

Mohammed, G., & Bostanji, A. (2013). The Impact of Service Quality on Customers Loyalty A Study on five stars hotel ’ s customers in Riyadh , KSA. European Journal of Business and Management, 5(31), 230–241.

Nayebzadeh, S. (2013). The Relationship between Customer Satisfaction and Loyalty with the Bank Performance in IRAN. International Journal of Academic Research in Business and Social Sciences, 3(6), 114–124.

Nunally, J. C. (1978). Psychometric Theory. New York NY: McGraw Hill Publishing.

Nyadzayo, M. W., & Khajehzadeh, S. (2016). The antecedents of customer loyalty: A moderated mediation model of customer relationship management quality and brand image. Journal of Retailing and Consumer Services, 30, 262–270.

Olatokun, W. M., & Ojo, F. O. (2014). Influence of service quality on consumers ’ satisfaction with mobile telecommunication services in Nigeria. Information Development, 6, 1–11. http://doi.org/10.1177/026666914553316

Oliver, R. L. (1980). Measurement and evaluation of satisfaction processes in retail settings. Journal of Retailing, 57(3), 25–48.

Oliver, T. A. (1992). A catastrophes model for developing service satisfaction strategies. Journal of Marketing, 56(July), 83–95.

Oña, J. De, Oña, R. De, Elobili, L., & Mazzulla, G. (2013). Perceived service quality in bus transit service: A structural equation approach. Transport Policy, 29, 219–226. http://doi.org/10.1016/j.tranpol.2013.07.001

Ostrom, A., Iacobucci, D. (1995). Consumer trade-offs and the evaluation of services. Journal of Marketing, 59(1), 17–28.

Palladan, A. A. (2017). Quality of Learning: Smartphones in the Hand of Business Students. Empirical Evidence from a Developing Economy. International Journal of Business Excellence, 2(1), 1–11.

Palladan, A. A., & Adamu, A. M. (2019). Toward Mitigating Graduate Unemployment for Political Stability: The Role Electronic Commerce Technology. A PLS Approach. Cross Current International Journal of Economics, Management and Media Studies, 1(1), 22–29.

Palladan, A. A., & Palladan, N. Y. (2018). Arabian Journal of Business and Employees Views on Payroll Computerization and Its Impact on Their Productivity: A Grounded Theory Approach. Arabian Journal of Business and Management Review, 8(2).

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (2002). SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. Journal of Retailing, 64(Spring), 2–40.

Paul, J., Mittal, A., & Srivastav, G. (2016). Impact of service quality on customer satisfaction in private and public sector banks. International Journal of Bank Marketing, 34(5), 606–622. http://doi.org/10.1108/IJBM-03-2015-0030

Soyinka, A. (2008). Seven Years of Telecoms R evolution: Breeding Jobs for the Masses. Tell Magazine.

Szymanski, D. M., & Henard, D. D. (2001). Customer satisfaction: a meta-analysis of the empirical evidence. Journal of the Academy of Marketing Science, 29(1), 16–35.

Taylor, S. A., & Baker, T. L. (1994). An assessment of the relationship between service quality and customer satisfaction in the formation of consumers’ purchase intentions. Journal of Retailing, 70(2), 163–178.

Ting, H. et al. (2019). Structural model robustness checks in PLS-SEM Structural model robustness checks in PLS-SEM, (January). http://doi.org/10.1177/1354816618823921

Twenekoah-koduah, E. Y., Yuty, A., & Farley, D. (2016). Relationship between Customer Satisfaction and Customer Loyalty in the Retail Banking Sector of Ghana. International Journal of Business and Management, 11(1), 249–262. http://doi.org/10.5539/ijbm.v11n1p249

Weaver, M. (2006). Formula for calculating sample size, a statistics consultants at researcher support centre, school of Nursing. North Carolina: Chapel Hill.

Yoo, M., & Bai, B. (2013a). Customer loyalty marketing research: A comparative approach between hospitality and business journals. International Journal of Hospitality Management, 33, 166–177.

Yoo, M., & Bai, B. (2013b). Customer loyalty marketing research: A comparative approach between hospitality and business journals. International Journal of Hospitality Management, 33, 166–177.
Copyrights
Copyright for this article is retained by the author(s), with first publication rights granted to the journal. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).