

# ANALYSIS OF CUSTOMER SATISFACTION AS THE MEDIATOR BETWEEN RELIABILITY, RESPONSIVENESS, ASSURANCE AND CUSTOMER LOYALTY AMONG MOBILE PHONE USERS IN NIGERIA'S TELECOMMUNICATION INDUSTRY

Christian Friday Akpan<sup>1</sup>, Azadeh Amoozegar<sup>2</sup>, Mehrunishah Begum<sup>3</sup>

<sup>1,2</sup>Limkokwing Graduate School, Limkokwing University of Creative Technology, Malaysia

DOI: 10.47750/pnr.2022.13.S06.217

## Abstract

The survey study was based on sample of mobile phone users in Enugu metropolitan city in South Eastern Nigeria. The respondents were randomly chosen from the four mobile operators in Nigeria (MTN, GLO, Airtel and 9mobile). Respondents must have used the mobile service for at least one year in order to participate in the survey. Out of the total 300 copies of distributed questionnaires, 250 were found useable in the final analysis, which accounted for 83% response rate. All the items were modified to suit the context of the current study. It was found that reliability of a telecom provider has the greatest effect on satisfaction which is statistically significant. Surprisingly responsiveness showed a negative relationship with loyalty, which indicated that responsiveness of a network provider has no statistical effect on customer loyalty. Implications on theory and practice are discussed.

**Keywords:** Customer satisfaction, Assurance, Customer loyalty, Responsiveness, Reliability.

## INTRODUCTION

Satisfied customers are not only the engine for profitability of telecom operators; instead, they represent the single critical barometer for achieving sustained customer loyalty (Alabar, 2012; Nimako, 2012). Following the liberalization of Nigeria telecom industry in 2000 according to Ndukwe (2004), the level of competition and associated competitive pressures have increased tremendously with many operators competing to win the patronage and support of the customers (Pallandan & Ahmad, 2019; Timothy et al, 2017). According to Nigeria communication commission (2020), quarterly report on subscribers' base, it showed that at the end of June 2020, Nigeria has total mobile subscription of 196,039,869 which according to the operators showed that MTN is the dominant operator with 73,573,788 (37.53%). Globacom has a total mobile subscriber of 51,856,114 (26.45%) followed by Airtel with 51,298,878 (26.17%). 9mobile was on distant fourth with 12,123,185 (6.18%) while Visafone barely competed the list with 137,086 (0.07%).

Organizational competitiveness has increased tremendously within the last decades. From developed to emerging countries, the intensity to retain customers in key demographics has been challenging, especially in a dynamic and concentrated industry like telecom. In telecommunication sector, the increasing threats from financial technology companies on service level have necessitated the urgent need for telecom operators to re-examine their competitive strategy and overall business model in order to remain competitive. One aspect of achieving improved customer loyalty in telecom industry is to constantly evaluate and improve customer service level, which is consistent with the current and emerging industry trend. Timothy et al (2017) posit that, one of the greatest challenges facing Nigeria telecom industry is how to achieve improved customer loyalty owing to the competitive industry dynamics. Designing a customer focused is critical for any long-term competitiveness, profitability and loyalty (Nkwede & Okpara, 2017; Pallandan & Ahmad, 2019; Ugbomhe et al, 2018).

Customer satisfaction is the degree to which a product or service meets customer expectation. This positive evaluative judgment determines then extent of customer loyalty to the particular business, brand or organization. In the context of telecom industry, building and maintaining robust customer satisfaction is essential in achieving sustained customer loyalty and resultant improved organizational performance. Satisfied customers are believed to have significant influence on the pattern of services being offered by the telecom operators (Nkwede & Okpara, 2017; Pallandan & Ahmad, 2019). The study will achieve the following objectives:

R01: What is the effect of reliability of service quality on customer loyalty? R02: What is the effect of responsiveness of service quality on customer loyalty? R03: What is the effect of assurance of service quality on customer loyalty?

R04: What is the mediating role of customer satisfaction on customer loyalty?

## Literature reviews

The concept of service quality has become the centerpiece of the modern marketing management. Most organizations have paused their international expansion strategy to re- focused on those markets with huge potential for growth. This new focus and attention are much felt in Nigeria telecommunication market which the major competitors (MTN, Glo, Airtel and 9mobile) are redefining customer relationship management with emphasis on service quality, innovation and competitiveness. This new mantra is a systematic shift from all “branding waves” which have been the dominant strategy to retain customers in telecommunication industry. Increasing customer sophistications, especially from the younger generations is suggestive that, service quality is the new competitive strategy in telecom sector where convergence of technologies is redefining the market and competition.

Specifically, the reviews will focus on how service quality, customer satisfaction and customer loyalty influence competitive action in Nigeria telecom industry.

### Reliability and customer loyalty

Although, the term service quality has different meanings to different peoples, the common denominator in all the various interpretations is improved service delivery is the new normal for sustained organisational competitiveness. However, the current study will focus on the context of service quality in telecommunication sector in Nigeria. Parasuranam, et al (1988) defined service quality as a form of attitude which is driven by the difference between expectation and perception of performance. Gronroos (1990) posits that service quality is the confirmation or disconfirmation of consumers’ expectation of service in relation to consumer perception.

Bitner et al (1994) sees service quality as the total customer impression on organisational reputation based on service delivery. According to the authors, service quality has an indirect effect on organizational performance. Rahhal, (2015) argues that consumer service quality is one of the most effective competitive strategies in telecom sector. Customer experience according to Hafeez and Mohammed (2012) has become the leading indicator for achieving sustained performance and profitability. The experience being perceived by the consumers is critical in determining how consumers perceive the services being rendered (Kotler & Keller, 2011). Unless an organization manages the customer experience effectively; its ability to deliver improved customer satisfaction will be greatly impaired, especially in a competitive industry like the telecom (Hafeez & Mohammed, 2012; Rahhal, 2015). It is important to ascertain the critical service points in other to achieve quality service delivery.

### Customer satisfaction as a mediator

Customer satisfaction is the corner stone of every marketing and organizational strategy. The central argument in favour of the above position is that, satisfied customer will exhibit range of behavioural outcomes such patronage, repeat purchase and loyalty to the brand, product or service. Instructively, customer satisfaction means different thing to different peoples in different context. Kotler and Keller (2011) argue that customer satisfaction is the pleasure or displeasure resulting from product or service performance (outcome) in relation to customer’s expectation. Customer satisfaction is best examined in two perspectives; attribute specifics and total performance (Nimako, 2012).

Satisfaction in the context of attribute specific entails specific product or service attributes while total performance which could be either transactional (one-time experience) or cumulative (over a period of time). Although, scholars argued that service quality and customer satisfaction are two distinct concepts (Al-Azzan, 2015; Rahhal, 2015), however, it has been widely agreed that service quality is a good indicator of customer satisfaction which is the customer positive evaluative judgment on products or services (Ibrahim et al, 2018; Jasinskas et al., 2016). In the telecom industry, where the changing demographics and associated consumer sophistications are redesigning the customer experience; understanding the critical service point is essential in achieving high customer satisfaction.

#### Responsiveness and customer loyalty

Responsiveness dimension of service quality denotes the willingness or preparedness of a service provider to providing quality services speedily. This is one of the leading service quality dimensions usually prioritised by customers in choosing a service provider. Essentially, when telecommunication customers are assured that the service provider would respond promptly to demanding issues, customer satisfaction and resultant loyalty would be strong (Hafeez & Mohammad, 2012).

Olatokun and Ojo (2014) found with a sample of 431 mobile telecommunication users in Nigeria that responsiveness and empathy were the major determinants of customer loyalty. Abd-Elrahman (2018) found that responsiveness has significant effect on customer loyalty.

When telecom service providers respond to the customers' complaints in a timely and efficient manner, customer loyalty is re-enforced. Customer responsiveness represents not only how telecommunication service providers address customers' needs but the manner of such response (Al-Azzan, 2015). The speed of such resolution is what motivate customers to remain with an organisation irrespective of competitive pressures in the market (Rahhal, 2015). Also, in an increasingly commoditized market where service offerings are becoming similar, customer responsiveness has become a veritable tool to achieving improved performance strong profitability and sustained competitiveness (Hafeez & Mohammad, 2012).

#### Assurance and customer loyalty

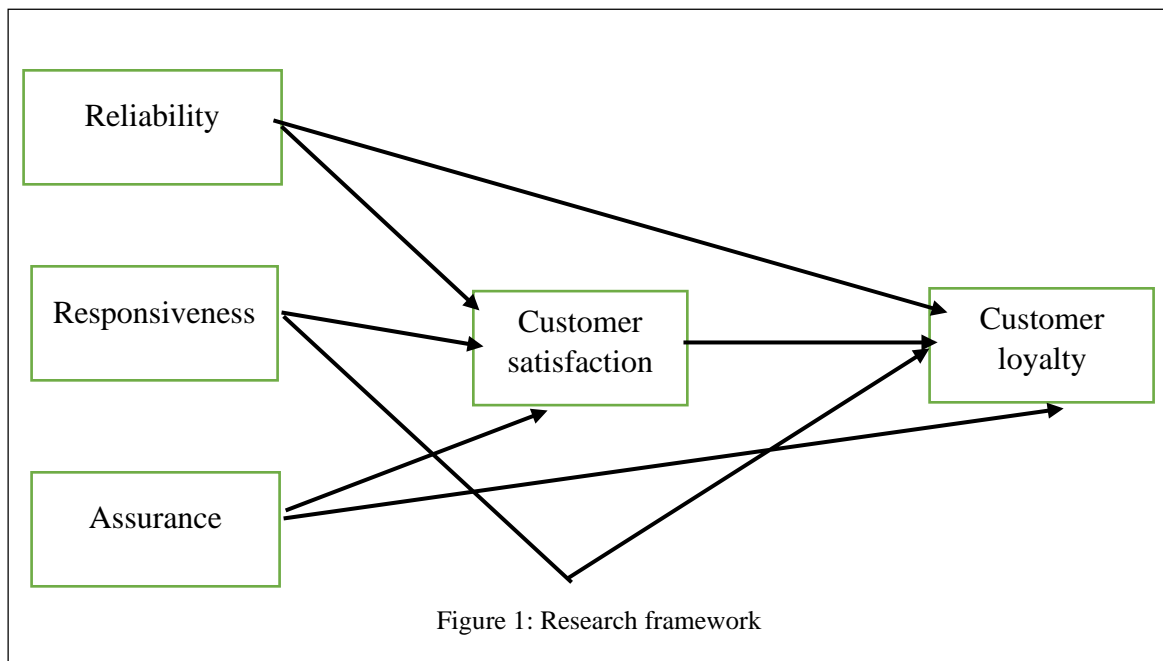
Assurance is the degree of trust and commitment which telecommunication service providers exhibit in other to retain their customers. Incessant drop calls and associated poor services are ripe in an environment where competitive landscape is weak. Assurance also denotes positive employee attitude, competency and effective communication (Alhkam & Alarussi, 2016). Alhkam and Alarussi (2016) found with a sample of 400 telecommunication users in Yemen that assurance has significant effect on customer satisfaction.

Assurance is also a commitment by the service provider that certain level of service quality would be achieved and sustained. Satisfied customers are believed to have positive disposition towards the organisation offerings which would lead to improved commitment and sustained customer loyalty. Unlike in other industries where customers rarely switch camp, telecommunication industry presents a rapidly evolving market where competition for services is changing dramatically and swiftly in response to the information communication revolution. Assurances in terms of service quality and resultant customer satisfaction would improve customer loyalty (Abd-Elrahman (2018).

#### Customer Loyalty

Customer loyalty is a behavioural disposition built on overall customer experience over a product or service which led to repeat purchase, improved patronage or positive word of mouths. Customer loyalty is one of the most studied organizational development constructs in especially in the modern marketing. Although, scholars have supported the views that retaining current customer is essentially in achieving sustained performance (Johnson et al, 2016; Kheng et al, 2010; Kottler & Keller, 2011), the increasing competition in telecommunication industry globally, and in emerging country like Nigeria requires a critical evaluation of the future consumer drivers among the operators (NCC, 2020).

Loyalty, being a post consumption experience denotes a positive fulfilment from a product or service which motivates future action such as repeat purchase and or positive word of mouth. Yoo and Bai (2013) suggested that, two main factors; internal and external factors determine customer loyalty. According to them, internal factors include; product brand, service quality, costs and promotional mix while external factors include satisfaction, trust, perceived value and switching cost. The relative importance of each group determines how customers would respond to a particular product or service.



## Research Methodology

### Sample Size

The on-going survey study was based on sample of mobile phone users in Enugu metropolitan city in South Eastern Nigeria. The respondents were randomly chosen from the four mobile operators in Nigeria (MTN, GLO, Airtel and 9mobile). Respondents must have used the mobile service for at least one year in other to participate in the survey. Questionnaires was the preferred method obtaining respondents viewpoints on series of questions presented. The study was conducted between August and September, 2020 due to increasing challenge posed by covid-19 pandemic. The researcher visited 4 locations repeatedly at the city center in to obtain maximum responses. Out of the total 300 copies of distributed questionnaires, 250 were found useable in the final analysis, which accounted for 83% response rate. All the items were modified to suit the context of the current study.

### Instrumentation

The five variables of the study were measured on with previously scales on five-point Likert scale on increasing-increasing order of (1) strongly disagree (2) disagree (3) neutral (4) agree and (5) strongly agree. Reliability was measured with six items adopted from Devrulez (2012). Responsiveness was measured with seven items of which four items were adopted from Devrulez (2012) and three items from Baruah et al (2015). Assurance was accessed with six items chosen from Baruah et al (2015). Customer satisfaction was also measured with five items chisel from Chinomona & Sandada (2013). Customer loyalty was measured with eight items of which four items were sourced from Deng & Zhang (2010) and four items from Kaur & Soch (2012).

Table 1: Materials and Measures

Constructs	Sample question	Sources
Reliability	(1) My network provider services are efficient (2) My network provider services are reliable (3) My network provider provides quick services (4) I feel secure that my personal information is safe with my mobile provider (5) My mobile provider has strong security (6) I have confidence in using my mobile services.	Devrulez (2012)
Responsiveness	(1) My mobile provider gives accurate direction for new users (2) My mobile provide gives instant feedback to users. (3) I receive prompt response from my request to my mobile provider. (4) My mobile provider guides me effectively in solving problems with the services. (5) My mobile provider acknowledges me by name. (6) My mobile provider is always on time to help me. (7) I require little efforts to resolve any problem with my mobile provider.	Devrulez (2012), Baruah et al (2015).
Assurance	(1) I trust my mobile provider to deliver quality service at all times (2) I am confident that my mobile provider to deliver quality service at all times (3) I think using my mobile provider services gives much freedom. (4) I always prefer using my mobile provider in my telecommunication services. (5) I have trust in my mobile provider. (6) I am assured of quality services from my mobile provider.	Baruah et al (2015)
Customer satisfaction	(1) I am satisfied with the experience of using my mobile provider. (2) I am more satisfied with the service provider than other service providers (3) I am satisfied with my decision to stay with my service provider (4) When I decided to use this mobile provider, I thought I had made the right decision (5) I am satisfied with the overall expectation with my mobile provider.	Chinomona & Sandada (2013).
Customer loyalty	(1) I would say many positive things about my mobile provider to other people (2) I would recommend my mobile provider to other people (3) I would encourage friends and family members to switch to my mobile provider (4) I intend to stay with my mobile provider (5) I would consider my mobile provider as the network of choice (6) I will remain with my mobile provider (7) I will continue to use my mobile provider in the future (8) I'll choose my mobile provider if I have the opportunity again.	Deng & Zhang (2010), Kaur & Soch (2012).

Table 2: Demographic Profile of the Respondents

	Item	Frequency	%
<b>Gender</b>	Male	141	56.4
	Female	109	43.6
	Total	250	100%
<b>Age group</b>	26-30	33	13.2
	31-35	53	21.2
	36-40	56	22.4
	41-45	60	24.0
	46-50	26	10.4
	≥ 51	22	8.8
	Total	250	100%
<b>Number of years with mobile operator</b>	1-3	47	18.8
	4-6	43	17.2
	7-9	42	16.8
	10-12	118	47.2
	Total	250	100%

Table 3: Summary of reliability test

Variable	No of items	Cronbach Alpha Coefficient
Reliability	6	0.917
Responsiveness	7	0.878
Assurance	6	0.916
Customer satisfaction	5	0.914
Customer loyalty	8	0.882

Table 3 of the reliability test shows that all the variables achieved improved internal consistency because each of them has a Cronbach alpha of more than 0.7 which is the threshold mark in most social science and educational studies.

Table 4: Correlations

	RE.1	RS.1	ASS.1	SATIS.1	LOYA.1
RE.1 Pearson Correlation	1	.004	.997**	.888**	.771**
Sig. (2-tailed)		.944	.000	.000	.000
N	250	250	250	250	250
RS.1 Pearson Correlation	.004	1	.012	.051	-.002
Sig. (2-tailed)	.944		.856	.424	.980

N		250	250	250	250	250
ASS.1	Pearson Correlation	.997**	.012	1	.885**	.765**
	Sig. (2-tailed)	.000	.856		.000	.000
	N	250	250	250	250	250
SATIS.1	Pearson Correlation	.888**	.051	.885**	1	.660**
	Sig. (2-tailed)	.000	.424	.000		.000
	N	250	250	250	250	250
LOYA.1	Pearson Correlation	.771**	-.002	.765**	.660**	1
	Sig. (2-tailed)	.000	.980	.000	.000	
	N	250	250	250	250	250

\*\* . Correlation is significant at the 0.01 level (2-tailed).

RE.1: Reliability, RS.1: Responsiveness, ASS.1: Assurance, SATIS.1: Satisfaction. LOYA.1: Loyalty.

## Results

Table 4 showed the correlation among the variables of the study. The relationship between each of the service quality dimensions showed that reliability of a telecom provider has the greatest effect on satisfaction which is statistically significant ( $0.888 p < 0.001$ ), followed by assurance ( $0.885 p < 0.001$ ) and responsiveness ( $0.051 p < 0.001$ ). Also, service quality dimensions showed the following values with customer loyalty, reliability has the greatest effect with ( $0.771 p < 0.001$ ), followed by assurance ( $0.765 p < 0.001$ ) and satisfaction ( $0.660 p < 0.001$ ). However, responsiveness showed a negative relationship with loyalty ( $0.002 p > 0.05$ ), which indicated that responsiveness of a network provider has no statistical effect on customer loyalty.

## Discussions

Service quality has become the dominant barometer for measuring customer interaction in telecom sector. From the results of the study, the three independent variables (reliability, responsiveness and assurance) showed a statistically significant effect on customer loyalty through the mediation effect of customer satisfaction. The following insights may be gleaned from the study. First, the significant effect of reliability variable on customer loyalty is indicative that reliability of telecom service provider in terms of service efficiency and effectiveness is essential in achieving strong customer loyalty. This finding is consistent with results by Rahhal (2015) on the need for telecommunication service providers to strengthen service quality effectiveness in order to attract and retain valuable customers. Second, responsiveness variable which was also significant with customer loyalty is suggestive that prompt response to customer complaints is positively associated with customer satisfaction and loyalty. Third, assurance of service quality which is the commitment by telecommunication service providers to provide all advertised services was also associated with and loyalty means that long term performance and survival of by telecommunication service providers in terms of customer loyalty is dependent on assuring customers of improved services at all times ((Abd- Elrahman, 2018; Alkham & Alarussi, 2016).

## Conclusion and implications

Service quality has become the centerpiece of new customer experience. Globally, telecommunication sector is under serious attacks from emerging innovation in information, communication technology. In order to leverage on the service quality to

deliver improved customer satisfaction and resultant loyalty, there is need to examine the critical service points within the individual market service level. From the findings, it was revealed that three service quality dimensions adopted in the study (reliability, responsiveness and assurance), showed positive and statistically relationship with customer satisfaction. However, responsiveness has a negative effect on customer loyalty. Contrary to previous findings, responsiveness of a network provider would satisfy customers but could not guarantee their loyalty in Nigeria telecommunication context.

## REFERENCES

1. Abd-Elrahman, A. H. (2018). A Review of Telecommunications Service Quality Dimensions. *Scholar Journal of Applied Sciences and Research*, 1(1), 10-18.
2. Alabar, T. T. (2012). Electronic Banking Services and Customer Satisfaction in the Nigerian Banking Industry. *International Journal of Business and Management Tomorrow*, 2(3), 1-8.
3. Al-Azzan, M. F. (2015). The Impact of Service Quality Dimensions on Customer Satisfaction: A Field Study of Arab Bank in Irbid city Jordan. *European Journal of Business and Management*, 7(15).
4. Alhkam, A. A., & Alarussi, A. S. (2016). Service Quality Dimensions and Customer Satisfaction in Telecommunication Companies. *Asian Journal of Business and Management*, 4(3), 117-126.
5. Bitner, B. M., Booms, B. H., & Mohr, L. A. (1994). Critical Service Encounters: The Employee viewpoints. *Journal of Marketing*, 58(4), 95-106.
6. Grönroos, C. (1990). *Service management and marketing: Managing the moments of truth in service competition*. Lexington, Mass: Lexington Books.
7. Hafeez, S., & Mohammad, B. (2012). The Impact of Service Quality, Customer Satisfaction and Loyalty Programmes on Customer Loyalty: Evidence from Banking Sector of Pakistan. *International Journal of Business and Social Science*, 3(16).
8. Ibrahim, S. B., Hafeez, 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.
9. Jasinskis, E., Streimikiene, D., & Svagzdiene, B. (2016). Impact of hotel service quality on the loyalty of customers. *Economic Research-Ekonomska*, 96(64), 559-579.
10. Johnson, G., Whittington, R., Regner, P., Scholes, K., & Angwin, D. (2016). *Exploring Strategy: Text and Cases* (11th ed.). London: Pearson Education Limited.
11. Kheng, L. L., Mahamad, O., Ramayat, T., & Rahim, M. R. (2010). The Impact of Service Quality on Customer Loyalty: A Study of Banks in Penang Malaysia. *International Journal of Marketing Studies*, 2 (2) 57-66, 2(2), 57-66.
12. Kotler, P., & Keller, K. L. (2011). *Marketing Management* (14th ed.). New Jersey: Pearson Education Inc.
13. NCC. (2020). *Statistics and Report: Nigeria Communication Commission*. Retrieved 5th September, 2020, from <https://www.ncc.gov.ng/statistics-reports/industry-overview#view-graphs-tables-5>
14. Ndukwe, E. C. (2004). An Overview of the Nigerian Telecommunications Environment Nigerian Communications Commission. ITU Telecom Africa.
15. Nimako, S. G. (2012). Linking Quality, Satisfaction and Behaviour Intentions in Ghana's Mobile Telecommunication Industry. *European Journal of Business and Management*, 4(7), 1-18.
16. Nkwede, M. F., & Okpara, G. S. (2017). Correlate of Service Quality Dimensions and Customer Loyalty in the Nigerian Telecom Markets: Does Customer Satisfaction Play a Mediating Role? *Journal of Business and Management*, 19(1), 60-71.
17. Olatokun, W. M., & Ojo, F. O. (2014). Influence of service quality on consumers' satisfaction with mobile telecommunication services in Nigeria. *Information Development*, 32(3), 398-408.
18. Palladan, A. A., & Ahmad, M. A. (2019). Leveraging Customers Loyalty in Telecommunication Industry: The Role of Service Quality and Customer Satisfaction a PLS Approach. *International Journal of Marketing Research Innovation*, 3(1), 1-10.
19. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). "SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing* (64),1, 12-40.
20. Rahhal, W. (2015). The Effect of Service Quality Dimensions on Customer Satisfaction: An Empirical Investigation in Syrian Mobile Telecom Services. *International Journal of Business and Management Invention*, 4, 81-89.
21. Timothy, A. T., Egena, O., & Richard, G. I. (2017). Service Quality and Customer Satisfaction in Nigerian Mobile. *European Centre for Research Training and Development*, 5(1), 37-49.
22. Ugbomhe, U. O., Osagie, N. G., & Amaka, U. (2018). Service Quality and Customer Satisfaction in Cellular Telephony in Nigeria. *Journal of Business and Management*, 20(8), 21-31.
23. Yoo, M., & Bia, B. (2013). Customer loyalty marketing research: A comparative approach between hospitality and business. *International Journal of Hospitality Management*, 33, 166- 177.