



SERVICE QUALITY DIMENSIONS AND CUSTOMER LOYALTY IN THE NIGERIAN TELECOMMUNICATION INDUSTRY

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Abstract: *The Nigerian telecommunication sector has experienced exponential growth in recent years. The sector has witnessed stiff competition, with the operators engaging in diverse marketing activities to ensure their subscribers remain satisfied and brand loyal. In spite of such activities, complaints of poor quality of service have been on the increase, and most subscribers have to possess more than one line and frequently switch from one network provider to the other in search of better quality of service. This study therefore sought to examine the relationship between service quality dimensions and customer loyalty in the Nigerian telecommunication industry, using the SERVQUAL model. Three hundred and eighty four (384) subscribers of the four major telecommunication companies (Airtel, MTN, Glo and 9mobile) were surveyed. A structured questionnaire was used to collect data from these subscribers. The data were analyzed using descriptive and inferential statistics. Specifically, frequency count and simple percentages were used to analyze the personal data, while Pearson Product Moment Correlation was used to test the hypotheses at 5% level of significance. It was found that the five service quality dimensions (tangibles, reliability, responsiveness, assurance and empathy) have significant positive relationship with customer loyalty. On the basis of the findings, it was recommended among others, that telecommunication service providers should strive to improve the quality of service offered to their customers, if they want to enjoy the loyalty of their customers.*

Keywords: Service quality, customer loyalty, telecommunication,

Introduction

The Nigerian telecommunication sector became revolutionized following the deregulation of the sector by the Nigerian Communications Commission (NCC) in 2001, which opened the door for private companies to participate, leading to the granting of license for the operation of the Global System for Mobile Communications (GSM). The Nigerian telecommunication sector has experienced exponential growth in recent years, going from 19,519,154 subscribers in 2005 to 154,529,780 subscribers as of March, 2017(NCC, 2017).

The major players behind the revolution in the sector are MTN, Globacom, Airtel, and Etisalat (9mobile) with share of total GSM subscribers of 40%, 25%, 23%, and 12% respectively as of March 2017. These players (companies) continuously compete intensively among themselves by engaging in diverse marketing activities such as provision of attractive tariff regime, introduction of new and innovative products, sales promotion, and many others, to ensure that their subscribers remain satisfied and loyal (Hashim,2014).

These companies are aware that it is important to create loyal customers and continuously deal with such customers as a



consistent source of profit. Loyal customers are deeply committed to rebuy a preferred product or service (Jahanzeb, Fatima & Khan, 2011). In another sense, loyal customers are profitable customers that purchase more items and recommend new customers, and therefore should be specially considered (Salgaonkar, 2004).

Notwithstanding the benefits of creating loyal customers, the issue of poor service quality still remains in the Nigerian telecom sector, and it is often highlighted in the media and widely discussed among the general public. It was based on this that the National Assembly, in July, 2007, summoned all operators of GSM in Nigeria to give explanation regarding inefficiency in their operations. The Lawmakers maintained that such was necessary because of the outcry of the public on the epileptic nature of telecom services (Adegoke, Babolola and Balogun, 2008).

In a bid to tackle the service quality problem in the country, the Nigerian Communications Commission in April 2013 introduced the Mobile Number Portability (MNP) service, in order to deepen competition and force the telecom operators to provide better service to their subscribers. The MNP makes subscribers free to change network provider while maintaining the same mobile number. It grants subscribers the power to terminate their relationship with their current network provider at any point they are not satisfied with the quality of services provided. Between January and March, 2017 alone, about 83,362 porting activities took place across all networks – 41,419 incoming and 41,943 outgoing porting (NCC, 2017). This shows the degree of dissatisfaction and disloyalty in the sector.

Studies have shown that there is a relationship between service quality and customer loyalty. This study therefore seeks to use the SERVQUAL model to examine that relationship in the telecoms sector of Nigeria.

Statement of the Problem

Despite the stiff competition in the Nigerian telecommunication sector, with operators engaging in diverse marketing activities to ensure their subscribers are satisfied and remain brand loyal, complaints of poor quality of service have been on the increase. Subscribers are dissatisfied as the quality of service provided is below their expectations. Following this, most subscribers have to possess multiple lines and frequently move from one network provider to the other, searching for better quality of service. This development negatively affects the profitability of the

telecommunication firms, and by extension affects the contribution of the telecoms sector to Nigeria's GDP. It is therefore important to examine empirically the connection between service quality and customer loyalty in this sector.

Although studies have been carried out on service quality in the Nigerian telecoms industry, most of those studies, however, focused on service quality and customer satisfaction. There is little empirical research on the relationship between service quality and customer loyalty. Specifically, we could not find any study on the relationship between the SERVQUAL dimensions (tangibles, reliability, responsiveness, assurance and empathy) and customer loyalty in the Nigerian telecommunication industry. This study therefore attempts to examine that relationship.

Objectives of the Study

The main objective of this study is to examine the relationship between service quality dimensions and customer loyalty in the Nigerian telecommunication industry using subscribers of Airtel, MTN, Glo, and Etisalat(9mobile). The specific objectives of the study include:

1. To ascertain the relationship between tangibles and customer loyalty.
2. To determine the relationship between reliability and customer loyalty.
3. To examine the relationship between responsiveness and customer loyalty.
4. To assess the relationship between assurance and customer loyalty.
5. To examine the relationship between empathy and customer loyalty.

Research Questions

Based on the objectives set out, the following research questions were advanced to aid the study.

1. What relationship exists between tangibles and customer loyalty?
2. What is the nature of relation between reliability and customer loyalty?
3. To what extent does responsiveness relate with customer loyalty?
4. How does assurance relate with customer loyalty?



5. How does empathy relate with customer loyalty?

Research Hypotheses

The following research hypotheses were formulated to guide the study:

H₀₁: There is no significant positive relationship between tangibles and customer loyalty

H₀₂: Reliability has no significant positive relationship with customer loyalty.

H₀₃: Responsiveness has no significant positive relationship with customer loyalty.

H₀₄: Assurance has no significant positive relationship with customer loyalty.

H₀₅: There is no significant positive relationship between empathy and customer loyalty.

REVIEW OF RELATED LITERATURE

Conceptual Review

The concept of service

Economic activities are classified into three - primary, secondary and tertiary. The primary activities focus on extracting of raw materials, and include such activities as mining, fishing, farming, etc. Secondary activities involve the transformation of the extracted raw materials into goods, and comprise of such things as manufacturing, construction, processing, etc. Tertiary activities concentrate on services instead of goods.

The word “service” has no universally acceptable definition. Thus, different experts have different definitions. However, the central point of every definition is that service is intangible in nature (Kotler, 1990 and Payne, 1995)

Service Quality

This concept has gained huge attention in today’s business world. The provision of high quality of service to customers has become a top priority for organizations that are serious about acquiring and retaining profitable customers.

Service quality, according to Zeithaml, Berry & Parasuraman (1993) involves determining whether the service delivered meets, exceeds or fails to meet customers’ expectation. Gronoos (1984) earlier noted that service quality is the confirmation or disconfirmation of consumers’ perception of the service actually received.

Service quality is an important factor that determines customer satisfaction and loyalty. Any organization that focuses attention on delivering high quality of service will stand out from other organizations that do not, and will have advantage over competitors (Boshoff & Gray, 2004).

Customer loyalty

Customer loyalty has been widely discussed over the past twenty years by scholars and practitioners. This is so because of the relationship it has with profitability (Nukpezah & Nyumuyo, 2009).

According to Johanzeb, Fatima & Khan (2011), customer loyalty is regarded as a commitment that is deeply held by customers to continue to patronize a preferred brand in spite of differences in situations and marketing efforts of competitors that could cause switching of brand. Also, Agyei & Kilika (2013) see customer loyalty as the willingness of the customer to continue on exclusive basis to patronize a firm over a long period of time, and to recommend the products or services of the firm to others. Thus, customer loyalty entails repeated purchase and recommendation.

Wangpaichitr (2010) opines that organizations that are serious about meeting the needs of their customers usually place customer loyalty at the centre of their marketing strategy. They use customer loyalty as a strategic tool to achieve competitive advantage. The reason is that growth and survival of firms depend on how loyal their customers are (Boohene & Agypong, 2011).

Theoretical Framework

This study was based on the SERVQUAL model propounded by Parasuraman, Zeithaml, & Berry (1985). SERVQUAL is an instrument operationally used in measuring service quality construct. It is a scale consisting of a set of items developed to evaluate how customers perceive service quality.

Before the SERVQUAL model came into existence, several models (scales) for measuring service quality had existed. However, according to Borgave (2012), these earlier models ad hoc in nature and highly generalized. Thus, following continuous research in marketing, Parasuraman et al (1985) came up with the SERVQUAL model containing ten (10) determinants of service quality. In a subsequent study, the authors made some modifications to the model and came up with five dimensions of



service quality – tangibles, reliability, responsiveness, assurance, and empathy (Parasuraman et al., 1991).

Tangibles

Tangibles constitute a very important dimension of service quality in the SERVQUAL model. Since services are intangible in nature, trying to make them tangible becomes very important. Tangibles include the appearance of equipment, physical facilities, personnel and communication materials. Tangibles significantly influence customers' perception (Borgave, 2012).

Reliability

In today's business world, customers are constantly looking for service providers they could trust/rely on. Service reliability implies the dependability and accuracy in the performance service. In other words, it means the extent to which a service provider can deliver promised services meticulously and consistently (Parasuraman et al., 1988). In another perspective, Blery et al., (2009) stated that reliability implies the service provider being able to provide consistent and truthful service.

Responsiveness

Responsiveness has to do with the extent to which the service provider is willing to assist customers to get timely service offering. Generally speaking, responsiveness entails helping customers and providing service promptly. According to Kandampully, Mok & Sparks (2001), service responsiveness is a function of the time taken to provide service for a customer.

Assurance

This has to do with the expertise of the employees to instill faith in the customer concerning the competence of the service provider. Blery et al., (2009) clearly stated that assurance is the ability of the employees to instill in customers, confidence and trust, through knowledge and courtesy.

Empathy

Empathy implies the individualized attention and care an organization offers a customer. It refers to how the company cares and gives individualized attention to their customers, making the customers feel extra valued and special (Parasuraman et al., 1988). Markovic, Raspor and Segaric (2010) mentioned that empathy entails the willingness to show sympathy towards customer's problems and to pay individualized attention to them.

Review of Related Empirical Studies

Agyei & Kilika (2013) made an examination of the connection that exists between service quality and customer loyalty in the Kenyan mobile telecommunication industry. The SERVQUAL model was adopted for the study. 350 Kenyatta University students participated in the study. Primary data were generated with the help of a questionnaire. Pearson product moment correlation and regression were the statistical tools used in analyzing the data. The study found that service quality and customer loyalty are positively and significantly related.

Similarly, Al-Zoubi (2013) empirically studied the effects of service quality on customer loyalty in the Jordanian telecom Sector, using the SERVQUAL model. Five Jordanian universities were selected for the study, and 300 students participated. ANOVA and Pearson correlation were used. The result indicated that service quality and customer loyalty are positively related. It was concluded that Jordanian customers are loyal to the providers of their telecom service.

Iddrisu (2011) investigated the association between Service quality and customer loyalty in the Ghanaian mobile telecommunication industry. The study was done at the time the MNP was just introduced in Ghana, which provided a great opportunity for dissatisfied customers to switch to other service providers that offered better services. Service quality was measured using the SERVQUAL instrument. Customer satisfaction was used as a mediating variable as a mediating variable in testing the relationship.. A total of 400 copies of questionnaire were administered. Pearson's correlation and regression were employed in testing the hypotheses. The study revealed that the five service quality dimensions positively influence customer loyalty through customer satisfaction. The study recommended that for mobile operators to achieve brand loyalty, they should improve the quality of services they offer to subscribers .

Kheng, Mahamad, Ramayah & Mosahab (2010) evaluated the impact of service quality on customer loyalty in Malaysian banking sector using the SERVQUAL model. Also customer satisfaction was used as a mediating variable. A total of 238 copies of questionnaire were returned in useable form. The regression analysis revealed that reliability, empathy, and assurance significantly impacted customer loyalty. The study



concluded that customer loyalty can be improved by enhancing service quality.

Alabar, Egena, & Gbande (2014) measured the relationship between service quality and customer satisfaction in Nigerian mobile telephony. A total of 532 mobile subscribers from the six geopolitical zones of the country were questioned. Data were analyzed using Pearson correlation. The study found that service quality and customer satisfaction have a positive connection

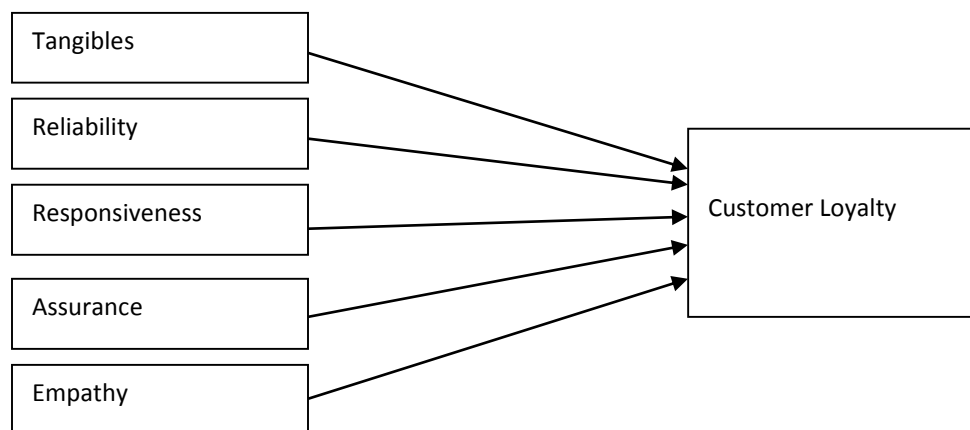
Mohammed and Bostanji (2013) examined the impact of service quality on the loyalty of five star hotels' customers in Riyadh, Saudi Arabia. Questionnaire developed and distributed to 333

hotel customers in Riyadh. The study revealed that service quality has a strong impact on customer loyalty in five stars hotels in Riyadh. It was recommended that providing services close to customers' expectations and strengthening the culture of service quality are key factors that should be considered in a bid to gain customer loyalty.

Research Model

Based on the research hypotheses, the conceptual model below was developed to examine the relationship between service quality and customer loyalty.

Figure 1. Research Model of the Relationship between Service Quality Dimensions and Customer Loyalty



INDEPENDENT VARIABLES

Source: Researcher's Construct

METHODOLOGY

Research Design

This study adopted the survey research design. This design enhances the gathering of firsthand data directly from the respondents concerning their opinions, beliefs, actions, and attitude on issues through the use of questionnaire and/or personal interview.

From the review of related literature, the questionnaire of service quality was adopted to gather data for the study.

Population of the study

DEPENDENT VARIABLE

The population of the study was made up of all the subscribers of the four major telecommunication companies (MTN, Airtel, Glo, and 9mobile) operating in Uyo metropolis, Akwa Ibom State, Nigeria. The population was assumed to be infinite as the exact population of the telecommunication subscribers in Uyo metropolis cannot be ascertained from available official records of the Nigerian Communication Commission (NCC).

Sample size determination and sampling technique

The sample size for this study was 384, determined using the sample size formula for infinite population by Conchran (1963) as follows:

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



where:

n_o = sample size

Z = selected critical value of the desired confidence level

P = estimated proportion of an attribute that is present in the population

$q = 1-p$

e = desired level of precision

Assume $p=0.5$ (maximum variability), and we desire 95% confidence level and $\pm 5\%$ precision, then $Z= 1.96$. The sample size is calculated thus:

$$n_o = Z^2 pq / e^2$$

$$(1.96)^2 (0.5)(0.5) / (0.05)^2$$

$$(3.8416)(0.25) / (0.0025)$$

$$384.16$$

$$n_o = 384$$

Convenience sampling technique was used in selecting the respondents. This was done for the reasons of convenience and accessibility.

Research Instrument

The instrument used in data collection was the questionnaire adapted from Caruana (2002), Bellini, Linardi & Hennique (2005), Agus, Baker & Kanadampully (2007), Negi (2009), and Iddrissu (2011). The instrument comprised of two sections, A and B. Section A contained 4 items on demographics and two items on the choice of mobile service provider. Section B contained items on service quality and customer loyalty in a five-point likert scale.

Validity of the Instrument

The questionnaire was presented to experts in the field of service marketing to ascertain that it can measure what it was meant to measure. Certain corrections were made by the experts and were incorporated into the questionnaire before it was administered.

Reliability of the Instrument

The reliability of the instrument was assessed using Cronbach alpha. Twenty copies of the questionnaire were administered to five subscribers each of MTN, Glo, Airtel, and 9mobile. The responses obtained were subjected to the Cronbach alpha's

internal consistency test and the following reliability coefficients were obtained:

Table 1: Reliability Coefficients for constructs

Constructs	Cronbach's Alpha	Number of Items
Tangibles	0.71	4
Responsiveness	0.74	4
Assurance	0.78	4
Empathy	0.75	4
Reliability	0.76	4
Customer Loyalty	0.79	4

The Alpha Coefficient for each of the constructs is more than 0.70. This implies that the items on the questionnaire are internally consistent, hence they are reliable.

Method of Data Analysis

Analysis of personal data of the respondents was done using frequency count and simple percentages while Pearson correlation was used for the test of hypotheses at 5% level of significance.

DATA ANALYSIS, RESULTS AND DISCUSSION

A total of three hundred and eighty four (384) copies of questionnaire were administered and three hundred and sixty two (362) were properly filled and returned making a return rate of 94.3%.

Test of Hypotheses

Hypothesis one

There is no significant positive relationship between tangibles and customer loyalty

Table 2: Correlation between Tangibles and Customer loyalty

	Tangibles	Customer loyalty
Pearson Correlation	1	.838**
Tangibles Sig. (2-tailed)		.000
N	362	362
Pearson Correlation	.838**	1



Customer loyalty	Sig. (2-tailed)	.000	
	N	362	362

Source: SPSS Version 20

**. Correlation is significant at the 0.05 level (2-tailed).

Table 2 shows a correlation value of .838 for the relationship between tangibles and customer loyalty. This means there is a positive relationship between tangibles and customer loyalty. The P value obtained was 0.000 which is less than 0.05 ($P < 0.05$).

Decision Rule

Reject H_0 if $p < 0.05$. Do not reject if otherwise.

Decision

Since the correlation value (r) is positive .838 and $p < 0.05$, we reject the null hypothesis (H_0). Hence, there is a significant positive relationship between tangibles and customer loyalty.

Hypothesis two

H_0 : Reliability has no significant positive relationship with customer loyalty.

Table 3: Correlation between Reliability and Customer loyalty

		Reliability	Customer loyalty
Reliability	Pearson Correlation	1	.271**
	Sig. (2-tailed)		.000
	N	362	362
Customer loyalty	Pearson Correlation	.271**	1
	Sig. (2-tailed)	.000	
	N	362	362

Source: SPSS Version 20

**. Correlation is significant at the 0.05 level (2-tailed).

Table 3 shows a correlation value of .271 for the relationship between reliability and customer loyalty. This means there is a

positive relationship between reliability and customer loyalty. The P value obtained was 0.000 which is less than 0.05 ($P < 0.05$).

Decision Rule

Reject H_0 if $p < 0.05$. Do not reject if otherwise.

Decision

Since the correlation value (r) is positive .271 and $p < 0.05$, we reject the null hypothesis (H_0). Hence, reliability has a significant positive relationship with customer loyalty.

Hypothesis three

H_0 : Responsiveness has no significant positive relationship with customer loyalty.

Table 4 Correlations between Responsiveness and Customer loyalty

		Responsiveness	Customer loyalty
Responsiveness	Pearson Correlation	1	.559**
	Sig. (2-tailed)		.000
	N	362	362
Customer loyalty	Pearson Correlation	.559**	1
	Sig. (2-tailed)	.000	
	N	362	362

Source: SPSS Version 20

**. Correlation is significant at the 0.05 level (2-tailed).

Correlation value of .559 was obtained as shown in table 4. This means there is a positive relationship between responsiveness and customer loyalty. The P value obtained was 0.00, which is less than 0.05 ($P < 0.05$).

Decision Rule

Reject H_0 if $p < 0.05$. Do not reject if otherwise.

Decision

Since the correlation value is positive (.559) and $p < 0.05$, we therefore reject the null hypothesis (H_0). Hence there is a



significant positive relationship between responsiveness and customer loyalty.

Hypothesis four

Ho: Assurance has no significant positive relationship with customer loyalty.

Table 5: Correlations between Assurance and Customer loyalty

		Assurance.	Customer loyalty
Assurance	Pearson Correlation	1	.472**
	Sig. (2-tailed)		.000
	N	362	362
Customer loyalty.	Pearson Correlation	.472**	1
	Sig. (2-tailed)	.000	
	N	362	362

Source: SPSS Version 20

** . Correlation is significant at the 0.05 level (2-tailed).

Result in table 5 shows a correlation value of .472. This implies that there is a positive relationship between assurance and customer loyalty. The P value .000 is less than 0.05

Decision Rule

Reject H_0 if $p < 0.05$. Do not reject if otherwise.

Decision

Since the correlation value is positive (.472) and $p < 0.05$, the null hypothesis (H_0) is therefore rejected. Thus, assurance has a significant positive relationship with customer loyalty.

Hypothesis five

Ho: There is no significant positive relationship between empathy and customer loyalty.

Table 6: Correlations between Empathy and Customer loyalty

		Empathy	Customer loyalty
Empathy	Pearson Correlation	1	.874**
	Sig. (2-tailed)		.000
	N	362	362
Customer loyalty	Pearson Correlation	.874**	1
	Sig. (2-tailed)	.000	
	N	362	362

Source: SPSS Version 20

** . Correlation is significant at the 0.05 level (2-tailed).

From table 6 above, a correlation value of .874 was obtained for the relationship between empathy and customer loyalty. This shows that there is a positive relationship between empathy and customer loyalty.

Decision Rule

Reject H_0 if $p < 0.05$. Do not reject if otherwise.

Decision

Since the correlation value (r) is positive .874 and $p < 0.05$, we reject the null hypothesis (H_0). Therefore empathy has a significant positive relationship with customer loyalty.

Discussion of Findings

This study examined the relationship between service quality dimensions and customer loyalty in the Nigerian telecommunication sector. It was found that each of the five dimensions of service quality (tangibles, reliability, responsiveness, assurance and empathy) has significant positive relationship with customer loyalty. The results imply that as service providers increase their level of service delivery, the loyalty of their subscribers will be enhanced. These results are in agreement with similar study by Agyei & Kilika (2013), which found a significant positive relationship existing between service quality dimensions and customer loyalty in the Kenyan mobile telecommunication service industry.

The findings are also in line with that of Al-Zoubi (2013) who, in his study on the effects of service quality on customer loyalty in



the Jordanian telecom sector, found that there is a strong positive relationship between service quality and customer loyalty. The findings also agree with that of Iddrisu (2011), who investigated the association between service quality and customer loyalty in the mobile telecommunication industry in Ghana and found that through customer satisfaction, service quality variables such as tangibles, responsiveness, reliability, assurance and empathy have a positive influence on customer loyalty.

However, the result on the responsiveness dimension is in contrast with the findings of Kheng, Mahamad, Ramayah, & Mosahab (2010), which revealed that the relationship between responsiveness and customer loyalty is insignificant. It is important to note that their study was conducted in the banking sector, which is in a high-touch service environment.

From the findings, it is important to note that the reliability dimension has the weakest correlation (0.271) with customer loyalty. This is not good enough for the telecommunication firms. Customers are constantly looking for service providers that they could rely on. Service reliability implies the ability to perform the promised service dependably and accurately. Reliability is considered the most vital component of service quality dimension.

Summary

This study employed the SERVQUAL model to assess the relationship between service quality dimensions and customer loyalty in the Nigerian telecommunication industry. Subscribers of the four main telecommunication service providers operating in Uyo metropolis were investigated. Questionnaire was used to obtain data for the study. Five hypotheses were tested.

The first hypothesis stated that there is no significant positive relationship between tangibles and customer loyalty. The study found that there is a significant positive relationship between tangibles and customer loyalty.

The second hypothesis stated that reliability has no significant positive relationship with customer loyalty. Findings showed that reliability has a significant positive relationship with customer loyalty.

The third hypothesis stated that responsiveness has no significant positive relationship with customer loyalty. The study revealed that responsiveness has a significant positive relationship with customer loyalty.

The fourth hypothesis stated that assurance has no significant positive relationship with customer loyalty. Findings indicated that assurance has a significant positive relationship with customer loyalty.

The fifth hypothesis stated that there is significant positive relationship between empathy and customer loyalty.

Conclusion

The study showed that the five service quality dimensions of the SERVQUAL model (tangibles, reliability, responsiveness, assurance and empathy) are important in determining the choice of telecommunication network.

It is clear from the study that telecommunication service providers who are interested in creating loyal customers, have to improve their level of service delivery along these dimensions.

Also, it is important to emphasize that service reliability, which has the weakest positive relationship with customer loyalty as revealed by the study, should attract the attention of service providers in order to enhance the loyalty of their customers.

Recommendations

Based on the findings, the following recommendations were made:

1. Telecommunication service providers should strive to improve the quality of service offered to their customers in order to enjoy the loyalty of their customers.
2. Mobile service providers need to improve on the reliability dimension of service quality by investing more funds into network maintenance and expansion so as to become more dependable.
3. The Nigerian government should include the service quality dimensions in their policy framework on the operation of the telecommunication industry.

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