

Brand Choice Influencing Factors and Customer Preference Level of Mobile Network Service Providers

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As customers switch from one network to another, researchers argue over the propelling factors behind their switching behaviour. Most people in other zones of the country believe that an average Igbo man does not joke with money, to the extent that other factors are considered inconsequential. With this in view, one begins to wonder if tariff is the major factor that an average subscriber in the south east zone considers to switch brands. This work, therefore, examined brand choice influencing factors and customer preference level of mobile network service providers, and adopted descriptive research design. Three hundred and ninety-one copies of questionnaire were administered on GSM users spread over the Southeastern parts of Nigeria to make possible the testing of three hypotheses formulated. Using SPSS, multiple regression was run to ascertain the effect of each of the independent variables: network quality, tariff level and complaint management on the dependent variable, customer brand preference level. Findings revealed that the three variables had significant relationships with customer brand preference. However, network quality made the highest contribution to Customer Preference Level, followed by tariff level and finally, complaint management, which made the least contribution. Since Network Quality made the greatest contribution to customer preference level, the researchers recommended that GSM service providers in Nigeria should creatively and innovatively apply the model developed by this work to enhance the quality of their service delivery.

Background of the Study

Communication is sharing of information between two or more persons. It was originally meant for commonness. Like oil that greases the wheel of life, it makes life meaningful. Communication takes different forms and formats, of which telecommunication is chief. Telecommunication is the science and practice of transmitting information by electromagnetic means (Britannica). According to Muhammad (2015), it is a communication at a distance by technological means, particularly through electrical means or electromagnetic waves. It is the science of conveying information in verbal, written, coded or pictorial form, through various devices like telephone, cable, telegraph, television, radio, among others. Telecommunication sector is one of the sectors of Nigerian economy that is currently witnessing a conspicuous progress today, hence will be suicidal if it is neglected. Therefore, the rapidly growing demand for telecommunication services in developing economies, like Nigeria, presents great opportunities for millions of Nigerian subscribers and network providers.

Some decades ago, telephones were obviously scarce in developing countries, like Nigeria, and where they were seen, the cost of telephone and its related services was so high that only privilege few could afford them. In corroboration, Bankole (2005) opined that telephones were either not available or not affordable before the liberalization of this sector in 2001. Bankole further observed that the liberalization of the telecommunication sector ushered in new operators and subscribers, aggressive competition, increasing discerning subscribers and dynamic vigilant and responsible regulatory body, NCC, making it possible for many Nigerians to easily acquire telephones, unlike in the past. Ibok and Edet (2013), opined that the growth witnessed in the sector spurred competition among the operators, thus giving users the privilege of comparing services of operators and deciding on the ones to patronize. The authors also opined that the frequency with which subscribers go for a network and leave it for other perceived better networks is quite worrisome, hence, the need to unveil what spurs, sustains and turns them off as they use GSM. As past studies revealed that most subscribers abandon current network when they are dissatisfied with the services of their service providers, (Sorenko et al., 2006 and Soderlund, 2011). It is obvious that most Nigerians, who know their rights are not willing to sacrifice their satisfaction, especially when options to quit a service provider and go for what appears better than what is currently in use is available and within reach. Could this switching behaviour of subscribers be caused by poor network of service providers? Could other variables be responsible for this? This work intends to delve into this discuss with a view to proffering lasting solutions that will ensure customer satisfaction and ultimately reduce customer brand switching behaviour to the barest minimum.

Statement of the Problem

An average consumer is an enigma, a conundrum, whose attitude in a market space is difficult to predict accurately. Consumers know what they want in terms of service quality and why they prefer a particular network to the other. To unveil the mysteries in the behavioural patterns of consumers with respect to their preferences for networks, Wole and Nwume (2006), suggested that factors that influence a buyer's preference

include brand image, buyer's capacity, seller's behaviour (for instance, complaint management), buyer's behaviour, demand, service quality, taste, and fashion. In the same vein, Islam et al. (2008) opined that economic, social and psychological factors are responsible for consumer preference for brands of services. Some researchers identified influencing factors that have the capability of strongly influencing demand and enhancing the preference level of any product (Wole and Nwume, 2006; Khan & Rehman, 2008; Kotler & Keller, 2009). Some of these factors are so lumped (economic, social, psychological) that the researchers thought it wise to extricate them and ultimately reduce the variables to make measurability easy and succinct.

Most people in other zones of the country believe that an average Igbo man does not joke with money, to the extent that other factors are considered inconsequential. With this in view, one begins to wonder if tariff is the major factor that an average subscriber in the south east zone considers to switch brands. This study attempted to close this gap in knowledge by evaluating this brand choice influencing factors vis-a-viz customer preference level of mobile network service providers to unveil the variable that needs to be propagated the most to reduce brand switching behaviour and ultimately ensure customer satisfaction, even at a profit. The work will project the factors that influence GSM users in the Southeast region, making it possible for operators to cash into these identified areas to build brand equity as they ensure customer satisfaction.

Objectives of the Study

The specific objectives of the study were to:

1. Determine the extent to which network quality affects customer preference level;
2. Examine the extent to which tariff level affects customer preference level;
3. Find out the extent to which complaint management affects customer preference level.

Research Questions

To achieve the objectives stated above, the following research questions were considered:

1. To what extent does network quality affect customer preference level?
2. To what extent does tariff level affect customer preference level?
3. To what extent does complaint management affect customer preference level?

Research Hypotheses

The following hypotheses were developed in this study:

- H₀1: Network quality has no significant effect on customer preference level.
H₀2: Tariff level has no significant effect on customer preference level.
H₀3: Complaint management has no significant effect on customer preference level,

Scope of the Study

The geographical scope of this study covers GSM service providers in Imo, Anambra and Ebonyi States in the South-East Zone of Nigeria. The work was restricted to the areas specified in order to ensure a realistic and effective coverage. For the theoretical scope, the

study focuses on telecommunication, which is part of services marketing, and which undoubtedly is a sub-field of marketing. There are many brands choice influencing factors, but this work limited the factors to network quality, tariff level and complaint management.

Review of Related Literature
Conceptual Review

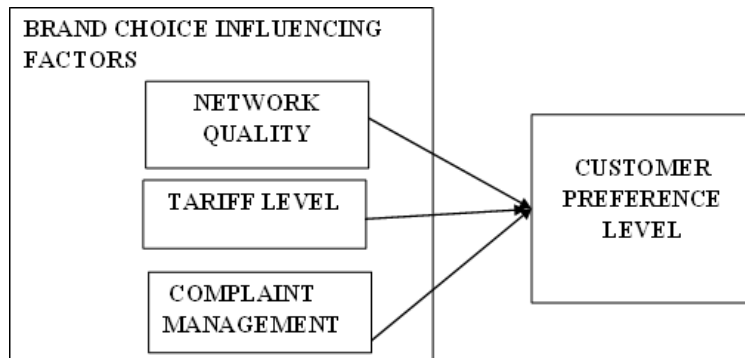


Fig 1: Brand Choice Influencing Factors and Customer Preference Level
Source: Researchers, 2022

The diagram above depicts the central theme of the research and the relationship that exists among the variables. In the framework above, brand choice influencing factors of customers with respect to mobile network service providers include these three independent variables: network quality, tariff level and complaint management. In the same vein, the dependent variable is customer preference level.

Concept of Network Quality

According to Miller (1993), American Society for Quality Control defined quality as the totality of features and characteristics of a product that bear on its ability to satisfy stated or implied needs. A service provider is said to have delivered a quality product whenever its service meets or exceeds the users' expectations. John F. Welch Jr., the CEO of General Electric in America in Wang and Lo (2012), averred that quality is the best assurance of customer allegiance; a strong defense against competition and the only part to sustain growth and earnings as well as customer loyalty and retention. It has been observed that high service quality, customer satisfaction and loyalty are ultimately connected. Zeithlaml (2000), opined that service quality, customer satisfaction and company profitability are ultimately connected. Yoo and Park (2010), affirmed that a firm's aptitude to generate and sustain competitive advantage depends on the elevated level of service quality provided by the service operators. In this work, service quality will be limited to network quality of GSM providers. For the purpose of this work, network quality is seen as the ability of a GSM operator to ensure clarity of calls, short downloading time, absence of background noise, absence of call jams, among others.

Concept of Price (Tariff)

Price is anything of value given by a buyer to a seller in exchange of a product. Price is the only marketing mix element that generates revenue, others incur costs. It is a widely acclaimed fact that customers in developing countries are price sensitive, as such, price appears to be a major determinant in their choice of brands. Price plays an important role in a competitive market among service providers, hence right price decisions has a high possibility of enhancing customer retention and reducing the rate of subscribers switching between and among service providers.

Concept of Complaint Management

Complaint management is the process of dissemination of information aimed at identifying and correcting various causes of customer dissatisfaction (Fornell and Westbrook, 1984). It clearly spells out strategies adopted by organizations to solve and learn from previous mistakes in order to restore customer confidence in organizational reliability (Hart et al, 1990). Its thrusts are to resolve customer grievances amicably, identify possible areas of improvements and ultimately deliver quality products that ensure customer satisfaction. How a customer complaint is resolved, to some extent, determines whether they will switch brand or not. To this end, it becomes imperative for customer complaints to be managed effectively, as one dissatisfied customer is capable of putting many to flight.

Customer Preference Level

This is conceived as the level at which a customer prefers a brand to other brands. This can be influenced by many factors as discussed earlier.

Theoretical Framework

This section discussed some theories considered relevant to this study. The theories are Attribution and Equity.

Attribution Theory

Attribution theory by Heider, F. was propounded to help consumers to determine how and when dissatisfaction occurs (Heider, 1958). It was designed to make people understand how individuals arrive at explanations or causes for their behavior. For instance, a consumer who subscribed to the services of a GSM operator and suddenly realized that it failed to satisfy their needs or expectations, having considered many factors, is likely to be dissatisfied. The question is, what do we attribute the dissatisfaction of this customer to? Could it be poor network, high tariff or how long the problem has lingered? This theory suggested three key factors that explain consumers' dissatisfaction. The first is if the dissatisfaction is permanent; second is if it is marketer oriented; and finally, if it is firm oriented (Anderson, 1973). For instance if a customer paid a GSM operator for data subscription, if after the activation, the system failed to connect for a short while, the consumer may not be dissatisfied because it was temporary, but if the subscriber, out of curiosity called others, only to find out that the problem was also faced by many others who out of experiences said that it had lingered, then the subscriber will

be dissatisfied with the services of the GSM operators. If such subscriber switched brands, then such behaviour can be attributed to this obvious dissatisfaction. Attribution gives firms guidance on how to deal with consumer complaints and dissatisfaction. If the courses of dissatisfaction are within the control of GSM operators, definitely something should be done to arrest the situation.

Equity Theory

This theory as posited by Stouffer is built upon the argument that a man's rewards in exchange with others should be relative to his investments. The theory advocates a balance between inputs made by consumers and outputs derived from the firm, dealer or salesperson. Nobody likes to be short-changed. Everybody wants fair and equitable service to match the resources spent on a product. For equity to take place, the consumer must perceive a fair dealing in the exchange transaction with the seller. Kim, Park and Jeong (2012), observed that fairness perceptions tend to be self-centered, that is biased more toward buyer outcomes and seller inputs than to buyer inputs and seller outcomes.

It is expected that GSM service providers imbibe the culture of fairness in their marketing activities with subscribers to ensure consumer satisfaction. For instance, when a customer recharges their phone, they do not expect the airtime to disappear when they have not used it. Subscribers expect that whatever amount of airtime they buy should last for the number of minutes it was designed to last. Anything short of this is perceived as unfair. There are cases where promos not subscribed to by customers or unsuccessful connection cart away the airtime bought by a subscriber. This is against equity as commensurate satisfaction is not met.

Empirical Review

Ibok and Edet (2013), examined customer's demand preference among mobile network providers. The study was a cross sectional survey restricted to cellular network service providers in Akwa Ibom State: AIRTEL, MTN, GLOBACOM, ETISALAT and VISAFONE. Pearson's product moment correlation analysis and regression were employed to test the hypothesis. The findings showed that network coverage was the strongest predictor of customer satisfaction.

Oyatoye, Adebisi and Amole (2013), in an empirical study on consumers preference for Mobile Telecommunication attributes in Nigeria, used convenient samples drawn from Yaba and Akoka environs in Lagos State, while ordinary least squares (OLS) was used. Mobile telecom was described in the conjoint analysis study as having five (5) attributes that users assessed in the survey: call quality, coverage, cost, customer service and SMS delivery. The result obtained showed that call quality, coverage, cost and customer service were very important attributes, while SMS delivery was not important. The findings confirmed that consumers mostly consider cost, at the expense of call quality.

Manser and Kofi (2012), examined the determinants of customer loyalty in GSM services in Ghana. They employed Pearson Correlation Coefficient for analysis. The result showed

that service quality, tariff and customer satisfaction had positive relationship with choice of mobile network service provider. Sales promotion showed an insignificant relationship with customer satisfaction, as it had a negative relationship with customer choice of mobile network service provider.

In another study carried out by Olatokun and Nwonne (2012), Determinants of Users' Choice of Mobile Service Providers in the Nigerian Telecommunication Market African, a cross sectional survey design was employed by users in Ibadan, Oyo state. The variables used in this study were tariff, service quality and availability, promotion and brand image. Bart Letts Test of Sphericity and Kaiser Mayer Olkin (KMO) were applied to test the validity of the constructs. The findings revealed that service quality, tariff and service availability were the determinants of users' choice of a mobile operator in the Nigeria Communication Industry, while promotion, brand image showed no significant impact on users' perception in selecting mobile network of service providers.

Bardoli (2012), also conducted an empirical study on Consumer Preferences for Mobile Service Providers in China Telecommunication sector. The researcher adopted an exploratory research design. Factor analysis in SPSS was used to analyze the following variables: tariff, connectivity, coverage, advertisement, brand image, clarity and corporate reputation to ascertain if these variables had a significant effective on consumer preference for mobile service providers. The results revealed that connectivity, coverage, clarity (service quality) and tariff had strong effect on consumer preferences for mobile service providers, while brand image, advertisement did not have significant impact on consumers' choice of mobile network providers.

Methodology

Descriptive research design was adopted in this study in order to determine the relationship between the independent variables (Network Quality, Tariff Level and Complaint Management) and the dependent variable (Customer Preference Level). The population of this study consisted of all the customers/subscribers of GSM operators. The sample was drawn from three senatorial zones of each of the three states under study. A structured, multiple-choice questionnaire was administered on 471 respondents randomly selected from the local governments of each of the three senatorial zones of Anambra, Imo and Ebonyi States to have a fair capture of subscribers. However, three hundred and ninety-one copies were successfully retrieved. The researchers considered it justified to draw sample/respondents from Anambra, Imo and Ebonyi States, for the following reasons: From Enugu State, Anambra State was carved out. Of the two states, Anambra State had a heavier patronage of GSM services because the citizens/inhabitants are engaged in commerce and industry unlike Enugu (parent state) which is a civil service state; hence the decision to draw sample from Anambra State. Old Imo State gave birth to Abia State. Although Abia State is industrializing at a rapid pace, for some years now, industrialization has declined. On the other hand, although Imo State is basically a civil service state, its tourism and hospitality industry is rapidly growing despite the spike in insecurity. Besides, Imo State is a gateway to several states in the South-East and South-

South zones of Nigeria. Therefore, the decision to draw sample from Imo State is justified. Ebonyi State was carved out of old Enugu State and Abia State, and lies at one end of South-East cluster, so it is justified to draw sample from Ebonyi State. The main research instrument for data collection was questionnaire. The Likert attitude measurement scale was used to design a structured multi-choice questionnaire. Multiple regression and correlation analysis techniques were used for the analysis with the aid of SPSS. The questionnaire of this study was tested for reliability by using the test-retest technique on a representative sample of 40 subscribers which helped to determine the level of consistency of the research instrument. The scores obtained by each of the respondents on the first administration of the questionnaires were correlated with the scores obtained on the second administration of the same questionnaire. The correlation coefficient obtained from the comparison of the different scores was above 70%. Therefore, the questionnaire was considered consistent. Use of test-retest technique to ascertain the reliability of the questionnaire is justified because the same respondents almost gave exactly the same responses after a time interval.

As stated above, the population of this study consisted of customers/subscribers of MTN, GLO, ETISALAT and AIRTEL. This population is large, unknown and infinite as it contains millions of subscribers. Because the population is infinite, Cochran (1977) formula was used to determine the appropriate sample size, hence

$$n = \frac{Z^2 pq}{e^2} = \frac{2.17^2(0.90)(0.10)}{0.05^2} = 470.89 \approx 471$$

Where;

$Z = 2.17$ is the 97% confidence level of the abscissa of the normal curve.

$p = 0.90$ is the estimated proportion of GSM users in the south east.

$q = 1 - p = 1 - 0.90 = 0.10$

$e = 0.03$ is error margin.

This is in line with the recommendation of Sekaran and Bougie (2013), that when a population is very large or unknown, a sample size of 400 or more is large enough to give valid and accurate results. Therefore, the sample size of 471 selected for this study is large enough to ensure the validity and generalizability of the findings of the study. However, out of the four hundred and seventy-one copies of questionnaire administered on the respondents, three hundred and ninety-one (391) copies were retrieved, giving a retrieval success rate of eighty-three per cent (83%).

Data Analysis and Interpretation

Correlation analysis

Table 1 below presents the correlation matrix (associated p-values in bracket) generated by SPSS regression analysis of field data.

Table 1: Correlation matrix of Customer Brand Choice Influencing Factors and Customer Preference Level (n = 391) with associated p-values in bracket

	CPL	NQ	TL	CM
CPL	1.000	0.595 (0.000)	0.530 (0.000)	0.102 (0.045)
NQ	0.595 (0.000)	1.000	0.565 (0.000)	0.120 (0.018)
TL	0.530 (0.000)	0.565 (0.000)	1.000	0.076 (0.134)
CM	0.102 (0.045)	0.120 (0.018)	0.076 (0.134)	1.000

Source: Multiple Regression Analysis of Field Survey Data 2022

The correlation matrix above displays the degree of association (r) between “Consumer Preference Level” and the three independent variables of the study namely: Network Quality, Tariff Level and Complaint Management. The t-values tested the correlation between the dependent and each of the independent variables. In Table 2, the degree of correlation between Network quality and Customer Preference Level is 0.595 with a p-value of 0.000 which indicates a significant correlation between Network quality and Customer Preference Level as its p-value is less than 0.05; the degree of correlation between Tariff Level and Customer Preference Level is 0.530 with a p-value of 0.000 which indicates a significant correlation between Tariff Level and Customer Preference Level as its p-value is less than 0.05; the degree of correlation between Complaint Management and Customer Preference Level is 0.102 with a p-value of 0.045 which indicates a significant correlation between Complaint Management and Customer Preference Level as its p-value is less than 0.05.

Table 3: Result of Multiple Regression Analysis of Y on X₁ to X₃.

Variable	Coefficient	Standard Error	Test statistic	p-value
Constant	17.762	1.218	14.587	0.000
X ₁ (NQ)	0.459	0.057	8.110	0.000
X ₂ (TL)	0.366	0.062	5.904	0.000
X ₃ (CM)	0.030	0.041	0.741	0.459

Intercept = **17.762**; Multiple Correlation Coefficient (R) = 0.640; Coefficient of Determination (R²) = 0.410

Source: Multiple regression analysis of field survey data

The study fitted a multiple regression model from the data analysis as follows:

$$CPL = 17.762 + 0.459(NQ) + 0.366(TL) + 0.030(CM)$$

When the values of the independent variables X₁ to X₃ are known, the Customer Preference Level can easily be estimated. The coefficients in the fitted model (Equation 1) indicate the marginal effect of each of the independent variables on Customer Preference

Level, when all the other independent variables are held constant. The coefficient, therefore, represents an increase in Y when one independent variable is increased by one unit, while holding the other independent variables constant. For example, the coefficient of X_1 (NQ) is $b_1 = 0.459$, which means that the Customer Preference Level is increased by 0.459 (45.9%), when "Network Quality" (X_1) is increased by one unit. Similarly, the coefficient of X_2 (TL) is $b_1 = 0.366$ means that the Customer Preference Level is increased by 0.366 (36.6%), when "Tariff level" (X_2) is increased by one unit. Finally, the coefficient of X_3 (CM) is $b_1 = 0.030$ and this also means that the Customer Preference Level is increased by 0.030 (30%), when Complaint Management (X_3) is increased by one unit.

Hypotheses tests with Pearson Correlation

This study developed the following hypotheses for testing:

Ho1: Network quality has no significant effect on customer preference level.

It was found that the p-value of 0.000 for Network Quality generated by regression analysis is less than the significance level of 0.05. Therefore, the null hypothesis was rejected and it was concluded that 'Network Quality' of GSM service providers is statistically significant in determining Customer Preference Level (CPL) of GSM providers.

Ho2: Tariff Level has no significant effect on Customer Preference Level.

It was found that the p-value of 0.000 for Tariff Level generated by regression analysis was less than the significance level of 0.05. Therefore, the null hypothesis was rejected and it was concluded that 'Tariff Level' of GSM service providers is statistically significant in determining the value of "Customer Preference Level" (CPL) of GSM service providers.

Ho3: Complaint Management has no significant effect on Customer Preference Level.

It was found that the p-value of 0.045 for Complaint Management generated by regression analysis was less than the significance level of 0.05. Therefore, the null hypothesis was rejected and it was concluded that Complaint Management of GSM service providers is statistically significant in determining the value of Customer Preference Level (CPL) of GSM service providers.

Summary of Findings

- i. There is a significant relationship between customer preference level and network quality.
- ii. There is a significant relationship between customer preference level and tariff level.
- iii. There is a significant relationship between customer preference level and customer complaint.
- iv. The study generated a multiple regression model as follows:

$$CPL = 17.762 + 0.459(NQ) + 0.366(TL) + 0.030(CM)$$

Network Quality made the highest contribution to Customer Preference Level (45.9%), followed by Tariff Level (36.6%) and finally, complaint management (3%) that made the least contribution,

- i. Customer Preference Level of GSM service providers is established at about 85.5%. The above average customer preference level resulted from the combined impact of Network Quality, Tariff Level and Complaint Management of GSM service providers. A customer preference level of 85.5% leaves a customer preference level gap of 14.5% that requires to be bridged by GSM service providers to attain 100% performance excellence. Other variables, not considered by this work may have culminated into this gap.
- ii. The concern of customers is mainly service excellence in terms of network quality (Clarity of reception, avoidance of call jam, avoidance of background echoes, rapid connections, avoidance of distortions and so forth, when subscribers are making calls), tariff level (Cost of calls, data and text messages that are reasonable and give value for money spent; avoidance of fraudulently making deductions from subscribers airtime for services not rendered; sending unsolicited calls and text messages) and Complaint Management (Prompt, polite and satisfactory resolution of subscribers' complaints and queries). These findings empirically confirmed the studies cited in the literature review (Ibok and Edet (2013; Menser and Kofi, 2013; Olatokun and Nwonne, 2012; and Oyatoye et al., 2013).

Conclusion

Based on the findings of this study, the researchers concluded that network quality and tariff level are major predictors of customer's preference for mobile network service providers. This finding empirically confirmed the works of Olatokun and Nwonne, (2012) and Bardoli (2012).

Recommendations

Based on the findings of this work, the following recommendations were made:

1. GSM service providers in Nigeria should creatively and innovatively apply the model developed by this work to enhance the quality of their service delivery.
2. Since Network Quality made the greatest contribution to Customer Preference Level, creative strategies should be adopted to optimize the value of this element. Strategies to be adopted should include:
 - (a) Deploying modern technology and processes to ensure that voices are clearly heard and without distortions or echoes when subscribers make calls.
 - (b) Regular servicing, maintenance of communication facilities and equipment.
 - © Ensuring availability of well-trained and motivated GSM service staff, smartly-turned-out, well-tutored in organization philosophy, culture, customer interaction and equipment/facilities use and safety consciousness.

3. GSM service providers should, as a matter of urgency lower their tariffs and make them relatively affordable to an average Nigerian, like it is done in developed countries.
4. GSM service providers should design, implement and manage creative strategies to neutralize the negative impact of any internal or external constraints that inhibit customer preference level and marketing performance. These constraints include:
 - i. Intense competition in the GSM industry
 - ii. Insecurity of lives and property in the polity
 - iii. Inadequate business and GSM infrastructure
 - iv. Insufficient and unattractive government policy in telecommunications
 - v. High cost of capital for GSM service development
 - vi. Difficulty in accessing GSM investment capital
 - vii. High taxation on the GSM service industry
 - viii. Difficulty in assessing GSM working capital
 - ix. High cost of land for GSM service development
 - x. Inadequate technological back-up for GSM operations. Concerted efforts ought to be made by the government for the upgrade of infrastructural facilities and creation of more conducive business environment.

Contributions to Knowledge

The study could be seen as having made the following contributions to knowledge:

1. Formulation of a predictive model which is a decision-making support framework that enhances the management and performance of GSM service business in Nigeria and indeed in Imo, Anambra and Ebonyi States. The predictive model is fitted as follows:

$$CPL = 17.762 + 0.459(NQ) + 0.366(TL) + 0.030(CM)$$

2. The three independent variables (Network Quality (NQ), Tariff Level (TL) and Complaint Management (CM) in the new forecasting model as indicated in (1), best predict the value of "Customer Preference Level (CPL)" of GSM service providers in Nigeria.
3. There is a customer preference level gap of 14.5% that requires to be bridged by GSM service providers to attain 100% performance excellence.

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APPENDIX 1

SN	STATEMENT	SD	D	N	A	SA
X₁ = NETWORK QUALITY (NQ)						
1	Reception is clear and voices are properly heard when making calls					
2	There are no jamming voices when making calls					
3	Background echoes are heard when making calls					
4	There are rapid connections when making calls					
5	There are unsolicited text messages					
X₂ = TARIFF LEVEL (TL)						
1	Cost of calls and text messages are reasonable					
2	Cost of calls and text messages are not competitive					
3	Value is obtained for money spent on calls and text messages					
4	Deductions are made from customers' airtime for calls not made					
5	Deductions from customers' airtime for calls not made are refunded					
X₃ = COMPLAINT MANAGEMENT (CM)						
1	Customer complaints are handled promptly by GSM providers					
2	Efforts are not made to satisfactorily handle customer complaints					
3	Customers are treated politely at corporate office and call centers					
4	Staff of GSM providers are slow in attending to customers in queue					
5	Staff of GSM providers are well-trained and well-motivated					

Mark an (X) at the point that represents your opinion on these factors that build customer preference.

SN	STATEMENT	SD	D	N	A	SA
Y = CUSTOMER PREFERENCE LEVEL (CPL)						
1	GSM users stick to a network if reception is clear and voices are properly heard when making calls.					
2	Call jam when can make GSM users to switch brands.					
3	High cost of calls and text messages make GSM users to switch brands.					
4	Prompt and satisfactory handling of customer complaints can make GSM users not to switch brands.					
5	Polite treatment of customers at corporate offices & call centres make GSM users not to switch brands.					

APPENDIX 2
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	17.762	1.218		14.587	.000
NQ	.459	.057	.442	8.110	.000
TL	.366	.062	.289	5.904	.000
CM	.030	.041	.029	.741	.459