Evaluation of Factors Affecting Choice of Service Providers among Mobile Phone Users in South East Nigeria

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Abstract

Background: The telecommunication industry has continued to witness competition among service providers. Understanding factors that influence customer choice of mobile networks is crucial for marketing decisions.

Objective: This study examined factors affecting user's choice of mobile networks in South East Nigeria. The study adopted a descriptive survey anchored on the customer utility model. Using a multi-stage sampling technique, the study population was drawn from three selected states in South East Nigeria. From the states selected, a sample size of 550 respondents was drawn. Data was collected and analysed using standard deviation and chi-squared.

Result: The findings indicated that the call rate of mobile networks, service availability, quality of service and promotional strategies determine the user's choice of a mobile network. Additional results showed that the quality of service is the most contributing factor compared to the other factors.

Conclusion: Telecommunication network providers should pay close attention to mobile network call rates, service availability, quality of service, and promotional strategies in their marketing approaches.

Unique contribution: This study has provided empirical evidence that could guide telecommunication operators in influencing the choice of network of telecommunication users.

Key recommendation: Telecommunication network providers should consider mobile network call rates, service availability, quality of service, and promotional strategies in their marketing decision-making.

Keywords: Customer; Choice; Factors; Mobile Phone; Service; Nigeria

Introduction

Mobile phone technology is an important device in contemporary society. It is an essential companion of many people, and it influences different aspects of human beings. Researchers (Ajiboye et al., 2007; Abatan & Maharaj, 2016; Chhachhar et al., 2016; Sahota et al., 2014) agree that mobile phone technology is crucial to individuals in the current society. Mobile phone technology as a device is hardly useful, except it has a Subscriber Identification Module (SIM). It is through the SIM card that users are able to communicate with others. The SIM has a special number that is allocated to the users. Through such numbers, users can exchange contacts and establish communication. Each mobile phone has a space for at least one SIM card.   Unlike in the past, when each mobile phone had only one SIM card (Subscriber Identification Module), mobile phones now have as many as three slots for SIM cards (Aricat et al., 2015; Campbell & Kwak, 2011). Also, the sizes of SIM cards have changed, leading to the emergence of three sizes of SIM cards: Standard SIM (15 x 25mm), Micro SIM (12 x 15mm), and Nano SIM (8.8 x 12.3mm). SIM cards are part of the services that telecommunication service providers provide. On the other hand, telecommunication service providers are companies that specialise in offering services that are related to mobile phone technology. Such companies do not necessarily manufacture mobile phones but render services that assist in working the mobile phones. These range from calling, texting, and mobile data, among others. These companies also have different tariff plans with varying qualities of signal. In Nigeria, there are leading telecommunication network service providers competing for customers' attention. They are MTN Nigeria, Global Com, 9mobile and Airtel. These telecommunication service providers are battling to outsmart each other by capturing a higher market share. They all promise subscribers quality services and good tariff plans. There is intense competition among telecommunication service providers (Afako et al., 2019).

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Telecom subscribers desire to have reliable services. They want their call services to be strong, constant and dependable. Customers feel unease when for example, their mobile phones are switched on but intending callers cannot reach them. Or when they receive a telephone call, but their voices or those of their callers or both are unclear, or they cannot hear each other. Customers may also not be happy that their texting services are unreliable enough, so they cannot receive or send text messages. They typically desire to send and receive text messages unhindered.

The same thing applies to data services. Issues like slow Internet connectivity or lack thereof, even when customers have active data plans, could be annoying. These may constitute part of the consideration for customers when analysing telecom service providers. Therefore, this study assesses the influence of mobile telecommunication services quality and tariff plans on users' preference of network service providers in South-East Nigeria.

Users' choice of mobile network is one of the fundamental determinant factors in a mobile network provider's sustainability. Therefore, knowing the user's choice of a mobile network and the factors that influence the user's choice is necessary for mobile network providers to succeed. A good product/service must satisfy users' needs, catch their purchasing choices, and enhance their purchasing desires. It is expected that before a mobile network starts to design and manufacture products/services, it cannot ignore factors influencing user choices to ensure maximum patronage (Okoro & Gever, 2018; Kim et al., 2004; Shamsudin, 2020).

Theoretical framework and hypothesis development

This study used the consumer utility theory. Merwe, Berthon, Pitt, and Barnes (2007) assert that consumers augment the anticipated utility of individual benefits into preferences by structuring decisions. According to this theory, consumers always make rational choices and try to maximise the utility of procuring a good, which comes from many factors like the value associated with the good, lower price, personal preference, etc.

This theory is relevant to this study because it focuses on mobile networks providing a positive user experience in order to drive profit and gain a competitive advantage. This is because users are overwhelmed with a vast array of choices in today's mobile network market, especially now they are exposed to many network products and services, and they have to make quick decisions based on the ones that have values and satisfy their communication needs. Mobile network users are generally constrained by both time and money, and for mobile network operators to succeed in influencing consumers' choices, they need to offer valuable services like providing reasonable call rates, service availability, service quality, brand image and promotional strategies that would instil in the user's confidence in the products and services they offer. Based on the above theory, the following hypotheses were postulated:

H_1. Call rates, service availability, service quality and promotional strategies will significantly predict mobile phone users' choice of mobile network.

Methodology

Research Design: This study used a descriptive survey research design to sample the opinions, feelings, views, etc., of network users in South East Nigeria.

Population of the Study: This study's population consisted of mobile network users in South East Nigeria. The Nigerian Communications Commission (NCC), in conjunction with the National Bureau of Statistics (NBS), indicated that the active mobile network lines in South East as of September 2023 were 21,690,427.

Sample Size: The sample size for this study was 523. The Australian Calculator was used to calculate the sample size, as the population was large (21,690,427). The Australian Calculator, as provided by the National Statistical Service (NNS), was employed. A confidence level of 95 per

cent, a precision level of 0.05(%), and an estimate of variance (proportion) of 5% were used (NSS, 2012).

Sampling Technique: In this study, the multi-stage sampling technique was used. This requires the use of several sampling techniques or stages in a particular method, especially when the population is large and complex to ensure true presentation.

Stage 1 (Cluster Sampling Technique)

The cluster sampling technique was used. South East was subdivided into five (5) existing states: Abia, Anambra, Ebonyi, Enugu, and Imo. These states were regarded as clusters.

Stage 2 (Random Sampling Technique)

The random sampling technique was used to select three states that represented the zone. The three (3) states (Abia, Anambra and Imo) were equally represented in the sample. The choice of these states was as a result of the concentration of mobile phone subscribers in the locality.

Stage 3 (Systematic Sampling Technique)

The systematic sampling technique was used in this stage to select local government areas from the selected states. Every sixth (6th) element present in the list below was included in the sample. Therefore, three (3) local governments that fall within the fourth (6th) element on the list in the selected states were included in the sample.

Stage 4 (Convenience Sampling Technique)

The convenience sampling technique was used to select wards from the selected local government areas that were convenient to the researcher. Due to financial implications, time constraints, and other contingencies, only wards that are easily accessible were selected to represent the selected local government.

Stage 5 (Purposive Sampling Technique)

The purposive sampling technique was used to select villages and streets where the availability and network signals of these mobile networks are high and stable. One village or street was selected in each of the wards, so a village or street was used to represent each ward.

Stage 6 (Accidental Sampling Technique)

This stage used the accidental sampling technique to select households within the selected villages/streets. Only available households were included in the sample.

Table 1: Selected villages and households

Selected Villages/streets	Number of Households within the selected villages/streets	Selected households available
Umuala – Umuala Nsulu Central School	88	59
Nkpukpu Ebula 11	78	59
Ndikpa Village	96	65

Umuonwara	66	58
Ogwugwuekwe	82	57
Lagos Street I	74	59
Umunze	101	62
Umueze	115	70
Umuala	132	61
Total= 9	832	550

Stage 7 (Purposive Sampling)

The sample included only individuals within the selected households who are aware and knowledgeable about the existence of these network providers and have used any of these networks.

Instrument for Data Collection: The questionnaire was used to generate quantitative data. It was designed in very simple English for the respondents to understand easily. It contained only close-ended questions that sought information on factors affecting users' choice of mobile network in South-East Nigeria. The questionnaire was used because of its ability to generate data in large quantities (Gever, 2024; Monday & Gever, 2024). The questionnaire was face-validated by three research scholars. First, they tested whether the questions in the questionnaire were related to the topic under consideration and whether they provided answers to the questions raised in the study. It was also tested for clarity and accuracy. The test-retest technique was used to check the reliability of the study instrument. Twenty (20) respondents from Enugu state in Nsukka Local Government were asked to field in responses to the questionnaire in the first week. The same procedure was repeated after two (2) weeks to determine whether the responses aligned with the required result expected from the instrument. The Pearson r coefficient was used, which gave a reliability index of 0.85, showing a high degree of consistency. Pearson's r correlational coefficient statistical procedure was used to test for the reliability of the research instruments. This formula was used because it allows for the calculation of the questionnaire's reliability for two weeks.

Method of Data Analysis: The data collected was presented quantitatively using simple frequency tables, percentages, and numbers. The tables were used to show the relationship between the various responses fielded for the options at the respondents' disposal. The researchers used multiple regression to test the hypotheses in the study.

Results and Discussion

The study's results showed that among the 550 copies of the questionnaire that were administered, 526 copies were returned and found useful. The gender distribution of the participants showed that 55% were female and 45% were male. This means that the difference between both genders was not significant.

Table 2: Regression analysis of the predictive power of call rates, service availability, service quality and promotional strategies on choice of mobile network

	Constant	β value	R square	F. value	P. value
Call rates	2.201	.381	.381	52.522	.001
Service availability		.158			.001
Service quality		.410			.001
Promotional strategies		.245			0.003

In Table 2, the researchers examined the predictive role of call rates, service availability, service quality and promotional strategies on consumer choice of mobile network. The overall analysis showed that our model contributes 38.1% in explaining the observation of consumer choice of mobile network, R^2=.381, p=0.001, $F(3,411)$ 52.522. Based on this result, the hypothesis was supported. Comparatively, service quality was a higher predictive factor than all the other factors. This study has extended that of Okoro and Gever (2018), who examined gender differences in mobile phone use but did not examine the factors determining the mobile phone network's choice. The study has also offered fresh information beyond that of Mahmud et al. (2014), who examined the impact of promotional strategies in mobile phone marketing but offered limited information on the contributing role of service quality, service availability and call rates.

Conclusion and recommendations

User choice is one of the major determinant factors in the survival of any business, including mobile communication. The liberalisation and deregulation of Nigeria's telecommunication industry have given mobile network users the power to choose networks that satisfy their communication needs. Mobile networks are adopting different approaches to make their products and services users' choice in the market. The study sought to examine factors affecting user's choice of mobile networks in South East Nigeria. The customer utility theory model was used in the study to show how consumers always make rational choices, and they always try to maximise the utility of mobile networks that comes from many factors like value associated with call rate, service availability, service quality, brand image and promotional strategies. Therefore, mobile networks must consider factors affecting users' choices of utmost importance. The study found that call rate, service availability, service quality, and promotional strategies increase user choice. The study established that a strong positive relationship existed between users' choice, service availability, brand image, service quality and promotional strategies of mobile networks.

Recommendations

Based on the findings of the study, the following recommendations were made:

i.   Mobile networks should consider factors like call rate, service availability, service quality, and promotional strategies when marketing their products and services.

ii.   Service quality is one of the determinant factors in users' choice of mobile network. Therefore, companies, especially service delivery ones, should prioritise their service quality to retain their users now that services are similar and the level of competition is high.

iii.   Mobile networks should ensure the availability of their services. Service fluctuation should be discouraged at all times to retain users.

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