Influence of Socio-Demographic Variables on Users' Choice of Mobile Service Providers in Nigerian Telecommunication Market

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Abstract— **The study examined the influence of mobile network providers' attributes on users demography in their choice process within the Nigerian telecommunication environment. The study was a sample survey of mobile phone users. Data was collected with a self structured questionnaire from 367 users using convenience sampling technique and was analyzed using inferential statistical approach. The result revealed that while mobile users between ages 19-24 (p=0.021) and ages 25-30 (p=0.028) were influenced by price, ages 25-30 (p=0.015) proved additionally sensitive to service quality. The occupation category showed that student (p=0.031) mobile users were significantly influenced by promotional offers. Mobile users whose income were below N20,000 (p=0.042) and between N51,000-N100,000 (p= 0.09) and whose expenditure on mobile services were amid N2,001-N3,000 (p=0.03) and N4,001-N5000 (p=0.03) were both influenced by operators brand image. Yet, religion (Christian, p=0.035 , Islam, p=0.41) did not differ in its overall significance to price dynamics of the mobile operators. However, none of the providers attributes significantly influenced users based on their gender, neither did service availability influence any of the categories of users demography. The study recommends that telecommunication regulatory body in Nigeria could establish policy guidelines that would specifically address the observed dimensions in this study to further enhance mobile phone users satisfaction.**

Keywords: mobile service provider, service quality, service availability, price, promotion, brand image, demography.

I. INTRODUCTION

The Nigerian telecommunication sector has experienced unprecedented growth especially between 2001 and 2007 following the deregulation of that sector by the then civilian democratic government in 1999. Since then, Nigeria has pursued an aggressive market liberalization policy that has made her perhaps the most liberalized telecommunication market in Africa. The deregulation brought about the issuance of the first set of GSM licenses in 2001 by the Nigeria communication commission (NCC) [1]. At present, there are five active Global System for Mobile Communication (GSM) operators: MTN, Airtel, Global Communication Limited (Glo), Mobile Telecommunications Limited (Mtel) and most recently Etisalat, and multitude of Code Division Multiple Access (CDMA) operators. The top mobile GSM operators; MTN, Glo and Airtel, account for over 85% of mobile subscriptions in the country [2]. The Nigeria telecommunication market has been described as one of the world's fastest growing market, making it the most preferred investment destination for mobile network operators [3]. The telecommunication market has attracted more than $18 billion dollars in investment as at 2009 [2], the second largest after the oil and gas sector and is still growing both in terms of subscribers' base and infrastructural development [1]. The nation's teledensity currently exceeds 50%, with about 74 million subscriber lines as of the end of December 2009.Access to modern telecom services is now within reach of more than 90% of the people who live within Nigeria [2]. Users of mobile products and services are highly differentiated in terms of demography thereby increasing sensitivity across the offerings of mobile operators. Since subscribers base determine the network effects accrued to a mobile telecom operator, huge subscribers base amount to high network effect with a resultant margin on profitability. To this end, taking cognizance of users demography in response to mobile network operators attributes could lead to differentiated market segments capable of enriching mobile users experience. Communication research has long identified the importance of demographic factors in technology utilization. Age, gender, education, occupation, income, were found to be antecedents in new media adoption [4]. Clements and Abramowitz found age to be a factor of media technology adoption [5]. Through a household-level analysis, the authors [5] found income, age, educational attainment to influence adoption of broadband service. Likewise, Birke and Swann observed that the choice of mobile phone operators is strongly coordinated within households where gender differences in the use of telecommunication product exist [6]. Operator choice then could be regarded as one single product choice and not as separate, but coordinated decisions [7]. The authors [7] stated that one of the difficulties when analyzing

network effects looking at households is that unobserved household level characteristics might be the reason for choosing the same operator. Various studies [8], [9] have reported a positive relationship between education and media technology adoption. Wareham and Levy report that education is a steady indicator of wireless phone diffusion because achieving higher education has a positive association with being comfortable with higher technology use [8]. Scott as well reports that educated people used phone more, have a strong intention to use phone in future, and have a more positive attitude towards phones [9]. Also, income of users have proved to be a key index in technology adoption. Ahn and Lee, in their study of the determinants of demand for mobile telephone networks, found that the probability of subscribing to the telephone networks was positively correlated with income [10]. Similarly, Madden et al., while investigating the economic factors influencing the growth of mobile phone services, concluded that higher income and a large user base tend to promote mobile diffusion [11]. Also in a separate empirical study, Andonova found income to be a major contributing variable to mobile diffusion [12]. Emphasizing the significance of demographic factors on users choice of telecom operators, Karaçuka's [13] study on consumer choice and local network effects in mobile telecommunications in Turkey with respect to individual demographic variables showed that being male rather than female has a positive impact on choice of mobile operator, while being married has a negative impact. For choice of some telecom operators, age and educational level were observed to have negative effects, whereas other telecom operators are preferred among young mobile phone users who use voice services more often than others. While the effect of individual income levels was not significant for choice of network, some operators were found to be less preferable when mobile expenditures increase. However, the influence of religion in users choice process is scare in literature and portends a need for researchers to examine its role in selecting a service provider [13]. In relation to mobile operators attributes, an analysis of consumer choice behavior towards mobile phone operators in Bangladesh showed that mobile users give utmost value to mobile phone operators brand Image, price, customer service in that order, when making a purchase decision [14]. Furthermore, Khan and Afsheen [15] on determinants of customer satisfaction in telecom industry in Pakistan, found customer satisfaction to be highly influenced by customer service, price fairness, sales promotion, coverage, signal strength and promotion. User satisfaction is very important in today's business world. The ability of a service provider to create high degree of satisfaction is crucial for product differentiation and developing strong relationship with the user [16]. It is therefore necessary for a telecommunication service provider to concentrate on the improvement of service quality and charge appropriate fair price in order to satisfy its users which will ultimately help the service provider to retain its users [17]. In today's market, the mobile technology has been extremely competitive and service providers are moving aggressively to attract versatile users by offering some meaningful attractive promotions and services [18]. The image of a service provider is also a consideration to subscribers and in Lambert 's opinion, brand plays an important role in user's selection of service provider even when the call rate offered by that provider is high [17]. Hennig-Thurau and Klee, observed that satisfaction of customers with products and services of a company is considered the most important factor leading toward competitiveness and success [20]. It becomes imperative for network providers to ensure service availability to meet the demands of mobile users. Evaluating the perception of a mobile users in a highly competitive telecommunication market is very crucial. However, not much is known about the determinants of satisfaction of mobile users in relation to their demographic attributes in their choice of mobile network operators in the Nigerian telecommunication market. This study which is a follow up of [21], examines the influence of call rate (price), service quality, service availability, promotion, and brand image on mobile phone users choice of mobile network provider based on their demographic characteristics.

II. RESEARCH OBJECTIVES

1) To examine the influence of age of mobile phone users on choice of attributes of mobile operators.
2) To examine the influence of gender of mobile phone users on choice of attributes of mobile operators.
3) To examine the influence of religion of mobile phone users on choice of attributes of mobile operators.
4) To examine the influence of occupation of mobile phone users on choice of attributes of mobile operators.
5) To examine the influence of income of mobile phone users on choice of attributes of mobile operators.
6) To examine the influence of expenditure on mobile services of mobile phone users on choice of attributes of mobile operators.

III. RESEARCH HYPOTHESES

$H0_1$: There is no significant relationship between age of mobile phone users and choice of attributes of mobile operators.

$H0_2$: There is no significant relationship between gender of mobile phone users and choice of attributes of mobile operators.

$H0_3$: There is no significant relationship between religion of mobile phone users and choice of attributes of mobile operators.

$H0_4$: There is no significant relationship between occupation of mobile phone users and choice of attributes of mobile operators.

$H0_5$: There is no significant relationship between income of mobile phone users and choice of attributes of mobile operators.

$H0_6$: There is no significant relationship between expenditure on mobile services of mobile phone users and choice of attributes of mobile operators.

IV. PREVIOUS STUDIES

In a previous study, Birke and Swann, showed that choice of mobile phone operators is strongly coordinated within households and that this effect is far stronger than the effect of overall network size [6]. Research carried out in the past also revealed the significance of demographic factors such as sex, age, and psychographic factor like self-esteem with mobile phone use. In addition, studies [10], [11] have empirically supported the importance of national economic health in stimulating the demand for mobile services. Ahn and Lee, in their study of the determinants of demand for mobile telephone networks, found that the probability of subscribing to the telephone networks was positively correlated with income [10]. Madden et al., concluded that higher income and a large user base tend to promote mobile diffusion [11]. Communication research has long identified the importance of demographic factors as antecedents in new media adoption [4]. Furthermore, studies have reported a positive relationship between education and new media technology adoption [22], [23]. Wareham and Levy reported that education is a steady indicator of wireless phone diffusion because achieving higher education has a positive association with being comfortable with higher technology use [8]. In a household-level analysis, [5] found income, age, educational attainment and the presence of children to influence adoption of broadband service in the United States.

A study by [24] found that satisfaction of customers can help the brands to build long and profitable relationships with their customers. Turel and Serenko, however, observed that it is a common phenomenon that the services a brand offers and the price it charges actually determine the level of satisfaction among its customers, than any other measure [25]. Matej and Nevenka, noted that the number of subscribers and market share of a service operator are significant contributors to users' selection of such a service provider [26]. In a study carried out by Wang and Lo on comprehensive integrated framework for service quality, customer value, and customer satisfaction and behavioral intentions of customers in China's mobile phone sector, they observed that competition between two mobile phone service providers is more intense than ever which is not only in ensuring network quality by a large amount of investment in network extension and upgrading but also in customer acquisition and retention by direct and indirect price reduction efforts [27]. Price plays a vital role in the telecommunication market especially for the mobile telecommunication service providers [28]. Leisen and Vance states that service quality helps to create the necessary competitive advantage by being an effective differentiating factor [29]. As a result, service quality can be used as a competitive advantage which is related to customers' satisfaction and also leads to consumer loyalty and future purchase [30]. In particular, consumers prefer service quality when the price and other cost elements are held constant [31]. Omotayo and Joachim attempted to find the relationship between customers' services on customer retention in telecommunication industry in Nigeria. They found strong relationship between customer service, satisfaction and retention in the communication industry in Nigeria [32]. The quality of a product is also related to the availability of the product's main functional features on one hand and the consumer's experience-in-use of the other auxiliary features on the other [33]. A product's main functional features are the sources of the primary benefits that the consumers expect to obtain when purchasing it. In general, consumers' evaluations of a product's overall quality are related to the availability of these features in comparison with the competition [34]. Deng et al., observed that the ability of a service provider to create high degree of satisfaction is crucial for product differentiation and developing strong relationship with customers [16]. Besides the quality of service offered by various brands to attract subscribers, promotion remains a powerful tool in gaining new customers. Promotion is concerned with ensuring that consumers are aware about the company and the products it makes available to consumers [35]. Promotion goes beyond mere communication of product awareness but involves inducing the consumer to make a purchase. [36] stated that promotion is when companies inform, persuade, or remind customers and the general public of its products. Each of the promotion techniques is intended to have a direct impact on buying behavior and perception about the company or service providers. The impressions consumers have of a company extend well beyond the product or service the firm provides. Brand image is a mental image that reflects the way a brand is perceived, including all the identifying elements, the product or company personality, and the emotions and associations evoked in the consumer's mind. A good brand image can increase brand loyalty [37]. Physically attaching a brand-name to a product costs little, so the brand's capacity to command higher prices translates into substantial profit opportunities. Hence, a particular brand's capacity to command higher prices is like a capital asset whose magnitude varies over time and that deserves to be managed carefully [38].

V. METHODOLOGY

A cross sectional survey design was adopted to identify the determinants of choice of mobile service providers based on users' demographic characteristics in Ibadan – a Nigerian municipality. The population for this study cut across diverse groups, professions, institutions and age encompassing students' in educational institutions, market women, artisans, workers in private and public institutions, businessmen, traders and customers at market places. A non-probabilistic sampling technique; convenience sampling was used to select 367 respondents from the study population. A structured questionnaire was used to collect the required primary data

from the mobile phone users. Questions on the constructs; service quality, price, product availability and promotion were adapted from [15], while those on brand image were from [35]. The survey was conducted through face-to-face contact with mobile phone users. In all, 600 questionnaires were distributed, to cover a cross section of mobile phone users. At the end, 367 (61.2%) copies of the questionnaire were retrieved and considered fit for analysis.

VI. RESULTS

A. Demographic Characteristics of the Respondents

The demographic characteristics of the respondents reveal that males accounted for (37.6%) while (60.2%) were females. The largest proportion were within the age group of 25-30 years. Most of the respondents have tertiary education (89.1%). Those with secondary education accounted for (5.7%). Only (1.4%) of the respondents had primary education. Majority were Christians (81.7%), Islam accounted for (16.1%). In the occupation category, public sector accounted for the largest number of respondents (40.9%), whereas private sector accounted for (18.8%). Student respondents accounted for (34.3%). The respondents whose monthly income are less than N20,000 topped the chart in that category (39.2%) as against only (4.9%) of those that earn more than N200,000 monthly. Those whose income fall between the range of N21,000 to N50,000 and N51,000 to N100,000 were (29.7%) and (11.7%) respectively. Only (8.2%) earn between N101,000 and N200,000. In the monthly expenditure on mobile services category, about (50%) spend less than N2,000 monthly on mobile services. Those that spend between N2,000 and N5,000 were about (34%) when compared to (10.6%) that spend more than N5,000 on mobile services monthly.

Table I: Demographic Characteristics of the Respondents

Variables	Measurement	Percentage
Age	< 18yrs	3.8
	19-24yrs	16.1
	25-30yrs	32.2
	31-36yrs	21.3
	>36yrs	25.3
Gender	Male	37.6
	Female	60.2
Level of Study	Tertiary	89.1
	Secondary	5.7
	Primary	1.4
	None	1.1
Occupation	Public Sector	40.9
	Private Sector	18.8
	Student	34.3
	Trader	1.9
	Unemployed	1.6
Religion	Christianity	81.7
	Islam	16.1
	Others	0.8
Monthly Income	Below N20,000*	39.2
	N 21,000 - N 50,000	29.7
	N51,000 - N 100,000	11.7
	N101,000 - N 200,000	8.2
	Above N 200,000	4.9
Monthly Expenditure	Below N 1,000	20.4
	N 1,001 - N 2,000	30.2
	N2,001 - N3,000	16.6
	N 3001 - N4,000	9.8
	N4,001 - N5,000	7.9
	Above N 50,000	10.6

**N165 is equivalent to $1*

B. Descriptive Analysis of Components Extraction and Factor loadings

Table 1 presents the descriptive summary of variables extracted using factor analysis that explains users perception in selecting a mobile service provider with their factor loadings and the corresponding mean and standard deviation. From the table, call rate does not have an impact on my choice of a network operator has the highest mean score (1.75) compared to other factors within the group. Call rate does not have an impact on my choice of a network provider has the greatest deviation from the mean with a standard deviation of 0.453. In the service quality section, quality of service is just one of the reasons why I chose my service provider has the highest mean score (1.87) with a standard deviation of (0.336), while my network service provider is very assuring has the least mean (1.74) and the highest standard deviation (0.438). I chose my network provider strictly because of the quality of service it offers has mean (1.79) and standard deviation of (0.408). In the service availability section, I chose my network provider because its network coverage is available within the area I call and product outlet of my service provider is hardly reachable, both has the least mean score (1.60) and the highest deviation from the mean (0.490), while product service availability is as important to me as service quality, has the highest mean (1.74) and a (0.442) deviation from the mean score.

TABLE II. COMPONENTS EXTRACTED WITH MEAN, STANDARD DEVIATION AND FACTOR LOADINGS

Users' Perception on Service Providers Attributes	Mean	Std. Dev.	Factors
Call Rate			
Call rate was the only factor I considered when I choose my NSP.	1.48	0.500	0.725
Call rate does not have an impact on my choice of a NSP.	1.29	0.453	0.426
Call rate was one of the factors I considered when I chose my NSP.	1.75	0.435	0.598
Service Quality			
Quality of service is one of the reasons why I chose my NSP.	1.87	0.336	0.771
I chose my NSP strictly because of the quality of service it offers.	1.79	0.408	0.802
My NSP is very assuring.	1.74	0.438	0.938
Service Availability			
Product/service outlet availability is as important to me as service quality.	1.74	0.442	0.827
Product / service outlet availability is one of the factors I considered when choosing a NSP.	1.70	0.458	0.700
I chose my NSP because its network coverage is available within the area I call.	1.60	0.490	0.747
Product outlet of my NSP is hardly reachable.	1.60	0.490	0.844
Promotion			
I bought the SIM card of my NSP not minding the call rate.	1.13	0.339	0.898
Attractive promotional offer made me to chose my NSP	1.37	0.483	-0.898
Brand Image			

Brand image made me to choose my NSP	1.38	0.486	0.629
I am hooked to my NSP because of the brand image.	1.31	0.461	-0.678
Popular brand image is an indication of good service quality.	1.34	0.475	0839

Table 1.Components extraction with mean, std. dev. and factor loadings Source: [18]

In the Promotion section, two variables were extracted, I bought the SIM card of my service provider not minding the call rate has the least mean score (1.38) and the least deviation from the mean (0.339), while attractive promotional offer made me to chose my service provider has a mean score of (1.37) with standard deviation of (0.483). The Brand Image section has three factors extracted. I am hooked to my service provider because of the brand image has the least mean score (1.31) and standard deviation of (0.461). Brand image made me to choose my network service provider, has the highest mean score (1.38) and deviation from the mean (0.486). Popular brand image is an indication of good service quality has a mean (1.34) with a deviation from the mean (0.475).

C. Test of Hypotheses

$H0_1$: There is no significant relationship between age of mobile phone users and choice of attributes of mobile operators.

The result shows that age groups 19-24 and 25-30 are significantly influenced by price in their choice of mobile operators. Also age group 25-30 are significantly influenced by service quality of the mobile operators. At $p<0.05$, the null hypothesis was rejected for these groups.

$H0_2$: There is no significant relationship between gender of mobile phone users and choice of attributes of mobile operators.

The result shows non-significant relationship between gender and all other attributes of the mobile operator, $p>0.05$. The null is therefore not rejected.

$H0_3$: There is no significant relationship between religion of mobile phone users and choice of attributes of mobile operators.

In the religion category, the result shows both Christian and Islam were significantly influenced by 'price' in their choice process, $p<0.05$, hence the null hypothesis is rejected.

$H0_4$: There is no significant relationship between occupation of mobile phone users and choice of attributes of mobile operators.

The result shows that promotion significantly influenced students choice process, $p<0.05$. Therefore, the null hypothesis is rejected.

$H0_5$: There is no significant relationship between income of mobile phone users and choice of attributes of mobile operators.

Under the income category, the result shows that brand image significantly predicts choice of mobile users earning below N20,000, and those earning between N51,000 and N100,000 For these two categories, $p<0.05$, the null hypothesis is rejected.

$H0_6$: There is no significant relationship between expenditure on mobile services of mobile phone users and choice of attributes of mobile operators.

The result shows that brand image influence the choice of mobile users who spend between N2,001-N3,000 and those that spend N4,001-N5,000, $p<0.05$, on mobile services. The null hypothesis is rejected for these groups. (See Tables III).

TABLE III. SUMMARY OF SIGNIFICANT VALUES BETWEEN USERS' DEMOGRAPHY AND NETWORK OPERATORS ATTRIBUTES.

Demography of Mobile Users	*Price*	*Service Quality*	*Service Available*	*Brand Image*	*Promo*
Age					
18 or less	*0.826*	*0.410*	*0.628*	*0.390*	*0.898*
19-24	*0.021**	*0.904*	*0.646*	*0.241*	*0.556*
25-30	*0.028**	*0.015**	*0.678*	*0.656*	*0.887*
31-36	*0.666*	*0.217*	*0.123*	*0.446*	*0.829*
Gender					
Male	*0.329*	*0.648*	*0.090*	*0.797*	*0.783*
Female	*0.564*	*0.632*	*0.153*	*0.834*	*0.540*
Religion					
Christianity	*0.035**	*0.070*	*0.982*	*0.884*	*0.174*
Islam	*0.041**	*0.093*	*0.765*	*0.906*	*0.181*
Occupation					
Pub. Sector	*0.155*	*0.676*	*0.960*	*.0569*	*0.134*
Priv. Sector	*0.412*	*0.412*	*0.734*	*0.477*	*0.057*
Student	*0.504*	*0.707*	*0.887*	*0.458*	*0.031**
Trader	*0.426*	*0.781*	*0.358*	*0.268*	*0.059*
Mon. Inc.					
Below 20K	*0.660*	*0.357*	*0.438*	*0.042**	*0.122*
*N21-50K**	*0.643*	*0.503*	*0.976*	*0.322*	*0.076*
N51-100K	*0.596*	*0.497*	*0.689*	*0.009**	*0.193*
N100-200K	*0.093*	*0.135*	*0.704*	*0.950*	*0.991*
Mon. Exp.					
Below N1K	*0.083*	*0.897*	*0.843*	*0.104*	*0.206*
N1,001-2K	*0.507*	*0.550*	*0.905*	*0.214*	*0.161*
N2,001-3K	*0.318*	*0.085*	*0.381*	*0.003**	*0.107*
N3,001-4K	*0.320*	*0.440*	*0.373*	*0.122*	*0.346*
N4,000-5K	*0.813*	*0.107*	*0.713*	*0.003**	*0.783*

*Summary of significant values *Sig. at p=0.05 *K= '000(thousand)*

VII. DISCUSSION

The special significance of the price for the decision to purchase is as undisputed in the telecommunications sector as it is elsewhere, which correlates to establish, yet the universal effect of price on purchase decisions. This is predominantly true in the mobile telecommunication sector as available studies [18], using the Malaysian experience and [39] in Pakistan. Both studies revealed a high correlation between price fairness and customer satisfaction. Despite its universal effect on purchase decisions, the Nigerian experience might be due to the add-on effect of third world syndrome were poverty and unemployment have its toll on the populace. Hence, any price variation could instantaneously influence a choice process. The significance of age in association to price attribute should not be surprising. Although price has a wholesome effect on purchase behavior, its impact on the younger people clearly depicts the high sensitivity of pricing on this group.

Younger people, invariably are more price sensitive than older people. But the same cannot be said for service quality that affect only age bracket 25-30. This shows the additional sensitivity of these group to price effect. Furthermore both Christians and Islam were influenced by price attribute, which further strengthens the universal and non-distinguishing nature of pricing on users purchase behavior. Furthermore, it is a common phenomenon that the services a brand offers and the price it charges actually determine the level of satisfaction among its customers, than any other measure [25]. The impact of service quality in predicting the users choice is further proved in this study as it is in [40] on measurement of service quality at cellular retail outlets in the South African environment and in [18]. In line with the importance of service quality, [17] suggested that firms should concentrate on the improvement of service quality and charge appropriate fair price in order to satisfy and retain their customers. More also, users are increasingly becoming mobile and as such would prefer mobility in terms of products and services. In this regard, [34] and [41] observed that consumers' evaluations of a product's overall quality are related to the availability of these features in comparison with the competition. Service availability could either be in network terms or in a customer experience where access to service centers is within reach. In any case, any effort engaged by the players in this direction, would contribute significantly in influencing the users decision process. However, this study showed that service availability did not influence any of the characteristics of mobile users. On the other hand, promotion proved to be a strong tool in students' decision process compared to other occupational categories. This finding is not unexpected, as younger people have the laxity to be exposed to promotional activities and offers, either by direct observation or through media exposure, and are more susceptible to its attractions than the much older professionals in their work places. Therefore, the huge amount spent on advertisement and promotional activities by the mobile telecommunication operators in Nigeria to drive profit vertically and remain competitive is justified by this study and compares to [18], where promotion was equally found to influence purchase decisions. Generally, promotion has an impact on consumer's perception since it is used to communicate with the consumers with respect to product offerings. Promotion also possesses a significant key role in determining profitability and market success as well as a tool that can help manufacturers and retailers in the achievement of their objectives. Likewise, brand image has more impact on those whose earnings are below N20,000 and between N51,000-N100,000. For the former category, the implication could be highly correlated with the former case of promotion versus student, since a good number of low earners are students. For the latter category, the brand effect could be more of egoism due to their relative high earning, attributable to popular brand addiction than mere colossal judgment based on observation of events. In line with this dimension, [26] posits that the network operator with the highest subscribers holds the greatest value for a customer. This indicates that subscribers indirectly pays for this brand effects, though silently, since good brand and quality are often synonymous. . Also the significance of brand image on those whose monthly expenditure ranges between N2,001-N5,000 could easily be understood, since every purchase decision is likely due to a brand influence.

VIII. CONCLUSIONS, IMPLICATIONS AND FUTURE STUDIES

This study examined the factors that played significant role in the users choice process based on their demographic attributes. Empirical evidence on the various attributes examined, revealed that categories in age, religion, occupation, monthly income and expenditure on mobile services were found to be influenced by price, service quality, promotion and brand image. However, none of the attributes of mobile operators influenced gender. More also service availability was not found to influence any of the characteristics of the mobile user.

The findings could help mobile service operators in their operation and strategic plan of marketing and also provide them with indicators to focus marketing campaign. It could also reinforce the position of NCC, the telecommunication regulatory body in Nigeria in its commitment toward ensuring optimum user satisfaction, through policy guidelines that would address specifically the observed dimensions in this study. On the other hand, the network operators should reduce their expenditure on all-purpose promotional activities and brand building, but rather engage more on stratified promotion and brand building strategies to elicit specific group attention and capture the different interest in other categories of the demographic elements. Since price directly influence the lower age bracket, specific price reduction strategies should be implemented to address the price-sensitivity of this group. In addition, NCC could by way of policy assume the control and management of base stations from the network operators such that all mobile network operators would make use of same base stations but operate on different frequencies and pay rental fees to NCC or her designated agent. This would eliminate the high cost of building and maintaining base stations by the various operators and consequently reduce operational cost. Furthermore, mobile operators should as well invest on network extensions, quality service delivery and product and services outlets infrastructures to continually improve on service quality and availability.

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