

An Evaluation of Mobile Number Portability on Consumer Satisfaction in Two Local Development Council Areas of Lagos State

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Abstract

This study examined GSM Network portability on Consumer Behavior. Although the growing trend of the demand of GSM telephone lines in Nigeria is quite impressive and commendable, the number of complaints that trail the operation of GSM in Nigeria has continued to be on a steady increase. This made the federal government to introduce the portability policy. But the question of whether the government portability policy to protect consumer right in the industry has affected consumers' satisfaction continued to persist. Cross sectional survey research design method was adopted for this study. Two hundred and eighty (280) questionnaires administered to residents of Ojo and Amuwo Council Development Areas was used for the study. The respondents were selected using convenience sampling technique. The questionnaire for this study was validated using face and content validity. Regression and correlation analyses were used to test the stated hypotheses. The findings revealed that there is a significant relationship between consumer's satisfaction and the number of network used by the consumers and that there is no difference in variation of the portability policy by Nigerian Communications Commission (NCC). It was also discovered that there is no significant correlation between government portability policy framework and consumers right protection. Based on this findings, it was concluded that mobile number portability in Nigeria could have fueled healthy competition among telecoms service providers in the county, but the acceptance of the policy by consumers is still very low

as a result of years of delay for its adoption which has made the consumers create an alternative. It was therefore recommended that NCC should review the processes involved in mobile number portability to make it consumer friendly and accessible for better acceptability.

Key words: GSM Network, Mobile Number Portability, Policy, Nigerian Communications Commission.

Introduction

Due to the general outcry by the Nigerian populace from the 80s' through the early 90s about the poor quality of service offered by NITEL, the nation's telephone service provider, the Federal military Government of Nigeria in 1992 established the Nigerian Communications Commission (NCC) by decree 75 to regulate the activities of telecommunications services in the country. The need for the establishment of the commission was to open up the telecommunications sector to attract local and foreign private investors.

The take off of GSM in Nigeria, in 2001 ease the burden the telecom consumers had suffered from the once powerful, but virtually insignificant, NITEL. The mobile phone has helped to improve telecommunications accessibility and also helped to improve the number of line available from less than five hundred thousand (500,000) telephone lines before 2001 to more than one hundred and thirty five million (135,000,000) active lines today (Osugwu, 2015)

The GSM industry has grown in Nigeria since its introduction in 2001. According to the NCC figures, at the end of January 2013, Nigeria had 154 million connected lines, out of which 114 million were active. That made Nigeria's tele-density to rise from the 80.85 per cent it stood at by the end of December 2012 to 81.78 per cent at the end of January 2013. Tele-density is the percentage of connected lines in relation to the population in a given period of time, and its growth is proportional to the growth in telephone subscriber base. Between December 2012 and January 2013 (one month), 1.3 million phone lines were added. Between January 2012 and January 2013 (one year), 18.3 million lines were added to the subscriber base of phone users in Nigeria, which was a 19.1 per cent rise (Onwuka, 2013).

This had made researchers, to believe that this sector will continue to experience tremendous growth with multiplier effects in all other sectors of the economy, including the banking, education, e-commerce/retailing, agriculture, medicine, media, oil and gas, among other sectors for some years.

Despite this remarkable result, the service quality of GSM began to experience major decline. Some of the complaints that subscribers have are increased dropped

calls, slower Internet connections and phone calls being routed to wrong number. The problem of perennial low quality of service in the sector apparently puts a clog in the wheel of progress and perhaps slowed down the pace of growth that would have made the country greater. Oketola (2012) is of the opinion that, though, the arrival of the GSM into Nigeria was a welcome development by all and sundry as it was long awaited. However, the number of complaints that trail the operation of GSM in Nigeria has continued to be on a steady increase.

The view of different researchers differs slightly on consumption, consumer behaviour, and consumer decision-making process especially considering their different background. To economists, consumption is used to produce utility; for sociologists, it is a means of stratification; for anthropologists - a matter of ritual and symbol; for psychologists - the means to satisfy or express physiological and emotional needs; and for business, it is a way of making money" (Fine, 1997). As noted by Kotler and Keller (2012) consumer buying behaviour is studied as a part of marketing and with the objective of learning how individuals, groups or organizations make choices, buy, use and dispose the goods at the same time examine how factors such as their previous experience, taste, price and branding effect these consumers purchasing decisions. Babaita, (2010) identified that Nigeria network customers switch service providers due to core service failures and unfavourable service encounters with the company's personnel or customer service. This complaint has steadily increased in recent time (2014-15) as a result of the steady decrease in the rate at which consumers get proper response to complain through the networks operators customer service lines. This has also caused a steady increase in the queue length at the various networks customers' service centers, thus leading to consumer frustration and the inability of several consumers to lodge their complaint.

But it should be noted that, dissatisfied customers that are unwilling to lodge complain should be a source of concern to management, because; One, the ability to restore the customer's satisfaction level becomes difficult; two, the possible damages on the firm's reputation and goodwill as a result of the possible negative word-of mouth to friends, family or other people external to each customer's social circle. This might result in the loss of customers.

Thirdly, the firm would be denied of valuable information about its products and services that is likely to improve the bottom-line performance and to prevent similar problems in the near future. In a bid protect consumer right and to deepen competition and force mobile phone operators to provide better service to their customers, the Nigerian Communications Commission, NCC, launched the Nigerian Mobile Number portability service to guarantee freedom for telecoms subscribers (Bassey, 2013) .

The growing trend of the demand of GSM telephone lines in Nigeria is quite impressive and commendable. A study by (Amusa, 2005; Ojo, 2005; Olatokun and Bodunwa, 2006) identified the factors affecting consumer behavior, constraints and users' satisfaction in the GSM industry. In spite of these studies, there is still dearth in knowledge on the impact of telecommunication Network on consumer behavior of the major networks in Nigeria. This is because their studies failed to explain why consumers prefer using more than one network at any point in time, and how the government portability policy to protect consumer right in the industry has affected consumers' satisfaction etc.

Thus, this study tends to focus on the subscribers' complaints, behavior of the subscribers to responses of the network operators and examine the portability policy structures in response to consumers' behavior and complaints.

The main objective of the research study is to examine the impact of GSM Network portability on Consumer Behavior while the specific objectives are;

- I. To examine if there is relationship between consumers' satisfaction and number of network used by GSM consumers
- II. To determine if the portability policy on GSM in Nigeria has been effective in solving consumers' complaints
- III. To investigate if the government policy framework on portability has significant effect on consumers' right protection.

The importance of this research is that it identified the gap created by the introduction of government policy framework on portability to improve consumers' right protection and problems facing GSM networks consumers in the Nigeria business environment. The study will thus create awareness to consumers, NCC, economic planners, telecommunication and network providers, on the implications of network failure, subscribers' behaviour in selecting a mobile telecommunication service provider when complain are not adequately treated and how government policy framework on portability is affecting the development of Nigeria telecommunication industry.

Conclusively, it will also help researchers on issues and addition that could aid further research on policy developed by various authorities and how their performance improved the various networks in Nigeria in providing excellent services to consumers. The scope of this study is limited to the variables identified in the objectives (such as consumers' satisfaction, number of network used by each GSM consumers, portability policy on GSM, consumers' complaints etc; the two Local Development Council Areas (Ojo and

Amuwo LCDA) and three of the major network providers namely MTN, Glo and Airtel.

Literature Review: Conceptual Framework

Researchers from different fields of academics have examined extensively the concept of customer satisfaction especially in the past four decades. In order to have a better view of the concept, an examination of the two words satisfaction and customer will be examined.

Satisfaction is a summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feelings about the consumption experience (Oliver 1981 as cited by Emerah, Oyedele & David, 2013). In free dictionary (Farlex extracted, 2015), satisfaction is the fulfillment or gratification of a desire, need, or appetite derived from a product or service. In businessdictionary.com satisfaction is seen as Consumer level of approval when comparing a product's perceived performance with his or her expectations. Satisfaction is also viewed as the consumer's fulfillment response. It is a judgment that a product or service feature, or the product of service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under- or over-fulfillment (Oliver, 1997, cited by Willard, 2000).

It should be noted that, each of this concept of satisfaction focused on the end user (consumers) and not the purchaser (customer) of the product/service who may and may not be the end user. This is because customer who does not use the product/service cannot compare with good level of accuracy the performance of the product/service with the desired expectations. Thus this study focused on consumer satisfaction and not customers' satisfaction.

Willard (2000) opinion that satisfaction has to do with the consumers feelings that resides in the users mind (which is subjective and could change even in the short term) and thus could have a threshold at both the lower level (under fulfillment) and upper level (over fulfillment). This means that a consumer's satisfaction may decrease if she/he is over fulfillment. Many managers place more emphasis on the lower threshold and neglect the potential for an upper threshold. This study will examine both thresholds. With the above concept of satisfaction in mind, the study can then focus on the concept of consumer satisfaction as follows;

Consumer satisfaction is a measure of end users expectation on output (products and services) supplied by an organisation, or the degree to which it meets or surpasses the end users' imagination of the output. It is defined as "the number of end users' or percentage of total end users, whose reported experience with a firm, its output (ratings) exceeds specified satisfaction goals (Farris, Neil Phillip, & David, 2010). This is a little bit in contrast with what customer satisfaction is. For example, Customer satisfaction in the opinion of Boone and Kurtz (2004 as cited from Emerah, Oyedele &

David, 2013) is the extent to which customers are satisfied with their purchased goods and services. And that satisfaction can be better noticed by a user, thus the need for this study to focus on consumer satisfaction. The study view Consumer satisfaction as measure of quality of an organisation output. This is collaborated in Businessdictionary.com, which opinion that it is the degree of satisfaction provided by the goods or services of a company as measured by the number of repeat end users. The effect of consumer' satisfaction ratings to firms can make a lot of difference in determining how competitive the firms can be. This is because it is seen by some researchers as key performance indicator, a Balanced Scorecard, a key differentiator and increasingly has become a key element of business strategy within business environment. This can be observed in how firms' emphasis to their employees to focus on the importance of fulfilling consumer' expectations (Farris, Neil Phillip, & David, 2010). Thus the essence of the first hypothesis: there is no relationship between consumers' satisfaction and number of network used by GSM consumers.

In Merriam Webster (extracted, 2015), the word portability means the transferability of a state of an event from one source to another without necessarily changing the major characteristic of the event. Telephone number portability is a system policy that enables end users to keeping their telephone number while switching from one service provider to another within that system (Ofcom, 2012). This policy enables Mobile telephone users to retain their mobile telephone number, when changing from one service provider to another irrespective of the consumer reason(s) for the switching. Before the advent of the portability policy, dissatisfied mobile number consumer either has the option to accept the service provider level of quality or switch to another service provider that he wishes by dropping his identity and the mobile number. The later become a very difficult decision to accept in that the mobile number is used for all business and family correspondence. To overcome these state of dissatisfaction, the concept of MNP (Mobile Number Portability) was introduced (blogadmin, 2010). Thus this study examined if government portability policy on GSM in Nigeria has been effective in solving consumers' complaints.

Number Portability in Nigeria

The mobile number portability (MNP) policy came into effect in Nigeria on April 22, 2013. Since then mobile line consumers can move from one network account to another without losing their numbers. To Onwuka (2013) there was not much excitement from Nigerians, in spite of the fact that the introduction of the MNP was meant to give them more freedom. This is because it came too late in the day as the agitation for the MNP began over seven years before the policy came into effect. Secondly, the bulk stops on the table of the Nigerian Communications Commission.

which foot-dragged on the issue all this while, only to allow it to come into effect at a time most Nigerians had embraced other alternatives. Thirdly, the condition for porting is inconvenient for most Nigerians. According to the NCC, before porting can take place, the subscriber must meet certain conditions: his/her mobile phone number must be registered; the subscriber wishing to change from one operator to another is expected to terminate service with his/her existing service provider before initiating porting with the new service provider; the subscriber must visit a customer care office, retail shop or outlet of his/her chosen new service provider and meet with the authorised sales person to request to port his/her number; the subscriber must present a proof of identity such as identity card, passport or driving license or an officially-validated photographic identity document; once porting has taken place, a subscriber must use the network for 90 days before being eligible to port again (Onwuka, 2013). These explained the other two hypotheses:

Hypothesis 2: Portability policy on GSM in Nigeria has not been effective in solving consumers' complaints

Hypothesis 3: Government policy framework on portability has no significant effect on consumers' right protection

Research Methods

Cross sectional survey research design method was adopted for this study. The reasons for adopting this research design lies on the fact that it will cover wider and diverse range of telecommunication subscribers in examining the impact of telecommunication networks on consumers' behavior. However, this research design was juxtapose with objectives of the study, research questions and hypotheses. The population cut across diverse groups and professions; the students' of the higher educational institution within the chosen local government area (Lagos State University, LASU) , businessmen, customers and market women from Ojo local council market, workers in banks within Lagos State University (LASU) premises, and civil servants in Ojo and Amuwo LCDA. These areas were being selected because of convenient for the researcher to elicit information and interview respondents.

The sample is representative of the population to ensure a higher level of confidence. As the populations of subscribers to the three networks of this study are quite large in number, the cost of studying the whole population would be prohibitive. Therefore A non-probabilistic sampling technique; convenience sampling will be used to select 300 respondents from the study population. This method was considered appropriate because it ensures that all relevant groups were represented in the sample. It also allows the reduction of the sample size so as to reduce sampling errors which could occur when repeated samples of the same size are drawn from the same population.

The research study made use of structured questionnaire which is the main instrument administered for (primary data) used in this study with purposive interview of the respondents. Therefore the research instrument covered demographic data (personal data), Socio-Economic Data (SES) and the technical data (research questions).

The distribution of the 300 questionnaires is as shown in table 1 below

| RESPONDENTS | DISTRIBUTIONS |
|--|---------------|
| Students in LASU | 100 |
| Respondents within Ojo Council Market | 80 |
| Bank workers in LASU | 60 |
| Civil servants in Ojo and Amuwo Local Government | 60 |

The demographic and the socio-economic data consists of questions based on the personal characteristics of the respondents with socio-economic status which include gender, age, educational qualification, income, marital status, years of using mobile phone with amount of network switch etc. while the technical data however, consisted of questions based on the research questions and research hypotheses. These would be further divided into three (3) sections with five (5) Likert scales (i.e. strongly Agree = 5, Agree = 4, Not Certain = 3, Disagree = 2 and Strongly Disagree = 1). Five Likert scales were adopted for easy analysis. The structural reason of using Likert scale is that it was easy for the researcher to code the opinions of the respondents while using appropriate statistical analysis. Hence, the sentimental response (s) of picking more than one question or being bias was not allowed because it shows total indifference on the part of the respondents.

Section B of the research instrument contained questions related to GSM telecommunication networks on consumers' behaviour with imbedding variables such as; consumers' satisfaction, GSM portability with consumers' complaints, customers' care responses, government policy on telecommunication effectiveness etc. Section C focused on open-ended questions requesting provision of relevant information that are perceived to be important to telecommunication network improvement from consumers' perceptions. Thus; the questions posed to the respondents through the questionnaire are formed in its simplest, concise and precise manner for easy understanding. For validity test, the draft of the self-constructed questionnaire was given to some experts that are knowledgeable on the subject-matter to confirm the face and content validity of the test items compared with the hypotheses.

The researcher practically carry out a pre-test activity by selecting small portion of the target sample and later carry out a re-test on the same target population, comparing the results of the pre-test and re-test, conducted under the same condition. Specifically, a total of thirty (30) copies of questionnaires were distributed among the respondents of

the study area. This is followed by the distribution of the main three hundred (300) copies of the questionnaire among the respondents using sampling techniques as stated earlier.

Practically, the reliability test was conducted using Crobach Alpha method through the use of statistical software (SPSS). Pearson Product Moment Correlation was thereafter applied for reliability.

The method of data analysis employed in this work is simple percentage and frequency analysis for the demographic and the social economic status of the respondents section of the research instrument (Section "A"). This section was also represented with descriptive statistics. The section "B" of the research instrument was analyzed using correlation analysis and specifically multiple regression analysis. However, this was done through Statistical Package for Social Science (SPSS)/Predictive Analysis Software, this is considered to be appropriate and less time consuming.

Data Presentation, Analysis and Interpretation

Table 2: Bio-Data

| Questionnaire Distribution | | Frequency | Percent | Cumulative Percent |
|---------------------------------------|---------------------|-----------|---------|--------------------|
| Valid | Returned | 280 | 93.3 | 93.3 |
| | Not Returned | 10 | 3.3 | 96.7 |
| | Filled with Errors | 10 | 3.3 | 100.0 |
| | Total | 300 | 100.0 | |
| Educational Qualification | | Frequency | Percent | Cumulative Percent |
| valid | WASC/GCE O/L | 36 | 12.9 | 12.9 |
| | Undergraduate | 132 | 47.1 | 60.0 |
| | B.Sc/B.Ed/HND | 86 | 30.7 | 90.7 |
| | M.Sc/M.Ed/M.A | 18 | 6.4 | 97.1 |
| | Others | 08 | 2.9 | 100.0 |
| | Total | 280 | 100.0 | |
| Number of network used by respondents | | Frequency | Percent | Cumulative Percent |
| | MTN Only | 5.0 | 1.9 | 1.9 |
| | Airtel Only | 4.0 | 1.4 | 3.3 |
| | Glo Only | 6.0 | 2.1 | 5.4 |
| | MTN and Glo only | 84.0 | 30.0 | 35.4 |
| | MTN & Airtel only | 93.0 | 33.2 | 68.6 |
| | Airtel & Glo | 53.0 | 18.9 | 87.5 |
| | MTN, Glo and Airtel | 35.0 | 12.5 | 100.0 |
| | Total | 280.0 | 100.0 | |

Table 2 shows the bio-data of the respondents in term of Questionnaire Distribution, Educational Qualification and Number of network used by respondents. It shows that, out of the 300 respondents, that were given the questionnaires, 290 completed and returned theirs. However, it was observed that out of the 290 questionnaire returned ten were filled with errors. Hence only 280 questionnaires were used for the research analysis. Table 2 also represents the frequency of the respondents' educational structure. The information depicted shows that most of the respondents were undergraduates of the institution within the study area (Lagos State University) because they were easily accessible. And finally, table 2 also shows that, 1.9% of the respondents were subscriber of MTN network only, 1.4% were Airtel subscribers only, 2.1% were Glo users only. Also 30% of the respondents use both MTN and Glo, 33.2% uses MTN and Airtel only, 18.9% uses Airtel and Glo, while 12.5% uses MTN, Glo and Airtel.

Analysis of the Research Questions

Hypothesis 1: There is no relationship between consumers' satisfaction and number of network used by GSM consumers.

Correlations

| | | Consumer's Satisfaction | Numbers of Network Used by Consumers |
|--------------------------------------|---------------------|-------------------------|--------------------------------------|
| Consumer's Satisfaction | Pearson Correlation | 1 | .979** |
| | Sig. (2-tailed) | | .000 |
| | N | 280 | 280 |
| Numbers of Network Used by Consumers | Pearson Correlation | .979** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 280 | 280 |

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

Interpretation of the result Based on Hypothesis One

The correlation table above tends to examine the relationship between consumer's satisfaction and numbers of Network used by consumers. Based on the correlation results, consumer's satisfaction influence the network preference and number of Network used by consumers. ($r = 0.979$ with p-value of 0.00 significant at 5% level of significance) the correlations among these variables is very strong and significantly affect one another. This depict that there is significant relationship between consumer's satisfaction and the Number of Network used by the consumers. Thus we reject the null hypothesis that there is no significant correlation between consumer satisfactions and numbers of network used by the consumer thus the research accept otherwise.

Hypothesis 2: Portability policy on GSM in Nigeria has not effectively solved consumers' complaints.

ANOVA^b

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|----|-------------|-------|-------------------|
| 1 Regression | 644.069 | 1 | 644.069 | 1.856 | .266 ^a |
| Residual | 1041.131 | 3 | 347.044 | | |
| Total | 1685.200 | 4 | | | |

a. Predictors: (Constant), Portability policy

b. Dependent Variable: consumers complaints

Hypothesis 3: Government policy framework on portability has no significant effect on consumers' right protection

Correlations

| | | Government Policy Framework | Consumers Right Protection |
|-----------------------------|---------------------|-----------------------------|----------------------------|
| Government Policy Framework | Pearson Correlation | 1 | .442 |
| | Sig. (2-tailed) | | .550 |
| | N | 280 | 280 |
| Consumers Right Protection | Pearson Correlation | .442 | 1 |
| | Sig. (2-tailed) | .550 | |
| | N | 280 | 280 |

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

Interpretation of the result based on Hypothesis Three

The correlation table above shows that there is a moderate positive relationship between government policy framework and consumers right protection ($r = 0.442$). Although the magnitude of the relationship is moderate, it is not statistically significant enough to accept the alternative hypothesis ($p\text{-value} = 0.55$), hence the study accepts the null hypothesis.

Discussion of Research Findings and Implication

According to the result from the hypotheses tested, though the mobile number portability came into effect April 22, 2013 with the aim that Nigerian mobile telephone users can now move from one network to another without losing their numbers, there was not much excitement from Nigerians. In spite of the fact that the introduction of the MNP was meant to give them more freedom, most mobile phone users did not

show enough interest in MNP due to the fact that the service can in late, condition for portability been tasking and the fact that consumers had already embraced other alternatives i.e. the use of multiple network account. Most of the respondent the researcher personally interviewed believed that, the use of multiple accounts is not just about convenience but improve their ego (psychological class) as it allowed them to display more one "classic" phone.

When consumers are not fully satisfied about the service quality, it brings about complaint among the subscribers. But the consumer believed that the use of multiple accounts is a better solution to portability in a system like Nigeria where there is no network with consistent quality service delivery. Thus there is significant correlation between consumer satisfactions and numbers of network used by the consumer. The research also found out that mobile number portability has not effectively solved consumers' complaints. The consumers complain as identified earlier has reduce with the use of multiple account even before the advent or adoption of the MNP policy. Hence MNP policy on GSM in Nigeria has not effectively solved consumers' complaints as there is no difference in variation of the portability policy by NCC in Nigeria.

Additionally, an examination of the government policy framework on the consumers' protection right has not yield a significant result in Nigeria. Though government is putting up a lot of structure to sanitize the telecommunication industry yet the consumer' expectation has not been met. The rights of the consumers are being violated several times. This may be because Nigerians are not enlightened enough to take advantage of the various government policy and take legal actions when necessary. This was evidence in the service fluctuation experienced most times by the consumer without the telecommunication industry paying fine to individuals. Hence the study concluded that there is no significant correlation government policy framework and consumers right protection.

Conclusion

Mobile number portability in Nigeria could have fuel healthy competition among telecom service providers in the county, but the acceptance of the policy by consumers is still very low as a result of years of delay for its adoption which has made the consumers create an alternative; use of multiple accounts. Though some consumers were eager to move to another network because of unsatisfactory service and continuous dissatisfaction with their GSM operators, but the processes involved in porting is tedious i.e. consumers must wait 48 hrs to complete the process; all outstanding call credit and data balance on the previous network must be forfeited during the porting process, etc. Thus the study believes that the MNP policy will not likely be effective nor will be able to fulfill its stated objectives.

Recommendations

One of the major causes identified in this study for the low acceptance of the MNP policy is the delay in passing into law the necessary act that made the policy legal. This delay in policies formation, adoption and implementation not only affect the telecom industry, but other sectors of Nigeria. Thus this study recommended the following: Authorised policy makers should review government process of policy formation to remove bottlenecks that cause delay in the formation adoption and implementation of the policy. The NCC should review the processes involved in MNP to make it consumer friendly and accessible for better acceptability. Necessary policy that will compel the network operators to pay adequate compensation where necessary, especially where there is evidence of consumers exploitation should be pass into law. This will improve the consumers' right protection and force most telecom service provider to improve the quality of their service and be consistent with it.

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