CONSUMER-PURCHASING MOTIVES IN NIGERIAN CELLULAR PHONE MARKET: AN EMPIRICAL INVESTIGATION

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Abstract
This exploratory study attempts to examine consumer-purchasing motives in cellular-phone markets. The study surveyed 297 Nigerian consumers to identify their motives for purchasing new mobile phones on one hand, and factors affecting operator choice on the other. The results indicate that price and properties were the most influential factors affecting the purchase of a new mobile phone whereas price, availability and friends' operator were regarded as the most important in the choice of the mobile phone operator. Based on this, contributions are discussed and suggestions for future studies in this under researched area are made.

Keywords: Consume motive, mobile phone, usage,

Introduction

The deregulation of the telecommunication industry in 1999 was a revolution that created the need for new mobile services. This is because the monopoly hitherto enjoyed by the Nigerian Telecommunication (NITEL) did not pay off as consumers could not enjoy quality services. Further challenging this situation is the global need for new mobile services (Bradner, 2002; Wag Staff, 2002)

Besides, the current state of affairs in the mobile phone industry indicates a shift from second-generation mobile phones to third generation. This means that a mobile phone is not only a device used for speaking but also a handset that allows consumers a variety of new services such as Internet access and multimedia message services (MMS). Our perspective is that handsets are merely used as connectors to the internet, and the actual surfing is done via laptop or other PC, thereby allowing users to use sharper screens. In other words, the best feature of the new mobile phones is the ability to connect to the net free from time and place constraints; thereby permitting consumers to have easy and relatively cheap access to the net via computers. There is currently a shift from modem connections to wireless Internet connections by the use of W-LAN and GPRS network. Briefly speaking, the real benefit of 3G mobile devices border on faster, cheaper and easier access to the internet, and most importantly, not bounded to space (Karjaluoto, Svento, Pietila, Pakola, 2003)

In the light of the above, this study attempts to first describe the trends in the information and telecommunication (ICT) sector to illuminate the issues underlying consumer behaviour. This, of course, is predicated on theoretical framework that articulates recent studies concerning factors that seem to affect the choice of a mobile phone and operator by consumers, as well as intention to adopt new mobile phone features and services like Multimedia Message Service (MMS) and sending e-mails. Finally, the paper reports the survey finding along with their managerial and theoretical implications.

Statement of problem

The shock waves that originate with product failure or dissatisfied consumers are ill wind that does nobody any good. The effects of such shock waves are bound to radiate throughout the entire economy and society.

The question then is can't this situation be avoided or controlled? The answer is fairly simple but economically important. Consumption is a fundamental part of every economic and social system and changes in consumer behaviour have varying implications for the whole society.

Consumption patterns reflect the personality of the individual. Fundamental institutions (like family) are not left out because a great deal of consumption takes place through the family.

Consumption is a fundamental part of every economic and social system. Also, consumption is in part culturally determined and thus can be held up as a mirror of society. It is therefore imperative that consumers be analyzed to be able to serve them better.

In trying to understand consumer behaviour, motive which is one of the basic determinants of consumer behaviour, becomes imperative. The motives that affect consumer behaviour and give direction to the purchase and use of mobile phone services, including the perceived value-added services are grossl y under researched especially in Nigeria where the need to collect general information about the users of mobile phone services has become particularly urgent in order to guide industry operations and policy makers.

It is however evident that the large players in the telecommunications business constantly conduct market research, but the problem is that the results obtained are usually kept inside company walls for specific marketing decisions, thereby creating dearth of reference materials in the academia. Thus consumer behaviour in mobile phone industry is an unexamined genre in scholarly literature. It is this dimension that is of preponderant concern in this paper.

Research methods

The data for the study were collected by means of questionnaire within selected educational institutions in the South-West region of Nigeria. There were three target groups in the survey: The first group comprised secondary school students aged around 15 in Ogun state. The second group included first-year students of the University of Lagos Akoka mainly aged 18-26. The older students at the Lagos State University, Ojo informed the third group. Their age varied between 20 and 30 years.

The data consisted of 297 copies of questionnaire, of which 146 were from Female students and 151 from Male students. Almost all (about 99.3%) of the respondents had at least one mobile phone in use at the time of the survey, which reflects the actual situation among the student population in the South Western Nigeria.

Questions inquiring the acquisition of a mobile phone and choice of operator were implemented with 11 statements, which respondents had to rate in their order of importance on five-point Likert Scale. The development of the scales was based on two sources: First was the existing statement found in the literature. The second base was our knowledge obtained as the outcome of two focus group interviews conducted among 45 university students. In the first focus group the theme was mobile phone acquisition, and in the second group the theme was operator choice. Youth consumer purchasing motives concerning the choice of a mobile phone as well as operator are not well known in theory, i.e. no commonly accepted knowledge of the factor influencing youth consumers' decision making exists. Thus, the results obtained have some limited applications since they are considered interim.

Discussion of results

The trend that mobile phones are purchased earlier was verified with the data. The survey of group three (Lagos State University, Ojo) indicates that majority of them bought their first mobile phone at the age of 18(24%), followed by the age of 19(23%), and20 (15%). In comparison, 33% of the youngest group (Secondary School Students), acquired their first mobile phone at the age of 15. This was followed by the age of 14 (27%)and 13 (18%), Hence, it can be argued that the age of buying the first mobile phone has lowered in just few years from 18 to 15 years.

Factors affecting the choice of a mobile Phone

Price and properties were regarded as the most important motives affecting the decision to purchase current mobile phone model among the respondents as displayed. As the survey has shown, close to 80 percent and over 85 percent felt that price and properties respectively affected their decision making at least relatively much. Price might have dominated the decision making in the sample more than it does for the whole population since the average net income in the target groups was relatively low. Employer's order or Salesman's recommendation were regarded as the least important motives.

A confirmatory factor analysis (table 1) of the 11 statements suggests that three factors (see e.g. Sharma, 1996; Hair et al, 1995,for more detailed presentation of factor analysis method) were chosen in terms of eigen value of larger than 1.0. The Bartlett's test of sphericity was highly significant indicating high correlation between the variables. The second factor analysis presented in this paper satisfied the above mentioned tests also. The identified factors represent 52 percent of the variance of the variables. The first factor can be called manufacturer as the highest loadings relate to three variables pertaining to properties, image, and new services. The second factor exhibits largely loading for four variables relating to market conditions. Price and availability had the highest loadings for the second factor. The third factor is defined by two items relating to other people's influence. Thus, it can be called influential persons. Influence of the manufacturer explained most of the total variance (20%).

Table 1: Confirmatory factor analysis on mobile phone choice

Motive	Manufacturer	Telemarket conditions	Influential persons
Image	□83		
Services	□79		
Properties	□78		
Price		□72	
Audibility		□65	
Type		□64	
Free calls		□55	

Salesman			□73
Family			□64
Employer			□57
Friends			□48

Factor affecting the choice of an operator

The choice of the operator was affected primarily by price and audibility: around 83 percent felt that the price the operator charges had affected their choice at least relatively much. In addition, audibility was the second most important motive: 82 percent felt that audibility had affected their decision at least relatively much. Other motives of significance were properties, friends' choice of the operator, contract type and free calls. Salesman and employer were the least important affecting the choice of one's operator.

A confirmatory factor analysis (table 2) of the eleven statements was carried out. Four factors explaining 62 percent of the variance of the variable were identified. The factors can be labeled as:

1. Features and brand
2. Quality of the operator
3. Component in pricing
4. Influential persons

The first factor has the highest loadings for four variables pertaining to operators features and brand. The second factor (quality) has the highest loading for three variables relating to price, audibility and type (supply of different contract types). The factor three can be called components in pricing, because two of the highest loadings for this factor refer to free calls and family's operator type. The final factor refers to employer's or salesman's influence and can thus be labeled as influential persons. The influence of the first factor (feature and brand) is the highest explaining 22 percent of the variability.

Table 2: Confirmatory factor analysis on operator choice Factors

Motive	Features & brand	Quality	Component in pricing	Influential persons
Image	□80			
Services	□76			
Properties	□71			
Friends	□51			
Price		□81		
Audibility		□60		
Type		□51		
Family			□78	
Free calls			□58	
Employer				□79
Salesman				□68

Use of mobile phone services

Respondents were asked to mention the services they are presently using and to indicate if they intended to use the services in the future. Most popular services used nowadays are logos and ringing tones. Over 70 percent of the respondents had order logos and tones for their mobile devices. These two were followed by phone bill inquiry (61% had ordered) and call forwarding (54% had used). Only five percent of all respondents had never used any of these fours. According to the data, the use of mobile phone services seems to remain at the same level during the next 12 months.

The question inquiring groups' intention to use new mobile phone services (e.g. MMS) revealed that majority agreed at least relatively much with the statement that there is no need for the mentioned mobile services. High price of the services was the most important motive decreasing the number of potential users. According to the survey, over 90% of each group felt that high price had affected at relatively much their use of mobile services. Interestingly, inability to use the service or ignorance about them had only minor impact on respondents.

Additionally, approximately two thirds of each group considered that poor usability had had only a little effect on their use of the services. Other factors affecting the adoption of mobile services such as small screen size, slow data transfer and poor functionality had relatively low impact on the possible adoption.

Conclusion

This exploratory study was conducted to analyze consumer decision-making process in particular, and to increase our current understanding of the mobile phone market in general. In addition, the study was an attempt to cast more light on the much-unexamined area of mobile phone purchase, operator choice, and use of mobile phone services. The main result of the study indicates the following:

First of all, the age of purchasing a mobile phone among young Nigerians has lowered in just a few years 18-19 to 14-15.

Secondly, the factors underlying the purchase of a mobile phone were found to be manufacturer, market conditions and influential persons. For the choice of operator, the factors were found to be features and brand components of pricing, quality, and influential persons.

Thirdly, only about 15 percent of the respondents felt that their use of mobile services would increase in the next 12 months. Two critical challenges are urgent here:

First, service marketers can (and must) distinguish conceptually between the production and distribution of services. The problem of making services more efficiently and widely available must not be ignored in favour of other elements of the marketing mix that are easier to deal with. For example, many service industries have been criticized for an "overdependence on advertising." The problem of overdependence on one or two elements of the marketing mix is one that service marketers cannot afford. The sum total of the marketing mix elements represents the total impact of the firm's marketing strategy. The slack created by severely restricting one element cannot be compensated for by heavier emphasis on another, since each element in the marketing mix is designed to address specific problems and achieve specific objectives.

Fourthly, this discussion points out the critical role of product development in the distribution of services. It indicates that making services available is often a product development as well as a distribution problem. In several of the examples described, indirect distribution of the service was made possible because "products" were developed that included a tangible representation of the service. This facilitates the use of intermediaries, because the service can now be "separated" from the producer. Of course, the process might be reserved: intermediaries could be located and appropriate "products" developed.

Implications and areas for further study

The results of the study are tentative and may have limited application since we focused on the youth segment of the consumer market. Besides, the research was not a country-wide study. However, the findings contribute to the existing albeit scarce literature on consumer behaviour in mobile phone markets. For managers, the result provide interesting aspects of mobile phone choice on one hand by arguing that youth consumers tend to value properties more than other people's opinion and by claiming that operator choice is mostly affected by price and audibility.

At present, the operator market in Nigeria is one of the most aggressively competed markets, and the competition is driven by price discounts. Although price was found as an important variable affecting youth consumer choice, audibility was practically calling for equal attention.

A more rigorous study is here suggested on the factors that influence the choice of a mobile phone and an operator. This is particularly urgent in order to offer better understanding of consumer motives.

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