CUSTOMER SATISFACTION IN THE MOBILE TELECOMMUNICATIONS INDUSTRY IN NIGERIA.

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ABSTRACT

Customer satisfaction is a fundamental marketing construct in the last three decades. In the past, it was unpopular and unaccepted concept because companies thought it was more important to gain new customers than retain the existing ones. However, in this present decade, companies have gained better understanding of the importance of customer satisfaction (especially service producing companies) and adopted it as a high priority operational goal.

This study aimed at investigation the overall customer satisfaction of the mobile telecoms industry in Nigeria, factors influencing satisfaction and the relationship between satisfaction and demographics. The results obtained in this research indicated that 57% of the respondents were satisfied and 5% highly satisfied. The combination of network quality, billing, validity period and customer support (mobile services attributes) showed strong relationship with satisfaction while age, gender, location and employment variables showed weak relationship.

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<u>PREFACE</u>

The Global System of Mobile Communications (GSM) is a digital technology with a worldwide acceptance and plays an important role in the socioeconomic development of countries. Thus, several management experts have paid research attention to this industry (one of the studies done concerns the customer satisfaction). Customer satisfaction is the assessment of the performance of a product or service by customers and this construct is important for successful business performance.

Nigeria introduced the mobile telephony five years ago and few studies have been done on the benefits and impact of its mobile telecoms development. However, there is no research done on the customer satisfaction of the Nigerian mobile telecoms industry. Therefore, there is need to create awareness among academic institutions, regulators and mobile operators of the importance of customers to the development of the industry.

Objective - this study is aimed at investigating the customer satisfaction of the mobile telecoms industry in Nigeria, the factors that influence it and the relationship between demographic variables and satisfaction.

Limitations – there is no available literature on customer satisfaction of the telecoms industry in Nigeria to consult neither are the mobile operators willing to cooperate.

The summaries of the chapters of this study are as follow:

Chapter 1 - Introduction: The GSM technology began in Europe and less than 10 years after it launch, it gained worldwide acceptance. Nigeria introduced the mobile telecoms in 2001 and despite its economic benefits, there is no research done on the customer satisfaction of its mobile telecoms. This study investigated the customer satisfaction of the mobile telecoms performance, factors influencing it and the significant relationship between demographic variables and customer satisfaction.

Chapter 2 - Literature review: In this study, customer satisfaction definition adopted is that of Homburg and Bruhn (1998) which is *"an experience-based assessment made by the customer of*

how far his own expectations about the individual characteristics or the overall functionality of the services obtained from the provider have been fulfilled". Its antecedent include customer need and expectation, perceived value, service quality, internal satisfaction and complaint management. The consequences are customer loyalty, customer retention and profitability. The benefits of this concept are repurchase propensity, word of mouth recommendation, low cost of transaction, etc.

Chapter 3 - Research method: 400 respondents were administered questionnaires on the streets of 4 different locations of Lagos State (Ikeja, Lagos Island, Mushin and Victoria Island) in Nigeria. The questionnaire contained 2 sections, A and B. Section A contained questions on age, gender, employment, location and section B contained questions on call quality, billing, validity period (duration of use), customer care support and customer satisfaction evaluation.

Chapter 4 - Data analysis and discussion: The data collected was analysed with the Statistical Package for Social Sciences (SPSS). The assessment of customer satisfaction was done with descriptive analysis and the relationship between mobile service attributes, demographic variables and customer satisfaction was analysed with the linear regression. 57% of the respondents were satisfied and 5% very satisfied with mobile telecoms performance, network quality, billing, validity period and overall customer care (mobile service attributes) demonstrated strong relationship with customer satisfaction while age, gender and employment variables (demographics) showed weak relationship.

Chapter 5- Conclusion: Based on the results of the data analysis, mobile operators need to maximise customer satisfaction to enhance successful business performance and an important way to achieve this is to improve on the mobile service attributes. Secondly, mobile operators can establish different market segments and adopt strategies to satisfy needs of different customers.

<div align="center">**CHAPTER ONE**</div>

1.1   **INTRODUCTION**

1.1.1   **BACKGROUND**

The Global System of Mobile Communications (GSM) is a second-generation digital technology, which was originally developed in Europe and in less than ten years after the commercial launch, it developed into world's leading and fastest growing mobile standard (GSM Assoc., 2006). Lonergan et al. (2004) reported that at the beginning of 2004, there were over 1.3 billion mobile phone users worldwide and by 2007, the demand for mobile services would have grown at an average annual rate of 9.1%. The GSM Association estimates that the GSM technology is used by more than one in five people of the world's population, representing approximately 77% of the world's cellular market and is estimated to account for 73% of the world's digital market and 72% of the world's wireless market (GSM Assoc., 2006). This growth principally results from the establishment of new networks in developing countries rather than from an increase in mobile access lines in developed countries (Serenko and Turel, 2006). African countries are actively involved in the establishment of the mobile services and specifically, Nigeria is the focus of this study.

Gerpott et al. (2001) wrote that since 1990s, the telecommunications sector has become an important key in the development of the economy of developed countries. This results from the saturated markets, de-regulation of telecommunications industry (removal of monopoly rights, especially enjoyed by state-owned telecoms networks), increasing number of mobile service providers, enormous technical development and intense market competition. Szyperski & Loebbecke (1999) wrote that this increasing economic importance and benefits of telecommunications firms motivated many management scholars (especially marketing experts) to devote attention to this sector. Wilfert (1999); Gerpott (1998); and Booz. Allen and Hamilton (1995) pointed out that marketing strategies are very important in telecommunications services because once customers have subscribed to a particular telecommunications service provider,

their long-term link with this provider is of greater importance to the success of the company than they are in other industry sectors. Hence, service providers need to form a continous lasting relationship with their customers to know them better and satisfy their needs adequately. Studies conducted to explore factors affecting satisfaction, loyalty and retention in mobile telecommunications industry include: Gerpott et al. (2001) investigated customer satisfaction, loyalty and retention in the German mobile telecommunications among 684 respondents and reported that customer retention can not be equated with customer loyalty and/or customer satisfaction, rather a two-stage causal link can be assumed in which customer satisfaction drives customer loyalty which in turn has impacts on customer retention. However, these three factors are important for superior economic success among telecommunication service providers. Kim et al. (2004) investigated the effects of customer satisfaction and switching barrier on customer loyalty among 350 respondents in Korea and reported that call quality, value-added services and customer support have significant impact on customer satisfaction. Thus, to maximize customer satisfaction, focus should be on service quality and customer-oriented services. Switching barrier on the other hand is affected by switching costs (e.g. loss cost, move-in cost, and interpersonal relationships) and was revealed to have an adjustment effect on customer satisfaction and customer loyalty. Serenko and Turel (2006) investigated customer satisfaction with mobiles services in Canada and reported that perceived quality and perceived value are the key factors influencing satisfaction with mobile services. Customer care is reported to be negatively related to customer satisfaction, which means that a more satisfied customer is less prone to complain. Hence, they concluded that customer satisfaction is the only single measure that better capture the range of services, prices and quality and moreso, this measure is an important performance indicator useful for both regulators and mobile service providers. In summary, these studies support the theory that highly satisfied customers stay longer, buy more, less sensitive to price increases from their providers or price decreases from competitors.

Nigeria, a developing country, in 1992 introduced its first mobile phone services, through the joint venture between NITEL and DSL of Canada to form Mobile Telecommunications Service (MTS), (Ndukwe, 2005, pp 26). In January 2001, the regulatory body NCC, modernised and expanded the mobile telecommunications network and services by granting GSM license to three service providers; MTN Nigeria, Econet Wireless (now Vmobile), and the first national carrier, NITEL (initially MTS, privatised to form Mtel). In 2002, the second national carrier, Globacom was also granted license to commence operation. Since the launch of the GSM, the number of subscribers in Nigeria has greatly increased. Ndukwe (2005, pp 37-38, 40) reported that between 1998 and 2000, the number of mobile lines was 35,000 but grew to over 11 million as of March 2005, with a growth rate of more than a million lines annually since 2002. This translated to an increase from the total density of 0.4 lines per 100 inhabitants in 1998 to 9.47 lines per 100 inhabitants currently. Additionally, this sector has attracted an investment of over US $8 billion and has greatly increased the number of employed people directly (those working with the GSM companies) or indirectly (this includes various levels of dealerships, cell phone vendors, repair shops, suppliers of accessories, fixed and mobile call shops and street recharge card hawkers) (Hoff, 2006). The number of the employed people is reported to be over 300,000 Nigerians in 2005 (Ndukwe, 2005). Other benefits include easy, affordable and quick access to phone by different categories of the population, reduced frequency of travelling, etc (Adomi, 2003), and all these benefits contribute to the socio- economic development of the country.

Based on the annual growth rate of the subscribers, and increasing teledensity, Nigeria is one of the fastest growing telecoms market in Africa (Hoff, 2006). Additionally, the population count of over 130 million people and GDP per capita and PPP valuation of US $1,776 (estimated in 2005) (OECD, 2006) presents a massive growth potential for the mobile telecoms sector and the customer base is estimated to reach 23 million subscribers in 2007 and 32 million subscribers in 2009 (Hoff, 2006). This anticipated increase in the customer base will translate into better social

and economic development, resulting from more financial investments from the service operators.

Despite the economic and social benefits of the mobile telecommunications to Nigerian economy and market, unlike the developed countries, there is no marketing or management research attention to this sector. However, it is probable that the mobile operators conduct satisfaction surveys and other marketing research but contact with the mobile operators for any useful information yielded no response [1]. This limitation affected this study in that there are currently no literature materials on customer satisfaction of the Nigerian mobile telecoms industry to consult. The majority of literature available (few in number) focuses on the study of the impact and development of the telecommunications, mobile telephony, communications, etc.

This lack of adequate research in the mobile telecoms sector may prevent it from acquiring knowledge useful for development. According to Serenko and Turel (2006), customer satisfaction measurement addresses both users and public interests and such studies can assist in economic and social development. Therefore, there is need to gain more understanding in the area of customer satisfaction.

Jackson et al. (1996), Platow et al. (1997), and Homburg and Giering (2001) expressed that customer behaviours and attitudes are greatly influenced by demographic, situational, environmental and psychological factors and these factors can be used by companies and policy makers to develop strategies to meet different needs of the different customer segments. Hence, there is need to gain more understanding of the influence of these factors on customer satisfaction.

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1 The author consulted the websites of the mobile operators to view their various customer-oriented practices and contacted their customer services departments through electronic mails to introduce the study, to confirm if they conduct customer satisfaction surveys and ask for any useful input, but yielded no response.

1.1.2 OBJECTIVES AND PURPOSE OF STUDY

The objective of this research work is to investigate:

1. Overall customer satisfaction of the Nigerian mobile telecoms industry

2. Factors influencing customer satisfaction

3. The link between certain demographic variables (age, gender, type of employment and location) and customer satisfaction in the Nigerian mobile telephone industry.

4. Using the results of the study to provide strategies to improve the mobile telecoms industry.

In order to explore the aforementioned objectives, this study adopts the following hypotheses:

❖ Customer satisfaction of the Nigerian mobile telecoms industry

H_1. Nigerian customers are satisfied with the mobile telecoms industry

H_2. Customer satisfaction differs among various groups of the demographic variables (age, gender, employment type and locations).

❖ Factors influencing customer satisfaction

H_3. There is a strong relationship between network quality and customer satisfaction

H_4. There is a strong relationship between billing and customer satisfaction

H_5. There is a strong relationship between validity period and customer satisfaction

H_6. There is a strong relationship between customer care support and customer satisfaction

H_7. There is a strong relationship between network quality, billing, validity period, customer care support and customer satisfaction

❖ Relationship between certain demographic variables and customer satisfaction

H_8. There is a strong relationship between age and customer satisfaction

H_9. There is a strong relationship between gender and customer satisfaction

H_{10}. There is a strong relationship between location and customer satisfaction

H_{11}. There is a strong relationship between employment and customer satisfaction

H_{12}. There is a strong relationship between age, gender and customer satisfaction

H_{13}. There is a strong relationship between age, location and customer satisfaction

H_{14}. There is a strong relationship between age, employment and customer satisfaction

H_{15}. There is a strong relationship between gender, location and customer satisfaction

H_{16}. There is a strong relationship between gender, employment and customer satisfaction

H_{17}. There is a strong relationship between location, employment and customer satisfaction

H_{18}. There is a strong relationship between age, gender, location, employment and customer satisfaction

The purpose of this research is to:

1. Understand customer satisfaction with the performance of the Nigerian mobile telephone industry.

2. Identify factors that influence customer satisfaction in Nigeria.

This study was conducted by administering 400 questionnaires in 4 different locations (100 questionnaires per location) of Lagos State, Nigeria, the commercial centre of the country. Most business transactions have been carried out in this State since the colonial era and most industries have their headquarters sited here. The locations include; Ikeja, Lagos Island, Mushin and Victoria Island.

The limitations encountered in this study include:

1. Lack of available literature on customer satisfaction of the mobile telephone industry or any other industry in Nigeria.

2. Lack of cooperation from the mobile telephone operators.

CHAPTER TWO

2.1   **LITERATURE REVIEW**

2.1.1   **CUSTOMER SATISFACTION**

Customer satisfaction, as a construct, has been fundamental to marketing for over three decades. As early as 1960, Keith (1960) defined marketing as "*satisfying the needs and desires of the consumer*". Hunt (1982) reported that by the 1970s, interest in customer satisfaction had increase to such an extent that over 500 studies were published. This trend continued and by 1992, Peterson and Wilson estimated the amount of academic and trade articles on customer satisfaction to be over 15,000.

Several studies have shown that it costs about five times to gain a new customer as it does to keep an existing customer (Naumann, 1995) and this results into more interest in customer relationships. Thus, several companies are adopting customer satisfaction as their operational goal with a carefully designed framework. Hill and Alexander (2000) wrote in their book that "*companies now have big investment in database marketing, relationship management and customer planning to move closer to their customers*". Jones and Sasser (1995) wrote that "*achieving customer satisfaction is the main goal for most service firms today*".

Increasing customer satisfaction has been shown to directly affect companies' market share, which leads to improved profits, positive recommendation, lower marketing expenditures (Reichheld, 1996; Heskett et al., 1997), and greatly impact the corporate image and survival (Pizam and Ellis, 1999).

2.1.1a   **DEFINITION**

Parker and Mathew (2001) expressed that there are two basic definitional approaches of the concept of customer satisfaction. The first approach defines satisfaction as a process and the second approach defines satisfaction as an outcome of a consumption experience. These two approaches are complementary, as often one depends on the other.

Customer satisfaction as a process is defined as *an evaluation between what was received and what was expected* (Oliver, 1977, 1981; Olson and Dover, 1979; Tse and Wilton, 1988), *emphasizing the perceptual, evaluative and psychological processes that contribute to customer satisfaction* (Vavra, 1997, p. 4).

Parker and Mathews (2001) however noted that the process of satisfaction definitions concentrates on the antecedents to satisfaction rather than satisfaction itself.

Satisfaction as a process is the most widely adopted description of customer satisfaction and a lot of research efforts have been directed at understanding the process approach of satisfaction evaluations (Parker and Mathews, 2001). This approach has its origin in the discrepancy theory (Porter, 1961), which argued that satisfaction is determined by the perception of a difference between some standard and actual performance.

Cardozo (1965); and Howard and Sheth (1969) developed the contrast theory, which showed that consumers would exaggerate any contrasts between expectations and product evaluations.

Olshavsky and Miller (1972); and Olson and Dover (1979) developed the assimilation theory, which means that perceived quality is directly increasing with expectations. Assimilation effects occur when the difference between expectations and quality is too small to be perceived.

Anderson (1973) further developed this theory into assimilation-contrast theory, which means if the discrepancy is too large to be assimilated then the contrast effects occur. The assimilation-contrast effects occur when the difference between expectations and quality is too large to be perceived and this difference is exaggerated by consumers.

According to Parker and Mathews (2001), the most popular descendant of the discrepancy theories is the expectation disconfirmation theory (Oliver, 1977, 1981), which stated that the result of customers' perceptions of the difference between their perceptions of performance and their expectations of performance. Positive disconfirmation leads to increased satisfaction, with negative disconfirmation having the opposite effect. Yi (1990) expressed that customers buy products or services with pre-purchase expectations about anticipated performance, once the

bought product or service has been used, outcomes are compared against expectations. If the outcome matches expectations, the result is confirmation. When there are differences between expectations and outcomes, disconfirmation occurs. Positive disconfirmation occurs when product or service performance exceeds expectations. Therefore, satisfaction is caused by positive disconfirmation or confirmation of customer expectations, and dissatisfaction is the negative disconfirmation of customer expectations (Yi, 1990).

While several studies support the disconfirmation paradigm, others do not. For instance, Churchill and Surprenant (1982) found that neither disconfirmation nor expectations had any effect on customer satisfaction with durable products.

Weiner (1980, and 1985); and Folkes (1984) proposed the attribution theory, which stated that when a customer purchases a product or service, if the consumption is below expectation, the customer is convinced that the supplier causes the dissatisfaction. The complaining customer is focused on restoring justice and the satisfaction outcome is driven by perceived fairness of the outcome of complaining.

Westbrook and Reilly (1983) proposed the value-percept theory, which defines satisfaction as an emotional response caused by a cognitive-evaluative process, which is the comparison of the product or service to one's values rather than an expectation. So, satisfaction is a discrepancy between the observed and the desired.

Fisk and Young (1985); Swan and Oliver (1985) proposed the equity theory, which stated that individuals compare their input and output ratios with those of others and feel equitable treated. Equity judgement is based on two steps; first, the customer compares the outcome to the input and secondly, performs a relative comparison of the outcome to the other party.

Pizam and Ellis (1999) reported that there are two additional distinct theories of customer satisfaction apart from the seven aforementioned ones and these include:

1. Comparison-level

2. Generalized negativity; and

The outcome approach of the customer satisfaction is defined as the end-state satisfaction resulting from the experience of consumption. This post- consumption state can be an outcome that occurs without comparing expectations (Oliver, 1996); or may be a cognitive state of reward, an emotional response that may occur as the result of comparing expected and actual performance or a comparison of rewards and costs to the anticipated consequences (Vavra, 1997, p. 4).

Furthermore, Parker and Mathews (2001) expressed that attention has been focused on the nature of satisfaction of the outcome approach which include:

1. Emotion - Satisfaction is viewed as the surprise element of product or service purchase and or consumption experiences (Oliver, 1981), or is an affective response to a specific consumption experience (Westbrook and Reilly, 1983). This acknowledges the input of comparative cognitive processes but goes further by stating that these may be just one of the determinants of the affective "state" satisfaction (Park and Mathews, 2001).

2. Fulfillment –The theories of motivation state that people are driven by the desire to satisfy their needs (Maslow, 1943) or by their behaviour aimed at achieving the relevant goals (Vroom, 1964). However, satisfaction can be either way viewed as the end-point in the motivational process. Thus "*consumer satisfaction can be seen as the consumer's fulfillment response*" (Rust and Oliver, 1994, p. 4).

3. State – Oliver (1989) expressed that there are four framework of satisfaction, which relates to reinforcement and arousal. "*Satisfaction-as-pleasure*" *results from positive reinforcement, where the product or service is adding to an aroused resting state*, and "*satisfaction-as-relief*" *results from negative reinforcement* .In relation to arousal, low arousal fulfillment is defined as "*satisfaction-as contentment*", *a result of the product or service performing adequately in an ongoing passive sense*. High arousal satisfaction is defined as "*satisfaction as either positive (delight) or negative surprise*" *which could be a shock* (Rust and Oliver, 1994).

The other customer satisfaction definitions include: Satisfaction is *"the cognitive state of the buyer about the appropriateness or inappropriateness of the reward received in exchange for the service experienced* (Howard and Seth, 1969, pp. 145)*; the evaluation of emotions* (Hunt, 1977, p. 460)*; the favorability of the individual's subjective evaluation* (Westbrook, 1980, p. 49); *a positive outcome from the outlay of scarce resources* (Bearden and Teel, 1983a, p. 21); *an overall customer attitude towards a service provider* (Levesque and McDougall, 1996, pp.14); *is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, included levels of under- or overfulfillment* (Oliver,1997, p. 13*); is an experience-based assessment made by the customer of how far his own expectations about the individual characteristics or the overall functionality of the services obtained from the provider have been fulfilled* (Homburg and Bruhn, 1998); *the fulfillment of some need, goal or desire* (Oliver, 1999); *an emotional reaction to the difference between what customers anticipate and what they receive* (Zineldin, 2000); *is based on a customer's estimated experience of the extent to which a provider's services fulfill his or her expectations* (Gerpott et al. 2001)".

For this study, customer satisfaction definition used is that of Homburg and Bruhn (1998) which is *"an experience-based assessment made by the customer of how far his own expectations about the individual characteristics or the overall functionality of the services obtained from the provider have been fulfilled"*.

The relevance of this definition to this study is that it indicates that customers assess the mobile services based on experience of use and the rating is done in accordance with the mobile services attributes. In this study, customer satisfaction with the Nigerian mobile services will be evaluated based on customers experience of network quality, billing, validity period and customer care support.

2.1.1b   <u>**ANTECEDENTS**</u>

Taylor and Baker (1994) and Rust and Oliver (1994) identified several factors that precede

customer satisfaction and suggested that these factors strongly influence the extent of customer

satisfaction. Some of these antecedents include:

CLEAR UNDERSTANDING OF CUSTOMER NEEDS AND EXPECTATIONS

The achievement of a strong customer satisfaction is closely related to the understanding

customer needs and expectations (William and Bertsch, 1992). According to the Kano Model

(2001), customer needs can be divided into:

- Basic needs – obvious needs of customers and if not met, he is dissatisfied, however

  meeting this needs may not be enough for customer satisfaction. Its satisfaction results in

  "*must be quality*".

- Expected needs – these are important needs that customers are fully aware of and

  satisfaction is expected in every purchase; their satisfaction creates "*expected quality*".

- Excitement needs – these are unconscious and unspoken needs of customers. By

  identifying and satisfying such needs, companies will have added large value to

  customers and can win loyal customers. This satisfaction creates "*attractive quality*".

Studies that supported the notion that expectations precede satisfaction include: Anderson,

Fornell and Lehmann (1994), who conducted investigation on Swedish firms and reported that

there is a positive and significant relationship between expectations and customer satisfaction.

They describe expectation as an accumulation of information about quality from the outside

sources (e.g. advertising, word of mouth and general media) and past experiences. Cadotte,

Woodruff, and Jenkins (1987) conducted investigation on food restaurant and reported that

expectation is significantly correlated with satisfaction. Additionally, expectation is a pre-

purchase choice process and form a part of evaluation standards of conceptualizing satisfaction

process. Churchill and Suprenant (1982) conducted investigation on durable good (video disc

player) and non-durable good (hybrid plant). For the hybrid plant study, expectation is reported to have a direct impact on satisfaction. Oliver (1981) conducted investigation on retail stores and reported that expectation has direct influence on satisfaction. However, there are other research works that disagree with this finding, examples include: Churchill and Suprenant (1982) in their investigation on video disc player, reported expectation to have no impact on satisfaction. Spreng and Olvshavsky (1993) conducted investigation on cameras and reported that there is no significant relationship between these two variables.

With this aforementioned literature, it is noted that customers purchase services based on their needs and have expectations that the purchased services will meet their needs. Customers in turn assess the service performance in accordance to how well it meets their expectations. Although, customer expectation is not a focus of this study, however satisfaction measurement is useful to understand customer expectations (since most times assessment is done by customers based on past experiences and future beliefs of service performance).

PERCEIVED VALUE

Perceived value is defined as *"the results or benefits customers receive in relation to total costs (which include the price paid plus other costs associated with the purchase) or the consumers' overall assessment of what is received relative to what is given"* (Holbrook,1994 and Zeithaml, 1988).

Additionally, Zeithaml (1988) found out that customers who perceive that they receive value for money are more satisfied than customers who do not perceive they receive value for money. Several studies have shown that perceived value is significant determinant of customer satisfaction (Anderson et al. (1994); Ravald and Gronroos (1996); and McDougall and Levesque, 2000). Turel and Serenko (2006) in their investigation of mobile services in Canada suggested that the degree of perceived value is a key factor affecting customer satisfaction.

Past research studies suggested that there are four features, which are key drivers of the customer value of cellular services: network quality, price, customer care, and personal benefits (Booz, Allen & Hamilton, 1995, Danaher & Rust, 1996; Bolton, 1998; Gerpott, 1998; Wilfert, 1999).

- The network quality refers to excellent indoor and outdoor coverage, voice clarity, and no connection breakdowns.

- Price refers to what is paid to obtain access to use the network.

- Customer care refers to the quality of the information exchanged between customer and supplier or network provider in response to enquiries and other activities initiated by the network provider, for example presentation of invoices.

- Personal benefits refer to the level of perception of the benefits of mobile communications services by individual customers.

It is apparent from this review that one of the factors customers use to determine satisfaction level is the benefits received from a product or service in comparism with what is spent. Perceived value is not a focus of this study (however customer satisfaction evaluation captures perceived value; the assessment shows what consumers value in the service received). The suggested mobile services attributes (features) will be used to assess customer satisfaction in this study.

SERVICE QUALITY

Another factor that contributes to satisfaction is service quality. Service quality is defined as *"the difference between customer expectations and perceptions of service" or "as the customers' satisfaction or dissatisfaction formed by their experience of purchase and use of the service"* (Gronroos, 1984 and Parasuraman et al.1988).

Oliver (1993) reported that service quality is a casual antecedent of customer satisfaction, due to the fact that service quality is viewed at transactional level and satisfaction is viewed to be an

attitude. Dabholkar et al. (1996) and Zeithaml et al. (1996) reported that the service quality divisions are related to overall service quality and or customer satisfaction. Fornell et al., (1996) expressed that satisfaction is a consequence of service quality. Hurley and Estelami (1998) argued that there is causal relationship between service quality and satisfaction, and that the perceptions of service quality affect the feelings of satisfaction.

There are various classifications of the components of service quality in marketing science. Gronroos (1984) stated that "*in service environments, customer satisfaction will be built on a combination of two kinds of quality aspects; technical and functional*". Technical quality or quality of the output corresponds to traditional quality of control in manufacturing. It is a matter of properly producing the core benefit of the service. Functional quality or process quality is the way the service is delivered. It is the process in which a customer is a participant and co-producer, and in which the relationship between service provider and customer plays an important role (Wiele et al., 2002).

Technical quality is related to what customer gets (transaction satisfaction); functional quality is related to how the customer gets the result of the interaction (relationship satisfaction).

Lewis (1987) suggested that service quality can be classified as essential and subsidiary. Essential refers to the service offered and subsidiary includes factors such as accessibility, convenience of location, availability, timing and flexibility, as well as interactions with the service provider and other customers.

The classification can also be the core (contractual) of the service, and the relational (customer-employee relationship) of the service. The core or the outcome quality, which refers to what is delivered and the relational or process quality, which refers to how it is delivered are the basic elements for most services. (Grönroos, 1985; McDougall and Levesque, 1992; Parasuraman et al., 1991b; Dabholkar et al., 1996).

McDougall and Levesque (2000) in their direct approach investigation on four service firms (dentist clinic, automobile shop, restaurant, and haircut salon) demonstrated that both core and

relational service quality classes have significant impact on customer satisfaction. Heskett et al. (1997) conducted studies on several service firms, such as airline, restaurants, etc and reported that service quality, solely defined as relational quality, has consistent effect on satisfaction and is regarded as key factor in delivering customer satisfaction.

Parasuraman et al. (1988) identified five dimensions of service quality (SERVQUAL) that must be present in any service delivery. SERVQUAL helps to identify clearly the impact of quality dimensions on the development of customer perceptions and the resulting customer satisfaction. SERVQUAL include:

- Reliability - the ability to perform the promised services dependably and accurately.

- Responsiveness - the willingness to help customers and provide prompt service.

- Assurance - the knowledge and courtesy of employees as well as their ability to convey trust and confidence.

- Empathy - the provision of caring, individualized attention to customers, and

- Tangibles - the appearance of physical facilities, equipment, personnel and communication materials.

The model conceptualizes service quality as a gap between customer's expectations (E) and the perception of the service providers' performance (P). According to Parasuraman et al. (1985), "*service quality should be measured by subtracting customer's perception scores from customer expectation scores (Q = P - E)*". The greater the positive score mark means the greater the positive amount of service quality or the greater the negative score mark, the greater the negative amount of the service quality.

Zeithaml et al. (1990) proposed a comprehensive perception of quality assessment and claimed that they are other factors apart from the dimensions of Parasuraman et al. (1988):

- Access – how easy it is to come into contact with the supplier. This is where position, opening hours, supplier availability, and other technical facilities belong.

- Communication – the ability to communicate in an understandable way that is natural to customer.

- Credibility – referring to being able to trust the supplier

- Courtesy – refers to the supplier's behaviour, e.g. politeness and kindness

Parasuraman et al. (1988), assurance dimension is a combination of the credibility and courtesy dimensions of Zeithaml et al. (1990).

Pizam and Ellis (1999) stated that the gap that may exist between the customers' expected and perceived service quality is a vital determinant of customer satisfaction or dissatisfaction, and not just only a measure of the quality of the service.

Previous studies on mobile telecommunication services, measured services quality by call quality, pricing structure, mobile devices, value-added services, convenience in procedures, and customer support (Kim, 2000; Gerpott et al., 2001; Lee, Lee, & Freick, 2001).

Customers determine satisfaction level of any purchased service by the perceptions of quality received. Therefore, customer satisfaction assessment captures service quality and in this study, the previous factors used to measure service quality (call quality, billing, customer support, etc) of mobile telecoms will be used to assess customer satisfaction.

INTERNAL SATISFACTION

Research works have shown the importance and the link of internal (employee) satisfaction to the external (customer) satisfaction. Hill and Alexander (2000) stated that there is a positive relationship between employee satisfaction and customer satisfaction and this is achieved in companies that practice employee motivation and loyalty. They reported that *"employees that are more motivated to achieve customer satisfaction tend to be more flexible in their approach to their work, make fewer mistakes and use more initiative"*. Fečiková (2004) conducted studies on the index method for customer satisfaction measurement with chairs in Slovakia and reported

that the satisfaction of internal customers is one of the basic factors to satisfy the external customer. Thus, she suggested that employee motivation and loyalty can be achieved through:

- Daily leadership – Top management officials motivate others through their performance.

- Top management communicates their expectations to the employees.

- Development of competencies – feedback on employees performance, work efforts, opportunity for development and improvement of competencies.

- Corporation and employee retention, and

- Good working conditions

COMPLAINT MANAGEMENT

Albrecht and Zemke (1985) found that of the customers who register complaints, between 54% and 70% will do business again with the company if their complaints are resolved. This figure increases to 95% if the customer feels that the complaint was resolved promptly. Customers who have complained to a company and had their complaints satisfactorily resolved tell an average of five people about the good treatment they received. Hart, et al., 1990, reported that when the service provider accepts responsibility and resolves the problem when customers complain, the customer becomes "bonded" to the company.

McNeale (1994) found out that about 5% of the dissatisfied customers actually complain to the appropriate companies but easily tell their friends, colleagues and acquaintances about their experiences. Thus, companies ought to be aware or routinely investigate how well or badly their customers are treated. Ovenden (1995) in his book about studies conducted on several companies in the UK, such as wholesaler, manufacturers, etc, argued that companies need to be aware how well or badly its customers are treated and that customers rarely complain and when they do, it might be too late to keep such customers.

Levesque and McDougall (1996) in their case study on retail banking found out that if a service problem or customer complaint is ill or not properly handled, it has a substantial impact on the customer's attitude towards the service provider. However, the study did not support the notion that good customer complaint management leads to increased customer satisfaction. They reported that *"at best, satisfactory problem recovery leads to the same level of customer satisfaction as if a problem had not occurred"*.

Nyer (2000) expressed that encouraging customers to complain increased their satisfaction and especially the most dissatisfied customers and stated that *"the more a customer complains the greater the increases in satisfaction"*.

Johnston (2001) reported that complaint management, not only results into increased customer satisfaction, but also leads to operational improvement and improved financial performance. Other suggested antecedents of customer satisfaction include: disconfirmation paradigm (Yi, 1990, and Szymanski and Henard, 2001); performance (Cadotte, et al., 1988, and Bolton and Drew, 1991); affects (Westbrook and Oliver, 1991 and Mano and Oliver, 1993); and equity (Oliver, 1993 and 1997).

In summary, the relevance of this sub-section to this study is to:

- Better understanding that customers assess service performance based on their past experiences, benefits received, service quality and how well queries and complaints are treated. Thus, customer satisfaction with the mobile services in Nigeria will be assessed based on network quality, billing, validity period and customer care support and the following hypotheses are adopted:

    - Nigerian customers are satisfied with the mobile telecoms industry

    - There is a strong relationship between network quality and customer satisfaction

    - There is a strong relationship between billing and customer satisfaction

    - There is a strong relationship between validity period and customer satisfaction

➢ There is a strong relationship between customer care support and customer satisfaction

➢ There is a strong relationship between network quality, billing, validity period, customer care support and customer satisfaction

2.1.1c   **ASSESSMENT AND BENEFITS**

Naumann (1995) expressed that the reasons for measuring customer satisfaction may vary among companies, and the success of the measurement depends on if the measurement is incorporated into the firm's corporate culture or not. However, he suggested five reasons for measuring customer satisfaction or five important roles of customer satisfaction measurement:

- To get close to the customer – this will help to understand customers more, their needs, the attributes that are most important, and their effect on the customer's decision making, the relative importance of the attributes and the performance evaluation of the firm delivery of each attribute. This process helps to provide enabling communication with customers.

- Measure continuous improvement - the important attributes of customers can be incorporated into the internal measurement to evaluate the value-added process in the company. This process involves comparing performance against internal standards (process control and improvement), and comparing performance against external standards (benchmarking).

- To achieve customer-driven improvement – the data collected from customers can be developed into sources of innovations and this can help to achieve customer driven improvement. This requires a comprehensive database and not just records of sales. This process helps to identify opportunities for improvement (quality costing).

- To measure competitive strengths and weaknesses - determine customer perceptions of competitive choices and companies.

- To link customer satisfaction measurement data to internal system

The market share is not a guage to measure customer satisfaction; rather it represents quantity of customers. Customer satisfaction is a measure of attitudes and perceptions of the quality and performance of a service (Bhote, 1996).

Edvardson and Gustafsson (1999) in their written book about studies conducted on different products and services in Sweden and wrote that customer satisfaction measurement provides significant information for modern management processes and additionally, it provides a warning signal about the future business performance. Oliver (1999) in his article on the link between consumer satisfaction and loyalty with goods and services, expressed that in the last two decades till date, customer satisfaction measurement represents an important source of revenue for market research firms.

Several empirical findings have shown that the application of customer satisfaction measurement often does not accomplish the objectives of the company and the reasons for this shortcoming are;

- Many organizations determine criteria for measurement internally without an accurate understanding of customer priorities (Hill, 1996). This measurement is based on the value defined by organizations and not by the customers, thereby providing wrong information.

- Many companies do not measure customer satisfaction as thorough as manufacture component and those who claim to do so, perform it an inadequate way (Hill and Alexander, 2000).

- Difficulty in translating the customer satisfaction data into action within the organization (Wiele et al., 2002)

Werth (2002) stated that many companies identify the level of customer satisfaction through;

- Number of product or service support problems

- Number of direct complaints by phone, email, etc

- Number of returned products or services and the reason for their return, etc

Fečiková (2004) disagreed with this measurement procedure in that it is a measure of customer dissatisfaction (no satisfaction) and may provide wrong information with no possibility for product or service development and innovation. The criteria for measurement should be customer defined so as to collect, analyze the appropriate data and provide relevant information. Thus, to obtain the right information, efforts should be made to filter out the irrelevant information and concentrate on the valuable dimensions. A convenient tool to achieve this aim is to first conduct a simple pre-study and from this a more effective study can be created. Therefore, for any company to achieve true customer satisfaction, there should be:

- Customer-oriented culture

- Customer-centered company

- Employee empowerment

- Process ownership

- Team building, and

- Partnering with customers and suppliers

He further expressed that the measurement research technique include:

- Survey methodologies

- Focus groups

- Standardized packages

- Various computer softwares

However, these typical measurement techniques have some problems which include;

- Analytical – this involves techniques, formal procedures, systems, etc

- Behavioural – involves the attitudes, beliefs, perceptions, motivation, commitment and resulting behaviour of the people involved in the process.

- Organizational – involves the organizational structure, information flows, management style and corporate culture.

Hill et al. (2003) expressed that one of the methods to measure customer satisfaction is through the simple frequency statistics of the Microsoft office Excel or that of the Statistical Package for Social Science (SPSS). Fečiková (2004) reported that there are other methods for customer satisfaction measurement and these include;

1. The indicator of customer satisfaction level

Hazes (1998) proposed that customer satisfaction could be measured as:

$$I_{CS} = \frac{I_{RCS}}{I_{OCS}} \times 100 \, [\%]$$

I_{CS} = increasing customer satisfaction

I_{RCS} = the real value of the customer satisfaction index which is used routinely as a tool of customer satisfaction measurement.

I_{OCS} = the optimum value of such an index.

2. The index of satisfaction

Bhave (2002) proposed that to obtain the index of satisfaction, the satisfaction score is multiplied by the corresponding weighting factor to produce weighting score. The index of satisfaction is the sum of the weighting score. The overall satisfaction index of any company is the average of every respondent's individual satisfaction index.

3. ACSM method of customer satisfaction measurement

The American Customer Satisfaction Model (ACSM) method is a set of causal equations that link:

- ❖ customer expectations

❖ perceived quality,

❖ and perceived value to customer satisfaction (ACSI).
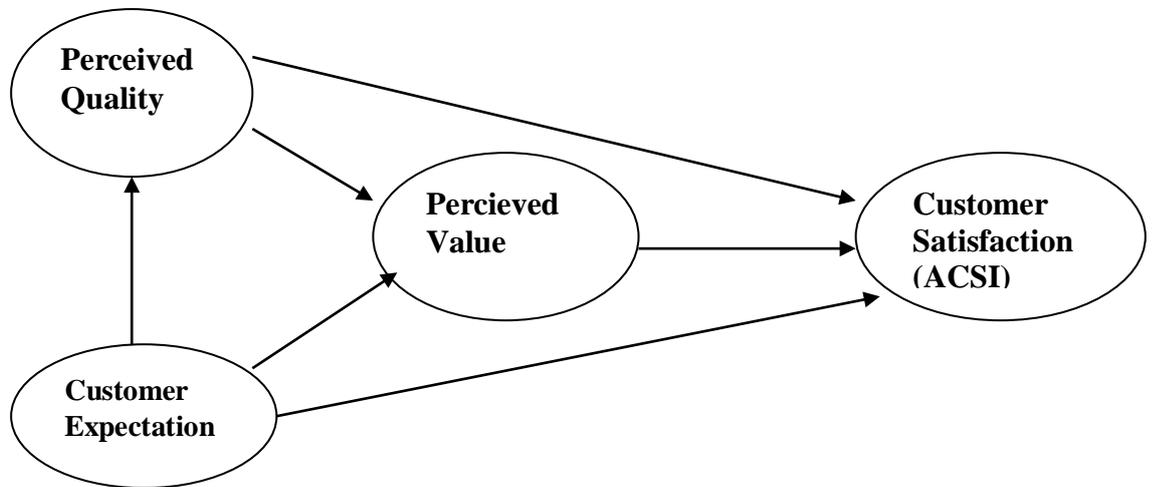
Fig. 2.1   The ACSM model of customer satisfaction measurement by Fornell et al.1996

Several empirical studies done on the assessment of customer satisfaction levels include: Gerpott et al. (2001) investigated the customer satisfaction level of 684 residential customers of mobile operators in Germany using the frequency distribution, the results showed that 28% of the respondents were completely satisfied and 6.3% were slightly satisfied or not satisfied. Turel and Serenko, 2006, assessed customer satisfaction level of 210 young adult mobile subscribers in Canada by adapting the American Customer Satisfaction Model, the result obtained was 54.67%. This score was relatively low compared to the 65% obtained by ACSI organization for the USA in 2004.

Fornell (1992) investigated customer satisfaction with 100 corporations in over 30 industries in Sweden and expressed that the benefits of customer satisfaction include the following; highly satisfied customers -

- Stay longer (i.e. prevent customer churn)

- Purchase more as the company introduces new products and upgrades existing products

- Talk favorably about the company and its products or services (helps to improve advertisement)

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- Pay less attention to competing brands

- Less sensitive to price

- Offer product or service ideas to the company

- Cost less to serve than new customers because transactions are routine

- Enhances business reputation

These benefits make customer satisfaction and its measurement an important marketing construct, which is especially essential to the mobile telecoms industry in which the long-term links between operators and customers are of greater importance to business performance.

2.1.1d   **CONSEQUENCES**

Several research works have shown that customer satisfaction is positively associated with desirable business outcomes namely; Customer Loyalty, Customer Retention, and Customer Profitability. Gerpott et al. (2001) reported that these consequences are important goals for telecommunications operators to have superior economic success.

CUSTOMER LOYALTY

Coyne (1989) stated that customer satisfaction has measurable impact on customer loyalty in that when satisfaction reaches a certain level; on the high side, loyalty increases dramatically; at the same time, when satisfaction falls to a certain point, loyalty reduces equally dramatically. Yi (1990) expressed that the impact of customer satisfaction on customer loyalty by stating that *"customer satisfaction influences purchase intentions as well as post-purchase attitude"*. In other word, satisfaction is related to behavioural loyalty, which includes continuing purchases from the same company, word of mouth recommendation, increased scope of relationship. Fornell (1992) found out that there is a positive relationship between customer satisfaction and customer loyalty but this connection is not always a linear relation. This relationship depends on

factors such as market regulation, switching costs, brand equity, existence of loyalty programs, proprietary technology, and product differentiation at the industry level. Jones and Sasser (1995) proposed that link between satisfaction and loyalty can be classified into four different groups: loyalist/apostle (high satisfaction, high loyalty), defector/ terrorist (low satisfaction, low loyalty), mercenary (high satisfaction, low loyalty), and hostage (low satisfaction, high loyalty). Roger Hallowell (1996) confirmed the link between customer loyalty (in the context of behavioural loyalty) and customer satisfaction. Oliver (1999) stated that the relationship between satisfaction and loyalty is that satisfaction is transformed into loyalty with the assistance of a myriad of other factors. However, this relationship is complex and asymmetric.

High levels of satisfaction lead to high levels of attitudinal loyalty. Attitudinal loyalty involves different feelings, which create a customer's overall attachment to a product, service, or company (Lovelock et al., 2001). Gerpott et al. (2001) in their study of the German mobile telecommunication found that customer satisfaction is positively related to customer loyalty, and both factors are important paraments in the mobile telecommunications industry. Turel and Serenko, 2006, in their study of Canadian mobile telecommunications also confirmed this finding.

CUSTOMER RETENTION

Several research works have shown that there is positive relationship between customer satisfaction and customer retention; customer satisfaction has a direct effect on customer retention (Rust and Subramaman, 1992); customer satisfaction is positively related to customer retention (Anderson and Sullivan, 1993); to retain a customer, it is necessary to satisfy him. Satisfied customer is more likely to return and stay with a company than a dissatisfied customer who can decide to go elsewhere (Ovenden, 1995); satisfaction leads to retention and the retention is not simply because of habit, indifference or inertia (Desai and Mahajan, 1998); customer retention is central to the development of business relationships, and these relationships depend on satisfaction (Eriksson and Vaghult, 2000); customer satisfaction is an antecedent of customer

retention (Athanassopoulos, 2000); customer satisfaction is a central determinant of customer retention (Gerpott et al., 2001); customer satisfaction is positively related to customer retention and the effect varies by customer size and the customer's current level of satisfaction (Niraj et al., 2003).

CUSTOMER PROFITABILITY

Research studies conducted by Gale (1992) and Fornell (1992) showed that higher customer satisfaction translates into higher than normal market share growth, the ability to charge a higher price, lower transaction costs, and a strong link to improved profitability. Nelson et al., (1992) also demonstrated that customer satisfaction is related to higher profitability and proved his findings statistically. Andersson et al., (1994) found a significant association between customer satisfaction and accounting return on assets. Ittner and Larckner (1996) found that shareholder value is highly elastic with respect to customer satisfaction. Fornell et al., 1996, found out that customer satisfaction is significantly related to firms' financial performance.

The volume of business conducted with a firm is directly related to customer satisfaction, which in turns affect profitability (Ittner and Larcker, 1998).

Other empirical findings further demonstrated that; customer satisfaction has greater influence on repurchase intentions and profits for service companies (Edvardsson et al., 2000b); customer satisfaction affects share-of-wallet (SOW) positively (Braun and Scope, 2003; Keiningham et al., 2003); customer satisfaction leads to increased profits (Fečiková, 2004); and customer satisfaction is strongly associated with improved share-of –spending (Keiningham 2005).

The significance of this sub-section to this study is that it helps to provide better understanding that customer satisfaction to some extent affects loyalty which in turn may affect retention and profitability.

2.2   **<u>DEMOGRAPHICS AND CUSTOMER SATISFACTION</u>**

The social identity theory proposed that attitudes are moderated by demographic, situational, environmental, and psychosocial factors (Haslam et al., 1993; Jackson et al., 1996; Platow et al., 1997). According to the social psychological theories, consumers' evaluations are moderated, or in some cases mediated, by personal feelings of equity in the exchange, disconfirmation between desires and outcomes, individual preferences, social comparisons, and other complex phenomena. These theories strongly suggest that differences in these phenomena among consumers influence their attitudes (Williams et al., 1998).

Several empirical findings that have shown the relationship between demographic variables and satisfaction include:

Bryant et al. (1996) conducted a study on 400 companies using the American Customer Satisfaction Index (ACSI) and demonstrated that there is significant relationship and consistent differences in the levels of satisfaction among demographic groups: Sex – positively related to satisfaction and female customers are more satisfied than the male customers. Female of all ages are more satisfied than the male. Women are more involved with the process of purchase and possibly use the mobile phone more for relational purposes (social network device) while men use it for functional purposes (businesses, sales, etc). Age – positively related to satisfaction but the relationship is not a straight line. Satisfaction increases with age. The major increase in satisfaction is seen within the age 55 and over. Income – the higher the income, the lower the satisfaction level. Location (type of area) – positively related to satisfaction. Customers living within metropolitan areas (central city and suburban areas) are less satisfied than those customers in non-metropolitan areas.

Palvia and Palvia (1999) found out that age is a significant determinant of satisfaction with information technology industry. Oyewole (2001) in his research on customer satisfaction with airline services reported also that gender, occupation, education, and marital status have significant influence on customer satisfaction, while age and household income had no

significant influence. Homburg and Giering (2001) conducted a study on German car manufacturers using LISREL notation and demonstrated that it is important to study demographic variables as determinants of customer behaviours. The results of their study showed that gender has significant moderating effect on satisfaction- loyalty relationship. Women are satisfied with sales process while men are satisfied with the impact of the product. Age showed a positive moderating effect and income had moderating influence with high income showing weaker effect and low income, high effect. Jessie and Sheila (2001) in their empirical work on patients' assessment of satisfaction and quality using factor analysis and regression, reported that age, beneficiary group, location, rank, service affiliation, education, marital status, race, gender, health status and number of visits (sociodemographic variables) have minimal influence on satisfaction.

Ahmad and Kamal (2002) conducted a study on a commercial bank using a stepwise regression and demonstrated that there is negative significance between age and satisfaction. When age goes up, satisfaction levels are likely to go down. However, occupation and income levels are positively related to satisfaction. Lightner (2003) in his study on online experience using regression, expressed that age is an important factor in determining satisfaction levels and technology perceptions. VanAmburg (2004) conducted a study on 200 companies using the American Customer Satisfaction Index (ACSI) and demonstrated that age has a significant effect on satisfaction. Younger age groups are less satisfied than older age groups across all products and services industries.

Venn and Fone (2005) conducted a study on patient satisfaction with general practitioner services in Wales using logistic regression and reported that satisfaction varied with age, gender, employment status, and marital status. The results obtained indicated that higher satisfaction is significantly related with increasing age, female gender, unemployed (those at home, disabled and retired), and married patients. However, unemployed - students and those seeking work, reported lower satisfaction.

Turel and Serenko (2006) in their study on customer satisfaction with mobile services in Canada using ACSI, reported that age has a significant influence on customer satisfaction and lower satisfaction level is found among young adults.

From this literature review, it is suggested that consumers differ in behaviors and attitudes and one of the factors responsible for this difference is demographics. It is therefore necessary to investigate the impact of demographic factors (age, gender, type of employment and location) on customer satisfaction of Nigerian mobile telephone industry. This investigation is necessary basically for three reasons:

- It is the first academic study on Nigerian customers

- Demographic factors are important factors in the society and greatly affect attitudes, lifestyle, standard of living, etc. This study intends to investigate the impact of these factors on customer satisfaction with mobile services in Nigeria.

- It helps to investigate the different market segments so as to better understand the needs of different customers.

The contribution of the aforementioned literature to this study is:

- Better understanding that consumer attitudes are influenced by several factors. In accordance with this review, the following hypotheses are adopted for this study:

  - ➤ There is a strong relationship between age and customer satisfaction

  - ➤ There is a strong relationship between gender and customer satisfaction

  - ➤ There is a strong relationship between location and customer satisfaction

  - ➤ There is a strong relationship between employment and customer satisfaction

  - ➤ There is a strong relationship between age, gender and customer satisfaction

  - ➤ There is a strong relationship between age, location and customer satisfaction

  - ➤ There is a strong relationship between age, employment and customer satisfaction

  - ➤ There is a strong relationship between gender, location and customer satisfaction

- There is a strong relationship between gender, employment and customer satisfaction

- There is a strong relationship between location, employment and customer satisfaction

- There is a strong relationship between age, gender, location, employment and customer satisfaction

CHAPTER 3

3.1   **RESEARCH METHOD**

In order to investigate the objectives of this study and answer the hypotheses, the descriptive research method was employed. The questionnaire survey technique was used to collect data and the questions were self constructed. The choices of questions for this investigation include questions on personal background; age- lowest range was 16-25 and highest was 66-75; gender- male/female; employment type- employed (public, private and self), student and unemployed; and area of residence (Ikeja, Lagos Island, Mushin and Victoria Island).

The other questions were on variables used to assess mobile service performance; network quality/availability, billing, validity period and customer care services. The rating scale varied from "very satisfied" to "no opinion". Please see the Appendix 1 for full details of the questionnaire.

The questionnaires were administered on the streets and the choice of this method of data collection was of high priority because the residents of Lagos State are mostly very busy people, who leave their homes for work or trade very early in the morning (5.00am) and return late (some people return as late between 10.00-11.00pm). There will probably be little or no available time to attend to the questionnaires if dropped at their homes and failure of power supply (electricity) is very common at nights. Additionally, the street interviews presented better chance of having high representation of the sampling population, cheaper cost and rapid speed of data collection.

3.1.1   **RESEARCH FRAMEWORK**

This study is to investigate the level of Nigerian customer satisfaction of the mobile telecoms services and explore the relationship between customer satisfaction and specific demographic variables. Previous studies on mobile telecommunication services suggested that network/call quality, pricing and customer care/support are important features of the mobile telecoms services

(Booz, Allen & Hamilton, 1995, Danaher & Rust, 1996; Bolton, 1998; Gerpott, 1998; Wilfert, 1999; Kim, 2000; Gerpott et al., 2001; Lee, Lee, & Freick, 2001). Hence, this study employs these variables in its investigation. Figure 3.1 presents the conceptual structure of this study.

Mobile Industry
- **Network quality**
- **Pricing**
- **Customer Care**

| **Demograhics** | → | **Customer satisfaction** |
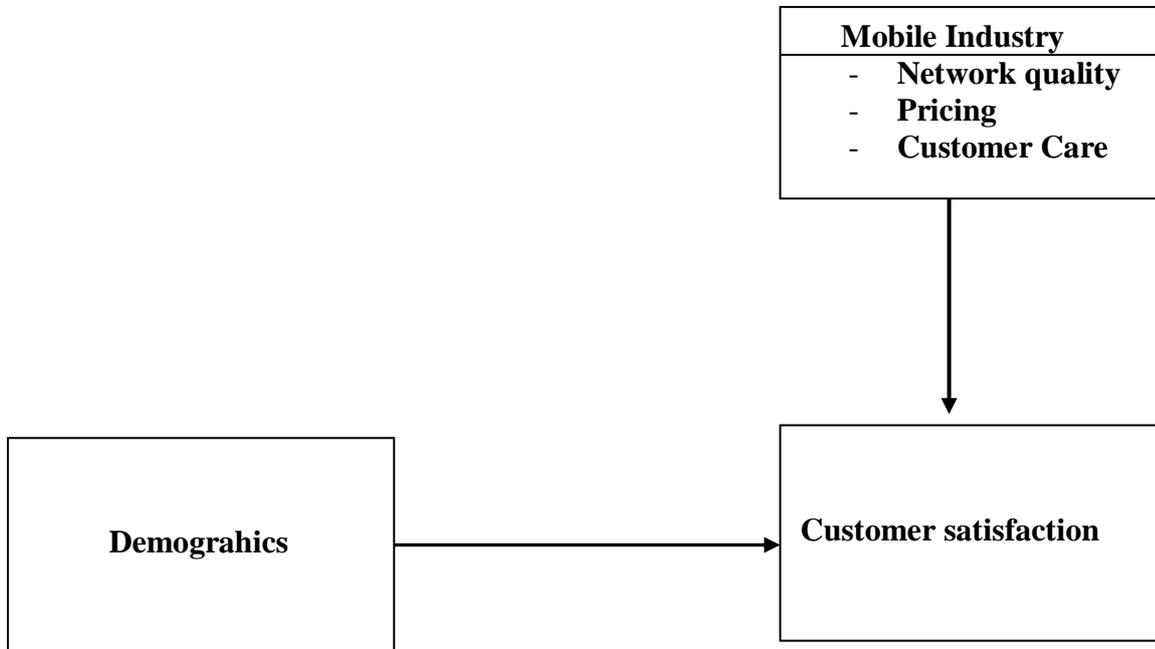
This diagram illustrates the objective of this study, which is to investigate the Nigerian customer satisfaction with the mobile telecoms industry, factors influencing satisfaction and the relationship between satisfaction and demographics.

Fig. 3.1 Conceptual structure of this study (research framework)

3.1.2 SELECTION OF INTERVIEWERS

Four people assisted in conducting the interviews. They include two recent graduates and two undergraduates, all males. No formal training was done apart from explaining briefly what the research is all about and the locations to collect the data. This was due to the fact that I was not physically available in Lagos State (resident in Sweden) to conduct the training and communications were basically done on the phone with the author. These different locations of the author and interviewers made supervision impossible. No compensation was given to the

interviewers (the interviewers are my friends residing not too far from the locations of data collection). The data was collected for four days, April 20-23rd, 2006 between 9am-1pm in each location.

3.1.3   <u>**SELECTION OF RESPONDENTS**</u>

Questionnaires were administered at four different locations. Since no list of customer was used, the residential locations were used as quota segment. These residential locations may relate to the level of income of the inhabitants and as well as to the level of use of the mobile services. The residential locations are in Lagos State, the commercial center, in the South West of Nigeria and these include:

- Victoria Island (High income)

- Ikeja (Middle)

- Lagos Island (Middle-low)

- Mushin (Low)

The breakdown of these locations is based firstly on my experience of these areas and secondly, on the Wikipedia article (2006) on the history of Lagos State. Victoria Island is surrounded by several beaches (from the Atlantic Ocean) and has been choice of residence for top federal officers and diplomats since the colonial administration. The residences in this location are for federal parastals, diplomatic communities and rich individuals. Ikeja is the state capital and is the choice of residence for state parastals, corporate bodies, top state officers, civil officers, businessmen and averagely rich people. It is a choice of residence for civil officers, business people, etc. Lagos Island is the commercial center of the state. It is the choice of residence for corporate bodies (mostly headquarters), big markets, traders, business people, civil officers, etc, and has poorer housing structures.

Mushin is the choice of residence for traders, low ranked employees, etc. The location has problems of overcrowding, inadequate housing and poor sanitation.

A total number of 400 people were interviewed for this study. This number is in accordance with the views of Dillman (2000) and Hill et al. (2003), who reported that a sample size of 100 and above is sufficient to present good concise research findings and also, provide good representation of the population or organization or any subject investigated. Selection is by convenience sampling (Non-probability sampling); interception of mobile users (questionnaires were handled out to every passerby and interested people waited to fill the forms) on streets in the central areas of the chosen locations on their way to work, lunch, school and shopping centers, etc. The points of data collection were changed within the chosen central locations to minimize bias. 100 respondents were administered the questionnaires in each location.

3.1.4 RESEARCH INSTRUMENT

A questionnaire was the instrument used in this study to collect data. The questionnaire employed the typical form of fixed-response alternative questions that require the respondent to select from a predetermined set of answers to every question. According to Malhotra and Birks (2003, pp. 224), this survey approach is the most common method of primary data collection in marketing research and the advantages are simple administration and data consistency.

The survey questionnaires were administered on the streets (mode of data collection): the questionnaires were filled out mostly by the people themselves or through the interviewers for few people who could not understand English. Malhotra and Birks (2003) showed in their evaluation of comparative survey techniques that street interviews have high flexibility of data collection, high degree of diversity of questions due to interaction and high response rate, moderate sample control, moderate quantity of data, moderate to high great potential to probe respondents, moderate to high great potential to build rapport, moderate to high speed and cost of

data collection. These qualities were responsible for the choice of this survey technique for this study.

The questionnaires employed the Likert non-comparative scaling technique. It is a widely used rating scale which requires the respondents to indicate a degree of agreement or disagreement with each of a series of statements or questions (Albaum, 1997). This rating scale is easy to construct and administer and respondents readily understand how to use the scale (Malhotra and Birks, 2003, pp. 305).

The Likert scale used in this study is odd numbered (as proposed by Spagna, 1984); balanced (the number of favourable and unfavourable categories is equal). This view is proposed by Watson (1992), who reported the balanced state helps to obtain an objective data; has non-forced choices "no opinion" to improve the accuracy of the data (as proposed by Hasnich, 1992); and 5-scaled categories which conforms to the traditional guidelines reported by Aaker (1997). He proposed that the categories scale should be between 5 and 9.

The questionnaire contains two sections; A and B. Section A has questions on demography (age, gender, employment and location) and the section B includes questions on mobile provider, rating of service quality (network availability, billing and validity period), customer care service (promptness, attitude and competence), and the rating of the service performance. In all, the questionnaire contains eight questions and the answers are "very satisfied", "satisfied", "dissatisfied", "very dissatisfied" and "no opinion". The questionnaire was constructed entirely in English. Please see table 3.1 for the operation definition for the content of the questionnaires and appendix 1 for a copy of the questionnaire.

Table 3.1   Operational definitions of the content of the questionnaire

Features/Contents	Operational definition
Network availability	Call quality as perceived by customers and this include: - Call clarity when calling and receiving - Coverage
Billing	The cost of refilling credit (pricing): - Variety of refill card - Affordability of the refill card - Freedom of choosing refill cards - Speed of refilling
Validity period	The period in which you can make calls and or receive calls after every refill
Customer Care	Customer support and complaint management systems: - Promptness (ability to get attendant quickly) - Attitude (response of the attendant) - Competence (ability to provide a solution)
Customer satisfaction	an experience-based assessment made by the customer of how far his own expectations about the individual characteristics or the overall functionality of the services obtained from the provider have been fulfilled

3.2   **RESEARCH DESIGN**

The Statistical Package for Social Sciences (SPSS) 12.0 will be used to analyze the data collected. The descriptive statistics (frequencies statistics) will be applied to assess the level of customer satisfaction while the relationship between the mobile services attributes, specific demographic variables and customer satisfaction will be analyzed with the linear regression model.

According to the SPSS package, the linear regression is used to model the value of a dependent scale variable based on its linear relationship to one or more predictors. The Model summary table reports the strength of the relationship between the model and the dependent variable. "R" value indicates the strength of relationship with larger values indicating stronger relationship and "R^2" is the proportion of the variation in the dependent variable explained by the regression. Both R and R^2 the regression procedure values range from 0 to 1.

According to Hair et al. (2005) independent variables can be classified as ordinal or nominal variable. Ordinal variable allows distinction and the distinction can quantify the differences between the variables. Example includes age. In this study to perform the data analysis, the age variable will be ranked from 1 to 5 with the least age group 16-25 as 1 and the highest group 66-75 ranked 5.

Nominal variable allows distinction but the distinction can not quantify the differences between the variables. Examples include gender, location and employment, etc. To be able to analyze this variable, dummy variable will be used. Dummy variable is variable representing nominal data encoded numerically, using the 0 and 1 values. For this study, gender variable will have 1 dummy variable: male is 1 and female is 0. Location will have 4 dummy variables and employment having 5 dummy variables.

The answers to questions rated "very satisfied", "satisfied", "dissatisfied", "very dissatisfied" and "no opinion" will be valued from 1 to 5 respectively.

CHAPTER 4

4.1   DATA ANALYSIS AND DISCUSSION

4.1.1   FREQUENCY STATISTICS

A total of 400 questionnaires were administered and collected in four different locations of

Lagos State, Nigeria. The data collected was analyzed with the Statistical Package for Social

Science (SPSS). Table 4.1 presents the descriptive statistics (frequency statistics) of the

independent variables (demographics).

Variables		Frequency	Percent	Cumulative Percent
Age				
	16-25	81	20,3	20,3
	26-40	222	55,5	75,8
	41-55	56	14,0	89,8
	56-65	34	8,5	98,3
	66-75	7	1,8	100,0
	16-25	81	20,3	20,3
Gender				
	Male	186	46,5	46,5
	Female	214	53,5	100,0
Employment				
	Public	72	18,0	18,0
	Private	142	35,5	53,5
	Self	119	29,8	83,3
	Student	49	12,3	95,5
	Unemployed	18	4,5	100,0
Location				
	Ikeja	100	25,0	25,0
	Lagos Island	100	25,0	50,0
	Mushin	100	25,0	75,0
	Victoria Island	100	25,0	100,0

4.1.2 ANALYSIS OF CUSTOMER SATISFACTION

The dependent variable (customer satisfaction) was analyzed with the descriptive statistics (frequency distribution). Table 4.2 presents the result of the analyzed overall customer satisfaction.

Satisfaction		Frequency	Percent	Cumulative Percent
	Very satisfied	20	5,0	5,0
	Satisfied	228	57,0	62,0
	Dissatisfied	137	34,3	96,3
	Very dissatisfied	8	2,0	98,3
	No opinion	7	1,5	100,0
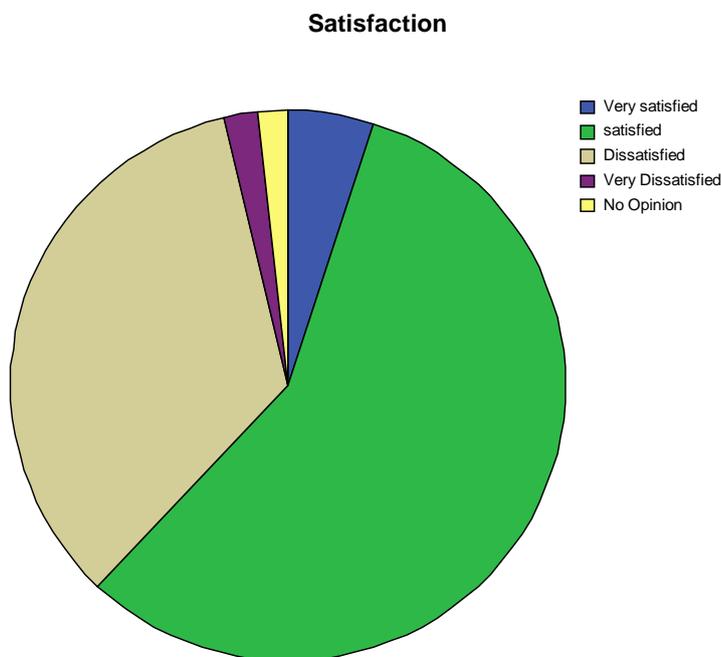
Satisfaction

The pie-chart represents the outcome of the analysis of the Nigerian customer satisfaction with the mobile telecoms services (frequency distribution in percentage).

Fig. 4.1   Pie-chart representation of customer satisfaction.

This result demonstrates that 57% of the respondents are satisfied, and 5% very satisfied with the mobile telecoms services in Nigeria and hence, supports H_1. Although this score is slightly above average, it is a fairly good assessment for a mobile telecoms sector that is barely 5 years old. The interpretation of this result could be that Nigerian customers are truly satisfied with the mobile service performance and its impact. In line with the adopted definition, this result showed that customers are satisfied with their experiences of use of the mobile services (services meet expectation). This satisfaction measure could also result from lack of viable competitor that the customers can compare services with and/or could be due to the fact that customers are kind of new to satisfaction measurement and may not be able to express their perceptions well. Thus, there is need for routine customer satisfaction measurement to better capture customers perceptions.

However, this result supports the previous studies conducted on customer satisfaction of mobile operators in Germany with 28% of the respondents satisfied (Gerpott et al., 2001), the United States – 65% of the respondents were satisfied (ACSI, 2004), and in Canada – 54.67% of the respondents were satisfied (Turel and Serenko, 2006).

4.2   CUSTOMER SATISFACTION AMONG THE DEMOGRAPHIC GROUPS

The demographic variables were analysed against customer satisfaction using the cross tab of the descriptive analysis to show assessments of customer satisfaction among various categories of the demographic variables. Table 4.3 presents the outcome of the analysis.

Cross tabulation

Variables		Very satisfied	Satisfied	Dissatisfied	Very dissatisfied	No opinion	Total	Satisfaction (%)
Age	**16-25**	0	46	28	0	7	81	56.8
	26-40	4	144	66	8	0	222	66.7
	41-55	16	12	28	0	0	56	50
	56-65	0	19	15	0	0	34	55.8
	66-75	0	7	0	0	0	7	100

Gender								
	Male	4	123	44	8	7	186	68.3
	Female	16	105	93	0	0	214	56.5
Employment	Public	0	65	7	0	0	72	90.3
	Private	16	46	65	8	7	142	43.7
	Self	0	62	57	0	0	119	52.1
	Student	4	37	8	0	0	49	83.7
	Unemployed	0	18	0	0	0	18	100
Location	Ikeja	0	63	37	0	0	100	63
	Lagos island	4	60	32	4	0	100	64
	Mushin	7	60	33	0	0	100	67
	Victoria island	9	45	35	4	7	100	54

Table 4.4 presents the result of the assessment of customer satisfaction in 2 categories of

demographic variables.

Variables		Satisfaction (Mean) (%)
Age	Young	61.8
	Old	68.6
Gender	Male	68.3
	Female	56.5
Employment	Employed	72
	Unemployed	91.9
Location	High income	58.5
	Low income	65.5

Note: *Young – those under 40, Old – those over 40; Employed – those in public, private and self*

employment, Unemployed – students, unemployed (those seeking jobs, retired, etc); High income

– Ikeja and Victoria Island dwellers status, Low income – Lagos Island and Mushin dwellers status.

This result demonstrates that customer satisfaction level differs among the various demographic variables and hence, supports H_2. Within the age groups, the old people are more satisfied than the young people. The low satisfaction of the young people could result from the fact that they are more demanding as a result of their greater familiarity with mobile technologies and higher tendency to complain than the old people. This result supports the findings of Bryant et al., 1996, which reported that satisfaction increases with age and major increase seen within the age of 55 and above; the younger age groups are less satisfied than older age groups across all products and services industries (VanAmburg, 2004); Venn and Fone (2005) reported that higher satisfaction is significantly related with increasing age; and Turel and Serenko (2006), in their study of mobile telecoms revealed that there is lower satisfaction level among young adults. Within the gender groups, this result revealed that male customers are more satisfied than the female. The higher satisfaction reported by the male customers may imply that they are well satisfied with the impact of the service and/or the mobile telecoms boost their functional activities (businesses, sales, etc), while for the female customers, their low satisfaction could be due to less or no personal interaction with sales process (mobile subscription is through vendors and not directly from the operators, unlike the fixed telecoms) or less influence of mobile telecoms on their relational activities. This result is in contrast with the findings of Bryant et al. (1996), who revealed that the female customers are more satisfied than the male customers across all industries; Venn and Fone (2005) revealed that higher satisfaction is positively related to female gender.

The result also indicates that the unemployed customers are more satisfied that the employed ones. Employment relates to education. Unemployment results from both lack of jobs for qualified people and lack of education. The higher satisfaction of the unemployed customers could be that they are truly satisfied with the services irrespective of their status or their

perception is a result of their level of education. This study did not examine the influence of education on satisfaction and future studies could investigate this. Additionally, this result confirms the findings of Venn and Fone (2005), which reported higher satisfaction level among unemployed customers.

Accordingly, customers living within the low-income areas are more satisfied than those in the high-income areas. High-income areas dwellers have greater tendency to be more familiar with information technologies and be more demanding and these factors could be responsible for the low satisfaction obtained in the high-income areas. This result confirms the findings of Bryant et al. (1996) which reported that the higher the income, the lower the satisfaction.

4.3 FACTORS INFLUENCING CUSTOMER SATISFACTION

To explore the relationship between mobile services attributes and customer satisfaction, the linear regression model was applied. R and R^2 values range between 0 and 1 with larger values indicating stronger relationship. The following sub-sections present the results.

4.3.1 Relationship between network quality and customer satisfaction

Table 4.5 presents the result of the relationship between network quality and satisfaction.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.635(a)	.404	.402	.53728

a. Predictors: (Constant), Network

This result indicates that there is a strong relationship between network quality and customer satisfaction and thus, supports H_3. The implication of this result is that network quality of the telephone services is the most significant of all the mobile service attributes in Nigeria. Secondly, the result means that the customers perception of network quality strongly influence their perception of mobile operators and their satisfaction level. From my experience of Lagos State, network quality is very good, especially in the major cities such as the locations used in

this study but some times, climatic conditions such as rainfall, strong wind, etc affect the call quality. Network quality involves call clarity and coverage and mobile operators should focus on improving network quality to create higher satisfaction. Please see appendix 2 for full statistical result.

4.3.2 Relationship between billing and customer satisfaction

Table 4.6 presents the result of the relationship between billing and satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.444(a)	.197	.195	.62340

a. Predictors: (Constant), Billing

This result demonstrates that there is a weak relationship between billing and customer satisfaction and thus, contradicts H_4. This finding means that billing (pricing structure) has negligible significance out of mobile services attributes in Nigeria. Secondly, the price paid to access the mobile services has little influence on customer satisfaction level. Thirdly, the finding could indicate that billing is meaningless without aligning it with other mobile services attributes. Thus, mobile operators need to provide reasonable pricing that are aligned with good mobile services attributes to maximise satisfaction and routine satisfaction assessment should be conducted. Lastly, this result may probably be due to the fact that the mobile technology is new in the country and rapidly gaining acceptance. Please see appendix 3 for full statistical result.

4.3.3 Relationship between validity period and customer satisfaction

Table 4.7 presents the result of the relationship between validity period and satisfaction.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.401(a)	.161	.159	.63749

a. Predictors: (Constant), Validity period

This result demonstrates that there is a weak relationship between the validity period and customer satisfaction and thus, contradicts H_5. The rejection of this finding also means that validity period has negligible significance out of mobile services attributes in Nigeria. Secondly, the result means that the duration to call and or receive calls after every refill whether short or long has little influence on customer satisfaction level. Thirdly, the finding could indicate that validity period is meaningless without aligning it with other mobile services attributes. Thus, mobile operators need to provide reasonable validity period that are aligned with good mobile services attributes to maximise satisfaction and routine satisfaction evaluation should be done. Lastly, this result may probably be due to the fact that the mobile technology is new in the country and rapidly gaining acceptance.

From my experience, in Nigeria, after every refill, I have less than 30 days validity period to make and receive calls, after this period, an additional 1 month is given to receive calls and if no refill is done within the period, the line is blocked and it will take calling the mobile operator support service to reactivate and load credit. However in Sweden, after every refill, validity period is one year from the date of refill. It is therefore interesting to observe that validity period has a weak influence on satisfaction of the Nigeria mobile telecoms industry and this may be due to the fact that the mobile telephony is the best telephony available. Please see appendix 4 for full statistical result.

4.3.4 Relationship between overall customer care and customer satisfaction

Table 4.8 presents the result of the relationship between overall customer care and satisfaction.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.396(a)	.157	.155	.63887

a. Predictors: (Constant), overall customer care

This result demonstrates that there is a weak relationship between overall customer care and customer satisfaction and thus, contradicts H_6. The implication of this result is that customer care service has negligible significance out of mobile services attributes in Nigeria. Secondly, customer care service has little influence on Nigerian customers satisfaction level. Thirdly, the result could indicate that customer care service is meaningless without aligning it with other mobile services attributes. Thus, mobile operators need to provide reasonable validity period that are aligned with good mobile services attributes to maximise satisfaction and routine satisfaction evaluation should be done. Lastly, this result may probably be due to the fact that the mobile technology is relatively new in the country.

From my experience, at times it takes about an hour of holding your call to successfully make a query or lodge a complain and it is therefore interesting to observe that customer care service has weak influence on satisfaction. Customer care service whether good or bad is demonstrated by this study to have weak influence on satisfaction but its influence on other customer attitudes (such as word of mouth) is not investigated. Future study can conduct this investigation. Please see appendix 5 for full statistical result.

4.3.5 <u>Relationship between network quality, billing, validity period, overall customer care and customer satisfaction</u>

Table 4. 9 presents the result between the combined mobile services attributes and satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.676(a)	.457	.452	.51469

a. Predictors: (Constant), Overall customer care, Billing, Validity period, Network quality

This result demonstrates that the interaction of the mobile services attributes have a strong relationship with customer satisfaction and thus, supports H_7. The interpretation of this finding is that the aligned mobile services attributes is significant to the assessment of the customer

satisfaction with mobile services. Therefore, customer satisfaction with Nigerian mobile services is a function of the assessment of network quality, billing, validity period and customer care service. Thus, mobile operators should focus on improving mobile services attributes to heighten customer satisfaction.

This strong relationship outcome supports the findings of Booz, Allen and Hamilton (1995); Danaher and Rust (1996); Bolton (1998); Gerpott (1998); and Wilfert (1999), which reported that the aforementioned attributes are key drivers of the customer value of the mobile services and key factors affecting customer satisfaction. Please see appendix 6 for full statistical result.

4.4 RELATIONSHIP BETWEEN DEMOGRAPHIC VARIABLES AND CUSTOMER SATISFACTION

To explore the relationship between demographic variables and customer satisfaction, the linear regression model was applied. R and R^2 values range between 0 and 1 with larger values indicating stronger relationship. The following sub-sections present the results.

4.4.1 Relationship between age and customer satisfaction

Table 4.10 presents the result of the relationship between age and customer satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.126(a)	.016	.013	.69027

a. Predictors: (Constant), Age

This result demonstrates that there is a weak relationship between age and customer satisfaction and hence, contradicts H_8. The interpretation of the result is that age has a negligible impact on customer perception of how well the mobile services meet needs and expectations. This result could probable be due to the fact the mobile telecoms industry is still growing and/or is too early to establish such relationship because the study is new to Nigerian customers. Thus, there is need for routine assessment to investigate this relationship.

This result supports the findings of Jessie and Sheila (2001) and Oyewole (2001) which reported that age has a minimal influence on satisfaction and contradicts the findings of Palvia and Palvia (1999), Lightner (2003) and Turel and Serenko (2006) which reported that age is a significant determinant of satisfaction with information technology and mobile telecoms industry. Please see appendix 7 for full statistical result.

4.4.2 <u>**Relationship between gender and customer satisfaction**</u>

Table 4.11 presents the result of the relationship between gender and customer satisfaction

			Model Summary	
Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.039(a)	.002	-.001	.69531

a. Predictors: (Constant), Gender

This result demonstrates that there is a weak relationship between gender and customer satisfaction and hence, contradicts H_9. The rejection of the hypothesis means that gender has negligible influence on customer perception of mobile services performance. This result could also probable be due to the fact the mobile telecoms industry is still growing and/or is too early to establish such relationship because the study is new to Nigerian customers. Thus, there is need for routine assessment to investigate this relationship.

This result supports the findings of Jessie and Sheila (2001) which reported that gender has a minimal influence on satisfaction and contradicts the findings of Oyewole (2001) which reported that gender has significant influence on satisfaction. Please see appendix 8 for full statistical result.

4.4.3   <u>Relationship between location and customer satisfaction</u>

Table 4.12 presents the result of the relationship between location and customer satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.151(a)	.023	.015	.68964

a. Predictors: (Constant), Victoria Island, Lagos Island, Ikeja, Mushin

This result demonstrates that there is a weak relationship between location and customer satisfaction and hence, contradicts H_{10}. The implication of this finding is that location has negligible influence on how customers perceive service performance. This result could as well be due to the fact the mobile telecoms industry is still growing and/or is too early to establish such relationship because the study is new to Nigerian customers. Thus, there is need for routine assessment to investigate this relationship. This result supports the findings of Jessie and Sheila (2001) which reported that location has a minimal influence on satisfaction. Please see appendix 9 for full statistical result.

4.4.4   <u>Relationship between employment and customer satisfaction</u>

Table 4.13 presents the result of the relationship between employment and customer satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.332(a)	.110	.099	.65971

a. Predictors: (Constant), Unemployed, Student, Public, Self, and Private employment

This result demonstrates that there is a weak relationship between employment type and customer satisfaction and hence, contradicts H_{11}. This result means that employment status has negligible impact on how customers evaluate service performance. This result could as well be due to the fact the mobile telecoms industry is still growing and/or is too early to establish such relationship because the study is new to Nigerian customers. Thus, there is need for routine assessment to investigate this relationship.

This result also contradicts the findings of Oyewole (2001) and Ahmad and Kamal (2002) which reported that occupation has a significant influence on satisfaction. Please see appendix 10 for full statistical result.

4.4.5 Relationship between age, gender and customer satisfaction

Table 4.14 presents the result of the relationship between age, gender and customer satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.141(a)	.020	.015	.68973

a. Predictors: (Constant), Gender, Age

This result demonstrates that the interaction between age and gender variables have a weak influence on customer satisfaction and thus, contradicts H_{12}. The interpretation of this finding indicates that age aligned with gender has negligible effect on customer perception of service performance and like the previous results, the result could probable be due to the growing state of the mobile industry and/or the new study, which maybe too early to establish this relationship. However, routine investigations are needed to investigate this relationship. Please see appendix 11 for full statistical result.

4.4.6 Relationship between age, location and customer satisfaction

Table 4.15 presents the result of the relationship between age, location and customer satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of t Estimate
1	.190(a)	.036	.026	.68580

a. Predictors: (Constant), Victoria Island, Age, Lagos Island, Ikeja, Mushin

This result indicates that the interaction of age and location variables have a weak influence on customer satisfaction and hence, contradicts H_{13}. This result contradiction means that age aligned with location has negligible impact on customer assessment of service performance, and

like the previous results, the result could probable be due to the growing state of the mobile industry and/or the new study, which maybe too early to establish this relationship. Hence, routine evaluation should be conducted to investigate this relationship. Please see appendix 12 for full statistical result.

4.4.7 <u>Relationship between age, employment and customer satisfaction</u>

Table 4. 16 presents the result of relationship between age, employment and satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.375(a)	.140	.127	.64921

a. Predictors: (Constant), Unemployed, Student, Public, Self, Private employment and Age

This result demonstrates that the interaction of the age and employment variables have a weak influence on customer satisfaction and contradicts H_{14}. This finding means that age aligned with employment status has negligible effect on customer perception of how well mobile services satisfy needs, and like the previous results, the result could probable be due to the growing state of the mobile industry and/or the new study, which maybe too early to establish this relationship. Thus, routine assessment should be conducted to investigate this relationship. Please see appendix 13 for full statistical result.

4.4.8 <u>Relationship between gender, location and customer satisfaction</u>

Table 4. 17 presents the result of the relationship between gender, location and satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.157(a)	.025	.015	.68984

a. Predictors: (Constant), Victoria Island, Lagos Island, Ikeja, Mushin and Gender

The result demonstrates that the interaction of gender and location variables have a weak influence on customer satisfaction and contradicts H_{15}. The interpretation of this result is that

gender aligned with location has negligible impact on customer ratings of service performance, and like the previous results, the result could probable be due to the growing state of the mobile industry and/or the new study, which maybe too early to establish this relationship. Please see appendix 14 for full statistical result.

4.4.9   Relationship between gender, employment and customer satisfaction

Table 4. 18 presents the result of the relationship between gender, employment and satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.366(a)	.134	.121	.65171

a. Predictors: (Constant), Unemployed, Student, Self, Public, Private employment and Gender

The result demonstrates that the interaction of gender and employment variables have a weak influence on customer satisfaction and contradicts H_{16}. This finding means that gender aligned with employment status has negligible influence on how customers perceive service performance. Like the previous results, this result could as well be due to the fact the mobile telecoms industry is still growing and/or is too early to establish such relationship because the study is new to Nigerian customers. Thus, there is need for routine assessment to investigate this relationship. Please see appendix 15 for full statistical result.

4.4.10   Relationship between location, employment and customer satisfaction

Table 4. 19 presents the result of the relationship between location, employment and satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.377(a)	.142	.124	.65029

a. Predictors: (Constant), Victoria Island, Lagos Island, Ikeja, Mushin, Unemployed, Student, Public, Self, Private employment

The result demonstrates that the interaction of location and employment variables have a weak influence on customer satisfaction and contradicts H_{17}. The implication of this result is that

location aligned with employment status has negligible influence on customer ratings of service performance. Like the other previous results, this result could as well be due to the fact the mobile telecoms industry is still growing and/or is too early to establish such relationship because the study is new to Nigerian customers. Thus, there is need for routine assessment to investigate this relationship. Please see appendix 16 for full statistical result.

4.4.11 Relationship between age, gender, location, employment and customer satisfaction

Table 4.20 presents the result of the relationship between all demographic variables and satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.443(a)	.196	.175	.63112

a. Predictors: (Constant), Unemployed, Student, Self, Public, Private, Victoria Island, Lagos Island, Ikeja, Mushin, Gender, Age

The result demonstrates that the interaction of age, gender, location and employment variables have a weak influence on customer satisfaction and contradicts H_{18}. This finding indicates that the alignment of age, gender, location and employment factors have negligible impact on how Nigerian customers perceive service performance. Like the previous results, this result could as well be due to the fact the mobile telecoms industry is still growing and/or is too early to establish such relationship because the study is new to Nigerian customers. Thus, there is need for routine assessment to investigate this relationship. Please see appendix 17 for full statistical result.

CHAPTER 5

5.1   **CONCLUSION**

This study aims to investigate the customer satisfaction of the mobile telecoms industry, factors influencing satisfaction and the relationship between demographic variables and customer satisfaction in Ikeja, Lagos Island, Mushin and Victoria Island, in Lagos State, Nigeria. Customer satisfaction is an experience-based assessment made by customers how far their expectations about the overall functionality of the services obtained from the mobile operators have been fulfilled. With regards to customer satisfaction measurement, the results demonstrated that customers are satisfied with the performance of the Nigerian mobile telecoms industry. The interpretation of this result could be that Nigerian customers are truly satisfied with the service performance (satisfied with experience of the mobile services use) or their satisfaction results from lack of competing services or it could be that the customers are new to satisfaction measurement and may not be able to express their perceptions well. The result also demonstrated that customer satisfaction level differs among the specific demographic groups. Within the age groups, the older customers were more satisfied than younger ones. The low satisfaction of the young customers could be due to greater familiarity with mobile technologies and are more demanding. The male customers showed more satisfaction than the female counterpart. The high satisfaction of the male customers could be due to the impact of the services on their functional activities. The unemployed customers demonstrated more satisfaction than the employed ones and the higher satisfaction of the unemployed group could be due to true satisfaction or low knowledge of mobile technologies. Lastly, the low-income areas showed more satisfaction than the high-income areas. The low satisfaction of high-income areas customers could probably be due to greater familiarity with information technologies and are more demanding. However, mobile operators need to strive to maximize customer satisfaction which in turn can influence the extent of loyalty and retention.

With regards to factors that influence satisfaction, network quality demonstrated a strong influence on customer satisfaction. The implication of this finding is that network quality is the most significant of all the mobile services attributes and its quality strongly affect satisfaction. Billing, validity period and customer support showed weak influence on satisfaction. These results indicate that the evaluation of these factors without alignment is meaningless and have weak impact on satisfaction. The result also demonstrated that the combination of the mobile services attributes has strong influence on satisfaction. Thus, to increase customer satisfaction, mobile operators should focus on improving mobile services attributes by investing in equipment to enhance call quality and coverage, offer reasonable pricing and price discounts, offer reasonable validity period and enhance customer care through routine personnel training and provision of better customer-friendly equipment.

With regards to influence of demographic variables on satisfaction, the result showed that the individual variables (age, gender, employment status and location) and their combination have weak influence on satisfaction. These results mean that customers perceptions of how well the mobile services meet their needs are not affected by these specific variables. However, since the results showed different customer satisfaction levels among the various demographic groups, mobile operators can strive to better understand these market segments and adopt marketing strategies to better satisfy their different needs.

Broadly, the implication of this study for mobile operators is that operators should not just rely on profit margins as a good indicator of business performance. Rather, they should develop strategies that better capture customers perceptions of their service offerings and these strategies can compliment the internal perceptions of service offering. Customer satisfaction strategy helps companies to compare their performance against customer standards, compare customer standards against internal process and identify opportunities for improvement.

Despite the potential contribution of this study, this study had four limitations. First, the questionnaire was self-constructed instead of adopting research standard such as SERQUAL and

this made analysis difficult and affected the reliability of the result. Second, convenience data sample was used in this study and employment of random sample is necessary to judge the generalizability of findings of any empirical investigation. Thirdly, the different locations of authors and interviewers made supervision impossible and this robbed this study of potential probe for any useful information. Lastly, lack of customer satisfaction study in Nigeria. This lack robbed this study of possible comparism and insight.

With respect future projects, there is need for cooperation between academic bodies and mobile operators so as to achieve better customer-oriented investigations. Future studies can further investigate the factors that affect satisfaction and loyalty (such as level of education, word of mouth, life cycles and usage pattern of customers, switching barriers, etc).

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APPENDIX 1

<div align="center">

QUESTIONNAIRE

CUSTOMER SATISFACTION SURVEY

</div>

This research work is a study to measure how well the Mobile Telecommunications Industry is meeting your needs and know what needs to be improved to increase your satisfaction. Your cooperation is well appreciated. Thank you.

Instruction:

Please mark your answer with an "X".

<div align="center">

Section A

</div>

1. Which of the following age category are you

☐ 16-25
☐ 26-40
☐ 41-55
☐ 56-65
☐ 66-75

2. Please indicate your gender

☐ Male
☐ Female

3. Which of the following indicate your type of employment

☐ Public employment
☐ Private employment
☐ Self-employment
☐ Student
☐ Unemployed

4. Which of the following is your area of residence

☐ Ikeja
☐ Lagos Island
☐ Mushin
☐ Victoria Island

Section B

5. Which of the mobile operators do you subscribe to

☐ Glo Mobile
☐ Mtel
☐ MTN
☐ Vmobile

6. Please rate your satisfaction of this service on the following:

	Very satisfied	Satisfied	Dissatisfied	Very dissatisfied	No opinion
Network availability	☐	☐	☐	☐	☐
Billing	☐	☐	☐	☐	☐
Validity period	☐	☐	☐	☐	☐

7. When you call to complain or query anything, how satisfied are you on the following:

	Very satisfied	Satisfied	Dissatisfied	Very dissatisfied	No opinion
Overall customer care service	☐	☐	☐	☐	☐
Ability to get attendant quickly	☐	☐	☐	☐	☐
Attitude of the attendant	☐	☐	☐	☐	☐
Ability to provide a solution	☐	☐	☐	☐	☐

8. Overall, how satisfied are you with the use of this service

☐ Very satisfied
☐ Satisfied
☐ Dissatisfied
☐ Very dissatisfied
☐ No opinion

FACTORS THAT INFLUENCE CUSTOMER SATISFACTION

RELATIONSHIP BETWEEN NETWORK (CALL QUALITY) AND CUSTOMER SATISFACTION

ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	77.820	1	77.820	269.583	.000(a)
	Residual	114.890	398	.289		
	Total	192.710	399			

a. Predictors: (Constant), Network
b. Dependent Variable: Satisfaction

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.345	.069		19.557	.000
	Network	.500	.030	.635	16.419	.000

a. Dependent Variable: Satisfaction

BILLING (PRICING) AND CUSTOMER SATISFACTION

ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	38.035	1	38.035	97.869	.000(a)
	Residual	154.675	398	.389		
	Total	192.710	399			

a. Predictors: (Constant), Billing
b. Dependent Variable: Satisfaction

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.454	.099		14.660	.000
	Billing	.356	.036	.444	9.893	.000

a. Dependent Variable: Satisfaction

VALIDITY PERIOD (DURATION TO CALL AND RECEIVE CALLS) AND CUSTOMER SATISFACTION

ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.966	1	30.966	76.196	.000(a)
	Residual	161.744	398	.406		
	Total	192.710	399			

a. Predictors: (Constant), Validity
b. Dependent Variable: Satisfaction

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.691	.086		19.734	.000
	Validity	.323	.037	.401	8.729	.000

a. Dependent Variable: Satisfaction

APPENDIX 5
CUSTOMER CARE SERVICES (0.C.C.S) AND CUSTOMER SATISFACTION

ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.266	1	30.266	74.154	.000(a)
	Residual	162.444	398	.408		
	Total	192.710	399			

a. Predictors: (Constant), O.C.C.S
b. Dependent Variable: Satisfaction

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.227	.138		8.883	.000
	O.C.C.S	.561	.065	.396	8.611	.000

a. Dependent Variable: Satisfaction

APPENDIX 6
MOBILE SERVICES ATTRIBUTES AND CUSTOMER SATISFACTION

ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	88.074	4	22.019	83.120	.000(a)
	Residual	104.636	395	.265		
	Total	192.710	399			

a. Predictors: (Constant), Customer care support, Billing, Validity period, Network quality
b. Dependent Variable: Satisfaction

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.820	.130		6.330	.000
	Network	.396	.040	.503	10.018	.000
	Billing	.200	.035	.250	5.714	.000
	Validity	-.016	.038	-.020	-.426	.670
	O.C.C.S	.122	.064	.086	1.923	.055

a. Dependent Variable: Satisfaction

RELATIONSHIP BETWEEN DEMOGRAPHIC VARIABLES AND CUSTOMER SATISFACTION

APPENDIX 7
AGE AND CUSTOMER SATISFACTION

ANOVA (b)

Model		Sum of Squar	df	Mean Square	F	Sig.
1	Regression	3.073	1	3.073	6.450	.011(a)
	Residual	189.637	398	.476		
	Total	192.710	399			

a. Predictors: (Constant), Age
b. Dependent Variable: Satisfaction

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.595	.090		28.983	.000
	Age	-.097	.038	-.126	-2.540	.011

a. Dependent Variable: Satisfaction

APPENDIX 8
GENDER AND CUSTOMER SATISFACTION

ANOVA (b)

Model		Sum of Squar	df	Mean Square	F	Sig.
1	Regression	.292	1	.292	.604	.438(a)
	Residual	192.418	398	.483		
	Total	192.710	399			

a. Predictors: (Constant), Gender
b. Dependent Variable: Satisfaction

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.360	.048		49.648	.000
	Gender	.054	.070	.039	.777	.438

a. Dependent Variable: Satisfaction

APPENDIX 9
LOCATIONS AND CUSTOMER SATISFACTION

ANOVA (b)

Model		Sum of Squar	df	Mean Square	F	Sig.
1	Regression	4.370	3	1.457	3.063	.028(a)
	Residual	188.340	396	.476		
	Total	192.710	399			

a. Predictors: (Constant), Victoria Island, Lagos Island, Ikeja
b. Dependent Variable: Satisfaction

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.260	.069		32.771	.000
	Ikeja = 1	.110	.098	.069	1.128	.260
	Lagos Is.	.100	.098	.062	1.025	.306
	Victoria Is.	.290	.098	.181	2.973	.003

a. Dependent Variable: Satisfaction

Excluded Variables (b)

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	Mushin	.(a)	.	.	.	.000

a. Predictors in the Model: (Constant), Victoria Island, Lagos Island, Ikeja
b. Dependent Variable: Satisfaction

APPENDIX 10
EMPLOYMENT AND CUSTOMER SATISFACTION

ANOVA (b)

Model		Sum of Squar	df	Mean Square	F	Sig.
1	Regression	21.235	5	4.247	9.758	.000(a)
	Residual	171.475	394	.435		
	Total	192.710	399			

a. Predictors: (Constant), Unemployed, Student, Public, Self, Private
b. Dependent Variable: Satisfaction

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.351	.469		5.013	.000
	Public	-.257	.469	-.142	-.548	.584
	Private	.257	.469	.177	.548	.584
	Self	.128	.473	.085	.272	.786
	Student	-.269	.478	-.127	-.562	.574
	Unemployed	-.351	.494	-.105	-.710	.478

a. Dependent Variable: Satisfaction

APPENDIX 11
AGE, GENDER AND CUSTOMER SATISFACTION

ANOVA (b)

Model		Sum of Squar	df	Mean Square	F	Sig.
1	Regression	3.846	2	1.923	4.042	.018(a)
	Residual	188.864	397	.476		
	Total	192.710	399			

a. Predictors: (Constant), Gender, Age
b. Dependent Variable: Satisfaction

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.573	.091		28.243	.000
	Age	-.106	.039	-.138	-2.733	.007
	Gender	.090	.070	.064	1.275	.203

a. Dependent Variable: Satisfaction

APPENDIX 12
AGE, LOCATIONS AND CUSTOMER SATISFACTION

ANOVA (b)

Model		Sum of Square	df	Mean Square	F	Sig.
1	Regression	6.933	4	1.733	3.685	.006(a)
	Residual	185.777	395	.470		
	Total	192.710	399			

a. Predictors: (Constant), Victoria Island, Age, Lagos Island, Ikeja
b. Dependent Variable: Satisfaction

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.495	.122		20.473	.000
	Age	-.093	.040	-.120	-2.335	.020
	Ikeja	.042	.101	.026	.419	.676
	Lagos Is.	.061	.098	.038	.621	.535
	Victoria Is.	.256	.098	.160	2.607	.009

a. Dependent Variable: Satisfaction

Excluded Variables (b)

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	Mushin	.(a)	.	.	.	.000

a. Predictors in the Model: (Constant), Victoria Island, Age, Lagos Island, Ikeja
b. Dependent Variable: Satisfaction

APPENDIX 13
AGE, EMPLOYMENT AND CUSTOMER SATISFACTION

ANOVA (b)

Model		Sum of Square	df	Mean Square	F	Sig.
1	Regression	27.073	6	4.512	10.706	.000(a)
	Residual	165.637	393	.421		
	Total	192.710	399			

a. Predictors: (Constant), Unemployed, Student, Public, Age, Self, Private
b. Dependent Variable: Satisfaction

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.671	.469		5.691	.000
	Age	-.143	.038	-.185	-3.722	.000
	Public	-.261	.461	-.145	-.566	.572
	Private	.261	.461	.180	.566	.572
	Self	.119	.465	.078	.256	.798
	Student	-.389	.472	-.184	-.825	.410
	Unemployed	-.268	.487	-.080	-.550	.583

a. Dependent Variable: Satisfaction

APPENDIX 14
GENDER, LOCATIONS AND CUSTOMER SATISFACTION

ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.739	4	1.185	2.490	.043(a)
	Residual	187.971	395	.476		
	Total	192.710	399			

a. Predictors: (Constant), Victoria Island, Gender, Lagos Island, Ikeja = 1
b. Dependent Variable: Satisfaction

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.239	.073		30.683	.000
	Gender	.063	.072	.046	.880	.379
	Ikeja = 1	.087	.101	.054	.863	.389
	Lagos Is.	.090	.098	.056	.922	.357
	Victoria Is.	.288	.098	.180	2.952	.003

a. Dependent Variable: Satisfaction

Excluded Variables (b)

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	Mushin	.(a)	.	.	.	.000

a. Predictors in the Model: (Constant), Victoria Is., Gender, Lagos Is., Ikeja
b. Dependent Variable: Satisfaction

APPENDIX 15
GENDER, EMPLOYMENT AND CUSTOMER SATISFACTION

ANOVA (b)

Model		Sum of Squar	df	Mean Square	F	Sig.
1	Regression	25.794	6	4.299	10.122	.000(a)
	Residual	166.916	393	.425		
	Total	192.710	399			

a. Predictors: (Constant), Unemployed, Gender, Student, Self, Public, Private
b. Dependent Variable: Satisfaction

Coefficients (a)

Model		Unstandardized Coefficier		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.326	.463		5.021	.000
	Gender	.237	.072	.170	3.276	.001
	Public	-.446	.467	-.247	-.955	.340
	Private	.209	.463	.144	.451	.652
	Self	.055	.468	.036	.118	.906
	Student	-.351	.473	-.166	-.742	.459
	Unemployed	-.418	.488	-.125	-.857	.392

a. Dependent Variable: Satisfaction

APPENDIX 16
LOCATIONS, EMPLOYMENT AND CUSTOMER SATISFACTION

ANOVA (b)

Model		Sum of Squar	df	Mean Square	F	Sig.
1	Regression	27.363	8	3.420	8.088	.000(a)
	Residual	165.347	391	.423		
	Total	192.710	399			

a. Predictors: (Constant), Victoria Island, Unemployed, Student, Public, Lagos Island, Self, Ikeja, Private
b. Dependent Variable: Satisfaction

Coefficients (a)

Model		Unstandardized Coefficier		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.138	.466		4.584	.000
	Public	-.293	.463	-.162	-.634	.526
	Private	.293	.463	.202	.634	.526
	Self	.153	.466	.100	.327	.744
	Student	-.265	.472	-.125	-.562	.574
	Unemployed	-.326	.487	-.097	-.669	.504
	Ikeja	.309	.099	.192	3.114	.002
	Lagos Is.	.174	.094	.108	1.848	.065
	Victoria Is.	.307	.092	.192	3.325	.001

a. Dependent Variable: Satisfaction

Excluded Variables (b)

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	Mushin	.(a)	.	.	.	.000

a. Predictors in the Model: (Constant), Victoria Island, Unemployed, Student, Public, Lagos Island, Self, Ikeja, Private
b. Dependent Variable: Satisfaction

APPENDIX 17
AGE, GENDER, LOCATION, EMPLOYMENT AND CUSTOMER SATISFACTION

ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.766	10	3.777	9.481	.000(a)
	Residual	154.944	389	.398		
	Total	192.710	399			

a. Predictors: (Constant), Unemployed, Victoria Island, Student, Gender, Self, Lagos Island, Age, Public, Ikeja, Private
b. Dependent Variable: Satisfaction

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.587	.466		5.551	.000
	Age	-.168	.041	-.218	-4.071	.000
	Gender	.304	.074	.218	4.123	.000
	Ikeja = 1	.115	.104	.072	1.099	.272
	Lagos Is.	.095	.093	.059	1.022	.308
	Victoria Is.	.250	.091	.156	2.760	.006
	Public	-.500	.452	-.277	-1.106	.270
	Private	.197	.450	.136	.438	.662
	Self	.020	.453	.013	.044	.965
	Student	-.540	.461	-.255	-1.169	.243
	Unemployed	-.337	.474	-.101	-.712	.477

a. Dependent Variable: Satisfaction

Excluded Variables (b)

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	Mushin	.(a)	.	.	.	.000

a. Predictors in the Model: (Constant), Unemployed, Victoria Is, Student, Gender, Self, Lagos Is., Age, Public, Ikeja, Private
b. Dependent Variable: Satisfaction