

**SERVICE QUALITY AND CUSTOMER SATISFACTION IN NIGERIA  
TELECOMMUNICATION INDUSTRY**

**BY**

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**BEING A RESEARCH DISSERTATION SUBMITTED TO SCHOOL OF  
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**AUGUST, 2018.**

## **DECLARATION**

I hereby declare that this dissertation has been written by me and it is a report of my research work. This work has not been presented elsewhere for the award of any academic programme in any institution. All quotations are indicated and sources of information specifically acknowledged by means of bibliography.

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## **CERTIFICATION**

The dissertation, “Service Quality and Customer Satisfaction in Nigeria Telecommunication Industry”, meets the regulations governing the award of Masters in Business Administration (MBA), of the School of Postgraduate Studies of Nasarawa State University, Keffi for its contribution to knowledge and literary presentation.

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## **DEDICATION**

This work is dedicated to God.

## **ACKNOWLEDGEMENTS**

First and foremost, my sincere gratitude goes to Almighty God for granting me the knowledge, wisdom, divine guidance and seeing me through my period of study.

I want to express my gratitude to my humble supervisor Dr. R.A Andah for her guidance and patience in this research work may God reward you. To all my lecturers in the department, I say God bless you all.

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## ABSTRACT

*There have been several researches on effect of service quality on customer's satisfaction and its various outcomes. However, this study seeks to look into the effects of service quality on customers' satisfaction in MTN telecommunication network using network quality, billing rate and customer care support to measure service quality. Data were collected through questionnaire using 5-point Likert scale and the data collected were analysed using simple percentage tables and multiple regression analysis. The findings revealed that billing rate, network quality and customer care support all have significant positive relationship with customers' satisfaction. Based on these findings, it is recommended that: Firstly, MTN mobile telecommunication network provider should provide excellent service to their customers to compensate the billing charges due to the significant relationship between the billing rate of mobile telecommunication companies and customer satisfaction. Secondly, MTN mobile telecommunication network provider should ensure always availability of desired services for the consumption of their customers. And also extend their desired services to all the cities and rural areas including road network, by so doing the unstable customers especially those in the business class that often travels from one place to the other will be satisfied. Thirdly, MTN mobile telecommunication network provider should improve their customer services by giving prompt and consistent customer services that attend to needs of the customers.*

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## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the study

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 Association, 2006). Lonergan (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 Association, 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&Turel, 2006). African countries are actively involved in the establishment of the mobile services and specifically, Nigeria is the focus of this study.

Gerpott, Rams and Schindler (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), and increasing number of mobile service providers, enormous technical development and intense market competition. SzyperskiandLoebbecke (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 continuous lasting relationship with their customers to know them better and satisfy their needs adequately.

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). 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) 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.

## **1.2 Statement of the problem**

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 cannot 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, Perkins-Munn and Evans (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 mobile 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 captures the range of services, prices and quality and more so, this measure is an important performance indicator useful for both regulators and mobile service providers.

This research is centered on the effect of service quality on customers' satisfaction in the telecommunication industry.

### **1.3 Research Questions**

The following questions guided the study:

- i. What is the relationship between network quality and customers' satisfaction?
- ii. What is the relationship between billing rate and customers' satisfaction?
- iii. What is the relationship between customer care support and customers' satisfaction?

### **1.4 Research Objectives**

The broad objective of this study is to determine the effect of service quality on customers' satisfaction in the telecommunication industry. The specific objectives are:

- i. To examine the relationship between network quality and customer satisfaction.
- ii. To examine the relationship between billing rate and customer satisfaction

- iii. To examine the relationship between customer care support and customer satisfaction.

## **1.5 Research Hypotheses**

The following hypotheses guided the study:

**H<sub>01</sub>** There is no significant relationship between network quality and customers' satisfaction.

**H<sub>02</sub>** There is no significant relationship between billing rate and customers' satisfaction.

**H<sub>03</sub>** There is no satisfaction between customer care support and customers' satisfaction.

## **1.6 Significance of the Study**

It is expected that the findings of this research will be of immense importance to the management of telecommunication organization, researchers, customers, employees and the government at large because they will help in formulating policies aimed at developing and regulating the increasing level of activities in the telecommunication industry.

This study will help the management of telecommunication industries in formulating and implementing a beneficial policy that will help it improve in the delivery of quality customer service as well as retaining and attracting potential customers.

The study will also be beneficial to employees of various telecommunication industries by providing framework of delivering quality customers' service.

The study will help other researchers as it will enable them get data and information from this research to assist them carry out further research. Above all, it is hoped that this

study will contribute to knowledge and be useful as reference material for scholars and researchers in their field of study.

### **1.7 Scope and Limitations of the Study**

This study will be too wide if it were to cover the total observation periods from the commencement of telecommunication activities in Nigeria. Due to time, material and financial constraints, the study will cover telecommunication activities between the periods of 2006 to 2016. Also the study will cover potential telecommunication customers in Keffi metropolis. However, this study covers the Global System of Mobile (GSM) communication industry; preferably, MTN was chosen because of their elaborate and wide outreach to the communities in Nigeria

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Conceptual Framework

##### 2.1.1 Concept of 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. (1988), 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.

### **2.1.2 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).

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).

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: Comparison-level and Generalized negativity.

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).

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

**Emotion:** Satisfaction is viewed as the surprise element of product or service purchase and or consumption experiences (Oliver, 1981), or is an effective 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).

**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).

**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); the evaluation of emotions (Hunt, 1977); the favorability of the individual's subjective evaluation (Westbrook, 1980); a positive outcome from the outlay of scarce resources (Bearden and Teel, 1983); an overall customer attitude towards a service provider (Levesque and McDougall, 1996); 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 over fulfillment(Oliver,1997); 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 and customer care support.

#### **2.1.2.1 Consequences of Customer Satisfaction**

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 behaviouralloyalty, which includes continuing purchases from the same company, word of mouth recommendation, and 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, and 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 parameters 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 (Athanasopoulos, 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.

### **2.1.3 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).

### **2.1.3.1 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); Raval 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 comparison with what is spent. Perceived value is not a focus of this study (however customer satisfaction evaluation captures perceived value; the assessment shows what consumer's value in the service received). The suggested mobile services attributes (features) will be used to assess customer satisfaction in this study.

#### **2.1.4 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”. Fečíková (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 i.e top management officials motivate others through their performance, top management should communicate 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.

### **2.1.5 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.

### **2.1.6 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 gauge 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's 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 soft wares.

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.

## **2.2 Empirical Review**

The relationship between service quality and customer satisfaction has received considerable academic attention in the past few years. Kirti Dutta & Anil Dutta (2009) observed that Customer expectations are higher than perceptions and this gap varies across the banking sector with tangibility having the highest impact on overall customer satisfaction. Dharmalingam, Ramesh & Kannan, (2011) stated that all the service quality attributes are positively correlated with customer satisfaction. Gopalkrishnan, et al, (2011) determined that Service quality and customer satisfaction had a direct positive effect on customer's retention intentions out of which customer satisfaction is a stronger predictor for retention. Jackie & Tam (2004) found that customer with higher perceptions of the value of the service results in turn with greater satisfaction. Montes, Mar & Fernandez, (2003) found that customers' perceptions, attitudes and intentions are being affected by employees' experiences and attitudes who are the internal customers of the organization. In line with the foresaid literature the following conceptual framework has been developed in association of the model developed by Ziethmal & Bitner (2003)

Rahaman et al. 2011, explored service quality of the private commercial banks in Bangladesh. The findings from their study revealed that, one of the primary causes of service quality design failure is the lack of understanding of the evolving need and preferences of targeted customers.

Ilhaamie (2010) examined the level of service quality, expectation and perception of the external customers towards the Malaysian public services using the SERVQUAL instrument. The study found that tangible is the most important dimension. It also has the lowest scores of perception. On the other hand, service quality gap is neither the lowest nor the highest. Finally, these external customers have the highest expectation on the reliability of the Malaysian public service.

Ojo (2010) investigated the relationship between service quality and customer satisfaction in the telecommunication industry with a focus on Mobile Telecommunication Network (MTN) Nigeria. A total of 230 respondents participated in the study. Regression analysis and Pearson product moment correlation coefficient were employed in analyzing the data. The study revealed a positive relationship between service quality and customer satisfaction. The researcher therefore recommended that organizations should focus more attention on service quality, because of its effects on customer satisfaction. To ensure that customer satisfaction level is high organization must first of all know the expectations of the customers and how they can meet such expectations. Customer satisfaction helps in customer loyalty and retention. It has been discovered that the cost of attracting new customer far exceeds the cost involved in retaining existing ones.

Kheng et al, (2010) employed the SERVQUAL model developed by Parasuraman et al., 1988 with five dimensions to evaluate the impact of service quality on customer loyalty among bank customers in Penang, Malaysia. Customer satisfaction was used as an intermediate variable. The findings show that improvement in service quality can enhance customer loyalty. The service quality dimensions that play a significant role in the equation are reliability, empathy, and assurance. The findings indicate that the overall respondents evaluate the bank positively, but still there are rooms for improvements.

Sammons (1982) conducted an exploratory study of customer satisfaction of fine dining restaurants in Singapore. His seeks to find out the service dimensions of service quality, which lead to higher levels of customer satisfaction. The findings from his study indicated that the service dimensions of assurance, empathy and tangibles are the most important to customers' evaluation of service quality, and thus, may have a positive influence customer satisfaction.

The association between dimensions of service quality and customer satisfaction was investigated by Ibanez et al. (2006). They found a significant relationship between reliability of services on the satisfaction level of customers.

The literature reveals an increased degree of positive relationship between service quality, customer satisfaction and performance (both financial and non-financial) where face-to-face dealing between customer and employee is the only focus. Technology expansion has had a great impact on the choice of service delivery standard and services marketing strategies. This has yielded many prospective competitive advantages

including augmenting of productivity and enhanced revenue creation from new services (Muyeed, 2012).

In addition to tangibles, reliability and responsiveness; assurance has been identified as a significant dimension of service quality by Parasuraman et al. (1988). They propose that all of these dimensions significantly enhance customer satisfaction. It is believed that if the employees of financial institutions display trustworthy behavior, the satisfaction level of customers can be enhanced significantly. It may also positively influence repurchase intention of customers (Ndubisi, 2006; and Ndubisi&Wah, 2005).

A positive and significant relationship is found between empathy and customer satisfaction by Iglesias and Guillen (2004). It was proposed in another research study, that customers may remain unsatisfied with service quality if a gap is left in empathy. It was also established by Al-Marri et al. (2007) that customer satisfaction is significantly impacted by empathy. It makes customers contented and in the long-run serves as an important predictor in improving the financial performance of the organization.

Wieseke et al. (2012) empirically investigated the role of empathy in service quality and its impact on customer satisfaction. It was established that customers treated emphatically are more often visitors and prone forgive any mistakes that may occur. Empathy creates an emotional relationship with customer, providing customer a touch of importance for business. This leads to retention and creation of new customer's pool.

Juneja (2011) has also studied the correlation between service quality dimensions and customer satisfaction in Bangladesh banking industry. It was found that customer loyalty

can be won through empathy. Empathy can play role in improvement of service quality, customer loyalty and finally satisfaction

Karatepe (2011) explored the service environment impact with empathy and reliability on loyalty. Empathy works as a moderator between quality and customer satisfaction. Empathy can change the behavior of customer ultimately.

## **2.3 Theoretical Review**

### **2.3.1 Relationship Quality Theory**

Relationship quality captures multiple aspects or dimensions of a relationship (e.g., trust, commitment, relationship satisfaction) and has a stronger impact on objective performance than any single dimension. Thus, Palmatier and colleagues (2006) suggest that “different aspects or dimensions of a relationship may be synergistic, and performance is optimized only when the relationship is sufficiently strong on all critical aspects”.

### **2.3.2 Consumer Perception Theory**

The consumer perception theory is an integral part of perception theory. It is enshrined in the idea that the perception of the consumers about a particular product or service influences their behaviour. It applies the concept of sensory perception to marketing and advertising; just as sensory perception relates to how humans perceive and process sensory stimuli through their five senses. The major thrust of this theory relates to “how individuals form opinions about companies and the merchandise they offer through the purchases they make” (Blank, 2012). Similarly, Flamand (2011) noted that “consumer

perception theory is any attempt to understand how a consumer's perception of a product or service influences their behaviour”

The idea of consumer perception theory started in 1932 when some students at Colgate University carried out a classical experiment on perception as it relates to marketing. The researchers “used women's silk hose which were made by the same manufacturer and were of the same style, colour and design” (Runyon, 1980). They packed the hose in four identical boxes, using different soft perfume to differentiate the identical hose in identical boxes. The scents were so faint that less than 3 percent of the subjects consciously noticed them. The researchers exposed the apparatus to 250 housewives and asked them to select the pair that was the best quality. The result showed that the subtle influence of different scents dramatically affected the housewives' perceptions of quality (Runyon, 1980).

This simply means that all perceptions are subjective and people in most cases do not really see things the way they are, they only see things the way they choose to. This aspect of perception was systematically exemplified by Lawrence Durrell in the *Alexandria Quartet*, a tour de force of English literature. The *Alexandria Quartet* consists of four stories describing the same events in the lives of a group of people in Alexandria, Egypt. Each story covers the same time period and is told from the point of view of different character. “Justine, for whom the first book is named, is a revolutionary; Balthazar, whose point of view is represented in the second book, is a mystic; Mountolive, in the third book, is a diplomat and man-of-the-world; and Clea, in the final volume, is an artist. Each story is dramatically different from the rest. In general psychological terms, Flamand (2011) averred that “perception is the ability to make some

kind of sense of reality from the external sensory stimuli to which people are exposed. Several factors can influence perception, causing it to change in certain ways. For example, repeated exposure to one kind of stimuli can either result to oversensitivity or de-sensitivity to such stimuli. Additionally, the amount of attention focused on something can cause a change in the perception of it". Runyon (1980) opined that perception is the "process through which incoming stimuli are given meaning or the process through which people make sense out of the world". This process scholars have argued begins with the stimulation of the sense receptors - eyes, ears, nose, skin, tongue, and kinaestheticreceptors - by a pattern of energy. It is important to note that each receptor transforms this energy into neural impulses that are received by the central nervous system as sensations (Runyon, 1980).

This theory is related to this study because it deals with how consumers build up their opinion about a company based on the services or products of that company or any other intervening concepts emanating from the company.

### **2.3.3 Perceived Service Quality Model**

Gronroos (2000) presented the Perceived Service Quality Model. He identified three components of service quality, namely: technical quality; functional quality; and image. Technical quality (outcome) is the quality of "what" consumer actually receives as a result of his/her interaction with the service firm. Functional dimension is "how" the manner in which the product/service is delivered to the customer. Functional quality of the process is subjective as it is based on encounters with the service provider. The third step in the above model is the Image (Corporate and/or Local). This is how customers

will see the organization and its methods of operation and is a major element of quality perception. Image is very important to service firms and this can be expected to build up mainly by technical and functional quality of service including the other factors (tradition, ideology, word of mouth, pricing and public relations). Further, if the company has a good image, minor mistakes will not change customers' perception of the company, but if the company has a bad image, mistakes will yield that customers perceive quality as bad. He suggests a company must not focus merely on one strategy and forget the other. Company should strike a balance between the two dimensions, since one cannot disregard the other, in order to increase perceived service quality. However, according to Gronroos (2000) it is very common to have slightly more focus on functional quality by most of organizations. The present study was focused on the above model and the functional dimension of the perceived service quality of the local banking sector in the rural economic context.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Research Design**

The research design to be used in this study is survey design because observation will be done in a short time. Cross sectional research design involves observation of sample subjects done at different points in a short period of time. This entails the administration of questionnaires to respondents. Thus, survey methodology will be used to obtain overall information from respondents. The study is a correlational study because it will try to discover or establish the existence of a relationship/interdependence between two or more variables relating to service quality and customers' satisfaction. The study is also a case study because the focal organization of study is MTN Nigeria.

#### **3.2 Population, Sample and Sampling Techniques**

The population of this study comprises of MTN mobile telecommunication users in Keffi. Using a convenience sampling method, a sample of 40 was drawn from each of the ten (10) electoral wards in Keffi Local Government. Hence the sample size of this study is 400.

#### **3.3 Methods of Data Collection**

Primary data will be used for the study. Primary data via questionnaire will be administered to the respondents and will serve as our source of data collection. Thus, the survey methodology will be used to obtain pertinent information regarding the study from Keffi local government area.

Secondary source of data was obtained from the review of related literature. In order words, the researcher censured unpublished and published works, journals/periodicals and official documents with relevant ideas.

### **3.4 Method of Data Analysis**

The data for the study was collected, coded and analyzed using computer-based software Stata version 13. Descriptive statistics in the form of tables and percentages will be used to describe the respondents' perception on service quality and customer's satisfaction. The inferential statistical methods used in analyzing the relationship of the variables will be Multiple Regression Analysis (Ordinary Least Squares). The basis of multiple regression is to assess the nature and degree of relationship between the dependent variable and a set of independent or predictor variables. F-statistics from the multiple regression analysis will formally be used to test the models for the three hypotheses in this study.

### **3.5 Model Specification**

In the first instance, least square method – multiple regression analysis – was employed to determine the effect or outcome of the relationship between service quality and customers' satisfaction. The multiple regression formula is implicitly represented below:

$$\text{Customers' satisfaction} = f(\text{Service Quality})$$

The explicit forms of the formula above are depicted below:

$$\text{Customers' satisfaction} = \beta_0 + \beta_1 \text{NQ} + \beta_2 \text{BR} + \beta_3 \text{CCS} + e \quad \dots \text{Model1}$$

Where:

NQ= Network Quality

BR= Billing Rate

CCS= Customer Care Support

$\beta_0$  = Y intercept value of the dependent variable

e = the random error

$\beta_1, \beta_2$ , = the regression coefficients of the independent variables.

### 3.6 Justification of the Method Used

The basis of multiple regression models is to assess the relationship between the dependent variable and a set of independent or predictor variables. Certain approaches are helpful in testing the effect of such independent variables, so as to increase the efficiency of the analysis. One of such approaches is regression analysis. The Coefficient of Multiple Correlation (R) tells us the relationship between the dependent ( $Y_i$ ) and independent variables ( $X_i$ ). The value of R ranges between 0 to  $\pm 1$ . This range means that coefficient of correlation can never exceed 1. The degrees of R used for this research are as follows: R = 0; no relationship, R = 0.3, 0.4; weak relationship, R = 0.5, 0.6; moderate relationship, R = 0.8, 0.9; strong relationship and R = 1; very strong relationship. Coefficient of Multiple Determination ( $R^2$ ) tells us what percentage of variations in the dependent variable that can be predicted or affected by variations in the independent variable. Decision Rule states that if Computed F Value  $\geq$  Tabulated F Value, the choice is to Reject  $H_0$  and accept  $H_1$  and vice versa.

## CHAPTER FOUR

### DATA PRESENTATION AND ANALYSIS

#### 4.1 Introduction

This chapter deals with the presentation and analysis of data collected from various respondent who are generally MTN subscribers for the purpose of drawing a clear, comprehensive and objective conclusion and recommendation for the research work. The hypothesis set out in chapter one is tested in this chapter.

#### 4.2 Presentation of Data

The researcher distributed four hundred (400) copies of questionnaire, out of which three hundred and seventy four (374) were returned answered; seven (7) were returned unanswered and nineteen (19) were not traceable. Therefore the total number of respondent is three hundred and seventy four (374). Below is the tabular representation of the respondents of the questionnaire administered:

**Table 1. Respondents' background information**

SN	Factor	Level	Frequency	Percentage
1	Gender	Male	214	57.2
		Female	160	42.8
		<b>Total</b>	<b>374</b>	<b>100</b>
2	Age	Below 20 years	57	15.2
		20-29 years	75	20.1
		30-39 years	86	23.0
		40- 49 years	93	24.9
		50years & above	63	16.8
		<b>Total</b>	<b>374</b>	<b>100</b>
3	Occupation	Civil servants	93	24.9
		Students	99	26.5
		Businessman/woman	107	28.6

		Others	75	20.1
		<b>Total</b>	<b>374</b>	<b>100</b>
4	Spending on GSM	Below N10,000	155	41.4
		N10,000 - N30,000	118	31.6
		Above N30,000 but less than N50,000	87	23.3
		Above N50,000	14	3.7
		<b>Total</b>	<b>374</b>	<b>100</b>
5	Academic qualification	WAEC/NECO	67	17.9
		Diploma/NCE	90	24.1
		1st Degree/HND	65	17.4
		Post-graduate diploma	50	13.4
		Master	61	16.3
		Phd	41	11.0
		<b>Total</b>	<b>374</b>	<b>100</b>

Source: Field Survey 2017

Table 1 above shows the respondents' background information. The table shows that 57.2% of the respondents are male while 42.8 % are female. This shows that the sample is not gender bias. And more than 80% of them are 20years and above. 24.9% of the respondents are civil servant, 26.5% are students and 28.6% are business men/women. This shows that the sample cut across different occupation for fair generalization. On the nature of spending on GSM 41.4% spend below N10, 000; 31.6% spend between N10, 000 and N30, 000; 23.3 % spend above N30, 000 but less than N50, 000 and only 3.7% spend above N50, 000 per month. This shows that those in the class below N10, 000 has more respondents than others. For the educational qualification, 17.9% had O' level; 24.1% had Diploma/NCE; 17.4% had 1<sup>st</sup> degree/HND; 13.4% had post graduate degree diploma; 16.3% had masters and 11% had PhD. This shows that educational qualification

of all the respondents are adequate to understand the questionnaire and respond accordingly.

**Table 2. General perception of respondents on the service quality of mobile network operators in terms of billing rate**

SN	View on billing rate	Response	Frequency	Percentage
6	MTN network service provider is excellent in terms of reloading cards and their denominations	<b>Strongly Agree</b>	60	16.04
		<b>Agree</b>	176	47.05
		<b>Neutral</b>	-	-
		<b>Disagree</b>	106	28.34
		<b>Strongly Disagree</b>	32	8.55
		<b>Total</b>	<b>374</b>	<b>100.00</b>
7	MTN network service provider is excellent in terms of call charges per minute/second	<b>Strongly Agree</b>	81	21.65
		<b>Agree</b>	191	51.06
		<b>Neutral</b>	-	-
		<b>Disagree</b>	63	16.84
		<b>Strongly Disagree</b>	39	10.42
		<b>Total</b>	<b>374</b>	<b>100.00</b>
8	MTN network provider gives confidence to their customers by ensuring that everyone makes use of exact value of the amount recharged.	<b>Strongly Agree</b>	00	00
		<b>Agree</b>	44	11.76
		<b>Neutral</b>	00	00
		<b>Disagree</b>	221	59.09
		<b>Strongly Disagree</b>	109	29.14
		<b>Total</b>	<b>374</b>	<b>100.00</b>
9	The billing charges of MTN network equate their service delivery.	<b>Strongly Agree</b>	01	0.26
		<b>Agree</b>	78	20.85
		<b>Neutral</b>	00	00
		<b>Disagree</b>	148	39.57
		<b>Strongly Disagree</b>	147	39.30
		<b>Total</b>	<b>374</b>	<b>100.00</b>

Table 2 above shows general perception of respondents on the service quality of mobile network operators in terms of billing rate. 47.05% Of the respondents agreed that the network service providers are excellent in terms of reloading cards and their denominations. For the call charges, majority of the respondents with 51.06% agreed with charges of the network service providers. And majority of the respondent with 59.09% are in disagreement with the statement that network provider gives confidence to their customers by ensuring that everyone makes use of exact value of the amount recharged. And 39.57% of the respondents disagree and 39.30% of the respondents strongly disagree (totaling 78.87%) with the statement that the billing charges of your network equate their service delivery.

**Table 3. General perception of respondents on the service quality of mobile network operators in terms of network quality.**

SN	View on network quality	Response	Frequency	Percentage
10	MTN network service provider provide quality service coverage in urban cities	Strongly Agree	104	27.80
		Agree	162	43.84
		Neutral	02	0.01
		Disagree	79	21.12
		Strongly Disagree	27	7.21
		<b>Total</b>	<b>374</b>	<b>100.00</b>
11	MTN network service provider provide quality network coverage in linking villages	Strongly Agree	00	0.00
		Agree	29	7.74
		Neutral	05	0.01
		Disagree	132	36.63
		Strongly Disagree	208	55.61
		<b>Total</b>	<b>374</b>	<b>100.00</b>
12	MTN network service provider has speed for calls and other services.	Strongly Agree	81	21.65
		Agree	187	50.00
		Neutral	00	00
		Disagree	86	22.99

		<b>Strongly Disagree</b>	20	5.34
		<b>Total</b>	<b>374</b>	<b>100.00</b>
<b>13</b>	Your network service provider ensures availability of service that met your expectation always.	<b>Strongly Agree</b>	00	0.00
		<b>Agree</b>	29	7.75
		<b>Neutral</b>	03	0.01
		<b>Disagree</b>	190	50.80
		<b>Strongly Disagree</b>	152	41.44
		<b>Total</b>	<b>374</b>	<b>100.00</b>

Table 3 above shows a general perception of respondents on the network quality of mobile network operators in terms of network quality. 27.80% of the respondents strongly agree and 43.85% of the respondents agree (totaling 71.65%) with the statement that MTN network service providers provide quality network service in urban cities. 36.63% of the respondents disagree and 55.61% of the respondents strongly disagree (totaling 92.24%) with the statement that MTN network service providers provide quality network coverage in linking villages. 21.65% of the respondents strongly agree, 50.00% agree, 22.99% disagree and 5.34% strongly disagree with the statement that MTN network service provider has speed for calls and other services. 7.75% of the respondents agree, 50.80% disagree and 41.44% strongly disagree with the statement that MTN network service provider ensures availability of service that met customers expectation always.

**Table 4. General perception of respondents on the service quality of mobile network operators in terms of customer care support.**

<b>SN</b>	<b>View on customer care support</b>	<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
<b>14</b>	MTN network service providers are dependable and consistent in solving customers' complaints	<b>Strongly Agree</b>	10	2.67
		<b>Agree</b>	110	29.41
		<b>Neutral</b>	04	0.01

		<b>Disagree</b>	180	48.12
		<b>Strongly Disagree</b>	70	19.78
		<b>Total</b>	<b>374</b>	<b>100.00</b>
<b>15</b>	MTN network service providers do have customer's best interest at heart and always apologizing for inconvenience caused to customers	<b>Strongly Agree</b>	00	0.00
		<b>Agree</b>	53	14.17
		<b>Neutral</b>	00	00
		<b>Disagree</b>	116	31.01
		<b>Strongly Disagree</b>	205	54.81
		<b>Total</b>	<b>374</b>	<b>100.00</b>
<b>16</b>	MTN network service providers do give prompt customer services and attend to customers' needs/problems	<b>Strongly Agree</b>	15	4.01
		<b>Agree</b>	72	19.25
		<b>Neutral</b>	00	00
		<b>Disagree</b>	105	28.07
		<b>Strongly Disagree</b>	182	48.66
		<b>Total</b>	<b>374</b>	<b>100.00</b>
<b>17</b>	After-sales service of MTN network service provider met your expectation.	<b>Strongly Agree</b>	00	0.00
		<b>Agree</b>	69	18.44
		<b>Neutral</b>	00	00
		<b>Disagree</b>	106	28.34
		<b>Strongly Disagree</b>	199	53.20
		<b>Total</b>	<b>374</b>	<b>100.00</b>

Table 4. Shows the general perception of respondents on the service quality of MTN network operators in terms of customer care support. 2.67% of the respondents strongly agree, 29.41% agree, 48.12% disagree and 19.78% strongly disagree with the statement that MTN network service provider are dependable and consistent in solving customers' complaints. 14.17% of the respondents agree, 31.01% disagree and 54.81% strongly disagree with the statement that MTN network service provider do have customer's best

interest at heart and always apologizing for inconvenience caused to customers. 4.01% of the respondents strongly agree, 19.25% agree, 28.07% disagree and 48.66% strongly disagree with the statement that MTN network service provider do give prompt customer services and attend to customers' needs/problems. 28.34% of the respondents disagree and 53.20% strongly disagree (totaling 86.62%) with the statement that after-sales service of MTN network service provider met customer expectation.

**Table 5 General perception of respondents on customers' satisfaction**

SN	View on customers' satisfaction	Response	Frequency	Percentage
18	MTN network service have provided high standard services.	Strongly Agree	14	2.68
		Agree	110	29.41
		Neutral	00	0.00
		Disagree	180	48.12
		Strongly Disagree	70	19.78
		<b>Total</b>	<b>374</b>	<b>100.00</b>
19	MTN network services are aimed at customers' satisfaction.	Strongly Agree	00	0.00
		Agree	00	00
		Neutral	53	14.17
		Disagree	116	31.01
		Strongly Disagree	205	54.81
		<b>Total</b>	<b>374</b>	<b>100.00</b>
20	You derive full satisfaction using MTN network service.	Strongly Agree	15	4.01
		Agree	72	19.25
		Neutral	00	00
		Disagree	105	28.07
		Strongly Disagree	182	48.66
		<b>Total</b>	<b>374</b>	<b>100.00</b>

Table 5 above shows general perception of respondents on customers' satisfaction of MTN network operator. 29.41% of the respondents agreed that the MTN network service have provided high standard services. For whether the services provided are aimed at customers' satisfaction, majority of the respondents with 54.81% strongly disagreed. And majority of the respondent with 48.66% are in disagreement with the statement that they derive full satisfaction from using MTN network service.

### 4.3 Billing Rate (BR), Network Quality (NQ), Customer Care Support (CCS) and Customer Satisfaction (CS)

Multiple Regression Analysis.

Source	SS	df	MS			
Model	.083433647	3	.041716823	Number of obs = 374		
Residual	2.08804071	370	.013647325	F (3, 370) = 3.06		
Total	2.17147436	373	.014009512	Prob> F = 0.0215		
				R-squared = 0.7325		
				Adj R-squared = 0.0259		
				Root MSE = .1168		

  

CS	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
BR	.3278635	.0727478	2.44	0.024	.0341427	.3215825
NQ	.1841832	.079848	-1.20	0.041	-.2539301	.0615637
CCS	.1646707	.1917281	0.86	0.039	-.2302007	.559542
cons	3.5579827	.2631023	10.55	0.000	2.256045	3.295609

The regression line  $CS = 3.5579827 + 0.32778635BR + 0.1841832NQ + 0.1646707CCS$  indicates that CS will increase by 3.5579827 units for every 1 unit increase in BR, NQ and CCS. The P-value of the f-test of 0.0215 is less than 0.05 level of significance which implies that the model has explanatory power and is statistically significant at 95%. The coefficient of determination ( $r^2$ ) of 0.7325 which indicates that 73.25% of variation in the CS can be explained by BR, NQ and CCS or the ability of the regression line to predict the CS is 73.25%.

The assumption of the null hypotheses is that  $BR = 0$ . From the p-value of the t-test 0.024 is less than 0.05, it therefore means we are 95% confident that BR is not  $=0$  as such we reject the null hypotheses which states that BR has no significant effect on CS.

Also, from the p-value of the t-test for the second independent variable, 0.041 is less than 0.05, it therefore means that the model is confident at 95% as such we reject the null hypotheses which states that NQ has no significant effect on CS.

Also, from the p-value of the t-test for the third independent variable, 0.039 is less than 0.05 at 95% level of significance. It therefore means that, we are confident at 95% that CCS is not  $=0$  as such we reject the null hypotheses which states that CCS has no significant relationship with CS.

In the absence of BR, NQ and CCS, CS will increase by 3.5579827 as indicated by constant ( $\alpha$ ).

#### **4.4 Discussion of findings**

The researcher has found that there is a significant relationship between the billing rate of MTN mobile telecommunication company and customer satisfaction. And network quality of MTN mobile telecommunication network has significant impact on customer satisfaction. So also the result revealed the positive relationship that exists between customer care support of MTN mobile telecommunication company and customer satisfaction.

The researcher also found that the responses of the subscribers of MTN mobile telecommunication network in Keffi are moving in same direction in terms of their satisfactions with respect to the billing rate, network quality and customer care support. The result shows that the service delivery of MTN mobile network in Nigerian

telecommunication industry is low and not equal to or better than desired or expectation, as the subscribers are not satisfied with the billing charges, availability of the desired service as well as the customer service of network service providers.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATION

#### 5.1 Summary

The study is the effect of service quality of MTN mobile telecommunication industry on customer satisfaction in Nigeria with respect to billing rate, network quality and customer care support.

Chapter one gave a background of the study and also the problem of the research was stated. Objectives, research questions and hypotheses were explicitly stated. Significance of the study as well as scope and limitation were also outlined.

Related literature were reviewed which include concept of service delivery and customer satisfaction as well as service quality models.

Chapter three of the work stated the research design, population, sampling technique and sample size of the study. Also, method of data collection, analysis and model specification were extensively stated.

In chapter four, based on the objective analysis of data and discussion of result, the researcher found out that there is a significant relationship between the billing rate of MTN mobile telecommunication company and customer satisfaction. And network quality of MTN mobile telecommunication network has significant impact on customer satisfaction. So also the result revealed the positive relationship that exists between customer care support of MTN mobile telecommunication company and customer satisfaction.

## **5.2 Conclusion**

Based on the analysis in chapter four generally, customers are not satisfied with service quality delivered by MTN mobile telecommunication industry in Nigeria. The result shows that the service delivery of MTN mobile network in Nigerian telecommunication industry is low and not equal to or better than desired or expectation, as the subscribers are not satisfied with the billing charges, availability of the desired service as well as the customer service of MTN network service provider.

## **5.3 Recommendations**

In the light of the findings of the study the following recommendations are given:

Firstly, MTN mobile telecommunication network provider should provide excellent service to their customers to compensate the billing charges due to the significant relationship between the billing rate of mobile telecommunication companies and customer satisfaction.

Secondly, MTN mobile telecommunication network provider should ensure always availability of desired services for the consumption of their customers. And also extend their desired services to all the cities and rural areas including road network, by so doing the unstable customers especially those in the business class that often travels from one place to the other will be satisfied.

Thirdly, MTN mobile telecommunication network provider should improve their customer services by giving prompt and consistent customer services that attend to needs of the customers. This is necessary due to the positive relationship that exists between customer care support of MTN mobile telecommunication company and customer satisfaction.

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## APPENDIX

Department of Business Administration,  
Nasarawa State University Keffi,  
Nasarawa State.

Dear mobile network subscriber,

### **Effect of Service Quality on Customer Satisfaction of Mobile Telecommunication Companies in Nigeria**

I am a postgraduate student in the Department of Business Administration at Nasarawa State University, Keffi. I am writing to request your assistance in my research on the above mentioned topic.

My objective is to investigate the effect of service quality on customer's satisfaction in telecommunication companies. I am particularly interested MTN mobile telecom subscribers. I would very much appreciate if you could answer the questions on the attached questionnaire, which should take you about 10 minutes to complete. I assure you that I handle the information collected in strict confidence and use it purely for research purposes. Only aggregated results will appear in the final research report. Therefore, there will be no need for you to write your name.

Thanks for your assistance and cooperation.

Yours sincerely

## SECTION A: RESPONDENT'S BACKGROUND INFORMATION

Please **tick [v]** the appropriate box for your answers.

1. Please what is your gender?  male  female
2. Please select your age group.  below 20 years  20 – 29  30-39  40 – 49  50 and above
3. What is your occupation?  civil servant  student  businessman/woman  other
4. How much do you spend on GSM services per month?  Below N10, 000  N10,000 – N30,000  N30,000-N50,000  above N50,000
5. Select your highest educational qualification  O'Level  Diploma/NCE  B.Sc/HND  Post-graduate Diploma  Masters  PhD

**SECTION B: CUSTOMER SATISFACTION WITH SERVICE DELIVERY**

**SA – Strongly Agree    A – Agree    N – Neutral    D – Disagree    SD- Strongly Disagree**

<b>S/N</b>	<b>ITEM</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
	<b>Billing Rate</b>					
6	MTN network service provider is excellent in terms of reloading cards and their denominations					
7	MTN network service provider is excellent in terms of call charges per minute/second					
8	MTN network provider gives confidence to their customers by ensuring that everyone makes use of exact value of the amount recharged.					
9	The billing charges of MTN network equate their service delivery.					
	<b>Network Quality</b>					
10	MTN network service provider provides quality service coverage in urban cities					
11	MTN network service provider provide quality network coverage in linking villages					
12	MTN network service provider has speed for calls and other services.					
13	MTN network service provider ensures availability of service that met your expectation always.					
	<b>Customer Care Support</b>					
14	MTN network service providers are dependable and consistent in solving customers' complaints					
15	MTN network service providers do have customer's best interest at heart and always apologizing for inconvenience caused to customers					
16	MTN network service providers do give prompt customer services and attend to customers' needs/problems					
17	After-sales service of MTN network service provider met your expectation.					
	<b>Customer Satisfaction</b>					
18	MTN services have met your expectation					
19	MTN services are aimed at customers' satisfaction					
20	You derive full satisfaction using MTN network					

Thank you for taking time to complete this questionnaire