

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

In the service industry, particularly the banking sector, across the world, the delivery of high quality services to customers is a key factor affecting the performance of firms(Akinci, Atilgan-Inan, & Aksoy 2010; Aliyu &Tasmin, 2012). It is thus realistic to state that the industry is synonymous with competition as a result of continued improvement in the service deliveryAkinci, Atilgan-Inan, and Aksoy(2010). This improvement is a reflection of the high expectation of bank customers. This quest for continued improvement has thus made the banking sector in Nigeria to face enormous challenges of rapid environmental changes which eventually translate to stiff competition among banks (Adewuyi, 2011). This competition equivocally made the banks to jostle for leadership positions in the industry and thus imperative for banks to at least meet the target customers' satisfaction with quality of services expected by them since customers' quest for improved services has become non- negotiable. The essence of this competition bothers on which bank could actually offer customers services or offerings that will be more attractive to customers than that of a competing bank.

Ariff, Yun, Zakuan and Jusoh (2012) asserted that delivering effective electronic service quality (e-SQ) is crucial to becoming, and remaining, competitive in internet banking service. From the banks perspective, to remain competitive, banks must ensure that their service delivery is effective, and this can be achieved by measuring and improving every dimension of internet banking service quality. This is because service quality is one of those virile determinants of customer satisfaction (Ziethaml, Parasuraman, Malhotra, 2003).

Customer satisfaction can be interpreted as an overall evaluation of service quality attributes or service attribute performance (Boulding, Kalra, Staelin & Zeithaml, 1993). It is invariably the state felt by a person who has experienced a performance or outcome that has fulfilled his or her expectations. According to Kotler and Keller (2006) customer satisfaction refers to a person's feelings of pleasure when a firm's offerings matches or exceeds customer expectations. As a performance indicator within an organisation, customer satisfaction measures products and services, in meeting customer expectations with respect to service quality (Cheolho, 2010). Existing customer satisfaction literatures highlighted the importance of service quality as an antecedent of customer satisfaction just as Parasuraman, Berry and Zeithaml, (1985) asserted that service quality is the customers' subjective assessment of the expectations with actual service performance.

The evaluations of service delivery are actually dependent on the consistency of the service delivery over time (Parasuraman & Grewal, 2000; Barrera, García, & Moreno, 2014). Going by the above, banks thus have the herculean task of attracting customers but a more difficult mission is how to maintain the existing customer base (Oghojafor, Mesike, Omoera & Bakare, 2012). This is because most consumers are rational and are prepared to spend their money and time judiciously. The implication of the above is that banks will strive hard to ensure that their service delivery is of high standard. For an organization to gain competitive advantage over its competitors, its services delivery must be commendable by their consuming public (Hazlina, 2011). The quest for delivering high and standardized services coupled with zeal to meet international banking practices eventually led Nigerian banks to opt for a more sophisticated electronic banking for doing business. This is because electronic banking is found to be an important driver of performance in the banking industry for bank's performance in a way that

seeks to enhance effective customer service delivery and efficient financial services (Thulani, Njanike, Manoramo & Chriseri, 2011; Aliyu, Tasmin & Takala, 2012). This implies that its effective delivery will be a critical success factor for banks to build their competitive advantage and increase their competitiveness.

The issue of service delivery applies to all service industries including the banking sector where firms jostle for customers in a keenly competitive industry. As a result, the quality of electronic banking services (e-banking), e.g Telephone Banking, Point of Sale (POS), Mobile Banking, Automated Teller Machine(ATM), Internet Banking e.t.c, has become a major area of attention among researchers and bank managers due to its strong impact on business performance, customer satisfaction, customer loyalty and profitability (Hanzaee & Sadeghi, 2010).It is therefore germane to look inwards at bank performance and service delivery before the digital era banking operations.

Traditional banking is a relatively old economic activity in Nigeria, dating back to 1892 when the African Banking Corporation was established. First Bank of Nigeria established in 1894 was formerly Bank of British West Africa (BBWA); and Barclays Bank DCO, now Union Bank of Nigeria Plc established in 1917 (Ehikhamenor, 2003). All these banks had banking activities done traditionally. During this time, bank customers spent more waiting time in the banking halls. However, transformation in the banking sector started in the 1960s when the use of mainframes by banks helped facilitate the replacement of paper by book entries (Emmanuel & Adebayo, 2011). During the 1970s and 1980s, banks created database; with the automation of simple and repetitive clerical tasks there were considerable gains in efficiency. By 1990s, the western world had continued to dominate the world of Information Technology (IT) and set the pace in transformation of the world economy; hence the need for the Nigerian Banking sector to

follow the trend of IT compliance. The revolution in Information and Communication Technology (ICT) informed need for the banking sector to change from the traditional mode of operations to a presumably better way with technological innovation that improves efficiency (Osubuohien, 2008; Singh, 2012).

Information Technology (IT) has brought about extensive changes in the banking industry, forcing them to re-engineer and restructure many of their basic processes and systems (Adeoti, 2005). Few of the technology-driven or delivery channels of electronic banking services being offered are Automated Teller Machines (ATM), Electronic Clearing Service (ECS), Electronic Funds Transfer (EFT), Point of Sale (POS), Tele-banking, Internet banking to mention a few.

These new technological capabilities mentioned above are to be effectively used to create value and to better manage customer relationship. To this end, Sidiqqi, (2010) and (Singh, 2012) appreciate this technology absorption to be electronic banking (e- banking) which according to Rotchababkitumnuai and Speece, (2003) is ‘an internet portal, through which customers can use different kinds of banking services ranging from bill payment to making investments’. With the exception of cash withdrawals, internet banking gives customers access to almost any type of banking transaction at the click of a mouse (De Young, Lang & Nolle, 2007). Fierce competition in the banking sector have made it expedient for banks to turn their attention to internet banking so as to be competitively viable with international practice (Alaba, 2012; Jayawardhena & Foley, 2000). The aforementioned will thus inform for customer satisfaction which, according to Spreng, MacKenzie, and Olshavsky (1996); Mick and Fournier, (1999) and Sidiqqi, (2010) is one of the important outcomes of marketing activity in the competitive banking industry and as such considered as the essence of success (Sidiqqi, 2010). Kotler and Keller, (2006) mentioned that the customer is the king thereby signifying that if banks policies are customer- oriented and

delivery of high quality services guaranteed, then high customer satisfaction will be important in maintaining a loyal customer base (Kumar, kee & Manshor, 2009).

In the light of the above, it is germane for banks to recognise that effective delivery of services need complementary functions from the staff that will ensure its certainty. Effective e- service delivery is all about service quality which according to Kenova and Jonasson (2006); Lee and Lin (2005); and Santos (2003) is the overall customer evaluations and judgments regarding the excellence and quality of e-service delivery in the virtual marketplace. Keeping in view the significance of service quality as a means of competitive advantage and organizational sustainability, banks pursue multidimensional approaches to improvement in service quality to attract and retain customers (Kandampully, 1997). From the aforementioned, it is evident that superior service quality is a weapon of competition and this helps demonstrate that it is a predictor of customer satisfaction.

## **1.2 Statement of the Problem**

Effective service delivery in the service industry and the banking sector in particular, is the ultimate goal and objective so that customer retention can be evidently possible. More often than not, it can be quite an issue. It is therefore expedient that banks strive hard to ensure that their teeming customers are satisfied with their service delivery. Traditional banking practice in Nigeria in the time past was done without much regards to how customers' really felt about their performances and this led to loss of customer confidence in the service delivery of banks (Adeshina & Ayo, 2010).

The paradigm shift to online banking however brought about relief to customers thus their expectations that service delivery of their banks will improve (Auta, 2010). Despite being

hopeful, customers were still skeptical in the sense that series of complaints ranging from wrong debiting of account, non- availability of network, machine breakdown, lack of security, Personal Identification Number (PIN) challenges, employees lack of sense of humane, privacy concerns, frequent cases of account hacks *etc.* were all occurrences that customers get exposed to.

Kassim and Abdullah, (2006) in a study demonstrated that it is critical to develop secured and private internet banking systems that are trustworthy from the customer's point of view. It is expedient that banks in Nigeria look inwards to find a very good blend of strategies to reduce customer's rate of dissonance and improve perceived service quality. The implication of the above is that customers may not be too satisfied with online banking service delivery, hence the need for improved service delivery.

With the patterns of consumer behavior changing with the increasing use of technology in the delivery of banking services, there is a need to build customers' confidence in using the tech-based services otherwise the confidence of customers may be eroded.

It is therefore logical to state that customers are not satisfied with the service delivery of online banking, but the extent to which customer satisfaction is affected by efficiency, security, system availability, reliability, privacy, employee courtesy and perceived value of service delivery needed to be investigated, hence the need for this study.

### **1.3 Objectives of the study**

The main aim of this study is to investigate the level of customer satisfaction with e- banking services delivery provided by selected commercial banks in Lagos metropolis, Nigeria. The specific objectives of the study are to:

- (i) assess whether efficiency of e- banking delivery channels enhance customer satisfaction among commercial bank users in Lagos state

- (ii) determine the extent of security and privacy features associated with online banking transactions as it affects satisfaction among commercial bank customers in Lagos state
- (iii) analyze if availability of e-banking service delivery channels bring about customer satisfaction in commercial bank users in Lagos state.
- (iv) determine whether responsiveness (employee courtesy) towards resolution of customer complaints about e-banking services create satisfaction in users in Lagos State.
- (v) examine whether customers' reliance on e-banking delivery channels bring about satisfaction among commercial bank customers in Lagos state.
- (vi) ascertain the extent to which customers' perceived value of e-banking service delivery will bring about satisfaction among commercial bank customers in Lagos state.

#### **1.4 Research Questions**

This study addressed the following research questions.

- (i) Does efficiency of e-banking delivery channels bring about satisfaction among commercial bank users in Lagos state?
- (ii) To what extent will security and privacy measures associated with online transactions enhance customer satisfaction among commercial bank users in Lagos state?
- (iii) Will availability of e-banking service delivery channels bring about customer satisfaction among commercial bank users in Lagos state?

- (iv) How does employee responsiveness towards resolution of customer complaints with respect to e- banking service enhance customer satisfaction among commercial bank users in Lagos state?
- (v) Can customer's reliance on e-banking delivery channels enhance customer satisfaction among commercial bank users in Lagos state?
- (vi) To what extent will perceived value through effective service delivery bring about customer satisfaction among commercial bank users in Lagos state?

### 1.5 Research Hypotheses

The hypotheses examined in this study are:

- (i) **H<sub>0</sub>**: The level of efficiency in the delivery of e-banking services are not significantly correlated with the degree on customers' satisfaction among commercial bank users in Lagos state
- (ii) **H<sub>0</sub>**: Security and privacy of online transactions are not significantly correlated with the degree of customer satisfaction among commercial bank users in Lagos state
- (iii) **H<sub>0</sub>**: Availability of e-banking service delivery channels does not guarantee customer satisfaction among among commercial bank users in Lagos state
- (iv) **H<sub>0</sub>**: Prompt resolution of customer complaints with respect to e- banking service delivery is not strongly correlated with the level customer satisfaction
- (iv) **H<sub>0</sub>**: Customer's reliance on e-banking delivery channels is not correlated with customer satisfaction among commercial bank users in Lagos state.
- (v) **H<sub>0</sub>**: perceived value through effective service delivery will not bring about customer satisfaction

## **1.6 Significance of the study**

Upon completion, this study would enable policy makers at strategic levels in the banking industry to be aware of customer's needs so that efforts toward improving e-service quality would be initiated. At this point, It would be clearer to the policy makers in banks the extent to which customers are ready to churn services rendered by the banks if they can be offered better services in other competing banks; hence abide by the code of conducts as spelt out by the Central Bank of Nigeria.

The knowledge gained from this study would be beneficial to the government, researchers in the sense that the study would afford the academic world the opportunity to be more accessible to material and local literatures that would further enrich knowledge. At the level of business practice, it is hoped that this study would be useful to banks. These banks would not only be interested in profitability alone, but also on customer orientation approaches or programmes to further enhance customer satisfaction. Theoretically, this study would enable policy makers at strategic levels in the banking industry to be aware of customer's needs so that efforts toward improving e-service quality would be initiated. It is definitely of necessity that this study would afford policy-makers in the banking industry to further appreciate the fact that bank customers are rational and as such must be given very good value for money and time spent in patronizing them. The benefit of this study to the banks would therefore mean more profit, larger investment opportunity and better service delivery to its customers which would invariably bring about retention of existing customers and the cultivation of potential customers.

This study would equally be beneficial to customers in the sense that they would be more exposed to better e-banking service delivery from the banks. This would further enjoin them to continue to patronize e-banking channels and even encourage others to do so. This would

invariably improve customer confidence in the patronage of e- banking service delivery channels.

This study would also benefit the bank employees as increase in profitability for banks will transform to exposure of employees to more training and development programs and may bring about additional incentive packages.

This study would unequivocally be beneficial to the Nigerian economy in the sense that it would definitely bring about improvement in the Gross Domestic Product (GDP). This improvement would of course bring forth improved standard of living, and enhance ethical practices in the banking sector.

### **1.7 Scope of the Study**

This study investigates the influence of e-banking service quality on customer satisfaction. In view of the technicalities involved, it would be unrealistic to assume that all necessary facts have been gathered in the process of this study. Insufficient time, availability of funds, attitude of respondents to research informed this limited focus.

### **1.8 Limitations**

To begin with, there were some difficulties in getting the respondents to attend to the online survey. This is because the respondents actually don't have a good disposition towards research and partially because certain factors equally impede the respondents from filling the online survey. Some of these factors are internet unavailability, epileptic power supply e.t.c among the customers of Nigerian commercial banks, inevitably leading to low response rate. To ameliorate this shortcoming, several reminders were sent, but the response rate was still low.

Another limitation of this study relate to the fact that extensive scholarly literature which comprehensively look at the local content of this discourse were sparsely available. The implication of this is that foreign literatures dominated this study

### **1.9 Delimitation of the study**

This study is however delimited to cover selected commercial banks in Lagos metropolis taking into consideration e-banking service delivery and customer satisfaction as variables of this study. However, impacts of these limitations are reduced to the barest minimum. Online survey will be used, to elicit information from bank customers who are residents in Lagos state, Nigeria, for this study; results would however be beneficial to the entire country.

### **1.10 Operational Definition of Terms**

**Customer satisfaction:** This is the positive emotion exhibited by a customer upon exposure to effective delivery of electronic banking services

**Customer:** This include an account holder, or his representative, or a person carrying out casual business transactions with a bank.

**E-banking:** This is the delivery of banking transactions or activities through electronic means.

**Efficiency:** This relates to timely and speedy operation of technology based banking services

**Employee responsiveness:** This refers to the ability of bank staff to resolve customer's complaint with utmost sense of humour.

**E-SQ (E-S-Qual and E-RecS-Qual) Instrument:** This is an instrument developed specifically for measuring online services (e-services) quality.

**Hidden Population:** This is a kind of population whose sampling frame or list is not known

**Privacy:** This refers to the protection of customer's confidential information and identity from outsiders.

**Reliability:** This describes the accurate and promised service rendered by banks at all times without negligence and failure

**Security:** From the context of this study, Security refers to the safeguard and protection of customers' use of e- delivery channels.

**Service Quality:** This is defined as customers' overall evaluation and judgment of the excellence and quality of service offerings in the virtual marketplace.

**Service:**An activity or series of activities of more or less intangibles nature that normally take place in interactions between the customer and service employees and which are provided as solutions to customer problems"

**System Availability:** This refers to the minimal breakdown of e- delivery channels.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Preamble**

This chapter is designed to focus on the extant literatures that are relevant to the issues of attention in this study. Here is where the theoretical and conceptual framework will be clearly defined.

#### **2.2 Theoretical Framework of the Study**

This study hinged on notable theories underpinning this work. This review is intended to derive the linkage between these theories, dependent variables and the independent variable. These theories are discussed below:

##### **2.2.1 Technology Acceptance Model**

The Technology Acceptance Model, proposed by Davis and Bagozzi (1989), is an information systems theory that models how users come to accept and use a technology. This model is widely referenced as an innovation adoption model (Bagozzi, Davis, & Warshaw, 1992). This model has

been perused in a series of studies to thoughtfully adduce the factors affecting consumers' adoption and use of new technology (Venkatesh & Davis, 1996). Davis (1989) suggests that the sequential relationship of belief–attitude–intention– behavior in TAM, enables us to predict the use of new technologies by users.

In fact, TAM is an adaptation of Theory of Reasoned Action (TRA) in regard to information systems (IS) which notes that perceived usefulness (the degree to which a person believes that using a particular system would enhance his or her job performance) and perceived ease of use (the degree to which a person believes that using a particular system would be free from effort) influence the attitudinal disposition of a user towards his/her intention to use an innovation with the intention serving as a mediator to the actual use of the system. Perceived usefulness is also considered to be affected directly by perceived ease of use. This theory emphasizes that perceived usefulness and ease of use are fundamental determinants of system adoption and usage (Emmanuel & Adebayo, 2011).

In fact, TAM provides the provision to add external variables as the determinants of perceived usefulness and perceived ease of use (Davis, 1989). What's more, TAM assumes that potential consumers are free to act and choose without limitation. In fact, consumers may come up with some constraints in practice that may prevent them to act freely such as the rationalization of traditional banking channels which is why many of them tend to adopt mobile banking over the past decade (Hanafizadeh, Byron, *et. al.*, 2014). Yousafzai, Foxall, and Pallister (2010), who compared three models (TRA, TPB, and TAM) in terms of their ability to predict customer online banking behavior, also indicated that TAM is superior to the other models and highlighted the importance of it in understanding online banking behavior. Investigation on consumers' acceptance of e-banking in Nigeria based on TAM revealed that bank customers who are active

users of e-banking system use it because it is convenient, easy to use, saves time, and meets their transaction needs (Adesina & Ayo 2010).

### **2.2.2 Diffusion of Innovation Theory**

The Diffusion of Innovation Theory was first discussed historically in 1903 by the French sociologist Gabriel Tarde who plotted the original S-shaped diffusion curve, followed by Ryan and Gross (1943) who introduced the adopter categories that were later used in the current theory popularized by Everett Rogers. Katz (1957) was also credited for first introducing the notion of opinion leaders, opinion followers and how the media interacts to influence these two groups. The Diffusion of Innovation theory is often regarded as a valuable change model for guiding technological innovation where the innovation itself is modified and presented in ways that meet the needs across all levels of adopters.

In simple terms, the diffusion of innovation refers to the process that occurs as people adopt a new idea, product, practice, philosophy. It cogitates adoption of mobile banking as a social construct that increasingly develops through the population over time (Momammadi, 2015). The theory categorises the steps an individual takes from awareness of an innovation, through the formulation of an attitude to the innovation, on to the decision as to whether to implement, into five namely: knowledge, persuasion, decision, implementation and confirmation. The characteristic of an innovation have impact on the likelihood of acceptance and adoption, and also on the rate of at which the process develops (Emmanuel & Adebayo, 2011). There are however five categories of adopters which can be described in the context of technological innovation adoption and their influence on the innovative and adoption processes. They are:

**Innovators:** These set of people are also known as technology enthusiasts, they are venturesome, motivated by idea of being change agent, and they understand and as well apply complex technical knowledge to cope with high degree of uncertainty. With reference to this study, people belonging to the upper-upper class are mostly here. This is because they are mostly widely travelled and are exposed to some of these latest technologies and as such may want to bring changes to the way banking operations are done in Nigeria.

**Early adopters:** These set of people are also known as visionaries. They always want to revolutionise competitive rules in their industry. They have natural desire to be trendsetters and they are adventurous. With reference to this study, the set of people here are mostly those in the ‘upper- middle’ class. They are mostly those on white collar jobs.

**Early Majority:** These set of people are also known Pragmatists. They are prudent, likes to avoid risks and complexities, but they always want reliable service. With reference to this study, these set of people are mostly people who are educated and rational in their spendings.

**Late Majority:** These people are conservatives. They are often technologically shy, skeptical, and cautious with adoption of technology.

**Laggards:** These set of adopters always exhibit some sense of skepticism. They are always suspicious of innovations, think technology is a hinderance to operations. They also like to maintain status quo and they see that point of reference is in the past.

With reference to this study, bank customers in Nigeria are skeptical about easy adoption of technology based banking. This is largely because of insecurity, inadequate operational facilities

(Auta, 2010), absence of open standards/trust among banks and providers, and low internet penetration (Bickersteth 2005; Fenuga & Kolade 2010).

### **2.2.3 Theory of Reasoned Action**

The TRA, according to Fishbein & Ajzen (1975), is a well-established social psychological model that is concerned with the determinants of consciously intended behaviors. From a theoretical point of view, the TRA is intuitive and insightful in its ability to explain behavior (Bagozzi, 1982). The TRA assumes that individuals are usually conscious of the implications of their actions before embarking on such (Ajzen & Fishbein, 1980). According to the TRA, behavioral intention is the immediate antecedent or premise of an individual's behavior. According to Ajzen and Fishbein (1980), the TRA posits that "most behaviors of social relevance are under volitional control and are thus predictable from intention".

The theory also suggests that because many extraneous factors influence stability of intention, the relationship between intention and behavior depends on two factors: (a) the measure of intention must correspond to the behavioral criterion in action, target, context, and time; and (b) intention does not change before the behavior is observed (Ajzen & Fishbein, 1980). The TRA specifies that behavioral intention is a function of two determinants: a personal factor termed attitude toward behavior, and a person's perception of social pressures termed subjective norm (Fishbein & Ajzen, 1975). *Attitude* refers to the person's own performance of the behavior, rather than his or her performance in general (Fishbein & Ajzen, 1975). *Subjectivenorm* is a function of a set of beliefs termed normative beliefs. According to Ajzen and Madden (1986), normative beliefs "are concerned with the likelihood that important referent individuals or groups would approve or disapprove of performing the behavior". According to the TRA, to

obtain an estimate of a subjective norm, each normative belief of an individual is first multiplied by motivation to comply with the referent and the cross product is summed for all salient referents.

The TRA is a general model and, as such, it does not specify the beliefs that are operative for a particular behavior (Davis *et. al.*, 1989). Thus, the researcher using the TRA must first identify the beliefs that are salient for participants regarding the behavior under investigation. Furthermore, the TRA deals with the prediction, rather than outcome of behaviors (Foxall, 1997). In the TRA, behavior is determined by behavioral intentions, thus limiting the predictability of the model to situations in which intention and behavior are highly correlated.

The highest correlates between intention and behavior are found where the temporal gap between their expressions is minimal. To take the extreme case of overcoming this, however, measuring intention and behavior at the same time fails to ensure an assertive state of the model's power to predict the future. At best, it affirms the attitudinal basis of current behavior. Davies, Foxall, & Pallister (2002) opined that in order to test TRA, actual behavior should be measured objectively, and unobtrusively, without prejudice to the prior intention measurement phase. A further requirement of the TRA is that behavior must be under volitional control. Hence, the TRA is ill equipped to predict situations in which individuals have low levels of volitional control (Ajzen, 1991).

#### **2.3.4 Theory of Planned Behavior**

The theory of planned behavior (Ajzen, 1991), an extension of the TRA, tackles the original model's limitations in dealing with behaviours over which people have incomplete volitional control. The TPB suggests that in addition to attitudinal and normative influence, a third element, perceived behavioral control (PBC), also influences behavioral intentions and actual behavior

The TPB extends the TRA to account for conditions in which individuals do not have full control over the situation. According to the TPB, human action is guided by three kinds of considerations:

- (a) Behavioral beliefs or attitudes about the likely outcomes of the behavior and the evaluations of these outcomes;
- (b) Normative beliefs or subjective norms about the normative expectations of others and then
- (c) Control beliefs about the resources and opportunities possessed (or not possessed) by the individual and also the anticipated obstacles or impediments toward performing the target behavior (Ajzen, 1991).

In their respective aggregates, behavioral beliefs produce a favorable or unfavorable attitude toward the behavior; normative beliefs result in perceived social pressure or subjective norm; and control beliefs give rise to PBC. The TPB is, nevertheless, problematic on several grounds. First, like the TRA, the TPB assumes proximity between intention and behavior; thus, the precise situational correspondence is still vital for accurate prediction (Foxall, 1997). As Eagly & Chaiken (1993) pointed out, the assumption of a causal link between PBC and intention presumes that people decide to engage in behavior because they feel they can achieve it. Second, the operationalization of the theory is troubled by the problem of measuring PBC directly, as opposed to recording control beliefs (Davies *et. al.*, 2002). Third, the theory introduces only one new variable when there is continuing evidence that other factors add predictive power over and above the measures formally incorporated in the TPB (Davies *et. al.*, 2002). Ajzen (1991) himself described the model ‘as open to further expansion: The theory of planned behavior is, in principle, open to the inclusion of additional predictors if it can be shown that they capture a

significant proportion of the variance in intention or behavior after the theories' current variables have been taken into account''.

### **2.2.5 The Social Cognitive Theory**

**The Social Cognitive Theory (SCT)** is a learning theory that describes how behaviors are learned. Specifically, SCT emphasizes reciprocal determinism, or the interactive and dynamic process by which behaviors, personal, and environmental factors affect each other and are affected by each other. These personal and environmental factors form the constructs of SCT and include psychological determinants of behavior, environmental determinants of behavior, observational learning, and self-regulation. These are defined as follows:

**Psychological Determinants** are cognitive factors which influence behaviors. They include outcome expectations, or the perceived value associated with the consequences of a behavior, and self-efficacy, or the perceived belief about one's ability to perform a health promoting behavior.

**Observational Learning** is the ability to learn a new behavior by exposure to interpersonal or media displays of it, especially through peer modeling.

**Environmental Determinants** are external and physical factors which influence behavior, such as incentive motivation and facilitation. Incentive motivation is the use of rewards or punishment to modify behavior, and facilitation is the process by which tools, resources, and environmental changes are introduced to make new behaviors easier to perform.

**Self-Regulation** is one's personal ability to control oneself through self-monitoring, goal-setting, feedback, self-reward, self-instruction, and enlistment of social support.

### **2.2.6 The Unified Theory of Acceptance and Use of Technology (UTAUT)**

The Unified Theory of Acceptance and Use of Technology (UTAUT) is a technology acceptance model formulated by Venkatesh, Morris and Davis (2003) based on a review of the theory of reasoned action, the technology acceptance model, the motivational model, the theory of planned behaviour, the combined theory of planned behaviour/technology acceptance model, the model of personal computer utilization, the diffusion of innovations theory, and the social cognitive theory. The UTAUT theory holds that four key constructs namely, performance expectancy, effort expectancy, social influence and facilitating conditions are direct determinants of usage intention and behaviour (Martins, Oliveira, & Popovic, 2014; Shaikh & Karjaluoto, 2015).

Venkatesh *et. al.* (2003) defines the factors as follows: **Performance expectancy** refers to the extent to which an individual believes that using the system will help him or her achieve better results on the task (Venkatesh *et. al.*, 2003; Wang & Wang, 2010). **Effort expectancy** refers to the extent of ease associated with the use of the system (Venkatesh *et. al.*, 2003). **Social influence** refers to the extent to which an individual perceives that important others believe he or she should use the new system (Venkatesh *et. al.*, 2003). **Facilitating conditions** refers to the extent to which an individual believes that an organisational and technical infrastructure exists to support use of the system (Venkatesh *et. al.*, 2003).

UTAUT is considered to be the most important theory for IT adoption research in Information Systems (IS) fields in the future. The model has been empirically examined and found to outperform the other eight individual models, including the TAM model (Carlsson, Carlsson, Hyvonen, Puhakainen & Walden, 2006). However, UTAUT is not perfect. To apply UTAUT in certain special IT applications such as mobile banking, modification and revision is needed as recommended by Venkatesh *et. al.* (2003). In a study by Carlsson *et. al.* (2006) using the UTAUT in Finland, performance expectancy and effort expectancy are found to be the main

determinants of behavioural intention in using mobile services (Carlsson *et. al.*, 2006). The UTAUT model has also been revised to study mobile commerce acceptance, where additional determinants such as trust, privacy, convenience and cost were shown to affect the behavioural intention (Min, Ji & Qu, 2008). The effort expectancy from UTAUT, PEOU from TAM and complexity from IDT are regarded as similar (Venkatesh *et. al.*,2003). Similarly, the relative advantage of IDT and performance expectancy of UTAUT is analogous to PU from TAM (Taylor & Todd, 1995; Venkatesh *et. al.*, 2003).

The theory has been tested for the adoption of information and communication technologies and mobile commerce. Compared to other theories, the UTAUT theory was found to be more relevant for studying the adoption of mobile commerce. Pedersen (2005) carried out a study in North America and Europe on the adoption of mobile Internet services. He found that TAM, Decomposed TPB and the domestication model are important from the social and technical perspectives. Further, usefulness and subjective norm were significant towards the attitude to use m-commerce. Facilitating conditions were restricted to the resources used. Self-efficacy and operator influence on facilitating conditions were not tested in his research. Rao and Troshani (2007) established user predisposition (i.e., knowledge, compatibility and perceived enjoyment), behavioural control and innovativeness, image, perceived usefulness, perceived ease of use, internal and promotion, security and privacy) as important drivers for m-commerce service external social influence, facilitating conditions (i.e adoption).

### **2.3 Conceptual Framework**

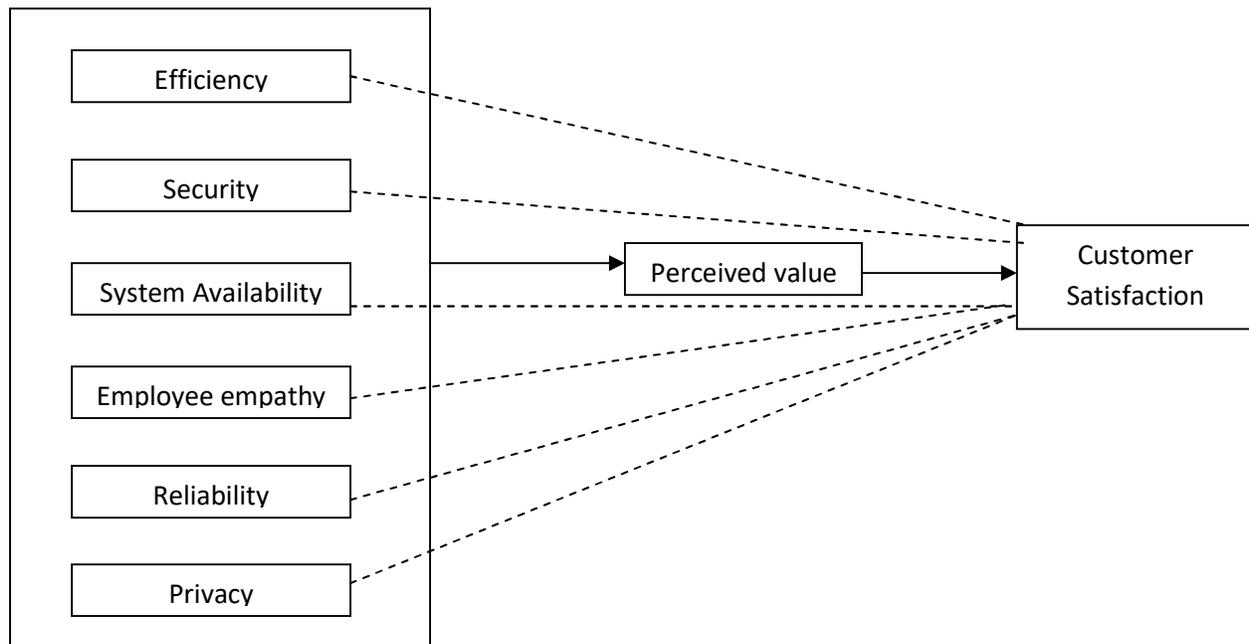
Looking at the contents and analysis of the foundational theories of this research, it is most fitting at this point to explain key components in the aforementioned topic and then develop a

simple descriptive or explanatory model to conceptualize the relationship between or among the various variables. A model is defined as the conceptualization of the way two or more concepts relate to each other or one another. Based on a thorough review of literatures, a simple explanatory model diagram showing major constructs/concepts of this study (customer satisfaction, perceived value, e-banking service quality and dimensions of e-banking services) and also the relationship between e- banking service quality and customer satisfaction.

Figure 1 below depicts the relationship among service quality dimensions (consisting of efficiency, privacy, system availability, empathy, reliability and security), perceived value and customer satisfaction where service quality is the independent variable, perceived value function as the mediating variable between independent variable and dependent variable (customer satisfaction)

A modified E-S- Qual and E-RecS-QUAL framework for measuring online service Quality

### Service Quality Dimensions



**Fig. 1** Source: Researchers conceptualization, 2016.

The framework above was adapted after review of several literatures. In understanding electronic banking service quality dimensions/measurements for which customer satisfaction can be assessed, it is worthwhile to note the dimensions for the e-banking service quality context are: efficiency, privacy, security, system availability, customer service, and perceived value. All these dimensions are explained below:

**Efficiency:** This according to Wong, Rexha & Phau (2008) is the ability to ensure that service delivery is as accurate as promised. Here, slow response time after any e-interaction leads to a delay of service delivery and makes consumers unsure about whether or not the transaction is completed (Jun & Cai, 2001). To this extent, Agboola (2003) ascertained that certain actions, such as increasing the speed of processing information, immediate and quick transaction, and effective money transfer are likely to have an important effect on customer's confidence in using e-banking services. Efficiency in the form of time savings, 24/7 access and service quality, is

often mentioned as one of the most beneficial features of internet Banking (Daniel, 1999; Liao & Cheung, (2002), and a key determinant of consumer satisfaction (Yanget. *al.*, 2003). Ramsay and Smith (1999) contend that efficiency is one of the dominating factors in transaction channel preferences. Devlin (1995) explains that as people become more time and leisure conscious, the convenience aspects of internet banking will be increasingly valued.

**Privacy:** Security and privacy are interconnected items that affect the confidence to embrace the use of online banking services (Wolfenbarger & Gilly, 2002; Wandaogou & Jalulah (2011). Items in this category includes assurance, Trust, and customer confidence that in using e-banking channels, confidentiality of his or her identity will be guaranteed and that measures will be put in place to ensure that he or she is protected from fraudsters or hackers.

**Security:** Mohd, Ahmad and Al-Zu'bi (2011) viewed security as relating to the extent to which the bank's web site guarantees the safety of customers' financial and personal information (Lallmahamood, 2007; Singh, 2012) and as such one of the critical elements of online banking service quality and credibility (Parasuraman, 1988; Wandaogou & Jalulah (2011). This is just as Aderonke and Ayo (2010) reiterated (Ezeoha, 2005) and asserted that insecurity, inadequate operational facilities like electric power supply and telecommunications are among the hinderances to online banking in Nigeria.

**System availability:** System availability is defined as the ability of users to access information and services from the web as dependent on many factors. These include the content format; the user's hardware, software and settings; internet connections; the environmental conditions and the user's abilities and disabilities (Mohd, Ahmad & Al-Zu'bi 2011). Items here include full

branch computerization, accessibility, state-of –the-art equipment. It is important to note that signs of fulfillment are felt once accessibility and availability of workable systems are evident.

**Employee empathy:** Customer service has been renowned and recognized as a significant element for enhancing service quality in electronic banking (Zeithaml, 2002, Agboola, 2004) Elements like service reliability, customer sensitivity, personalized service, and prompt response to customer complaints in customer service dimension have been identified in many previous studies (Van Riel *et. al.*, 2001; Madu & Madu, 2002; Wolfinbarger & Gilly, 2003; Wandaogou & Jalulah (2011). This is just as (Karjaluo, 2001; Matilla *et. al* 2003; Aderonke & Ayo, 2010) asserted that incomprehensiveness, difficulty of use, non-interaction between the customer and bank employees made some customer to be skeptical about using internet banking.

**Perceived value:** Perceived value is comparison between price or charges paid for the services by the customer as sacrifice of the money and utility derived by service perception (Bolton & Drew, 1991; Cronin & Taylor, 1992; 1994 and Kumbhar, 2011). It is also the consolidated perception from banking service in term of perceived quality and money expended for getting banking services (Kumbhar, 2011).

Perceived service value is “the consumer’s overall assessment of the utility of a product based on perceptions of what is received and what is given” (Zeithaml, 1988 and Lee & Wu, 2011).

According to Slater and Narver (2000) customer value is created when the benefits of a product or service perceived by the customer exceed all its related costs, such as price, search, operating and disposal. According to Sweeney and Soutar (2001), customer perceived value may be confused with satisfaction because they are both value judgments, but satisfaction only occurs after the product's use. Customer perceived value, however happens continuously throughout

different moments, including those before the purchase process (Sweeney and Soutar, 2001). Therefore, as service quality improves, the probability of customer satisfaction increases. Here, the bank customer clearly tries to exhibit the rationality of his/her patronage of the banking product by asking himself / herself whether or not the service delivery is worth the price charged. It is therefore imminent to assert that perceived service value is the function of customers' comparison of all the benefits derived from the purchase and use of a service, along with all the costs (sacrifices) associated with the purchase and use of the service.

## **2.4 Review of Empirical Studies**

Review of extant literatures shows that socio demographic profiling of online customers by researchers is in the right perspectives so that customer segmentation and satisfaction can be ascertained so as to unravel the determinants of electronic banking adoption in Nigeria and the world over. Venkatesh & Agarwal, (2006) in a study found that male interact more with the web than females; just as younger users hold more positive attitudes toward computers compared to older users. Li, Kuo & Russel, (1999) in a study found that the female interact more with online technologies.

Lichtenstein & Williamson, (2006) in a study titled understanding consumer adoption of internet banking: an interpretive study in the Australian banking context, Using grounded theory and correlation coefficient to analyse data gotten from 214 respondents found and supported, Shergill and Li's (2005) study of internet banking consumers, that women regarded privacy protection and ethical standards more seriously than did men; hence their patronage of e-banking services more than men. This was however contrary to the findings reported in Flavia'n *et. al.* (2006) indicated that women were less likely to conduct their banking activities online. This was however supported by the studies of Tao and Tan, (2000) where they found that males engage in

online banking than female. Igarria and Livari (1995) in a study found that users with higher education are more tolerant toward web usage and easier to satisfy compared to users with lower education levels.

Islam, Khadem and Alauddin, (2011) in a study titled an empirical assessment of the relationship between service quality and customer satisfaction in fashion house in Bangladesh, used factor analysis and regression analysis to analyse responses from 210 customers concluded that responsiveness (employee empathy) is not significantly correlated with customer satisfaction. This is just as (Karjaluto, 2001; Matilla 2003; Aderonke & Ayo, 2010) *et. al* asserted that incomprehensiveness, difficulty of use, non-interaction between the customer and bank employees made some customer to be skeptical about using internet banking.

Popoola (2013) concluded that reliability of the technology that supports internet banking is very crucial determinant of consumers' trust. Measurement variables in this regard service reliability, customer sensitivity, personalized service, and prompt response to customer complaints include varieties of service, accuracy of operation, reliability, and availability of network.

Previous research observes that a user-friendly bank website affects the selection and adoption of Internet banking services (Clemes *et. al.*,2012; Akinci *et. al.*,2004), has a positive effect on users' attitudes on usefulness and users' attitudes toward online banking. The website design influences customers' perceptions of the service provider and customers' behavioural intentions (Ranganathan & Ganapathy, 2002).

Wong *et. al.*(2008) in a study titled re-examining traditional service quality in an e-banking area asserted that reliability of the banking service also holds a high expectation from customers. This is in contrast to the findings of Munusamy, Chelliah and Mun, (2010) in a study titled service quality delivery and its impact on customer satisfaction in the banking sector in Malaysia where

117 respondents were sampled using correlation and regression analysis to analyse data. Results showed that reliability does not have any significant impact on customer satisfaction.

Consumers' concerns about security, which arise from the use of an open public network, have been emphasized as being the most important factor inhibiting the adoption and use of internet banking (Sathye, 1999; Daniel, 1999; Polatoglu & Ekin, 2001). In USA, Thorton Consulting (1996) which conducted a survey focusing on banks concluded that 67 percent of US banks feel that "security concerns" is the major barriers for Internet banking. The same results obtained from the study of Booz *et. al.* (1997), reveals that security concern among customers was the top-ranking obstacle for non-adoption of Internet banking in Latin America. The above is purely in line with the proposition of this study that security concerns will have effect on customer satisfaction.

Delivering qualitative e- banking services has shown to be an important strategy for marketers to establish customer value and satisfy customers' needs ( Lee & Wu, 2011) as well as promote customer loyalty and retention (Imrie, Durden, & Cadogan, 2000). Simply stated, the causal order of the relationship between service quality and consumer satisfaction has been a matter of considerable debate within the marketing literature. Three major positions have been advanced.

First, service quality has been identified as an antecedent to satisfaction (Zeithaml & Bitner, 2003; Lovelock & Wirtz, 2007; Wandaogou & Jalulah, 2011). Within this causal ordering, satisfaction is described as a "post-consumption evaluation of perceived quality. (Anderson and Fornell 1994). Parasuraman *et. al.* (1988) who specifically suggest that high level of service quality will always bring about customer satisfaction. However, Bitner, (1990) argued that satisfaction is antecedent to service quality.

Scholars have over the last years researched assiduously to research into the area of mobile banking adoption. Luarn and Lin (2005) using extended Technological Adoption Model (TAM) collected data from 180 respondents surveyed at an e-commerce exposition and symposium in Taiwan and found that Perceived self-efficacy, financial costs, credibility, easy-of-use, and usefulness had remarked influence on intention to adopt mobile banking. From the work of Laforet and Li (2005), 300 respondents randomly interviewed in the streets of six major cities in China and it was found that Awareness, confidential and security, past experience with computer and new technology are salient factors influencing mobile banking adoption. Yang (2009) had 178 students selected from a university in South Taiwan and found that adoption factors are location-free conveniences, cost effective, and fulfill personal banking needs, while resist factors are concerns on security and basic fees for connecting to mobile banking. Riquelme and Rios (2010) using Technological Adoption Model, TPB, and IDT had 681 samples drawn from the population of Singapore found that usefulness, social norms, risk influences the intention to adopt mobile banking.

From the Nigerian point of view, Auta (2010) looked at e-banking in developing economy: empirical evidence from Nigeria using 750 respondents. He concluded that most bank customers agreed that convenience, speed of operation, and lower transaction cost account for significant reasons why customers adopt mobile banking. Ayo, Adewoye and Oni(2010) in their study of the state of e-Banking implementation in Nigeria: A post-consolidation review using 369 questionnaires deduced that ATM is the most widely used of all e-banking service channels and that organizational reputation, reliability and trustworthiness are customers' preference for patronizing a bank or its services.

Osabuohiem (2008) in a study titled Information and Communication Technology (ICT) and Nigerian Bank Reforms: Analysis of anticipated impacts in selected Banks using 152 questionnaires concluded that age, and educational qualification had influence on the intensity of ICT use in banks and that its use in the banks impacts positively on the speed of operations and service delivery. Alaba (2012) in a study titled electronic banking services and customer satisfaction in the Nigerian Banking Sector used 391 questionnaires to elicit information from respondents. He concluded that customer satisfaction in banking industry has a positive relationship with banks' electronic banking services.

## **2.5 Service Quality**

One of the greatest challenges facing organizations today is the ever-growing competition, the continuous increase in customer expectation (Kandampully, 1998) and customers' subsequent demands as service improves (Ettorre, 1994). Moreover, customers are becoming increasingly critical of the quality of service they experience (Albrecht & Zemke, 1985). Customer demand and competition are forcing firms to cut loose from the traditional customer satisfaction paradigm, to adopt proactive strategies which will assist them to take the lead in the marketplace. Service quality is one of the key factors in determining the success or failure of e-banking. To gain and sustain competitive advantages in the rival-driven e-banking market, it is thus crucial for banks to understand in-depth what customers perceive to be the key dimensions of service quality and what impacts the identified dimensions have on the customers' perceived overall service quality, satisfaction, and loyalty (Pham, 2010).

In today's competitive environment, it is evident that gaining competitive advantage over other competing service providers can only be possible through effective delivery of service (Angelova & Jekiri, 2011). Service quality according to (Parasuraman *et. al.* 1985 and Dong-Hee Shin,

2014) is the customers' subjective assessment of the expectations with actual service performance.

In the light of the above, it is expedient to note that consumers expectations had been unimaginably high hence the constant demand for better service quality from the banking industry. Marketing environment are now consumer driven and as such, service quality (SQ) is conspicuously trending in the literature from both scholars and practitioners in business. Many studies have established that SQ, which is often driven by intensity of competition, changes in government regulations and adverse effects of technology, is a crucial driver of satisfaction (Grönroos, 2000; Zeithaml & Bitner, 2003; Lovelock & Wirtz, 2007; Hume & Mort, 2008; Wandaogou & Jalulah, 2011), profitability (Heskett, Sasser & Schlesinger, 1997), and a keycompetitive advantage for modern business firms (Grönroos, 2000,2001; Kotler & Keller, 2006; Hussain, Nasser & Hussain, 2015).

Indeed SQ is not just a corporate offering, but acompetitive weapon which is necessary for corporate profitability and survival (Alaba, 2012). Many authors agree that in today'sdynamic market place and market space, survival of organisations is dependent on the delivery of its services. Providing high service quality is also critical for enhancing long-term relationships with customers, which is especially important in the competitive business environment of modern banking (Hussain, Nasser& Hussain, 2015). Therefore, delivering quality service to customers is compulsory for success and survival in today's competitive banking environment. It is therefore imperative for banks to identify and manage the service quality dimensions which would lead to competitive advantage with their customers.

### **2.5.1 E- Banking Service Quality**

The rapid diffusion of information technology in the Nigerian banking sector has indeed made banking activities and products to change rapidly. These changes are induced mainly from the increased competition in the financial sector and the technology improvements. These two factors affect simultaneously and are interrelated and as such have assisted in providing a platform to use innovative technologies to enhance operational efficiency and quality of service to attain and retain customers. The paradigm shift from traditional banking to electronic banking further kept stakeholders on their toes since service quality provides strategic competitiveness in dynamic business environment.

Electronic banking has received considerable interest from scholars and practitioners as a result of the value and usefulness customers derive from internet banking, as well as the practical value of implications it offers marketers. According to Zeithamlet. *al.* (1996) a bank could enhance its reputation, customer retention, get new customers and increase financial performance by delivering superior quality internet banking services to its valued customers. Delivering quality e-services has been shown to be an important strategy for marketers who are trying to differentiate their service offerings by establishing customer value and satisfying customers' needs (Lee & Wu, 2011) as well as promoting customer loyalty and retention (Imrie, Durden, & Cadogan, 2000), which are essential to any e-service retailer (Collier & Bienstock, 2006).

The advent of electronic banking has thus changed the mode of interaction between the banks and their customers. Internet banking has become an avenue by which banks could deliver superior service quality as a competitive tool against industry rivals (Ranganathan & Ganapathy, 2002). Improvement in the internet service quality could be made if customers' satisfaction and perception of it can be measured in the first place. Effective measurement of customer satisfaction for various dimensions of internet service quality could be very useful in

the allocation of resources and in the segmentation of customers (Kotler & Keller, 2006; Parasuraman *et. al.*, 1988).

Automated service quality also known as E- service quality is defined by Santos (2003) as “*the consumers’ overall evaluation and judgement of the excellence and quality of e-service offerings in the virtual marketplace*”. It is a crucial determinant in differentiating e-service offers and building a competitive advantage (Santos 2003).

E-service quality is determined by IT-related factors, such as website security and functionality, and by product and process factors, such as product variety and order delivery timeliness (Collier & Bienstock 2006, Rowley 2006). Superior e-service quality can improve customer satisfaction, customer acquisition, and customer retention (Boulding *et. al.* 1993, Lee & Lin, 2005).

Many past studies have established various models for understanding relevant e-service quality dimensions germane to electronic banking. Zeithaml, (2001) contends that attributes of internet service quality include: access, ease of navigation, efficiency, flexibility, reliability, personalization, security, responsiveness, assurance, site aesthetics and price knowledge. Parasuraman *et. al.* (2005) finds it important to advance a model worthy of note. In this model are two categories which are the e-S-QUAL (efficiency, fulfillment, system availability and privacy) and the e-RecS-QUAL (responsiveness, compensation and contact). The first four dimensions were said to constitute “core” quality (e-S-QUAL scale), whereas the last three were said to constitute “recovery” quality (e-RecS-QUAL scale).

## **2.5.2 Measuring Electronic Service Quality**

E-SQ (E-S-QUAL and E-RecS-QUAL) Instrument for measuring Online Services Quality. E-SQ Instrument is an instrument similar to the SERVQUAL scale, developed specifically for measuring online services (e-services) quality. The model has been developed in 2000 and tested and revised in 2002 by Parasuraman, Zeithaml and Malhotra who made an exploratory study on quality perceptions of customers as far as online shopping is concerned. The development of this instrument went through three stages. During the first stage the researchers used qualitative study with six focus groups with six to seven participants in each group (Zeithaml *et. al.*, 2000).

Furthermore, they claim that “the responses of focus-group participants to e-service quality (e-SQ) dimensions were remarkably consistent across the groups, experience levels, and e-service businesses discussed. The focus groups revealed that consumers use basically similar dimensions in evaluating e-SQ regardless of the type of product or service being evaluated on the Internet” (Zeithaml *et. al.*, 2000). The dimensions for measuring e-service quality, found out at that stage were eleven: reliability, responsiveness, access, flexibility, ease of navigation, efficiency, assurance/trust, security/privacy, price knowledge, site aesthetics and customization /personalization.

With the rapid growth of business to consumer (B2C) electronic commerce (e-commerce), banks realized that irrespective of their business type and product offerings, they are requested to deliver superior service quality over the web. Delivering high quality service is considered an essential strategy for business success and survival (Swaid & Wigand, 2009; Reicheld & Schefter, 2000; Zeithamlet. *al.* 1996). E-service quality can not only provide organization competitive advantages in the online environment, but also involves clients in the product process through customer’s feedback, and improve clients’ relationships and satisfactions (Santos, 2003). Measuring service quality of all automated channels separately will give better

understanding of automated service quality. It has been observed that different studies on e-banking service quality consider different dimensions of e-banking service quality. So it may be said that there is no universal or generally accepted model till date to measure e-banking service quality (Sindwani & Goel, 2012)

Zeithmalet.al (2003) while conceptualizing and measuring e-SQ, and particularly in determining the dimensions of the construct, used a three-stage process involving exploratory focus groups followed by two phases of empirical data collection and analysis. Their research indicates that e-SQ has seven dimensions that form two scales: a core e-SQ scale and a recovery scale. Four dimensions – efficiency, reliability fulfillment, and privacy – form the core e-SQ scale that can be used to measure customer perceptions of service quality.

These dimensions and their definitions are: (1) Efficiency refers to the ability of the customers to get to the Web site, find their desired product and information associated with it and check out with minimal effort. (2) Fulfillment incorporates accuracy of service promises, having products in stock and delivering the products in the promised time. (3) Reliability is associated with the technical functioning of the site, particularly the extent to which it is available and functioning properly. (4) The privacy dimension includes assurance that confidential data are not shared and that credit card information is secured.

They call this the core e-SQ scale because these are the main dimensions that consumers want electronic banking activities. Most consumers use the electronic channels for their banking transactions, and do not expect the personal interaction and warmth that they expect when they use traditional means of queueing in the bank halls. They found, however, that three other

dimensions become salient when online customers run into problems – responsiveness, compensation and contact.

They conceptualized these dimensions as constituting e-SQ recovery. The recovery-SQ scale includes the 'personal service' aspects:

(1) Responsiveness measures the ability of a company to provide appropriate information to customers when a problem occurs, have mechanisms for handling returns and providing online guarantees.

(2) Compensation is the dimension that involves receiving money back, return shipping and handling.

(3) Contact points to the need of customers to be able to speak to a live customer service agent online or through the phone – requiring seamless multiple channel capabilities on the part of e-tailers. Below are compilations of online service quality scales in previous studies.

## **2.6 Concept of Customer Satisfaction**

The concept of customer satisfaction occupies a central position in marketing thought and practice (Churchill & Surprenant, 1982). In today's competitive environment delivering high quality service is the key for a sustainable competitive advantage. Hence, it is one of the best-studied areas in marketing, because it has become a principal factor in achieving organizational goals, and is considered a baseline standard of performance and a possible standard of excellence for any organization (Munusamy & Chelliah, 2011 and Hussain, Al Nasser & Hussain 2015). Firms owe their duty of care because the consuming public must have to be made to realize that they have spent money or time judiciously. Many studies confirmed that the measurement of CS regarding the service quality of firms is a necessary means by which organizations study the

minds of its customers for useful feedback that could form the basis for effective marketing strategy (Kotler & Keller, 2006).

Since firms exist to satisfy customers by meeting their requirements, it is crucial for banks that offer internet banking services to periodically and consistently measure the satisfaction of their customers Wandaogou and Jalulah (2011). As customers use the banking internet services, it might be that they are not satisfied, or that they are satisfied to some extent, with certain dimensions of the service quality, hence the need to ascertain why some satisfied customers churn the use of a bank's e-banking products, while some dissatisfied customers stay, hence the subjectiveness of perceived service quality.

Customer satisfaction has been defined in different ways by different authors. Some definitions are given below:

Satisfaction is a person's feeling of pleasure or disappointment resulting from comparing product's performance (outcome) in relation to his or her expectation (Kotler & Keller, 2006).

Gyasi and Azumah, (2009) defined customer satisfaction as the process of customers' overall subjective evaluation of the product/service quality against his/her expectations or desires over a time period.

Satisfaction is an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfillment of some needs, goals or desire (Hansemark & Albinson, 2004).

Customer Satisfaction is one of the most important outcomes in the marketing literature. It serves to link processes culminating purchase and consumption with post purchase phenomena such as attitude change, repeat purchase, and brand loyalty (Jamal & Naser (2003) and Mishra (2009).

Customer Satisfaction is conceptualised as an overall customer evaluation of a product or service based on purchase and consumption experiences over a time period (Fornell, 1992).

Recent studies have found that satisfaction is as an outcome or end result during the process of the consumption of a service is viewed as a post-purchase experience (Wandaogou & Jalulah, 2011). This view has its roots in motivation theories which postulates that people are driven by the desire to satisfy their needs (Maslow, 1954) or that their behaviour is directed at the achievement of relevant goals (Vroom, 1964). In this way satisfaction is perceived as a goal to be achieve and can be described as consumer fulfillment response (Rust & Oliver, 1994). In the context of this study, customer satisfaction is defined from process perspective because we believe that in internet banking arena, customers' evaluation of internet banking service quality takes place predominantly during the service delivery process and continues, but not just an outcome that customers strive to achieve (Wandaogou & Jalulah, 2011).

Recent online banking studies, including Casaló, Flavián and Guinalú (2008), have found that customer satisfaction with previous online banking interactions have had a positive effect on both customer loyalty and positive word-of-mouth. Customers' attitudes and behaviors may vary according to individual characteristics such as age, gender and experience. It has been proposed that experience, in particular, influences consumer (or user) behaviors in marketing, e-commerce and information systems studies.

Several studies have examined the effects of experience on customers' behavior, perceptions and behavioral intentions (Taylor & Todd, 1995; Castaneda, Munoz-Leiva, & Luque, 2007). The above is actually in line with the views of Safeena, Date & Kammeni (2011) where they asserted that Customer satisfaction and customer retention are increasingly developing into key success factors in e-banking. Bauer, Hammerschmidt & Falk, (2011) and that the diffusion of internet

Banking is more determined by customer acceptance rather than by seller offerings (Mols, Bukh & Neilson 1999).

According to Yoon (2010) Customer satisfaction, the feeling of customers using a product or service, is one of the most popular research topics in marketing and e-commerce studies. When customers are satisfied with the service(s) of an organisation, they express such through patronage of their products and/or services and a positive 'word-of-mouth' behavior. Banks must thus be aware of the fact that the delivery of high quality services will make customers to become loyal to the bank and its services. At the very least, consumers can express negative feelings to people they know, and due to advancements in digital communication, word-of-mouth can spread rapidly, which can very likely affect a business's reputation in a positive, or, more worryingly, a negative way (Hussain, Al Nasser & Hussain 2015).

Research shows that an unsatisfied customer will communicate to nine other people about his or her bad experience (Hoffman & Bateson, 2010). This negative word-of-mouth can be very harmful, and can adversely impact the firm's reputation, profitability and depletion of its customer base. Going by the above, Oghojafor, Mesike, Omoera and Bakare (2011) reiterated the submission of (Khan, Jamwel & Sepehri, 2010) that the cost of acquiring new customer is five times higher than maintaining an existing customer. Hence, banks must strive hard to keep their customers satisfied at all times. The above assertion made this study to ask whether customer satisfaction a cost driver or a value driver.

A review of the literature reveals two conflicting viewpoints (see Anderson, Fornell, & Rust, 1997): one school of thought argues that increased customer satisfaction reduces costs, while the second argues that it requires additional costs. Therefore, prior literature is ambiguous regarding

the question whether customer satisfaction is a cost driver or value driver. This issue is especially pertinent in the banking industry, which is facing radically new challenges that may negatively affect the industry margins and profitability (Terpstra, Frank & Verbeeten 2014). Among the challenges faced are the advances in modern information and telecommunication technologies, which have resulted in changes in the cost transparency, service quality, customer retention rates, and in the commoditization of basic banking products. In order to face these challenges, many banks focus on customer satisfaction as a key strategic value driver; we investigate whether this is a sensible decision at the individual customer level.

The objective of this paper is to provide more detailed insight into the long-term relation between customer satisfaction, customer servicing costs, and customer value at the individual customer level in a financial services firm. Customer satisfaction may be regarded as a customer's response to consumption experiences (Oliver, 1997). One of the pivotal definitional issues in the literature is whether satisfaction is best conceived as a transaction-based evaluation, or as an overall evaluation of a series of transactions. Traditionally, satisfaction has been viewed as transaction specific, an immediate post purchase evaluative judgment, or as an affective reaction (Gupta & Zeithaml, 2006 and Terpstra, Frank & Verbeeten 2014). In more recent studies of the relation between customer satisfaction and companies' performance, the focus of satisfaction is often (the long-lasting relation with) the company and not a single product from, or a single contact with, the company.

### **2.6.1 Satisfaction Formation and Measurement**

Disconfirmation theory is one of the most popular theories that seek to elucidate the satisfaction formation process. This theory was championed by Oliver (1980). Proponents of this theory believe that satisfaction is formed as a result of the discrepancy between the perceived

performance of a product/service and the customer's expectation. This theory has two famous variables; expectation or desire and experience or perceived performance. These variables are defined in two distinct time periods. Expectation or desire is related to the pre purchase time period that a customer has initial expectation or desire about a specific performance such as quality of products or services. Experience or perceived performance is related to the after purchase time period that the customer gets the experience after perceiving a real performance such as quality of a specific product or service.

According to this theory, Wandaogou & Jalulah (2011) asserted that customers come to the service encounter with some expectations and by comparing their expectation with the perceived performance of the product they purchase or consume, they either confirm or disconfirm their expectation, which results in satisfaction or dissatisfaction; According to this paradigm, as customers consume a product, they compare the quality they have experienced to that of their prior expectations (Swan & Comb, 1976), which leads to an emotional reaction manifested in the satisfaction/dissatisfaction with the products or services purchased (Kandampully, 1998).

According to Wandaogou & Jalulah (2011), Expectation disconfirmation model of satisfaction formation has been empirically tested by Khalifa & Cheng (2002) and Bozorgi (2007). They all found out that among other cognitive standards like desire, expectation disconfirmation has stronger impact on customer satisfaction. Therefore, expectation disconfirmation could be used to measure overall customer satisfaction which according to Oyeniya and Abiodun (2008) in (Oghojafor *et. al.*, 2012) has become a priority for most enterprise and there are compelling arguments for manager to carefully consider the factors that might increase customer's retention rate.

## 2.6.2 E-service quality dimensions and customer satisfaction

All five dimensions are statistically significant in explaining over all service quality, with access and website interface as the more important predictors. Sohn and Tadisina (2008) identify six dimensions of service quality for online financial services: trust, customised communication, ease of use, website content and functionality, reliability, and speed of delivery. In a study of e-bank service quality, Ibrahim *et. al.* (2006) report six dimensions: convenience/accuracy, accessibility/reliability, friendly/responsive customer service, good queue management, personalization, and targeted customer service. In his review of the previous studies on e-service quality, Ladhari (2010) concludes that the reign consensus on the number and nature of the dimensions of the e-service quality construct.

Ladhari (2010) suggests that dimensions of e-service quality tend to be contingent on the service industry and that six dimensions occur more consistently. This study retains four of these dimensions: efficiency, web design, information quality, and responsiveness. The efficiency dimension, similar to the ease-of-use and access dimensions discussed in previous studies, refers to user friendliness (e.g., the site is simple and easy for customers to use), especially when searching for information (Yang, *et. al.* 2005; Yoo and Donthu, 2001). Quick navigation and efficient website organisation should facilitate access to information and thus enhance the website providers reputation in the area of service quality (Srinivasan *et. al.*, 2002). Indeed, ease of navigation makes users comfortable with the website (Ranganathan & Ganapathy, 2002).

Previous research observes that a user-friendly bank website affects the selection and adoption of Internet banking services (Clemes *et al.*, 2012; Akinci *et. al.*, 2004), has a positive effect on users' attitudes on usefulness and users' attitudes toward online banking (Lai and Li, 2005), increases service use (Lai and Li, 2005). The website design dimension, similar to the physical

store environment, refers to aesthetic features and content. The website design influences customers' perceptions of the service provider and customers' behavioural intentions (Sohn & Tadisina, 2008). As with the physical store environment, the website design plays a key role in attracting and retaining visitors (Ranganathan & Ganapathy, 2002). The information quality dimension refers to the adequacy and accuracy of the information users obtain when visiting the website (e.g., Collier & Bienstock, 2006; Ho & Lee, 2007).

Two of the five dimensions reported in Yan *et al.* (2005) concern the quality of information, its adequacy (comprehensiveness, completeness, sufficiency) and usefulness (relevance, uniqueness, whether it is up-to-date). Ranganathan and Ganapathy (2002) states that information content is critical for any website and a key factor that differentiates the company from competition. The responsiveness dimension refers to a willingness to help users by responding promptly to customer requests (Li *et al.*, 2002; Bauer *et al.* 2006). The responsiveness dimension has been shown to influence the duration of relationships with customers and purchase intentions (Bauer *et al.*, 2006).

Oliver (1997) defines satisfaction as a judgement (fulfillment, response) that a product or service gives upon consumption. Satisfaction with online financial services leads to increased use of the website for financial transactions, and to a closer relationship between the customer and the financial institution. But even dissatisfied customers do not readily switch to another institution because it takes an effort to close their old account and open a new one at another financial institution (Smith, 2006). Customers are more likely to remain with financial institutions they are familiar with or that have a good reputation. Previous research reports a significant effect of e-service quality on e-satisfaction.

Syzmanski and Hise (2000) report that convenience, product information, site design, and financial security all are positively related to online shopping customer satisfaction, with convenience having the greatest effect. Bauer et al. (2006) identify five dimensions of e-service quality that have significant positive impact on satisfaction, with reliability having the most important effect, followed by functionality/design, responsiveness, process, and enjoyment. Lee and Lin (2005) report that responsiveness influences overall service quality and satisfaction.

In another study, Ladhari and Leclerc, (2013) found that efficiency and privacy significantly influence e-satisfaction for respondents in both the US and Korea. In addition, system availability and fulfillment have a significant influence on e-satisfaction in Korea. In the financial service sector, research on the relationship between e-service quality and e-satisfaction is limited. Evanschitzky et al. (2004) found that convenience, followed by site design, received the highest ranking among the determinants of German online consumers' satisfaction with financial services sites. The Agarwal et al. (2009) study on e-banking in India reports that overall e-satisfaction largely depends on perceptions of security and trust, convenience and ease-of-use, and value proposition. Studying the role of e-service quality dimensions among Australian e-retail bank customers, Herington and Weaven (2009) observe that e-satisfaction is predicted by personal needs, site organisation, user-friendliness, but not efficiency. It is reasonable to believe that satisfaction will be positive when users perceive that the financial institutions website is well-designed. Also, satisfaction should increase when users perceive online information as adequate and accurate. We also expect that easily navigable websites would be perceived more interesting by users. Finally, we expect that a service provider's willingness to help customers and respond promptly to inquiries could play a role in consumer satisfaction.

## 2.7 Effective Service Quality Delivery, Customer Satisfaction and Organisational Performance: Cross Functional Analysis

Delivering effective electronic service quality (e-SQ) is essential to becoming, and remaining, competitive in internet banking service. From the banks perspective, to remain competitive, banks should try to make customers satisfied with their services and offerings, and this can be achieved by measuring and improving dimensions of internet banking e-SQ (Ariff, Yun, Zakuan & Josh 2012). It is pertinent to know that effective delivery of high service quality results in customer satisfaction and loyalty, greater willingness to recommend to someone else, reduction in customer complaints, and improved customer retention rates (see, for example, Bitner, 1990; Levesque & McDougall, 1996; Zeithaml *et. al.*, 1996).

Today, service quality is considered a critical measure of organizational performance and continues to compel the attention of practitioners and academics (Lassar *et. al.* 2000; Yavas and Yasin, 2001 and Karatepea, Yavasb & Babakusc (2005). It is however critical to equally note that there may be failure in service delivery since failures in service delivery are inevitable and recovery of such encounters represents a significant challenge for service firms (Sengupta, Balaji & Krishnan, 2015). When service failure occurs, customers experience disconfirmation and feel displeased (Smith, Bolton, & Wagner, 1999). The displeasure experienced will in turn lead to a scenario where customers who experience severe failure are likely to perceive greater loss, evaluate the service unfavorably and report dissatisfaction. They show aversion towards continuing relationship and indulge in negative word-of-mouth towards the service provider (del Río-Lanza, Vázquez-Casielles, & Díaz-Martín, 2009; Kalamas, Laroche, & Makdessian, 2008; Smith *et. al.*, 1999). Company's reputation in conjunction with its service offering determines

customer's expectation. The above is in line with the assertion of Culiberg, 2010; Hussain, Al Nasser and Hussain (2015) that service quality is interpreted as the overall impression of a customer's judgment concerning service provided; hence its effective delivery should be of utmost importance.

Generally, the significance of service quality is undeniable in that good service quality impacts positively on business performance. Delivering a good level of service to customers is essential for achieving success and surviving in the competitive world (Wang, Lo & Hui, 2003). Furthermore, providing high quality of services and products enhances the reputation of the firm, attracts new customers through word-of-mouth (Elmayar, 2011). Service quality is recognised as a key strategic issue for organisations operating in service sectors (Spathis, Petridou & Glaveli, 2004). Organisations achieving a higher level of service quality have high levels of customer satisfaction, which is an antecedent of sustainable competitive advantage (Guo, Duff & Hair, 2008).

A review of work focusing on service quality shows the importance of this concept in extracting or maximising value from customers. Therefore, there is clarity in the concept of service quality linked to the management of customer relationships, and the value that this brings to organisations. These values are empirically discussed below. Within service literature it is argued that there is a strong correlation between service quality and customer satisfaction (Cronin & Taylor, 1992; Zeithaml & Bitner, 1996). More precisely, some researchers and academics have mentioned that customer satisfaction is an antecedent of service quality (Parasuraman, Zeithaml & Berry, 1994; Parasuraman & Berry, 1991; Bitner, 1990). Alternatively, other researchers indicate that service quality is an antecedent of customer satisfaction (Cronin & Taylor, 1992). However, empirical studies carried out by Fisk, Brown and Bitner (1993) support the view that

service quality dimensions are important in determining customer satisfaction. This is just as a study by Levesque and McDongall (1996) shows that the performance of a service provider as regards to the core dimensions of service quality is a vital driver for customer satisfaction. Other researchers have focused on this link, suggesting that enhanced service quality impacts positively on customer satisfaction (Anderson, Fornell and Lehmann, 1994).

In recent years, the relationship between service quality and customer satisfaction has been examined in the banking sectors of various countries. Amin and Isa (2008) concluded in a study that “service quality is positively associated with customer satisfaction in Malaysian Islamic banking”. Similarly, research carried out in the retail banking sector in the UAE supports the view that service quality dimensions appear to be associated with customer satisfaction (Jamal & Naser, 2002). This has been further supported by Othman and Owen (2001), who mention that there is a significant relationship between service quality and customer satisfaction in Islamic banking in Kuwait. Moreover, Karatape, Yavas and Babakus (2005) stated that service quality appears to have the strongest effect on satisfaction, adding that customer satisfaction is a mediator between service quality and purchase intention in conventional banking.

In addition, Arasly, Katircioglu and Mehtap-Smadi (2005) pointed out that service quality is a vital predictor of customer satisfaction in Turkey's banking industry. The above analysis will automatically transcend to increased financial performance to the service provider (banks) as supported by literatures. Heskett and Schlesinger (1994) in a study of “service profit chain” developed a model that links internal service quality to external service quality, customer satisfaction, employee satisfaction, productivity, customer loyalty and retention, revenue growth, and profitability. This model was recently adopted in the study of Parasuraman, 2002 and Duncan and Elliot (2004), where they examined the link among service quality, financial

performance, and efficiency. Their findings supported that there is positive relationship between service quality and financial performance. (Heskett & Schlesinger, 1994 and Chen, Melissa, Martin, Merchant, 2014) in their various studies concluded that customer satisfaction is the result of service quality, which is driven in large part by customer perceptions and expectations of an organisation's service interaction with its customers.

## **2.8 Electronic Banking: An Overview**

In the past few years, Nigerian banks and the financial services industry have embraced the use of electronic means of transaction. This has emerged as a new channel for marketing banking product/services to customers in many emerging economies like Nigeria, Ghana etc. Electronic Banking System is an innovative service delivery mode that offers diversified financial services like cash withdrawal, funds transfer, cash deposits, payment of utility and credit card bills, cheque book requests, and other financial enquiries. (Okechi & Kepeghom, 2013). Wandaogou and Jalulah (2011) corroborating Daniel (1999) defined electronic banking as the delivery of banks' information and services by banks to customers via different delivery platforms that can be used with different terminal devices such as personal computer and mobile phone with browser or desktop software, telephone or digital television. Pikkarainen *et.al*(2004) define internet banking as an "internet portal, through which customers can use different kinds of banking services ranging from bill payment to making investments". It is intended to offer customers more value such as convenience and easy access to their money and other banking information they require. Intensified competition among banks and the quest to meet up with global standard of banking operations made stakeholders in the banking sector to ensure that Nigeria gets more competitive or alive in the scheme of things.

In Nigeria, ATM was conventionally introduced as an electronic delivery channel in 1989, and was first installed by National Cash Registers (NCR) for the defunct Societe Generale Bank of Nigeria (SGBN) in the same year at their Broad street and Apapa branches. This according to Idowu, (2005); Adewuyi, (2011) signified the emergence or genesis of electronic banking in Nigeria. Since its introduction, many Nigerian banks have installed ATM in response to the changing nature of modern banking operations. Until 2003, a small number of banks operated their own propriety ATM fleets .The main shared ATM network in Nigeria, InterSwitch, began operations in 2003 with 5 ATMs from United Bank for Africa (UBA) and First Bank of Nigeria (FBN). (Tope, 2010; Okechi and Kepeghom, 2013).

Wong, Rexha and Phau(2008) while corroborating Gonza'lez *et.al.*, 2008; Lichtenstein and Williamson, 2006; Barwise and Farley, 2005;believed undoubtedly that electronic banking (e-banking) has experienced explosive growth and has transformed traditional practices in banking thereby making Brodie *et. al.* (2007) speculate that these would lead to a massive shift in marketing practices and superior business performance. In fact, it has become the main means for banks to market and sell their products and services (Amato-McCoy, 2005) and is perceived to be a necessity in order to stay profitable and successful (Gan *et. al.*, 2006).

The changes occurring in the banking sector can be attributed to increasing deregulation and globalization, the major stimulus for rationalization, consolidation, and an increasing focus on costs (Hernandez & Mazzon, 2007). One offspring of this has been the rapid development and use of various new and innovative technologies by banks in the form of electronic banking services (Pikkarainen *et. al.*, 2006). The implementation of e-banking, such as internet banking and the use of computer-based office banking software hold several obvious advantages for banks.

It improves the bank's profit levels through the reduction of both variable and infrastructure costs, provides a source of differentiation and competitive advantage, provides global reach, adds another communication and feedback channel, increases customer satisfaction through the reduction of waiting times and thus improving service performance, or otherwise enabling the bank to more fully realise its sales potential through the achievement of higher sales volume (Lichtenstein & Williamson, 2006; Fox, 2005; Hernandez & Mazzon, 2007; Pikkarainen *et. al.*, 2006; Shamdasani *et. al.*, 2008; Schaggnit, 1998; Schneiderman, 1992; Wong, Rexha & Phau, 2008). As can be appreciated, the advantages to banks are manifold.

These have led many banks to undertake high levels of marketing effort in the bid to push more customers, in particular businesses, into implementing e-banking into their business processes. This current strategic approach undertaken by banks, however, may be seen as contrary to the views of many authors of relationship marketing, such as presented by McKenna (1992) who proposes that marketers need to devise strategies with the primary objective of sustaining and enhancing relationships with their customers over time.

As a whole, customers' motivation to use E-banking services comes from a number of factors: freedom of time and space, speed, convenience, 24 hours a day availability and price incentiveness (Kenova & Jonasson 2006; Mattila, Karjaluoto & Pento, 2002). Despite all the advantages the Internet offers to both banks and their customers in terms of increased productivity and reduced costs, it also hides a lot of disadvantages and challenges for the service providers. On the internet, the comparison between different service offerings is much easier and switching costs are lower, which makes it easier for customers to change service providers (Santos, 2003).

This, on its behalf, posts a challenge for the banks to not only acquire new customers, but retain their existing ones as well corroborating (Khan *et. al.*, 2010) that the cost of acquiring new customer is five times higher than maintaining an existing customer. To retain its customers, banks should try to make them satisfied with their services and offerings and this can be achieved through delivering high quality services. Delivering high quality online services requires understanding of the online service quality dimensions considered crucial and trying to improve the quality of the services provided so that a competitive advantage is gained.

## **2.9E-banking Delivery Channels**

The information technology revolution in the banking industry distribution channels began in the early 1970s, with the introduction of the credit card, the Automatic Teller Machine (ATM) and the ATM networks. This was followed by telephone banking, cable television banking in the 1980s, and the progress of Personal Computer (PC) banking in the late 1980s and in the early 1990s (Gan, Clemes & Weng 2006). Recent economic turmoil and increasing market complexity has placed unprecedented pressure on financial institutions. The demand for a digital lifestyle and the technological revolution are subjecting the financial sector to a host of new challenges in a time of severe market uncertainty. In a bid to drive even greater differentiation from the competition, financial services institutes are now exploring alternative banking channels, including the internet, telebanking, self-service halls, cell-phone and fax banking.

### **2.9.1 Main Alternative E-banking channels**

The major e-delivery channels used in the Nigerian banking industry are as follows:

#### ***Automated Teller Machine (ATM)***

The Automated Teller Machine (ATM) is a self-service machine that dispenses cash and performs some human teller functions like balance enquiry, bills payments, mini statements and so on. ATM transactions are carried out through the use of a debit/credit card which enables the card holder(s) to access and carry out banking transactions without a teller. According to Okechi and Kepeghom, (2013), it is usually in stores, shopping malls, fuel stations etc. On most modern ATMs, the customer is identified by inserting a plastic ATM card with a magnetic stripe or a plastic smart card with a chip that contains a unique card number and some security information such as an expiration date. Authentication is provided by the customer through entering a personal identification number (PIN). InterSwitch, VPay, ETranzact, and QuickCash are some of the leaders in ATM deployment in Nigeria. InterSwitch today has all banks in the country connected to her network. This actually makes it possible to use their cards in all bank branches nationwide and in almost all machines. Different ATM service providers are also interconnected so you do not need to worry which company services a particular ATM machine. InterSwitch for example supports Verve, Visa and MasterCard on her ATM machines and vice versa.

Transactions on ATMs include fund transfer, Account Balance Enquiry, Cash Withdrawal, Pin Change, Quick Teller Option (online payments), Virtual Top Up. The use of ATM is however beneficial to the bank as well as its customers. The benefits of using ATM to the bank includes an alternative service delivery channel for their esteemed customers, increased customer acquisition and retention, opens up new business opportunities, additional revenue streams and decongestion of the banking halls. The benefits of using ATM to the Customer includes convenience of banking transaction, Quick service, 24-Hour Access to funds, provision of security for funds since it is safer to carry cards than cash in wallets and accessibility to additional value added services like purchase of airtime for self & third party and utility bill settlement.

## 2.9.2 Categories of ATM transactions

Hayashi, Sullivan, and Weiner (2003) in a study examined four categories of ATM transaction and they are as follows:

**Native transactions:** This type of transaction also known as "owners on-us" occurs if a cardholder uses an ATM owned by his or her bank. Here, the entire transaction is routed only through the issuing bank's systems, there is no need to involve a network switch.

**"Processor's on-us" transactions:** This transaction occurs where the cardholder uses an ATM that does not belong to his or her bank but the card issuing bank and the ATM owner use the same processor. Some networks allow the processor to route transactions among its clients without involving the network switch, even when the ATM owner and the card issuer of the transaction are different institutions.

**Reciprocal transactions:** This transaction occurs occur when the cardholder uses an ATM of another institution and the card issuer and ATM owners use different regional networks but the networks have a reciprocal-sharing agreement. A reciprocity agreement between regional networks is an arrangement whereby the two networks agree to pass information to one another in transactions involving members of each network. Typically, two network switches are necessary to complete the transaction.

**National bridge transactions:** This transaction occurs when the cardholder uses an ATM of another institution and the card issuer and ATM owners use different regional networks but the networks do not have a reciprocal sharing agreement. In this case the card issuer and ATM owner must belong to the same national network (Cirrus or Plus) and the regional networks serve as gateways to the national network. The transaction involves three switches, one from the

initiating regional network, one from the national network, and one from the other regional network.

### **2.9.3 Electronic Cards**

***Credit cards:*** These are plastic cards encoded with electromagnetic identification -The card is incorporated with circuit on which value is loaded. Customers can use the card to carry out transactions on the ATMs deployed by the issuing banks at strategic locations as well as point of sale terminals with designated signs of the producer of such card ( Adewuyi, 2011). Among the companies that are offering this service to banks are Visa International, which is the leading payment solution system with presence in about 120 countries globally, the Master Card Inc. which is also the second largest credit card brand.

***Debit card:*** This is an electronic card with very advanced feature including the use of microchip, whereby transaction is validated against the chip rather than a magnetic stripe. Among the companies that are offering this service to banks are also Visa international, Master card incorporated and an indigenous company called smart switch Nigeria Ltd. Among banks in Nigeria operating this service are Diamond Bank, United Bank for Africa, Eco bank and Skye Bank (Skye card debit) and GTB cash plus. This card can be used on ATMs deployed by the banks and also various point of sales terminals deployed in strategic locations especially in banks, hotels, eateries, fuel stations etc.

### **2.9.4 Point of Sales (POS) Terminal**

A Point of Sales (POS) Terminal is a machine used to accept cards for payment of goods and services (Whitteker, 2014). POS Terminal allows a cardholder to have a real-time online access to funds and information in his/her bank account through debit or cash cards. Here, a debit card

transaction is initiated to the purchase of a good or service. A Retail Point of Sales system typically includes a computer, monitor, cash drawer, receipt printer, customer display and a barcode scanner, and the majority of retail POS systems also include a debit/credit card reader. It can also include a weight scale, integrated credit card processing system, a signature capture device and a customer pin pad device Okechi & Kepeghom(2013).

In this case, the consumer presents a debit card (which again was issued by the bank holding the checking account) to a merchant, and the consumer either enters a PIN (online debit) or signs a receipt (offline debit) to verify the consumer's identity. The merchant, in turn, sends information about the transaction across one or more debit card networks, and if the transaction is approved, the consumer receives the good or service and the checking account is correspondingly debited. The merchant is reimbursed by a credit to its bank account. The benefit of using Point Of Sale Terminal includes elimination of cash theft and fake currency, 24/7 access and secured transaction, ability to track sales and collections, cheaper means of transaction for both individual and corporate, and encouragement of spontaneous buying by cardholder.

### **2.9.5 Mobile Banking**

This is otherwise known as M- Banking. It is the implementation of banking and trading transactions using an Internet-enabled wireless device (mobile phones, PDAs, handheld computers etc.). It can thus be asserted that mobile banking (m-banking) is a subset of Internet banking (I-banking). It is one of the recent mobile technological wonders (Shaikh & Karjaluo, 2015) and one of the most recent innovations in the financial services sector, which has added the element of pure mobility to service consumption (Laukkanen, Sinkkonen, Kivijarvi, & Laukkanen, 2007; Mishra & Bisht, 2013; Oliveira, Faria, Thomas, & Popovic, 2014 and

Mohammadi, 2015) and enabled consumers to gain convenient access to value-added and banking services, even in countries with low incomes (Wonglimpiyarat, 2014).

It is at the core of the CBN's cashless policy that Hazell and Raphael (2002) reiterated that it allows users to create an e-wallet for storing funds on their phone. It is, consequently, becoming an inseparable part of how business is being done today (Wonglimpiyarat, 2014). Once value is stored on your mobile phone, you can use it to pay for goods and services at merchant locations that support mobile money. According to Okechi and Kepeghom (2013), the philosophy behind mobile money is that most Nigerians now have mobile phones (not as many have bank accounts).

To this extent, a customers' e-wallet can be funded via authorized agents of his/her mobile money service, partner banks and networks of his/her mobile money service, transfers from the customers' ATM/Debit cards, or any other funding method offered by his/her service provider. It is thus imperative to note that it can be used to send money to family and friends, buy airtime of any network, Pay bills like DSTV, Hi TV, MyTV, PHCN bills, etc. The Central Bank of Nigeria (CBN) in had in the past issued operating licenses to 11 mobile money firms, namely: Fortis Mobile Money, UBA/Afripay, GTBank Mobile Money, Pagatech, eTranzact, Eartholeum, Paycom, FET, Ecobank and Kudi. The operating license allows the companies to provide products such as electronic payments through mobile phones (micro capital brief 2011). Here, Mobile phone provide many of the services in banking sector such as request for account balance, business from account, transfer funds, trading or buying and selling, price information etc (Laukkanen, 2007), it should be very clear that from mobiles phones it is not necessary to have net access on phone because now banks are offering wireless service connections with or

without mediating internet on phones here mobile banking refers to any kind of banking services through phone(Khan & Khan, 2012)

### **2.9.6 Telephone Banking**

Telephone banking services are computer-based keypad response or voice recognition technologies allowing customers to perform banking activities over the telephone (Ahmad & Buttle, 2002;Hoehle, Scornavacca & Huff, 2012). Most telephone banking services use an automated phone answering system with phone keypad response or voice recognition capability (Okechi & Kepeghom, 2013). . Using this banking service enables bank clients to obtain information concerning active and passive banking products, but a client can also actively use the bank payment system and request, for example, a payment order or a collection order, open or cancel a term deposit or a current account (Chovanova, 2006), and as such have 24 hours round-the-clock access to his or her account.

### **2.9.7 Internet Banking**

Banks have traditionally been in the forefront of harnessing technology to improve their products, services and efficiency. They have, over a long time, been using electronic and telecommunication networks for delivering a wide range of value added products and services. The delivery channels include direct dial – up connections, private networks, public networks etc and the devices include telephone, Personal Computers including the Automated Teller Machines, etc. With the popularity of PCs, easy access to Internet and World Wide Web (www), Internet is increasingly used by banks as a channel for receiving instructions and delivering their products and services to their customers.

This according to Malhotra and Singh(2009) has emerged as a strategic resource for achieving higher efficiency, control of operations and reduction of cost by replacing paper based and labour intensive methods with automated processes thus leading to higher productivity and profitability. This form of banking is generally referred to as Internet Banking, although the range of products and services offered by different banks vary widely both in their content and sophistication. The table below shows the brand names given to internet banking by banks being used in this study.

Here, this form of banking is conducted by completing bank transactions by directly accessing the bank through the Internet. Nowadays, Internet banking customers can access many different services online, which makes physical banks open even after office hours. In means of offline banking is becoming to be online banking while physical banks are not opened (out of office hours), so customers do not need to go to the banks or call them any more unless there is an issue that cannot be handled online. Internet banking can be conducted either by accessing the internet with a computer or by using a phone that has Internet features.

To this extent, Safeena, Date and Kammani, (2011) asserted that internet banking (IB) has been a radical technological innovation with potential to change the structure and nature of banking so that sustainance of business competitiveness and customer satisfaction can be guaranteed. Koskoas (2011) thus put forward the advantages of internet banking which includes customer's convenience, more efficient rates, better service, and ease of use while he was quick to see transaction issues, service issues and security as possible shortcomings. The aforementioned shortcomings led this study to look at some regulatory functions of the Central Bank in the usage of e-banking delivery channels.

## **2.10 Brief History of Banking Industry in Nigeria**

The business of modern banking was started in Nigeria in 1892 by the British West Africa to which the Standard Bank of Nigeria Limited, now First Bank of Nigeria Plc, is a successor bank. Prior to 1952, there were all kinds of speculative investors who started mushroom banks in Nigeria.

About 1925, Barclays Bank acquired the Colonial Bank and opened a branch in Lagos. The National Bank of Nigeria Limited was established in 1933 while the African Continental Bank Limited came into being in 1947. The United Bank for Africa Limited was established initially as the British and French Bank in 1947 soon after the Second World War and took on its present name in 1961, while the Bank of the North was established in 1961. Most of the banks operated in Nigeria at this period were incorporated abroad, and only came to do business in Nigeria, and as such, were basically foreign companies to register in Nigeria. All the other commercial and co-operative banks were established in the late sixties or early seventies, all of them being wholly owned by Nigerian Institutions and individuals. Basically their activities centre on commercial banking relating to the financing of exports and imports and not much on industries.

The business of Merchant Banking did not come into being in any meaningful form until 1961, when an outpost was opened in Nigeria by Hill, Samuel & Company, a United Kingdom Merchant Bank, under the name Philip Hill Limited. This same year, John Holt Limited operated a kind of finance firm in Nigeria around 1961 under the name of Nigerian Acceptances. The two companies later merged under the name – Nigerian Acceptances in 1969. In August 1973, United Dominions Corporation (Nigeria) Limited, a wholly owned subsidiary of UDT International which is in turn wholly owned by United Dominions Trust Limited, a hire

purchases company, received approval to convert its hire purchase business into that of merchant banking in a bid to avert the contravention of the hire purchase regulations of 1968. In 1975, the Nigerian Industrial Development Bank Limited transformed ICON Securities into ICON Limited (Merchant Bankers).

As a result of the Nigerian Enterprises Promotion Act of 1977, the City Bank went into voluntary liquidation and since then there were five Merchant Banks in Nigeria until recently, (especially in the 1990s), when new ones were opened. The number of banks in Nigeria as at June 2004 was 89. However, mergers and acquisitions through consolidation and recapitalization trimmed down the number from 89 to 25 in January 2006.

## **2.11 Central Bank of Nigeria and Regulatory Measures on the Use E- Delivery Channels**

### ***GUIDELINES ON ELECTRONIC BANKING IN NIGERIA***

Due to increasing response of banks to e-banking in Nigeria coupled with the supervisory role of Central Bank of Nigeria led to the setting up of Technical Committee on e-banking in 2003 and also the formulation of guideline on e-banking based on the report submitted by the committee in 2003.

The CBN in one of its official documents in 2003 gave yardsticks or regulatory frameworks on the use of e- delivery channels in Nigeria. The CBN Technical Committee on E-Banking thus produced a report, which anticipates the likely impact of the movement towards electronic banking and payments on the achievement of CBN's core objectives. Following from the findings and recommendations of the Committee, four categories of guidelines have been developed as follows:

- Information and Communications Technology (ICT) standards, to address issues relating to technology solutions deployed, and ensure that they meet the needs of consumers, the

economy and international best practice in the areas of communication, hardware, software and security.

- Monetary Policy, to address issues relating to how increased usage of Internet banking and electronic payments delivery channels would affect the achievement of CBN's monetary policy objectives.
- Legal guidelines to address issues on banking regulations and consumer rights protection.
- Regulatory and Supervisory, to address issues that, though peculiar to payments system in general, may be amplified by the use of electronic media.

The Guidelines are expected to inform the future conduct of financial institutions in e-banking and electronic payments delivery.

The guidelines put in place include the following:

- I Restriction of issuance of e-money products to only licensed banks under the supervisory purview of the CBN or eligible subsidiary companies of it.
- ii. Any bank or company intending to serve as issuer of e-money to seek and obtain prior clearance and approval of CBN.
- iii. The bank or subsidiary company to submit a detailed feasibility report covering areas such as the scheme structure, documentation including prototype (sample card) products, clearing and settlement arrangements, security and system control, float management business plan and contingency plans i.e. disaster recovery plan and contingency system.
- iv. The promoter of e-products to enter into contractual agreement with the Nigerian Inter Bank Settlement System (NIBSS) for the clearing and settlement of e-money products.

- v. The electronic banking service should be offered in Naira only. Where such a service is to be provided in foreign currency, it should be to only holders of ordinary domiciliary accounts and-conform to all other foreign exchange regulations.
- vi. Electronic Banking products and services should comply with the Money Laundering Act 1995 as amended and "Know Your Customer Rules" (KYC).
- vii. The CBN, through its Banking Supervision Department would appraise the product or service as well as the applicant, bank's overall financial condition and its compliance with the CBN rules and regulations based on the latest available returns and examination report on the bank.
- viii. Banks wishing to provide transactional and /or enhance existing electronic banking services shall submit to the CBN, an application describing the services to be offered /enhanced and how it fits into the bank's overall corporate objective and strategy.
- ix. To disclose to the CBN and National Drug and Law Enforcement Agency (NDLEA) any single transaction, lodgment or transfer of funds in excess of N500, 000 and N2million or their equivalent for individuals and corporate bodies respectively in line with the provisions of Money Laundering Decree 1995.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Preamble**

The focus of this chapter is to describe the techniques and strategies employed in carrying out this study. The research design and methodology, population of the study, sampling procedure, instrumentation, procedure for data collection, measures of all variables of the study and statistical analysis were presented.

## **3.2 Research Design**

A research design is the yardstick or framework or the overall plan of the methods adopted by the researcher from the collection of data through to the analysis of the data (Quinlan, 2011). This study is for a survey whose population is not known or has no limit. This made the researcher to use referral mechanisms through social media networking to generate samples after initial member of the samples had been purposively chosen. For the purpose of this study, survey research design was found most relevant and suitable in testing all these hypotheses because, according to Leary (2001), surveys inquire about people's attitude, lifestyles, behaviours, and problems. A cross sectional survey research design was employed in this study. Saunders, Lewis and Thornhill (2007) asserted that most surveys involve a cross-sectional design in which a single group of respondents or a "cross section" of the population is studied at a particular time. According to Fowler, (2009), survey could be done through mail, telephone, the internet, personal interviews etc. For the purpose of this study, a web - based questionnaire was used to elicit information from bank customers as to how favourable or unfavourable they perceived e-banking service quality delivery of the bank(s) they patronize. According to Creswell, (2008), web -based questionnaire is the best form of survey instrument to use for hidden population which according to Heckathorn, (1997) are population which sampling frame or complete list is unknown.

### **3.2.1 Research Philosophical Perspective**

The philosophies of research are basic sets of beliefs that guide research undertakings (Guba, 2011). This study examined four philosophical worldviews or paradigms which are postpositivism, constructivism, transformative and pragmatism. All of these are paradigms or standards which are prototypes for good research (Mertens, 2010; Creswell, 2014). A paradigm is a worldview or framework which helps to direct the research (Corbetta, 2003; Radomir, 2013). For this study, positivism or postpositivistic worldview as a research philosophy is assessed. This is because it is deterministic and the problems studied by the postpositivists reflect the need to identify and assess the causes that influence outcome such as found in experiments (Creswell, 2014). The knowledge that develops through a postpositivists lens is based on careful observation and measurement of the objective reality that exists in the world. With reference to this study, how well customers view the delivery of e-banking channels will determine their extent of satisfaction or otherwise.

### **3.3 The Study Setting**

The study setting or area of this study is Lagos state, Nigeria. The study was conducted in Lagos state because of its urban status with an annual estimated growth rate of 10% - 15% (United Nations Development Programme- UNDP, 2013). Another justification for selecting Lagos, as study area/ setting was the fact that Lagos state still remains the commercial hub of Nigeria, for instance about 70% of the headquarters of many businesses including banks in Nigeria are domiciled in Lagos State, despite the movement of the Federal Capital to Abuja. In fact, Lagos State contributes 31.89% to the nation's GDP (Ojo & Rowen, 2014). Lagos State is also said to be the most urbanised state in Nigeria (CBN, 1999, 2012). The essence of the above is to clearly get a good representation of the major players in the Nigerian banking industry and their teeming number of customers.

### **3.4 Population of the Study**

Population is an aggregation of all elements, that share common characteristics, and that are relevant to the study (Asika, 2004; Quilan, 2011). The target population for this study comprises bank customers who are residents in Lagos state. The target population of this study therefore includes government officials, business men/ women, civil servants, students and others who have a considerably good enough knowledge of e- banking operations among commercial banks in Lagos state, Nigeria. It is of importance to note that getting a definite and stastically-sound sample is not feasible from this population largely because of the difficulty in obtaining sampling frame. Population at this point is referred to as being hidden in nature. The justification for selecting this population by the researcher was based on the fact that the respondents' possess sincere knowledge of the subject under discussion.

### **3.5 Sampling Procedure/ Techniques**

Sampling is a process concerned with the selection of a subset from a portion of a larger population, for the purpose of making predictions based on statistical inferences (Wrenn, Stevens & Loudon, 2002 and Saunders, Lewis & Thornhill, 2007). Decisions with regard to whether to work with the entire population or a sample of the population are made based on a clear definition or description of the population and the time available for the research (Quinlan, 2011), nature of the research questions, desired accuracy level, and the data collection techniques (De Vaus, 2002).

For the purpose of this study, non- probability sampling was employed in this study. A non-probabilistic sampling technique is that in which the chances of selecting a respondent from the population is not calculable since the selection is made on a subjective basis (Kent, 2007).

The sampling technique employed in this study was multi-stage in nature. Non-probabilistic sampling technique was used for this study. The first stage was to use purposive sampling to draw initial key informants or participants who were identified and certified to be knowledgeable of the subject matter under discussion. These key informants thereafter recommended other participants using snowball sampling technique. According to Quinlan, (2011), snowball sampling occurs when seeds (initial samples) drawn from the population, provide researchers with the names and contact information of other potential subjects; the researcher then selected a fixed number from each list; and the process continues until the desired number was reached.

At this stage, study participants made referrals on the basis of their social networks or links, affiliations and ties they have with participants they recruited for the study (chain-referral sampling or network sampling). This method is a form of convenience sampling which is very good for sampling hidden population especially when the population members know one another (Erickson, 1979).

### **3.6 Sample Size Determination**

A sample is a small sub-set of the population (Quinlan, 2011). Decision with regards to whether to work with entire population or a sample of the population are made based on the size of the population, the time available for the research, and the requirements of the research. The researcher must however ensure that sample size must be considerably large so the findings can be generalized from the sample drawn since the study used non-probability sampling technique. The use of non-probability sampling was because the population of the study is hidden or difficult to identify (Dragan & Isaic-Manu (2012).

For the purpose of this study, the qualitative approach was used to determine the sample size. Purposive sampling technique was used to draw 10 key informants who were used as initial

samples. This was used since the researcher is aware of the fact that the initial samples have adequate knowledge of the subject matter. Using the chain referral and respondent driven mechanism, the key informants on referral basis recommended other respondents who by their assessment are knowledgeable of the subject matter. This referral (snowball) sampling was however used to generate additional 207 respondents bringing the final sample to be 217 respondents.

### **3.7 Data Collection Instrument**

The survey instrument used for the purpose of this study is a well-structured web based questionnaire. A questionnaire is a survey instrument which the researcher uses to elicit information from respondents on an identified research study (Quinlan, 2011). According to Saunders, Lewis and Thornhill, (2007), the questionnaire is one of the most widely used data collection techniques within the survey strategy and its expediency in this has been widely accepted.

The questionnaire items essentially captured questions concerning e-banking services and its effect on customer satisfaction. The questionnaire consists of three sections (Section A to Section C). Section A consists of seven questions to collect information as regards the socio-demographic variables of the respondents, Section B and C covered question items that really addressed the germane issues in the study. Section B elicited information regarding customer analysis of e-banking service dimensions; Section C was used to collect information regarding customer satisfaction.

### **3.8. Pilot Study**

Pilot study refers to the initial testing of various aspects of a research study, such as the questionnaire, sample design, research method, and research hypotheses that have been proposed (Blumberg, Cooper & Schindler, 2011). However, a pilot study was carried out in this study to test the reliability and validity of all the measuring instruments. The need to conduct a pilot study became imperative in view of the fact that the section B of the questionnaire, which set out to measure e-banking service quality and customer satisfactions, was modified by the researcher. This scale needed to be tested for reliability and validity before administering the web-based questionnaire to a larger group. For the purpose of pilot study, 30 copies of the questionnaire were administered to some selected bank customers.

However, to assess the reliability of the research instruments, the alpha coefficients were computed for the following measures of the variables in this study using the Statistical Packages for Social Science (SPSS). The result of the pilot study showed that content and face validity of the instruments were reliable enough upon scrutiny. The summary of the Cronbach alpha scores for these service quality dimension are as follows: efficiency ( $\alpha = 0.657$ ); security ( $\alpha = 0.636$ ); system availability ( $\alpha = 0.809$ ); privacy ( $\alpha = 0.671$ ); reliability ( $\alpha = 0.897$ ); employee empathy ( $\alpha = 0.860$ ). The Cronbach alpha for customer satisfaction (dependent variable) is however 0.724. The implication of the above results showed that all these dimensions and their items passed the validity test.

### **3.8.1 Identification and Measurement of Variables**

A variable as defined by Cooper and Schindler (2011), is a construct or property that is being investigated. Four key variables were examined in this study. These variables are Electronic banking service quality, customer satisfaction and the control variable (demographics)

#### **Independent Variable**

The independent variable studied in this research is Service delivery. In this study, customer satisfaction is used to evaluate and determine service delivery. Extant literatures show that service quality is one of the virile determinants of customer satisfaction (Zeithaml, 1993; Hanzae & Sadeghi, 2010). On this note, E-SQ (E-S-QUAL and E-RecS-QUAL) models developed by Parasuraman, Zeithaml and Malhotra in 2000 and revised in 2007, were used to measure the dimensions of service quality. The E-S-QUAL and E-RecS-QUAL model were used to evaluate e-banking service quality in commercial banks in Nigeria. These dimensions have been fully discussed in chapter two of this study. These dimensions (privacy, security, system availability, efficiency, employee courtesy, reliability and perceived value) were measured using a total of thirty four (34) items. Rensis Likert Five – point scale ranging from ‘strongly agree to strongly disagree’ was applied to measure these dimensions. The reliability score for these dimensions or measures of service quality was high. Hair, Black, Babin and Anderson, (2010) corroborated the assertions of Cronbach, (1951) that an alpha ( $\alpha$ ) of .60 and over is acceptable.

### **Dependent Variable**

The dependent variable examined in this study is customer satisfaction. In this study, Parasuraman, *et. al* (1988) customer satisfaction measurement scale was adapted and this measured customer satisfaction as a construct. These items are believed to have carefully exhausted relevant aspects of customer satisfaction (Gabbott, Tsarenko, & Mok, 2011). A total of ten (10) items were used to measure customer satisfaction in this study using five – point Rensis Likert scale which ranges from strongly agree to strongly disagree. The reliability score for the scale from the conduct of pilot study was 0.724 (Cronbach’s  $\alpha$ ) which signified a high level of reliability of the instrument.

## **Mediating Variable**

The mediating variable here is the perceived value. This construct was measured in the questionnaire using 3 items. These items were chosen after careful exhaustion of literatures. The Cronbach's  $\alpha$  value of this mediating variable was 0.65 which signified a very reliable status of the research instrument.

### **3.8.2 Instrumentation**

In order to empirically test the conceptual model, construct measures were derived from existing literatures and on based this, some scales were adopted while some were adapted, some from prior studies to suit or achieve specific objectives of this study. These constructs are as follows:

E-banking service quality dimensions (efficiency, security, privacy, reliability, employee empathy system availability) and customer satisfaction.

Efficiency as a construct was measured using scales developed by Parasuraman, Zeithaml and Malhotra, 2005 and Papadomichelaki and Mentzas, (2011). The items were measured using five-point Rensis Likert scale which ranges from strongly agree (5) to strongly disagree (1). Pilot study was done on the five items measured and the outcome shows that efficiency as a construct have a Cronbach's alpha ( $\alpha$ ) of 0.657 which signified satisfactory reliability of the items.

Reliability as a construct was measured by using scale adapted from Gilly, (2003). The construct was measured using four items/ questions. Pilot study was done on the items measured and the outcome shows that reliability as a construct have a Cronbach's alpha ( $\alpha$ ) of 0.897 which signified a highly satisfactory suitability of the items within the context of this study.

Security as a construct was measured using scale adapted from the scales developed by Yoo and Donthu, (2001) and Papadomichelaki and Mentzas, (2011). This construct was measured (pilot

study) using three items. It has a Cronbach's alpha ( $\alpha$ ) of 0.636 from the result of pilot study which signified a good reliability test for the construct.

Privacy as a construct was measured adapting scale developed by Wolfinbarger and Gilly (2003). Five items modified were made in such a way that makes it suitable for the purpose of this study. Result of the pilot study shows that privacy has a Cronbach's alpha ( $\alpha$ ) of 0.671 which signified acceptable level of reliability of the items.

System Availability Scale: The measure of system availability was done by adapting from the scales developed by Parasuraman *et. al.* 2005 and Rotchanakitumnuai, (2008). Five items were modified to suit the focus of this study. Pilot test was conducted and the result shows that it has a Cronbach alpha ( $\alpha$ ) of 0.809 which signified plausible reliability of the items.

Employee empathy Scale: The measure of employee courtesy was adapted from scales developed by Wolfinbarger & Gilly, 2003 and Collier & Bienstock, 2006. This study adapted only 5- items which are deemed pertinent to the cause of this study. The items were subjected to pilot test. The result shows that it has a Cronbach's alpha ( $\alpha$ ) of 0.860 which signified adequate reliability of the items.

Customer satisfaction construct was measured by adapting scales developed by Parasuraman, *et. al* 1988 and Gabbott, Tsarenko and Mok, (2011). Ten items were modified to suit the purpose of this study. This items were measured on a Rensis Likert five- point scale which ranged from strongly agree(1) to strongly disagree (5). It has a Cronbach's alpha ( $\alpha$ ) of 0.772 which depicted significant reliability of the items.

### 3.9 Reliability and Validity of the instrument

Reliability and Validity are two different concepts that are distinct but closely related (Bailey, 1994). It should be clear that validity tends to measure accuracy of the research instrument while reliability only measures consistency. For quality of research to be ascertained, the research instrument must be subjected to the reliability and validity test.

Reliability is the degree to which measures of the research instrument are free from random error which will thus guarantee consistency of result (Zikmund, 2003). Zikmund, Babin, Carr and Griffin, (2010) opined that reliability test alone cannot bring out the best of results, hence the need for validity of the constructs to be done. Validity was formulated by Kelly (1927) who stated that a test is *valid* if it measures what it claims to measure. This was corroborated by Zikmund, 2003; Asika (2004); Saunders, Lewis and Thurnhill (2007) and Creswell (2014) when they asserted that validity is an indication of how sound a research is in terms of accuracy of measurement. Since most of the research instruments in this study were adapted from previous related studies and most of these studies took place in developed countries, it is imperative to validate the applicability of the research instruments or domesticate it to suit the local context (i.e. the Nigerian context). Consequently, the research instruments were subjected to validity testing through theoretical validity and content validity.

Theoretical Validity is established by developing measures from well-grounded theory (Barringer & Bluedorn, 1999). The measures of this study, which includes: e-banking service quality and customer satisfaction, have good reliability and have performed well in previous studies.

Content or Construct Validity on its own refers to “the degree to which a test measures what it claims, or purports, to be measuring (Brown, 1996). It is used to ascertain whether the research

instrument has adequate and representative coverage of the concepts in the variables being measured (Sullivan, 2001 cited in Gyasi & Azumah, 2009). It is usually achieved by seeking opinion of other investigators or experts. The questionnaire for this study has been proven valid in previous studies (Cristobal, 2007; Ho & Lin, 2010). According to Fraenkel and Wallen (1990), one of the ways of determining content validity is the use of a panel of experts to judge how well the instrument meets the set standards. According to Lawshe (1975), if more than half the panelists indicate that an item is essential, that item has at least some content validity. Greater levels of content validity exist as larger numbers of panelists agree that a particular item is essential.

In achieving the above, 30 copies of the draft of the research instrument were given to scholars and experts who were equally bank customers to assist in the review of the items in the research instrument to validate their inclusion or otherwise. After minor revisions and modifications, the instruments were resubmitted to the researcher's supervisor who recommended the use of the modified instruments.

### **3.10 Methods of Data Collection**

The data used for this study were generated by means of primary source. The primary data involved the use of a web- based questionnaire which according to Singh, (2006), is the most commonly used approach in a survey research. It is considered as a measuring instrument which have items or questions that are considered as indicators of the list of chosen distinctiveness. It should be clear that primary data are first hand in nature since they are gotten primarily for the purpose of the study at hand.

### 3.10 Method of Data Analysis

The analysis and interpretation of data in this study were presented, using the following statistical techniques:

(i) Descriptive statistical tools, such as frequencies, percentages, means, standard deviations and Product Moment Correlation (r) were employed to ascertain the association between each pair of the variables and also the inter-correlation among them.

(ii) Multiple regression analysis was used to investigate the prediction of dependent variable (customer satisfaction) by means of independent variables (E-banking service quality dimensions). This study succinctly develop a regression model to further showcase the extent of relationship between e-banking service quality and customer satisfaction. This study assumes that the dependent variable, that is, customer satisfaction (y) is functionally related to the predictors  $x_1, x_2, x_3, \dots, x_6$

i.e  $y = f(\beta_0, \beta_i, x_i, i = 1, 2, 3, \dots, 6, \epsilon)$  For this study, the following were put forward: Let:  $x_1$  be Efficiency,  $x_2$  be Privacy,  $x_3$  be Security,  $x_4$  be system availability,  $x_5$  be employee empathy, and  $x_6$  be reliability;  $\epsilon$  is the error term

The model here is:

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \epsilon \quad (3.1)$$

(iii) F test was used to ascertain the overall significance of the observed multiple regression coefficient.

## **CHAPTER FOUR**

### **DATA PRESENTATION, ANALYSIS AND INTERPETATION OF RESULTS**

#### **4.1 Preamble**

The purpose of this chapter is to analyze, evaluate and present the results of the data generated from the respondents with the aid of a questionnaire (online survey). Here, the socio-demographic variables of the respondents were analyzed. Descriptive statistics were used to thereafter to interpret the outcomes of the variables measured and test of means of research questions. This is followed by the analysis of other statistical tools used to answer the research questions. What follows is the interpretation of the results for meaningful conclusions to be drawn from them.

## 4.2 Analysis of Questionnaire (Online survey) Distribution

**Table 4.1: Socio demographic characteristics of Respondents**

Variables	Frequency	Percentage
Gender		
<i>Male</i>	105	48.4
<i>Female</i>	112	51.6
Marital Status		
<i>Single</i>	137	63.1
<i>Married</i>	80	36.9
Age		
<i>Less than 18 years</i>	12	5.5
<i>18 – 30 years</i>	121	55.8
<i>31 – 43 years</i>	39	18.0
<i>44 – 56 years</i>	22	10.1
<i>57 and Above</i>	23	10.6
Religion		
<i>Islam</i>	36	16.6
<i>Christian</i>	180	82.9
<i>None</i>	1	.5
Occupation		
Valid		
<i>Civil/ Public servant</i>	55	25.3
<i>Private Sector Employee</i>	46	21.2
<i>Self Employed</i>	47	21.7
<i>Student</i>	69	31.8
Range of Monthly Income		
<i>Below N50,000</i>	55	25.3
<i>N50,000 - N100,000</i>	21	9.7
<i>N100,000- N200,000</i>	64	29.5
<i>N200,000- N300,000</i>	56	25.8
<i>N300,000- N400,000</i>	19	8.8
<i>Above N400,000</i>	2	.9
Educational Status		
<i>First School Leaving Cert.</i>	10	4.6
<i>SSCE</i>	14	6.5
<i>OND/ NCE</i>	12	5.5
<i>B.Sc/ HND</i>	121	55.8
<i>M.Sc/ MBA</i>	51	23.5
<i>Ph.D</i>	9	4.1

Source: Field survey, 2017

## **Discussions of the Demographic Characteristics of the Respondents as presented in Table**

### **4.1**

#### **4.2.1 Gender Distribution of Respondents**

The gender distribution of respondents revealed that there are more female respondents than male. Male respondents accounted for 48.4% (105) while the female respondents accounted for 51.6% (112). This is an extent an indication that females spend more time on the internet than he male especially when their phones are involved. This corroborated the findings from the studies of Avery, Keith, Mathios, Kang and Bell (2006) where they asserted that female respondentsshowed a tendency of being more likely to participate in online surveys, This is however in contrast to the findings of Chang and Samuel, (2004) and Barre, Garcia and Moreno, (2014) where they asserted in their study that online consumers, unlike non-buyers, are mostly male.

#### **4.2.2 Age Distributions of Respondents**

The age distribution of respondents showed that respondents who are less than 18 years accounted for 12% of the sample, 121(55.8%) were between the age of 18 and 30 years, 39(18%) were between the age of 31 and 43 year, 22(10.1%) were between the age of 44 and 56, 23(10.6%) were above 57 years. The implication of the above to my study is that bank customers who are much younger participated more (77%) in the study than those bank customers who are older. This is however in harmony with the study of [Zeithaml and Gilly \(1987\)](#) where they asserted that the younger people(“nonelderly”) are more inclined to accept the use of new technologies

#### **4.2.3 Marital Distributions of Respondents**

The marital status distribution of respondents revealed that 137 which accounted for 63.1% of the respondents were single while 80 which accounted for 36.9% were married. The implication of the above is that majority of the participants in this study are mostly people who were not married.

#### **4.2.4 Religious Distribution of Respondents**

The religious distribution of respondents indicated that 36(16.6%) were muslims, 180(82.9%) were Christians while a paltry .5% (1) practices none of the two religion stated above.

#### **4.2.5 Occupational Status of Respondents**

The occupational distribution of respondents revealed that 55(25.3%) of the respondents were civil servants. 46(21.2%) belonged to the private sector, 47(21.7%) were self- employed while 69(31.8%) were students. The implication of the above from this study shows that those in private practice (42%) have less time to attend to questionnaires than those who are students and civil servants(58%).

#### **4.2.6 Income Status of Respondents**

With reference to income level, 55(25.3%) of the respondents were low income earners who earn less than N50, 000 on monthly basis. 21(9.7%) of the respondents earn between N50, 000 and N100, 000. 64(29.5%) of the respondents earn between N200, 000 and N300, 000. 19(8.8%) of the respondents earn between N300, 000 and N400, 000. 2 of the respondents however earn more than N400, 000. This above analysis corroborates the studies of Atkins, Jeffres, and Neuendorf (1998) where they asserted that adopters of computer technology and as well as online surveys tend to be more affluent, better educated, and younger than non-adopters.

#### 4.2.7 Educational Status of Respondents

In terms of educational accomplishment, 10(4.6%) of the respondents have only first school leaving certificate, 14(6.5%) of the respondents have only senior school education (SSCE/NECO). Respondents who are holders of bachelor's degree or its equivalent accounted for 55.8% (121), respondents with M.Sc /MBA degrees accounted for 23.5%(51),4.1% of the respondents however have doctorate degrees. It is therefore worthy to note that 89.9% of the respondents had a minimum of college education signifying that the questionnaire was filled by the educated people. This finding is in consonance with the work of Fuentes and Gil, (2011) whose study clearly showed that most online shoppers better are educated elites.

#### 4.3 Descriptive Statistics and test of means of Research Question

In this descriptive statistics, it is worthy of note to state categorically the codings in the tables below. 1, 2,3,4,5 in the codings represents strongly agree, agree, undecided, disagree and strongly disagree respectively

**Table 4.2 Efficiency Dimension of service Quality**

Variables	Scale Level					Mean	Std Dev.
	1	2	3	4	5		
The speed of e- banking transactions is commendable	0.0	1.8	2.8	54.8	40.6	4.3410	.62644
It is easy to use e-banking delivery channels i.e [ATM,POS, Phone banking etc]	.9	2.8	1.8	45.6	48.8	4.3871	.74375
The banking website makes it easy for me to find what i am looking for]	.5	4.6	15.2	49.3	30.4	4.0461	.82647
There is minimal breakdown of machine in e-banking operations	3.7	12.0	19.4	51.6	13.4	3.5899	.98718
There is immediate and quick transaction with e-banking	0.0	4.1	9.7	53.0	33.2	4.1521	.75762

Source: Field survey, 2017

Table 4.2 above shows the descriptive statistics of efficiency as a dimension of service quality and the result indicate that customers are highly satisfied with the rate of efficiency or performance of the delivery channels as the statistical means ranges from 3.5899 to 4.3871. Ease of use of delivery channels has the highest degree of efficiency (Mean= 4.3871, SD=0.74375), speed of operations of e- banking delivery channel (Mean= 4.3410, SD=0.6264), immediate and quick transaction (Mean= 4.1521, SD= 0.7576) ease of use of bank website (Mean= 4.0461, SD=0.82647) and minimal breakdown of machine during e-banking operations (mean =3.5899, SD=0.98718) respectively. This finding was in agreement with Parasuraman *et. al.*(2005) where the efficiency dimension was seen as a crucial predictor of service quality.

**Table 4.3: Security Dimension of Service Quality**

Variables	Scale Level					Mean	Std Dev.
	1	2	3	4	5		
Bank account of customers are protected from fraudsters	0.0	8.8	8.3	55.8	27.2	4.0138	.84151
Location of e-banking delivery channels are well lit at night	.9	5.1	21.7	51.6	20.7	3.8618	.83292
Banks safeguard of customer's financial information is guaranteed	1.8	4.6	7.4	51.2	35.0	4.1290	.87238

Source: Field survey, 2017

Results of the security dimension of service quality as presented in Table 4.3 depicted that customers were satisfied with measures of security before, during and after e-banking transactions or operations. The statistical means ranged from 3.8618 to 4.1290. Customers' satisfaction with regards to the fact that safeguard of their financial information is guaranteed has the highest mean of 4.1290 and SD= .87238. This was followed by customers' assurance that their bank accounts are protected from fraudsters with mean of 4.0138, SD = 0.84151 and lastly

the item which measures that location of e- banking delivery channels are well lit at night with mean of 3.8618, SD= 0.83292.

**Table 4.4: System availability as a dimension of Service Quality**

Variables	Scale Level					Mean	Std Dev
	1	2	3	4	5		
The bank's delivery channels i.e ATM,POS, are always available for business	2.3	12.4	9.7	46.5	29.0	3.8756	1.04003
The systems used up to date hardly crash thereby distorting transaction	2.8	15.2	28.1	44.2	9.7	3.4286	.95535
My bank use up to date equipment for e-banking transactions	.9	5.5	15.2	46.5	31.8	4.0276	.88148
There is full branch computerization of e-banking transactions in my bank	33.2	4.1	10.6	52.1	0.0	2.8157	1.36529

Source: Field survey, 2017

The result from Table 4.4 shows that customers are satisfied with rate at which systems performed functionally for e- banking operations. The statistical means ranges from 2.8157 to 4.0276. Customers' satisfaction with reference to the use of up to date equipment for e- banking operations has the highest mean of 4.0276, SD= 0.88148. This was followed by customers' satisfaction as a result of availability of e- delivery channels for e – banking operations (mean 3.8756, SD= 1.04003); This was followed by customers' exhibition of satisfaction because systems used for e- banking operations hardly crash with mean at 3.4286, SD= 0.95535. It is however worthy to note that customers were not completely in agreement when the issue of full branch computerization of e-banking operations in their chosen banks was put to them (mean 2.8157, SD=1.36529).

**Table 4.5 Employee Courtesyas a Dimension of Service Quality**

Variables	Scale Level					Mean	Std Dev.
	1	2	3	4	5		
When customer has a problem, employees show sincere interest in solving the problem	1.4	10.6	15.2	47.5	25.3	3.8479	.96701
Employees make information easily accessible to customers	0.0	6.9	12.9	54.8	25.3	3.9862	.81354

Employees commitment towards delivery of high quality service in my choice of bank is guaranteed	.9	6.5	18.9	46.1	27.6	3.9309	.89743
Bank employees are always willing to respond to customers' requests	1.8	3.7	18.0	52.1	24.4	3.9355	.85823

Source: Field survey, 2017

Table 4.5 above shows that bank customers are satisfied with the conduct of bank employees with reference to proffering solutions to their various complaints. With reference to the calibration given, all the variables measured shows that a high number of the respondents realistically agreed that employee courtesy has a big impact on how customers view the bank and its operations. The mean for this dimension ranges from 3.8479 to 3.9862. The item; employees make information easily accessible to customers have the highest mean of 3.862 and SD of 0.81354, followed by another item (Bank employees are willing to respond to customers' requests) with mean of 3.9355 and SD of 0.85823. This item was closely followed by another item (employees' commitment towards high quality service delivery in my bank is guaranteed) with mean of 3.9309 and SD of 0.89743. The last item (employees show sincere interests in solving customers' problem had the lowest mean of 3.8479 and SD of 0.96701. The outcome of this study corroborated the study of Akinci , Atilgan-Inan and Aksoy (2009) where customer responsiveness is seen as a virile stimulus for customer satisfaction.

**Table 4.6 Reliability as a Dimension of Service Quality**

Variables	Scale Level					Mean	Std Dev.
	1	2	3	4	5		
E-banking services are often times dependable	.9	3.7	8.8	60.8	25.8	4.0691	.75756
Service charge in my bank does not apply to unsuccessful e- banking transactions	.9	10.1	20.3	48.8	19.8	3.7650	.91544
My account balance is quickly reverted when wrongly debited for incomplete transaction	6.0	16.6	12.9	44.2	20.3	3.5622	1.16152
Confirmatory e-mails or text messages are sent to me after each transaction	.9	3.2	2.8	47.5	45.6	4.3364	.76510

Source: Field survey, 2017

Results from table 4.6 illustrates how bank customers feel when exposed to the use of e-banking services delivery channels in their chosen banks. The results shows that bank customers feel satisfied and comfortable when doing monetary transactions electronically. The means for this variable when measured ranges from 4.3364 to 3.5622. Item 4 (confirmatory e-mails or text messages are sent to me after each transaction) has the highest mean of 4.3364 and SD of 0.76510 followed by item 1(e-banking services are often times dependable) with mean of 4.0691 and SD of 0.7576 and then item 2 (Service charge in my bank does not apply to unsuccessful e- banking transactions) with mean of 3.7650 and SD of 0.91544 and item 3 (my account balance is quickly reverted when wrongly debited for incomplete transaction) with mean and SD of 3.5622 and 1.16152 respectively. The implication of the above shows that bank customers can convincingly rely on the use of e- banking delivery channels of their banks. This analysis is in line with the study of Wolfenbarger and Gilly, (2003). Where website reliability was shown to have a strong impact on customer satisfaction and quality

**Table 4.7 Privacy as a Dimension of Service Quality**

Variables	Scale Level					Mean	Std Dev.
	1	2	3	4	5		
The Personal Identification Number(PIN) of my credit/debit card is known to me alone	1.4	2.8	3.7	36.9	55.3	4.4194	.80748
My bank keeps confidential information about me away from others	.5	1.4	6.5	40.1	51.6	4.4101	.71524
My bank is up to date on its duty of secrecy to me as a customer	.5	1.4	6.5	45.2	46.5	4.3594	.70699
Banks always safeguard customers financial information	.5	4.1	6.9	42.9	45.6	4.2903	.80711
E-banking transaction cannot be interrupted or tampered with	6.0	16.6	23.5	34.1	19.8	3.4516	1.15819

Source: Field survey, 2017

Table 4.7 above indicate that bank customers are satisfied with privacy concerns as regards their use of e- banking delivery channels of their banks. Going from highest to lowest, The Personal

Identification Number (PIN) of my credit/debit card is known to me alone;my bank keeps confidential information about me away from others; my bank is up to date on its duty of secrecy to me as a customer; banks always safeguard customers financial information and E-banking transaction cannot be interrupted or tampered with all have the mean of 4.4194, SD of 0.80748; mean of 4.4101 and SD of 0.71524; mean and SD of 4.3594 and SD 0.70699; mean of 4.2903 and SD of 0.80711 and mean of 3.4516 and SD of 1.15819 respectively. This is a clear indicator that customers feel highly satisfied that the duty of secrecy owed them by their banks is well taken care of.This outcome is in the same light with Cheolho, (2010) where he asserted that high degree of support for privacy is an importante-service quality dimension and it was found to be one of the mostsignificant dimensions in increasing customer satisfaction.

**Table 4.8 Customer Satisfaction (Dependent variable)**

Variables	Scale Level					Mean	Std Dev.
	1	2	3	4	5		
Communication received from customer care unit is always up to date	.5	5.5	15.7	53.0	25.3	3.9724	.82168
Customer service of my bank is commendable	.9	5.5	15.2	53.0	25.3	3.9631	.84356
Charges in transaction in my bank is better than that of other banks	3.7	9.7	32.3	35.9	18.4	3.5576	1.01728
Efficiency of my bank's ATM, POS e.t.c is not in doubt	2.8	6.9	18.0	50.7	21.7	3.8157	.94435
I am often charged by my bank even when ATM fails to dispense cash	8.8	30.4	21.7	26.3	12.9	3.0415	1.19920
The value for services i got from patronising my bank is worthwhile	2.8	8.8	16.1	49.3	23.0	3.8111	.97954
Accessibility of my bank's ATM and other delivery channels is strategic	0.0	6.5	14.7	55.3	23.5	3.9585	.80112
I am not supposed to be charged for using ATM	2.3	8.3	8.3	29.5	51.6	4.1982	1.05075
Customer knowledge of e-banking products is little	2.3	5.5	12.9	55.3	24.0	3.9309	.89226
My bank adopt different product packaging which are more unique than that of other banks	1.4	5.1	24.9	38.2	30.4	3.9124	.93625

Source: Field survey, 2017

Table 4.8 shows the level of customer satisfaction upon their exposure to the use of e- delivery channels. From the table, it can be deduced that bank customers agreed that they were satisfied

with the e - banking operations of their chosen banks. Customers were in agreement that they were not supposed to be charged for using Automated Teller Machine (mean = 4.1982, SD = 1.05075). This was followed by others variables measured in descending order; communication received from customer care unit is always up to date (mean = 3.9724, SD = 0.82168); customer service in my bank is commendable (mean = 3.9631, SD = 0.84356); accessibility of my bank's ATM and other delivery channels is strategic (mean = 3.9585 SD = 0.80112); Customer knowledge of e-banking products is little (mean = 3.9303, SD = 0.89226); My bank adopt different product packaging which are more unique than that of other banks (mean = 3.9124, SD = 0.93625); Efficiency of my bank's ATM, POS e.t.c is not in doubt (mean = 3.8157, SD = 0.94435); The value for services i get from patronising my bank is worthwhile (3.8111, SD = 0.97954) and lastly, I am often charged by my bank even when ATM fails to dispense cash (mean = 3.0415, SD = 1.19920)

#### 4.4 Testing of Hypotheses

**4.4.1 Hypothesis One:** The level of efficiency in the delivery of e- banking services is not significantly correlated with degree of customer satisfaction

**Table 4.9**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.518 <sup>a</sup>	.268	.265	.46303

a. Predictors: (Constant), Efficiency

**Table 4.10**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.918	1	16.918	78.912	.000 <sup>b</sup>
	Residual	46.095	215	.214		
	Total	63.014	216			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Efficiency

### Coefficients<sup>a</sup>

Table 4.11

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.657	.245		6.764	.000
	Efficiency	.526	.059	.518	8.883	.000

a. Dependent Variable: Customer Satisfaction

To investigate that the level of efficiency in the delivery of e- banking services is not significantly correlated with degree of customer satisfaction, a hierarchical multiple linear regression was computed. Result showed in the model summary that there exists strong correlation between efficiency and customer satisfaction (**R= .518**) and that **27%** of the variance in customer satisfaction (dependent variables) is predicted from the independent variables (efficiency). The ANOVA table further indicated that efficiency of e-banking channels significantly predict customer satisfaction(**p< 0.005**); hence the rejection of the null hypothesis (Ho). Therefore, it can be concluded that the level of efficiency in the delivery of e-banking services is significantly correlated with the degree of customer satisfaction. This is however in conformity with Liao and Cheung, (2008) where ease of use was seen antecedent of customer satisfaction.

Table 4.12

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Efficiency	217	4.1032	.53198	.03611

Table 4.13

One-Sample Test						
	Test Value = 3					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper

Efficiency	30.549	216	.000	1.10323	1.0320	1.1744
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To further validate what was gotten from the analysis above, it is worthy of note that the one-sample statistics computed in Table 4.12 shows that customers feel satisfied with the rate of efficiency of the delivery channels in e-banking operations with the mean as high as 4.1032 and the SD at 0.53198.

Table 4.13 indicates that, ( $t = 30.549$ ;  $p < 0.005$ ) and the 95% confidence interval estimate for the difference between the population means is (1.0320, 1.1744), the result of the one sample test for efficiency is statistically significant at 5%. The implication of this is that hypothesis one is not supported by the result of this statistical analysis, hence its rejection. This study therefore conclude that the level of efficiency in the delivery of e-banking services is significantly correlated with the degree of customers' satisfaction in Lagos state, Nigeria.

#### 4.4.2 Hypothesis Two: Security and privacy of online transactions is not significantly correlated with the degree of customer satisfaction.

**Table 4.14**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.458 <sup>a</sup>	.210	.207	.48113

a. Predictors: (Constant), Security, privacy

**Table 4.15 ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.245	1	13.245	57.218	.000 <sup>b</sup>
	Residual	49.769	215	.231		
	Total	63.014	216			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Security, privacy

**Table 4.16**

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
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	B	Std. Error	Beta		
1 (Constant)	2.334	.199		11.751	.000
Security	.370	.049	.458	7.564	.000

a. Dependent Variable: Customer Satisfaction

To investigate that the level of privacy and security of online transactions is not significantly correlated with degree of customer satisfaction, a hierarchical multiple linear regression was computed. Result showed in the model summary that there exists strong correlation between security of online transactions and customer satisfaction (**R= .458**) and that **21%** of the variance in customer satisfaction (dependent variables) is predicted from the independent variables (security). The ANOVA table further indicated that privacy and security of e-banking transactions significantly predict customer satisfaction (**p< 0.005**); hence the rejection of the null hypothesis (Ho) is rejected. Therefore, it can be deduced that the level of privacy and security measures put in place in the delivery of e-banking services is significantly correlated with the degree of customer satisfaction. This is an indication that customers will exhibit being more satisfied once they are confident that their transaction is secured. This is in total agreement with the study of Jun & Cai, (2001) where security was found to be a significant determinant of online banking and as such have a positive influence on customers' satisfaction.

**Table 4.17 One-Sample Statistics for security dimension**

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Security	217	4.0015	.66859	.04539

**Table 4.18 One-Sample Test for security dimension**

One-Sample Test					
Test Value = 3					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference

					Lower	Upper
Security	22.067	216	.000	1.00154	.9121	1.0910

From the result given in Table 4.17, it is worthy of note that the one- sample statistics computed shows that customers feel satisfied with the level of security put in place to checkmate illicit acts when customers use delivery channels in e-banking operations. The mean is as high as 4.0015.

The result from Table 4.18 shows that the one sample test computed for security is statistically significant at 5% because the p-value = 0.000. This indicate that hypothesis two is rejected. The study therefore conclude that security of online transactions is significantly correlated with the degree of customer satisfaction.

#### 4.4.3 Hypothesis Three: Availability of e- banking delivery channels does not guarantee customer satisfaction

**Table 4.18 Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.361 <sup>a</sup>	.131	.127	.50477

a. Predictors: (Constant), System Availability

**Table 4.19**

#### ANOVA<sup>a</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8.234	1	8.234	32.315	.000 <sup>b</sup>
	Residual	54.780	215	.255		
	Total	63.014	216			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), System Availability

**Table 4.20**

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.604	.216		12.055	.000
	System Availability	.343	.060	.361	5.685	.000

a. Dependent Variable: Customer Satisfaction

To probe that the availability of systems does not guarantee level of customer satisfaction, a hierarchical multiple linear regression was computed. Result showed in the model summary that there exists strong correlation between system availability and customer satisfaction (**R= .361**) and that **13%** of the variance in customer satisfaction (dependent variables) is predicted from the independent variables (system availability). The ANOVA table further indicated that availability of e-banking channels significantly predict customer satisfaction (**p< 0.005**); hence the rejection of the null hypothesis (Ho) is rejected. Therefore, it can be concluded that the availability of systems in the delivery of e-banking services is significantly correlated with the degree of customer satisfaction. The implication of the above is that customers are seldom denied the use of e-banking delivery channels.

**Table 4.21 One-Sample Statistics for System Availability**

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
System Availability	217	3.5369	.56960	.03867

**Table 4.22 One-Sample Test for System Availability**

One-Sample Test						
	Test Value = 3					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
System Availability	13.884	216	.000	.53687	.4607	.6131

From the results in Table 4.22, it is pertinent to note that the one- sample statistics computed for system availability shows that customers feel satisfied with the level of availability of the delivery channels in e-banking operations with the mean at 3.5369.

Results from Table 4.23 shows that the one sample test for system availability as a dimension of service quality is statistically significant at 5% since the  $p < 0.005$ . The result therefore does not corroborate hypothesis three. Hypothesis three which hypothesized that availability of e-banking service delivery channels does not guarantee customer satisfaction among users in Lagos state is therefore rejected. The study therefore conclude that availability of e-banking service delivery channels guarantee customer satisfaction.

#### 4.4.4 Hypothesis Four: Prompt resolution of customer complaint does not guarantee Customer Satisfaction

**Table 4.23**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.623 <sup>a</sup>	.389	.386	.42331

a. Predictors: (Constant), Employee empathy

**Table 4.24**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.487	1	24.487	136.652	<b>.000</b>
	Residual	38.526	215	.179		
	Total	63.014	216			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Employee empathy

**Table 4.25**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.993	.159		12.564	<b>.000</b>
	Employee empathy	.465	.040	.623	11.690	<b>.000</b>

a. Dependent Variable: Customer Satisfaction

To investigate that employee empathy is not significantly correlated with degree of customer satisfaction, a hierarchical multiple linear regression was computed. Result showed in the model summary that there exists strong correlation between customer empathy and customer

satisfaction ( $R = .623$ ) and that **39%** of the variance in customer satisfaction (dependent variables) is predicted from the independent variables (employee empathy). The ANOVA table further indicated that employee empathy significantly predict customer satisfaction ( $p < 0.005$ ); hence the rejection of the null hypothesis ( $H_0$ ) is rejected. Therefore, it can be concluded that employee courtesy in the delivery of e-banking services is significantly correlated with the degree of customer satisfaction.

Table 4.26 **One-Sample Statistics for Employee empathy**

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Employee empathy	217	3.9251	.72479	.04920

Table 4.27 **One-Sample Test for Employee empathy**

One-Sample Test						
	Test Value = 3					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Employee empathy	18.802	216	.000	.92512	.8281	1.0221

Results from Table 4.26 shows that the one sample statistics has mean of 3.9251 and SD of 0.72479. This equally reiterated the findings in Table 4.33. Results from the one-sample test in Table 4.27 show that employee empathy is statistically significantly with customer satisfaction at 5% since  $0.000 = p\text{-value} < 0.005$ . This however depict that hypothesis five is rejected. The study thus conclude that prompt resolution of customer complaints

with respect to e- banking service delivery is strongly correlated with the level customer satisfaction.

**4.4.5 Hypothesis Five:** Customer’s reliance on e-banking delivery channels is not correlated with customer satisfaction

**Table 4.28**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.559 <sup>a</sup>	.313	.310	.44880

a. Predictors: (Constant), Reliability

**Table 4.29**

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.708	1	19.708	97.842	<b>.000</b>
	Residual	43.306	215	.201		
	Total	63.014	216			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Reliability

**Table 4.30**

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.857	.200		9.264	<b>.000</b>
	Reliability	.498	.050	.559	9.892	<b>.000</b>

a. Dependent Variable: Customer Satisfaction

To investigate that customer’s reliability is not significantly correlated with degree of customer satisfaction, a hierarchical multiple linear regression was computed. Result showed in the model summary that customer’s reliance on e-banking delivery channels bring about customer satisfaction (**R= .559**) and that **31%** of the variance in customer satisfaction (dependent variables) is predicted from the independent variables (employee reliability). The ANOVA table further indicated that employee reliance on e-banking delivery channels significantly predict

customer satisfaction ( $p < 0.005$ ); hence the rejection of the null hypothesis ( $H_0$ ) is rejected. Therefore, it can be concluded that employee reliance on the delivery of e-banking channels is significantly correlated with the degree of customer satisfaction. It is therefore expedient to note that reliability has been empirically shown to have a strong impact on customer satisfaction and quality, and the second strongest predictor of loyalty intentions and attitudes toward the Website (Wolfenbarger & Gilly, 2003).

Table 4.31 **One-Sample Statistics for Reliability**

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Reliability	217	3.9332	.60632	.04116

Table 4.32 **One-Sample Test for Reliability**

One-Sample Test						
	Test Value = 3					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Reliability	22.672	216	.000	.93318	.8521	1.0143

It is worthy of note that the result of one- sample statistics computed in Table 4.31 shows that bank customers feel satisfied and can rely on the use of e- delivery channels of their banks for transactions (mean = 3.9332, SD= .60632)

The result in Table 4.32 shows that the one sample test for reliability is statistically significant at 5% since  $0.000 = p\text{-value} < 0.005$ . This implies that hypothesis six is rejected. The study

therefore conclude that customer's reliance on e-banking delivery channels is correlated with customer satisfaction.

**4.4.6 Hypothesis Six:** customers' perceived value of e-banking service delivery will not bring about increased satisfaction

**Table 4.33**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.654 <sup>a</sup>	.428	.426	.40935

a. Predictors: (Constant), Perceivedvalue

**Table 4.34**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.986	1	26.986	161.047	.000 <sup>b</sup>
	Residual	36.027	215	.168		
	Total	63.014	216			

a. Dependent Variable: CustomerSatisfaction

b. Predictors: (Constant), Perceivedvalue

**Table 4.35**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.524	.183		8.335	.000
	Perceivedvalue	.193	.015	.654	12.690	.000

a. Dependent Variable: CustomerSatisfaction

To investigate whether or not perceived value will bring about increased satisfaction, regression analysis was computed and result shows that perceived value will bring about increased satisfaction (0.654). It also showed that 42.6% of the variation in customer satisfaction is predicted by perceived value. The ANOVA table further indicated significance of correlation

between the dependent and the independent variable ( $p < 0.05$ ); hence the rejection of the null hypothesis.

### The Multiple Regression Analysis

Table 4.36

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.707 <sup>a</sup>	.500	.486	2.99091

a. Predictors: (Constant), Efficiency, Security, SystemAvailability, Reliability, Employeeempathy, Privacy

b.

Table 4.37

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1879.101	6	313.183	35.010	.000 <sup>b</sup>
Residual	1878.567	210	8.946		
Total	3757.668	216			

a. Dependent Variable: CustomerSatisfaction

c. Predictors: (Constant), Efficiency, Security, SystemAvailability, Reliability, Employeeempathy, Privacy

Table 4.38

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	6.272	1.892		3.314	.001
Privacy	1.154	.466	.170	2.475	.014
Employeeempathy	1.713	.366	.298	4.676	.000
Reliability	.407	.129	.190	3.157	.002
SystemAvailability	.539	.407	.074	1.323	.187
Security	.576	.378	.092	1.524	.129
Efficiency	.947	.475	.121	1.994	.047

a. Dependent Variable: CustomerSatisfaction

To investigate the effect of e-banking service quality on customer satisfaction, a hierarchical multiple linear regression was computed. Result showed in the model summary that there exists strong correlation between e-banking service quality dimensions and customer satisfaction ( $R = .707$ ) and that 49% of the variance in customer satisfaction (dependent variables) is predicted from the independent variables. The ANOVA table (4.37) indicated that the combination of the service quality dimensions significantly ( $p < 0.005$ ) predict customer satisfaction. However, Table 4.38 have it that efficiency (0.047), employee empathy (0.00), reliability (0.002) and privacy (0.014) significantly contributed to the equation. The remaining variables, security (0.129), and system availability (0.187), are still included to obtain this result since overall F value (35.010) was computed with all the variables in the equation.

The equation therefore is:

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \epsilon \quad (4.1)$$

$$y = \beta_0 + 0.047\beta_1 + 0.014\beta_2 + 0.129\beta_3 + 0.187\beta_4 + 0.000\beta_5 + 0.002\beta_6 + \epsilon \quad (4.2)$$

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION, RECOMMENDATIONS, AND SUGGESTIONS FOR FURTHER STUDIES**

#### **5.1 Introduction**

This chapter presents summary of the major findings which is followed by discussion of the result and how they relate to the findings of previous related studies. This chapter also give a formal conclusion based on the data gathered and interpretations. On the basis of findings of the study, certain recommendations were outlined. After all these, the chapter further went on to look at implications (theoretical and managerial), main contributions to knowledge of the research, directions for further studies and finally, the limitations of the study.

## 5.2 Summary of Major Findings

Below are the summary of the major findings of this study:

- 1 Evidence from this study shows that bank customers were satisfied with the level of efficiency with which banks deliver quality service to them. This implies that customers' actual level of satisfaction exceeds their level of expectation. This connotes that hypothesis one is not supported by the result of the statistical analysis of this study. This result is therefore in line with the assertions of Chin & Lee, 2000 and Cheung & Lee (2003) who concluded that the speed with which a computer system responds has been argued to be an important factor influencing the usability and emotional responses from users.
- 2 Hypothesis Two was accentuated to examine the relationship between privacy and security as a dimension of service quality and customer satisfaction. The T- Test computed had a  $0.000 = p\text{-value} < 0.005$  signifying that there exists a significant relationship between privacy and security as a dimension of service quality and customer satisfaction. The implication of the above is that customers tend to be more satisfied transacting businesses electronically if there is an assurance that security of their online transactions are secured. This suggests that hypothesis number two be rejected. This finding was supported by (Kim & Kim, 2010; Benaroch & Appari, 2011 and Aliyu, Rosmain & Takala, 2013) who concluded that security measures when adequately put in place before, during and after e- banking transactions will boost customer confidence and satisfaction.
- 3 The focus of hypothesis three was intended to scrutinize whether system availability will bring about customer satisfaction. Result shows that customers were satisfied

- with the rate of functionality of the e- banking delivery channels. This invariably implied that hypothesis three was rejected. The result corroborated the findings of ( Sahadev & Purani, 2008; Yen & Lu, 2008) that adequate functionality of available systems will boost customer confidence and eventually customer satisfaction
- 4 Hypothesis four was intended to examine the relationship between employee courtesy (empathy) and customer satisfaction. The findings of this study showed that bank customers often feel contented when employees of the bank show great level of empathy to solve problems being faced by customers. This implied that hypothesis five was rejected. The findings is similar the previous studies of (Liu & Arnett, 2000; van Riel *et. al.*, 2001; Madu & Madu, 2002; Wolfenbarger & Gilly, 2003; Wandaogou & Jalulah, 2011) where they asserted that elements like customer sensitivity, personalized service, and prompt response to customer complaints in customer service dimension have been found to be significant indicator for adoption of e-banking operations.
  - 5 Evidence from this study demonstrates that bank customers feel comfortable relying on the service delivery of their banks with reference to e- banking operations. Here customers believed that service delivery in the bank is dependable hence a confirmation that hypothesis five is rejected. This findings is similar to the the submission of Popoola (2013) where he corroborated Henderson & Venkatraman (1999) by concluding that reliability of the technology that supports internet banking is very crucial in consumers' trust and satisfaction.
  - 6 This study evidently established that perceived value is a good predictor of customer satisfaction.

### 5.3 Conclusion

Banking through internet has emerged as a strategic resource for achieving higher efficiency, control of operations and reduction of cost by replacing paper based and labour intensive methods with automated processes thus leading to higher productivity and profitability. The main conclusion emerging from the findings of this study revealed that effective delivery of e- banking services in banks resulted in customer's satisfaction in Lagos state, Nigeria.

From the analysis carried out in this study, other conclusions are summarized as follows

- i. Bank customers were satisfied with the rate of efficiency with which e- banking service delivery channels work. The implication of this is that banks should be proactive to ensure that the delivery channels are technologically up to date so that customer satisfaction can continually be guaranteed.
- ii. Bank customers were fulfilled that their financial information were safeguarded and the feeling that they were protected from fraudsters makes them contented with the service delivery of the banks. The implication of this is that banks must be consistent in the delivery of the duty of care they owe their teeming customers. Hence bank staff must be constantly made to be aware of the threat a lapse of the above will cause the bank.
- iii. Banks must certify that e- banking delivery channels used for banking operations be up to date so that distortions in banking transactions can be reduced to the barest minimum.
- iv. Customers attested to the fact that banks were truthful with all information about them and their products or services on their website. Banks should thus guarantee that

- customers are not deceived by adverts or information which will make them to make wrong decisions.
- v. Banks must ensure that their staff are further sensitized on the importance of their customers. Here, it should be noted that it is very herculean to satisfy all of customer's needs, but concerted efforts should be driven towards this. Hence, employee empathy must be very high so that customer attrition can be minimized.
  - vi. Banks must be aware that their customers were satisfied with the after service of the banks hence, they must be ensure that the confidence level of their customers be maintained so that continued customer patronage can be further guaranteed.
  - vii. Bank customers were contented identifying that their banks kept to the agreement (duty of secrecy) to safeguard vital financial and confidential information about them to outsiders.
  - viii. It is pertinent for banks to know that personal demographic variables have influence on the adoption or otherwise of e- banking delivery channels for banking operations. Hence, banks should be mindful of the fact that sensitization or customer education may be needed in areas where customers are found not to be educated or sociable.

## **5.4 Theoretical and Managerial Implications of the Study**

The findings of this study have significant theoretical and managerial implication for service marketing practices in the banking industry in particular. The theoretical and managerial implication is discussed below

### **5.4.1 Theoretical Implications**

The theoretical underpinning of this research is based on literature from the e-banking relating to commercial banks within the banking industry. Service marketing scholars have long since recognized the crucial characteristics of service intangibility, inseparability, heterogeneity, fiduciary, and perishability, lack of transfer of title (Zeithaml *et. al*, 1985; Harrison, 2000). The recognition of such characteristics has led researchers to recognize the key role played by service marketers in improving service delivery and accessibility to shed light on the important role of marketing within service sectors, especially in the provision of banking services. The empirical conclusions drawn from this research are multifaceted and as a result, it is vitally important that banks managers pay attention to the influences of customer satisfaction. Researchers are therefore encouraged to place more focus on the impact influences stemming from the e-banking functionality and its impact on customer satisfaction.

Though the conceptual model for this study was adapted, it is pertinent to make it known that the E-S- QUAL model of Zeithaml, Parasuraman and Malhotra developed in 2000 was instrumental to the adaptation of the model for this study. The implication of this is that the E-S-QUAL model is applicable to the Nigerian setting in predicting customer satisfaction. More specifically, this thesis has extended research on e- banking service quality model which is a good response to e-banking service quality issues.

Furthermore, the study established that personal factors such as age, educational status, occupational status, gender, social class all have influence on perceived value of the customer with reference to use of e- banking channels for banking transactions. Overall, adapting and implementing the proposed model will enable regulators and operators to formerly establish service quality practices and code of conducts in the banking industry.

#### **5.4.2 Managerial Implications**

The results of this study showed that bank customers were satisfied with all the service quality dimensions and this has made customer satisfaction to be guaranteed. This invariably imply that operators will have to continually impress on their employees the habit of ensuring that customer empathy is taken seriously. This is because many customers still like human interphase in some of their interactions with their banks.

In view of this development, policy makers in the banking industry should deploy all resources to ensure that all key e- service quality dimensions are delivered as at when they are expected. Here, management of banks must ensure that satisfaction of their customers is key to their operations.

It must be clear to operators that all banks jostle for the same customers, and since customers are always driven by innovation, banks should ensure that service quality improvement initiatives must be evident on regular basis. This however does not mean that banks should venture into unhealthy rivalry which can plunge the banking sector into disarray. Since banks operate in a competitive environment where customer satisfaction is key, Management of banks must therefore ensure that that extensive customer-relations training programs for all the frontlines and tellers. In this way it would fortify the bank's core competency in customer satisfaction, hence customer retention will be considerably evident

## **5.5 Contributions to Knowledge**

1. The thesis developed and tested a conceptual model that brings together five major determinants of e- service quality, their individual and aggregate effect on customer satisfaction in the context of the Nigerian banking industry.

2. This thesis successfully modified an existing (E-S- QUAL) model by Parasuraman et. al (2005) by introducing a mediating variable (perceived value) to suit the context and applicability of this study in Lagos state, Nigeria.
3. This study has established existence of relationship of empirical evidence of key socio-demographic characteristics and customer satisfaction in the Nigerian banking sector.

## **5.6 Recommendations**

1. Policy makers in the banking industry should ensure that all the dimensions in a service quality program be strictly followed and implemented effectively. Responsiveness, reliability, empathy, efficiency, security, privacy, system availability, personal factors and Customer Satisfaction are all equally important. Marketing Managers should not only focus on the bank's objective of profits and gains, but must also look into satisfying the needs of the customers as well.
2. The result of this study has proven that E- S-QUAL model is the effective model to measure customer satisfaction in the banking industry. Managers from various banks should continuously measure and improve the level of customer satisfaction using the E-S- QUAL model in order to maintain competitive advantage in the market place.
3. Market perception and customer expectation can change rapidly from time to time, for example from long queue in the front desk last time till now the internet banking, perhaps there will be a new trend in the near future.
4. It is recommended that the management of banks do a periodic review of their performance and that of their employees using the web based survey instrument designed

for this study. This instrument can be modified as e-banking survey instrument. This will make the banks and their employees to be consistent with effective service delivery to their teeming but highly expectant customers.

### **5.7 Suggestion for Further Studies**

Several future research directions exist. First, future research can use different methodologies, such as longitudinal studies, focus groups and interviews to examine the relationship between service quality and customer satisfaction in the banking industry.

Second, the increased adoption of e- banking channels for banking transactions and online shopping for purchases will continue, and future research can replicate similar studies solely involving online shoppers, measuring actual purchase behaviours instead of adoption of e-banking channels for banking transaction. This procedure is designed to understand if there are any significant difference in the perceptions of e-service quality of internet users and internet purchasers.

Third, although the scales used for measuring dimensions of e-service quality are similar to existing scales, further research might consider developing more elaborate measures to allow for richer coverage of e-service quality scales.

Future research should also explore whether the model could be used for a comparative study between the service sector and the industrial sector, testing for the differences and effects of electronic functionality factors in both sectors. By doing so, it would be interesting to test whether the model could hold across a range of industries and service sectors apart from banking industry in Nigeria.

Finally, evidence exists that the relative importance and possible meaning of web site quality may differ across cultures (Gefen, 2000; Tsikriktsis, 2002). This study was done in Nigeria. It is thus good to note that all findings of this study may be subjective to the occurrences in Nigeria. Thus, the study can be replicated in different cultures to provide cross-cultural comparisons and analysis.

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# Questionnaire

## Appendix I

Survey on Predicting customer satisfaction using e - banking Service Quality among selected commercial banks in Lagos metropolis

\* Required

Kindly fill as appropriate the following Questions \*

Gender

- Male
- Female

Marital Status \*

- Single
- Married
- Widowed
- Divorced

Age \*

- Less than 18
- 18 - 30
- 31 - 43
- 44 - 56
- 57 and Above

Religion

- Islam
- Christianity
- Other:

Place of Residence \*

- Lekki / Ajah

- Surulere/ Yaba/ Ebute metta
- Ketu/ Ikorodu
- Mushin/ Isolo
- Oshodi/ Ipaja
- Somolu/ Bariga
- Festac/ Satelite Town
- Ajegunle/ Mile 2
- Others
- Other:

**Occupation ( Category of Respondents) \***

- Civil/ Public servant
- Private Sector Employee
- Self Employed
- Student

**Range of Monthly Income \***

- Below N50,000
- N50,000 - N100,000
- N100,000- N200,000
- N200,000- N300,000
- N300,000- N400,000
- Above N400,000

**Educational Status \***

- First School Leaving Cert.
- SSCE
- OND/ NCE
- B.Sc/ HND
- M.Sc/ MBA
- Ph.D
- Other:  #

**Please fill out the following information accurately and clearly using rating scale below \***

CUSTOMER ANALYSIS (Efficiency)

	Strongly Agree	Agree	Indifferent	Disagree	Strongly Disagree
The speed of e-banking transactions is commendable					
It is easy to use e-banking delivery channels i.e ATM,POS,Phone banking etc					
The banking website makes it easy for me to find what i am looking for					
There is minimal breakdown of machine in e-banking operations					
There is immediate and quick transaction with e-banking					

**Customer Analysis (Security) \***

please fill out the following information accurately and clearly using the rating scale below

	Strongly agree	Agree	Indifferent	Disagree	Strongly disagree
Bank account of customers are protected from fraudsters					
Location of e-banking delivery channels are well lit					

Strongly agree

Agree

Indifferent

Disagree

Strongly disagree

---

at night

---

Banks safeguard of customer's financial information is guaranteed

---

**CUSTOMER ANALYSIS(System availability) \***

Please fill out the following information accurately and clearly using the rating scale

Strongly agree

Agree

Indifferent

Disagree

Strongly Disagree

---

The bank's delivery channels i.e ATM,POS, are always available for business

---

The systems used up to date hardly crash thereby distorting transaction

---

My bank use up to date equipments for e-banking transactions

---

There is full branch computerization of e-banking transactions in my bank

---

E- banking transactions are often possible during public holidays

---

**CUSTOMER ANALYSIS(Fulfillment) \***

please fill out the following accurately and clearly using the rating scale

	Strongly Agree	Agree	Indifferent	Disagree	Strongly Disagree
The bank's website is truthful about its products/offerings					
The behavior of employees instill confidence in customers					
My bank offers varieties of product/services					
E-banking transactions are always accurate					

**CUSTOMER ANALYSIS( Employee Courtesy) \***

please fill out the following accurately and clearly using the rating scale

	Strongly Agree	Agree	Indifferent	Disagree	Strongly disagree
When customer has a problem, employees show sincere interest in solving the problem					
Employees make information easily accessible to customers					
Employees commitment towards delivery of high quality service in my choice of bank is guaranteed					

Strongly Agree      Agree      Indifferent      Disagree      Strongly disagree

Bank employees are always willing to respond to customers' requests.

**CUSTOMER ANALYSIS(Reliability) \***

please fill out the following accurately and clearly using the rating scale below

Strongly Agree      Agree      Indifferent      Disagree      Strongly Disagree

E-banking services are often times dependable

Service charge in my bank does not apply to unsuccessful e-banking transactions.

My account balance is quickly reverted when wrongly debited for incomplete transaction

Confirmatory e-mails or text messages are sent to me after each transaction

E- banking delivery channels i.e ATM operates effectively on public holidays

**CUSTOMER ANALYSIS( Privacy) \***

please fill out the following accurately and clearly using the rating scale below

Strongly Agree      Agree      Indifferent      Disagree      Strongly Disagree

The Personal Identification

Strongly Agree      Agree      Indifferent      Disagree      Strongly Disagree

---

Number(PIN) of my credit/debit card is known to me alone

---

My bank keeps confidential information about me away from others

---

My bank is up to date on its duty of secrecy to me as a customer

---

Banks always safeguard customers financial information

---

E-banking transaction cannot be interrupted or tampered with

---

**CUSTOMER ANALYSIS( Personal Factors) \***

please fill out the following accurately and clearly using the rating scale below

Strongly Agree      Agree      Indifferent      Disagree      Strongly Disagree

---

My level of education affects my perception of e-banking usage?

---

Level of my knowledge of e-banking affect my decision to use e-banking

---

Age/ lifestyle often influence customers' use of e-banking channels

---

My personality often influence my

---

Strongly Agree      Agree      Indifferent      Disagree      Strongly Disagree

---

decision to use e-  
banking channels

---

My occupational  
status often  
encourage me to use  
e- banking channels  
i.e ATM, POS,  
Money banking etc

---

**CUSTOMER SATISFACTION: \***

Please fill out the following information accurately and clearly using this rating scale

Strongly Agree      Agree      Indifferent      Disagree      Strongly Disagree

---

Communication  
received from  
customer care unit is  
always up to date

---

Customer service of  
my bank is  
commendable

---

Charges in  
transaction in my  
bank is better than  
that of other banks

---

Efficiency of my  
bank's ATM, POS  
e.t.c is not in doubt

---

I am often charged by  
my bank even when  
ATM fails to  
dispense cash

---

The value for  
services i got from  
patronising my bank  
is worthwhile

---

Accessibility of my  
bank's ATM and

---

Strongly Agree

Agree

Indifferent

Disagree

Strongly  
Disagree

---

other delivery  
channels is strategic

---

I am not supposed to  
be charged for using  
ATM

---

Customer knowledge  
of e-banking products  
is little

---

Product packaging in  
my bank is more  
unique than that of  
other banks

---

### CUSTOMER ATTRITION

Please fill out the following information accurately and clearly using this rating scale

\*

Very Certain

Certain

Average

Uncertain

Very uncertain

---

I am willing to dump  
e- banking operations  
in my bank for same  
in another bank?

---

I am willing to stop  
the use of ATM for  
e- banking operation?

---

I am willing to stop  
the use of POS for e-  
banking transaction

---

I am willing to stop  
the use of Mobile  
banking for e-  
banking operation

---

I am willing to stop  
the use of Electronic  
fund transfer for e-

---

Very Certain      Certain      Average      Uncertain      Very uncertain

banking operation

I am willing to stop  
the use of Telephone  
banking for e-  
banking operation

100%: You made it.

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## APPENDIX II Frequency Table

**The speed of e- banking transactions is commendable**

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	4	1.8	1.8	1.8
Indifferent	6	2.8	2.8	4.6
Valid Agree	119	54.8	54.8	59.4
Strongly Agree	88	40.6	40.6	100.0
Total	217	100.0	100.0	

**It is easy to use e-banking delivery channels i.e ATM,POS,Phone banking etc]**

	Frequency	Percent	Valid Percent	Cumulative Percent
--	-----------	---------	---------------	--------------------

Valid	Strongly Disagree	2	.9	.9	.9
	Disagree	6	2.8	2.8	3.7
	Indifferent	4	1.8	1.8	5.5
	Agree	99	45.6	45.6	51.2
	Strongly Agree	106	48.8	48.8	100.0
	Total	217	100.0	100.0	

**The banking website makes it easy for me to find what i am looking for]**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.5	.5
	Disagree	10	4.6	4.6
	Indifferent	33	15.2	15.2
	Agree	107	49.3	49.3
	Strongly Agree	66	30.4	30.4
	Total	217	100.0	100.0

**There is minimal breakdown of machine in e-banking operations**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	8	3.7	3.7
	Disagree	26	12.0	12.0
	Indifferent	42	19.4	19.4
	Agree	112	51.6	51.6
	Strongly Agree	29	13.4	13.4
	Total	217	100.0	100.0

**There is immediate and quick transaction with e-banking**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	9	4.1	4.1
	Indifferent	21	9.7	9.7

Agree	115	53.0	53.0	66.8
Strongly Agree	72	33.2	33.2	100.0
Total	217	100.0	100.0	

**Bank account of customers are protected from fraudsters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	19	8.8	8.8	8.8
Indifferent	18	8.3	8.3	17.1
Valid Agree	121	55.8	55.8	72.8
Strongly Agree	59	27.2	27.2	100.0
Total	217	100.0	100.0	

**Location of e-banking delivery channels are well lit at night**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	2	.9	.9	.9
Disagree	11	5.1	5.1	6.0
Valid Indifferent	47	21.7	21.7	27.6
Agree	112	51.6	51.6	79.3
Strongly Agree	45	20.7	20.7	100.0
Total	217	100.0	100.0	

**Banks safeguard of customer's financial information is guaranteed**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	4	1.8	1.8	1.8
Disagree	10	4.6	4.6	6.5
Valid Indifferent	16	7.4	7.4	13.8
Agree	111	51.2	51.2	65.0
Strongly Agree	76	35.0	35.0	100.0
Total	217	100.0	100.0	

**The bank's delivery channels i.e ATM,POS, are always available for business**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	5	2.3	2.3	2.3

Disagree	27	12.4	12.4	14.7
Indifferent	21	9.7	9.7	24.4
Agree	101	46.5	46.5	71.0
Strongly Agree	63	29.0	29.0	100.0
Total	217	100.0	100.0	

**The systems used up to date hardly crash thereby distorting transaction**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	6	2.8	2.8	2.8
Disagree	33	15.2	15.2	18.0
Indifferent	61	28.1	28.1	46.1
Agree	96	44.2	44.2	90.3
Strongly Agree	21	9.7	9.7	100.0
Total	217	100.0	100.0	

**My bank use up to date equipments for e-banking transactions**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	2	.9	.9	.9
Disagree	12	5.5	5.5	6.5
Indifferent	33	15.2	15.2	21.7
Agree	101	46.5	46.5	68.2
Strongly Agree	69	31.8	31.8	100.0
Total	217	100.0	100.0	

**There is full branch computerization of e-banking transactions in my bank**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	72	33.2	33.2	33.2
Disagree	9	4.1	4.1	37.3
Indifferent	23	10.6	10.6	47.9
Agree	113	52.1	52.1	100.0
Total	217	100.0	100.0	

**The bank's website is truthful about its products/offering**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	2	.9	.9	.9

Disagree	9	4.1	4.1	5.1
Indifferent	42	19.4	19.4	24.4
Agree	103	47.5	47.5	71.9
Strongly Agree	61	28.1	28.1	100.0
Total	217	100.0	100.0	

**The behavior of employees instill confidence in customers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	2	.9	.9	.9
Valid Disagree	22	10.1	10.1	11.1
Valid Indifferent	29	13.4	13.4	24.4
Valid Agree	119	54.8	54.8	79.3
Valid Strongly Agree	45	20.7	20.7	100.0
Total	217	100.0	100.0	

**My bank offers varieties of product/services**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	3	1.4	1.4	1.4
Valid Indifferent	15	6.9	6.9	8.3
Valid Agree	118	54.4	54.4	62.7
Valid Strongly Agree	81	37.3	37.3	100.0
Total	217	100.0	100.0	

**E-banking transactions are always accurate**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	2	.9	.9	.9
Valid Disagree	21	9.7	9.7	10.6
Valid Indifferent	40	18.4	18.4	29.0
Valid Agree	107	49.3	49.3	78.3
Valid Strongly Agree	47	21.7	21.7	100.0
Total	217	100.0	100.0	

**When customer has a problem, employees show sincere interest in solving the problem**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	3	1.4	1.4	1.4

	Disagree	23	10.6	10.6	12.0
	Indifferent	33	15.2	15.2	27.2
	Agree	103	47.5	47.5	74.7
	Strongly Agree	55	25.3	25.3	100.0
	Total	217	100.0	100.0	

**Employees make information easily accessible to customers**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Disagree	15	6.9	6.9	6.9
	Indifferent	28	12.9	12.9	19.8
Valid	Agree	119	54.8	54.8	74.7
	Strongly Agree	55	25.3	25.3	100.0
	Total	217	100.0	100.0	

**Employees commitment towards delivery of high quality service in my choice of bank is guaranteed**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	2	.9	.9	.9
	Disagree	14	6.5	6.5	7.4
Valid	Indifferent	41	18.9	18.9	26.3
	Agree	100	46.1	46.1	72.4
	Strongly Agree	60	27.6	27.6	100.0
	Total	217	100.0	100.0	

**Bank employees are always willing to respond to customers' requests**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	4	1.8	1.8	1.8
	Disagree	8	3.7	3.7	5.5
Valid	Indifferent	39	18.0	18.0	23.5
	Agree	113	52.1	52.1	75.6
	Strongly Agree	53	24.4	24.4	100.0
	Total	217	100.0	100.0	

**E-banking services are often times dependable**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	.9	.9	.9

Disagree	8	3.7	3.7	4.6
Indifferent	19	8.8	8.8	13.4
Agree	132	60.8	60.8	74.2
Strongly Agree	56	25.8	25.8	100.0
Total	217	100.0	100.0	

**Service charge in my bank does not apply to unsuccessful e- banking transactions**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	2	.9	.9	.9
Disagree	22	10.1	10.1	11.1
Indifferent	44	20.3	20.3	31.3
Agree	106	48.8	48.8	80.2
Strongly Agree	43	19.8	19.8	100.0
Total	217	100.0	100.0	

**My account balance is quickly reverted when wrongly debited for incomplete transaction**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	13	6.0	6.0	6.0
Disagree	36	16.6	16.6	22.6
Indifferent	28	12.9	12.9	35.5
Agree	96	44.2	44.2	79.7
Strongly Agree	44	20.3	20.3	100.0
Total	217	100.0	100.0	

**The Personal Identification Number(PIN) of my credit/debit card is known to me alone**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	3	1.4	1.4	1.4
Disagree	6	2.8	2.8	4.1
Indifferent	8	3.7	3.7	7.8
Agree	80	36.9	36.9	44.7
Strongly Agree	120	55.3	55.3	100.0
Total	217	100.0	100.0	

**My bank keeps confidential information about me away from others**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	1	.5	.5	.5
Disagree	3	1.4	1.4	1.8
Indifferent	14	6.5	6.5	8.3
Agree	87	40.1	40.1	48.4
Strongly Agree	112	51.6	51.6	100.0
Total	217	100.0	100.0	

**My bank is up to date on its duty of secrecy to me as a customer**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	1	.5	.5	.5
Disagree	3	1.4	1.4	1.8
Indifferent	14	6.5	6.5	8.3
Agree	98	45.2	45.2	53.5
Strongly Agree	101	46.5	46.5	100.0
Total	217	100.0	100.0	

**Banks always safeguard customers financial information**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	1	.5	.5	.5
Disagree	9	4.1	4.1	4.6
Indifferent	15	6.9	6.9	11.5
Agree	93	42.9	42.9	54.4
Strongly Agree	99	45.6	45.6	100.0
Total	217	100.0	100.0	

**E-banking transaction cannot be interrupted or tampered with**

	Frequency	Percent	Valid Percent	Cumulative Percent
--	-----------	---------	---------------	--------------------

Valid	Strongly Disagree	13	6.0	6.0	6.0
	Disagree	36	16.6	16.6	22.6
	Indifferent	51	23.5	23.5	46.1
	Agree	74	34.1	34.1	80.2
	Strongly Agree	43	19.8	19.8	100.0
	Total	217	100.0	100.0	

**My level of education affects my perception of e-banking usage**

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	Strongly Disagree	7	3.2	3.2	3.2
	Disagree	36	16.6	16.6	19.8
	Indifferent	16	7.4	7.4	27.2
	Agree	85	39.2	39.2	66.4
	Strongly Agree	73	33.6	33.6	100.0
	Total	217	100.0	100.0	

**Level of my knowledge of e-banking affect my decision to use e-banking**

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	Strongly Disagree	5	2.3	2.3	2.3
	Disagree	25	11.5	11.5	13.8
	Indifferent	21	9.7	9.7	23.5
	Agree	96	44.2	44.2	67.7
	Strongly Agree	70	32.3	32.3	100.0
	Total	217	100.0	100.0	

**My personality often influence my decision to use e- banking channels**

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	Strongly Disagree	3	1.4	1.4	1.4
	Disagree	28	12.9	12.9	14.3
	Indifferent	23	10.6	10.6	24.9
	Agree	105	48.4	48.4	73.3
	Strongly Agree	58	26.7	26.7	100.0
	Total	217	100.0	100.0	

**My occupational status often encourage me to use e- banking channels i.e ATM, POS, Money banking etc**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	4	1.8	1.8	1.8
Disagree	14	6.5	6.5	8.3
Indifferent	18	8.3	8.3	16.6
Agree	93	42.9	42.9	59.4
Strongly Agree	88	40.6	40.6	100.0
Total	217	100.0	100.0	

**Communication received from customer care unit is always up to date**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	1	.5	.5	.5
Disagree	12	5.5	5.5	6.0
Indifferent	34	15.7	15.7	21.7
Agree	115	53.0	53.0	74.7
Strongly Agree	55	25.3	25.3	100.0
Total	217	100.0	100.0	

**Customer service of my bank is commendable**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	2	.9	.9	.9
Disagree	12	5.5	5.5	6.5
Indifferent	33	15.2	15.2	21.7
Agree	115	53.0	53.0	74.7
Strongly Agree	55	25.3	25.3	100.0
Total	217	100.0	100.0	

**Charges in transaction in my bank is better than that of other banks**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	8	3.7	3.7	3.7

Disagree	21	9.7	9.7	13.4
Indifferent	70	32.3	32.3	45.6
Agree	78	35.9	35.9	81.6
Strongly Agree	40	18.4	18.4	100.0
Total	217	100.0	100.0	

**Efficiency of my bank's ATM, POS e.t.c is not in doubt**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	6	2.8	2.8	2.8
Disagree	15	6.9	6.9	9.7
Indifferent	39	18.0	18.0	27.6
Valid Agree	110	50.7	50.7	78.3
Strongly Agree	47	21.7	21.7	100.0
Total	217	100.0	100.0	

**I am often charged by my bank even when ATM fails to dispense cash**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	19	8.8	8.8	8.8
Disagree	66	30.4	30.4	39.2
Indifferent	47	21.7	21.7	60.8
Valid Agree	57	26.3	26.3	87.1
Strongly Agree	28	12.9	12.9	100.0
Total	217	100.0	100.0	

**The value for services i got from patronising my bank is worthwhile**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	6	2.8	2.8	2.8
Disagree	19	8.8	8.8	11.5

Indifferent	35	16.1	16.1	27.6
Agree	107	49.3	49.3	77.0
Strongly Agree	50	23.0	23.0	100.0
Total	217	100.0	100.0	

**Accessibility of my bank's ATM and other delivery channels is strategic**

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	14	6.5	6.5	6.5
Indifferent	32	14.7	14.7	21.2
Valid Agree	120	55.3	55.3	76.5
Strongly Agree	51	23.5	23.5	100.0
Total	217	100.0	100.0	

**I am not supposed to be charged for using ATM**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	5	2.3	2.3	2.3
Disagree	18	8.3	8.3	10.6
Valid Indifferent	18	8.3	8.3	18.9
Agree	64	29.5	29.5	48.4
Strongly Agree	112	51.6	51.6	100.0
Total	217	100.0	100.0	

**Customer knowledge of e-banking products is little**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	5	2.3	2.3	2.3
Disagree	12	5.5	5.5	7.8
Valid Indifferent	28	12.9	12.9	20.7
Agree	120	55.3	55.3	76.0
Strongly Agree	52	24.0	24.0	100.0
Total	217	100.0	100.0	

**My bank adopt different product packaging in my bank is more unique than that of other banks**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	3	1.4	1.4	1.4

Disagree	11	5.1	5.1	6.5
Indifferent	54	24.9	24.9	31.3
Agree	83	38.2	38.2	69.6
Strongly Agree	66	30.4	30.4	100.0
Total	217	100.0	100.0	

**I am willing to dump e- banking operations in my bank for same in another bank**

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Uncertain	47	21.7	21.7	21.7
Uncertain	72	33.2	33.2	54.8
Average	53	24.4	24.4	79.3
Certain	30	13.8	13.8	93.1
Very Certain	15	6.9	6.9	100.0
Total	217	100.0	100.0	

**I am willing to stop the use of ATM for e- banking operation**

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Uncertain	67	30.9	30.9	30.9
Uncertain	57	26.3	26.3	57.1
Average	48	22.1	22.1	79.3
Certain	36	16.6	16.6	95.9
Very Certain	9	4.1	4.1	100.0
Total	217	100.0	100.0	

**I am willing to stop the use of POS for e-banking transaction**

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Uncertain	57	26.3	26.3	26.3
Uncertain	67	30.9	30.9	57.1
Average	45	20.7	20.7	77.9
Certain	27	12.4	12.4	90.3
Very Certain	21	9.7	9.7	100.0
Total	217	100.0	100.0	

**I am willing to stop the use of Mobile banking for e- banking operation**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Very Uncertain	59	27.2	27.2	27.2
Uncertain	57	26.3	26.3	53.5
Average	47	21.7	21.7	75.1
Certain	35	16.1	16.1	91.2
Very Certain	19	8.8	8.8	100.0
Total	217	100.0	100.0	

**I am willing to stop the use of Electronic fund transfer for e- banking operation**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Very Uncertain	54	24.9	24.9	24.9
Uncertain	49	22.6	22.6	47.5
Average	58	26.7	26.7	74.2
Certain	32	14.7	14.7	88.9
Very Certain	24	11.1	11.1	100.0
Total	217	100.0	100.0	

**I am willing to stop the use of Telephone banking for e- banking operation**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Very Uncertain	48	22.1	22.1	22.1
Uncertain	57	26.3	26.3	48.4
Average	48	22.1	22.1	70.5
Certain	33	15.2	15.2	85.7
Very Certain	31	14.3	14.3	100.0
Total	217	100.0	100.0	

**Gender**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	105	48.4	48.4	48.4
Female	112	51.6	51.6	100.0
Total	217	100.0	100.0	

**Marital Status**

	Frequency	Percent	Valid Percent	Cumulative Percent
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	Single	137	63.1	63.1	63.1
Valid	Married	80	36.9	36.9	100.0
	Total	217	100.0	100.0	

#### Age

		Frequency	Percent	Valid Percent	Cumulative Percent
	Less than 18	12	5.5	5.5	5.5
	18 - 30	121	55.8	55.8	61.3
Valid	31 - 43	39	18.0	18.0	79.3
	41 - 56	22	10.1	10.1	89.4
	57 and Above	23	10.6	10.6	100.0
	Total	217	100.0	100.0	

#### Religion

		Frequency	Percent	Valid Percent	Cumulative Percent
	Islam	36	16.6	16.6	16.6
Valid	Christian	180	82.9	82.9	99.5
	None	1	.5	.5	100.0
	Total	217	100.0	100.0	

#### Place of Residence

		Frequency	Percent	Valid Percent	Cumulative Percent
		1	.5	.5	.5
	Agbara	1	.5	.5	.9
	Ajgunle/ Mile 2	1	.5	.5	1.4
	Akute	3	1.4	1.4	2.8
	alagbado	1	.5	.5	3.2
	alimosho	1	.5	.5	3.7
Valid	Arepo	1	.5	.5	4.1
	dopemu road	1	.5	.5	4.6
	Festac/ Satelite Town	12	5.5	5.5	10.1
	Gbagada	1	.5	.5	10.6
	ifo	1	.5	.5	11.1
	iju,ogun statte	1	.5	.5	11.5
	Ikeja	3	1.4	1.4	12.9
	ikorodu	1	.5	.5	13.4

ikotun	1	.5	.5	13.8
Ketu/ Ikorodu	27	12.4	12.4	26.3
kosofe	2	.9	.9	27.2
Lekki / Ajah	24	11.1	11.1	38.2
magodo	2	.9	.9	39.2
Magodo phase 1	1	.5	.5	39.6
Mushin/ Isolo	22	10.1	10.1	49.8
ogba	1	.5	.5	50.2
Ogudu	1	.5	.5	50.7
omole	1	.5	.5	51.2
Oshodi/ Ipaja	24	11.1	11.1	62.2
Others	10	4.6	4.6	66.8
Somolu/ Bariga	25	11.5	11.5	78.3
Surulere/ Yaba/ Ebute metta	46	21.2	21.2	99.5
Victoria Island	1	.5	.5	100.0
Total	217	100.0	100.0	

#### Occupation

	Frequency	Percent	Valid Percent	Cumulative Percent
Civil/ Public servant	55	25.3	25.3	25.3
Private Sector Employee	46	21.2	21.2	46.5
Valid Self Employed	47	21.7	21.7	68.2
Student	69	31.8	31.8	100.0
Total	217	100.0	100.0	

#### Range of Monthly Income

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Below N50,000	55	25.3	25.3	25.3

N50,000 - N100,000	21	9.7	9.7	35.0
N100,000- N200,000	64	29.5	29.5	64.5
N200,000- N300,000	56	25.8	25.8	90.3
N300,000- N400,000	19	8.8	8.8	99.1
Above N400,000	2	.9	.9	100.0
Total	217	100.0	100.0	

#### Educational Status

	Frequency	Percent	Valid Percent	Cumulative Percent
B.engk	1	.5	.5	.5
B.SC IN VIEW	1	.5	.5	.9
B.Sc/ HND	117	53.9	53.9	54.8
First School Leaving Cert.	10	4.6	4.6	59.4
M.Sc/ MBA	51	23.5	23.5	82.9
Valid OND/ NCE	12	5.5	5.5	88.5
Ph.D	9	4.1	4.1	92.6
SSCE	14	6.5	6.5	99.1
Student	1	.5	.5	99.5
undergraduate	1	.5	.5	100.0
Total	217	100.0	100.0	

## Descriptives

### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
The speed of e- banking transactions is commendable	217	2.00	5.00	4.3410	.62644
It is easy to use e-banking delivery channels i.e ATM,POS,Phone banking etc]	217	1.00	5.00	4.3871	.74375
The banking website makes it easy for me to find what i am looking for]	217	1.00	5.00	4.0461	.82647
There is minimal breakdown of machine in e-banking operations	217	1.00	5.00	3.5899	.98718
There is immediate and quick transaction with e-banking	217	2.00	5.00	4.1521	.75762
Bank account of customers are protected from fraudsters	217	2.00	5.00	4.0138	.84151
Location of e-banking delivery channels are well lit at night	217	1.00	5.00	3.8618	.83292
Banks safeguard of customer's financial information is guaranteed	217	1.00	5.00	4.1290	.87238
The bank's delivery channels i.e ATM,POS, are always available for business	217	1.00	5.00	3.8756	1.04003
The systems used up to date hardly crash thereby distorting transaction	217	1.00	5.00	3.4286	.95535
My bank use up to date equipments for e-banking transactions	217	1.00	5.00	4.0276	.88148
There is full branch computerization of e-banking transactions in my bank	217	1.00	4.00	2.8157	1.36529
The bank's website is truthful about its products/offerings	217	1.00	5.00	3.9770	.85224
The behavior of employees instill confidence in customers	217	1.00	5.00	3.8433	.89926
My bank offers varieties of product/services	217	2.00	5.00	4.2765	.65053
E-banking transactions are always accurate	217	1.00	5.00	3.8111	.91604

When customer has a problem, employees show sincere interest in solving the problem	217	1.00	5.00	3.8479	.96701
Employees make information easily accessible to customers	217	2.00	5.00	3.9862	.81354
Employees commitment towards delivery of high quality service in my choice of bank is guaranteed	217	1.00	5.00	3.9309	.89743
Bank employees are always willing to respond to customers' requests	217	1.00	5.00	3.9355	.85823
E-banking services are often times dependable	217	1.00	5.00	4.0691	.75756
Service charge in my bank does not apply to unsuccessful e-banking transactions	217	1.00	5.00	3.7650	.91544
My account balance is quickly reverted when wrongly debited for incomplete transaction	217	1.00	5.00	3.5622	1.16152
Confirmatory e-mails or text messages are sent to me after each transaction	217	1.00	5.00	4.3364	.76510
The Personal Identification Number(PIN) of my credit/debit card is known to me alone	217	1.00	5.00	4.4194	.80748
My bank keeps confidential information about me away from others	217	1.00	5.00	4.4101	.71524
My bank is up to date on its duty of secrecy to me as a customer	217	1.00	5.00	4.3594	.70699
Banks always safeguard customers financial information	217	1.00	5.00	4.2903	.80711
E-banking transaction cannot be interrupted or tampered with	217	1.00	5.00	3.4516	1.15819
My level of education affects my perception of e-banking usage	217	1.00	5.00	3.8341	1.15876
Level of my knowledge of e-banking affect my decision to use e-banking	217	1.00	5.00	3.9263	1.04266

Age/ lifestyle often influence customers' use of e-banking channels	217	1.00	5.00	4.1290	.87767
My personality often influence my decision to use e- banking channels	217	1.00	5.00	3.8618	.99966
My occupational status often encourage me to use e- banking channels i.e ATM, POS, Money banking etc	217	1.00	5.00	4.1382	.94735
Communication received from customer care unit is always up to date	217	1.00	5.00	3.9724	.82168
Customer service of my bank is commendable	217	1.00	5.00	3.9631	.84356
Charges in transaction in my bank is better than that of other banks	217	1.00	5.00	3.5576	1.01728
Efficiency of my bank's ATM, POS e.t.c is not in doubt	217	1.00	5.00	3.8157	.94435
I am often charged by my bank even when ATM fails to dispense cash	217	1.00	5.00	3.0415	1.19920
The value for services i got from patronising my bank is worthwhile	217	1.00	5.00	3.8111	.97954
Accessibility of my bank's ATM and other delivery channels is strategic	217	2.00	5.00	3.9585	.80112
I am not supposed to be charged for using ATM	217	1.00	5.00	4.1982	1.05075
Customer knowledge of e-banking products is little	217	1.00	5.00	3.9309	.89226
My bank adopt different product packaging in my bank is more unique than that of other banks	217	1.00	5.00	3.9124	.93625
I am willing to dump e- banking operations in my bank for same in another bank	217	1.00	5.00	2.5115	1.17501
I am willing to stop the use of ATM for e- banking operation	217	1.00	5.00	2.3687	1.19897
I am willing to stop the use of POS for e-banking transaction	217	1.00	5.00	2.4839	1.26965

I am willing to stop the use of Mobile banking for e- banking operation	217	1.00	5.00	2.5300	1.28390
I am willing to stop the use of Electronic fund transfer for e- banking operation	217	1.00	5.00	2.6452	1.30113
I am willing to stop the use of Telephone banking for e- banking operation	217	1.00	5.00	2.7327	1.34457
Gender	217	1.00	2.00	1.5161	.50090
Marital Status	217	1.00	2.00	1.3687	.48356
Age	217	1.00	5.00	2.6452	1.08798
Religion	217	1.00	3.00	1.8387	.38100
Occupation	217	1.00	4.00	2.5991	1.17875
Range of Monthly Income	217	1.00	6.00	2.8571	1.33779
Valid N (listwise)	217				

## Frequencies

### Notes

		Statistics						
		Efficiency	Security	SystemAvailability	Fulfilment	EmployeeCoutersy	Reliability	Privacy
N	Valid	217	217	217	217	217	217	2
	Missing	0	0	0	0	0	0	
Mean		4.1032	4.0015	3.5369	3.9770	3.9251	3.9332	4.18

## Frequency Table

		Efficiency			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.60	4	1.8	1.8	1.8
	2.80	2	.9	.9	2.8
	3.00	3	1.4	1.4	4.1
	3.20	9	4.1	4.1	8.3
	3.40	10	4.6	4.6	12.9
	3.60	15	6.9	6.9	19.8
	3.80	24	11.1	11.1	30.9

4.00	40	18.4	18.4	49.3
4.20	27	12.4	12.4	61.8
4.40	25	11.5	11.5	73.3
4.60	34	15.7	15.7	88.9
4.80	12	5.5	5.5	94.5
5.00	12	5.5	5.5	100.0
Total	217	100.0	100.0	

#### Security

	Frequency	Percent	Valid Percent	Cumulative Percent
1.67	1	.5	.5	.5
2.00	4	1.8	1.8	2.3
2.33	5	2.3	2.3	4.6
2.67	6	2.8	2.8	7.4
3.00	5	2.3	2.3	9.7
3.33	15	6.9	6.9	16.6
3.67	31	14.3	14.3	30.9
4.00	61	28.1	28.1	59.0
4.33	34	15.7	15.7	74.7
4.67	42	19.4	19.4	94.0
5.00	13	6.0	6.0	100.0
Total	217	100.0	100.0	

#### SystemAvailability

	Frequency	Percent	Valid Percent	Cumulative Percent
1.50	2	.9	.9	.9
2.00	5	2.3	2.3	3.2
2.25	2	.9	.9	4.1
2.50	6	2.8	2.8	6.9
2.75	9	4.1	4.1	11.1
3.00	20	9.2	9.2	20.3
3.25	26	12.0	12.0	32.3
3.50	39	18.0	18.0	50.2

3.75	46	21.2	21.2	71.4
4.00	35	16.1	16.1	87.6
4.25	19	8.8	8.8	96.3
4.50	8	3.7	3.7	100.0
Total	217	100.0	100.0	

#### Fulfilment

	Frequency	Percent	Valid Percent	Cumulative Percent
2.00	1	.5	.5	.5
2.25	1	.5	.5	.9
2.50	1	.5	.5	1.4
2.75	7	3.2	3.2	4.6
3.00	13	6.0	6.0	10.6
3.25	13	6.0	6.0	16.6
3.50	21	9.7	9.7	26.3
3.75	24	11.1	11.1	37.3
4.00	45	20.7	20.7	58.1
4.25	31	14.3	14.3	72.4
4.50	28	12.9	12.9	85.3
4.75	22	10.1	10.1	95.4
5.00	10	4.6	4.6	100.0
Total	217	100.0	100.0	

#### EmployeeCoutersy

	Frequency	Percent	Valid Percent	Cumulative Percent
1.75	2	.9	.9	.9
2.00	4	1.8	1.8	2.8
2.50	6	2.8	2.8	5.5
2.75	5	2.3	2.3	7.8
3.00	14	6.5	6.5	14.3
3.25	14	6.5	6.5	20.7
3.50	18	8.3	8.3	29.0
3.75	24	11.1	11.1	40.1

4.00	53	24.4	24.4	64.5
4.25	14	6.5	6.5	71.0
4.50	21	9.7	9.7	80.6
4.75	20	9.2	9.2	89.9
5.00	22	10.1	10.1	100.0
Total	217	100.0	100.0	

#### Reliability

	Frequency	Percent	Valid Percent	Cumulative Percent
2.00	3	1.4	1.4	1.4
2.25	2	.9	.9	2.3
2.50	2	.9	.9	3.2
2.75	3	1.4	1.4	4.6
3.00	11	5.1	5.1	9.7
3.25	11	5.1	5.1	14.7
3.50	29	13.4	13.4	28.1
3.75	29	13.4	13.4	41.5
4.00	43	19.8	19.8	61.3
4.25	32	14.7	14.7	76.0
4.50	24	11.1	11.1	87.1
4.75	21	9.7	9.7	96.8
5.00	7	3.2	3.2	100.0
Total	217	100.0	100.0	

#### Privacy

	Frequency	Percent	Valid Percent	Cumulative Percent
1.80	1	.5	.5	.5
2.00	1	.5	.5	.9
2.60	1	.5	.5	1.4
2.80	2	.9	.9	2.3
3.00	7	3.2	3.2	5.5
3.20	5	2.3	2.3	7.8
3.40	7	3.2	3.2	11.1

3.60	21	9.7	9.7	20.7
3.80	26	12.0	12.0	32.7
4.00	26	12.0	12.0	44.7
4.20	17	7.8	7.8	52.5
4.40	21	9.7	9.7	62.2
4.60	28	12.9	12.9	75.1
4.80	27	12.4	12.4	87.6
5.00	27	12.4	12.4	100.0
Total	217	100.0	100.0	

**PersonalFactor**

	Frequency	Percent	Valid Percent	Cumulative Percent
1.60	2	.9	.9	.9
2.20	1	.5	.5	1.4
2.40	3	1.4	1.4	2.8
2.60	6	2.8	2.8	5.5
2.80	14	6.5	6.5	12.0
3.00	10	4.6	4.6	16.6
3.20	8	3.7	3.7	20.3
3.40	7	3.2	3.2	23.5
Valid 3.60	14	6.5	6.5	30.0
3.80	18	8.3	8.3	38.2
4.00	33	15.2	15.2	53.5
4.20	17	7.8	7.8	61.3
4.40	22	10.1	10.1	71.4
4.60	21	9.7	9.7	81.1
4.80	21	9.7	9.7	90.8
5.00	20	9.2	9.2	100.0
Total	217	100.0	100.0	

**CustomerSatisfaction**

	Frequency	Percent	Valid Percent	Cumulative Percent
2.10	1	.5	.5	.5
2.40	2	.9	.9	1.4
2.60	1	.5	.5	1.8
2.70	2	.9	.9	2.8
2.80	2	.9	.9	3.7
2.90	4	1.8	1.8	5.5
3.00	1	.5	.5	6.0
3.10	9	4.1	4.1	10.1
3.20	9	4.1	4.1	14.3
3.30	6	2.8	2.8	17.1
3.40	17	7.8	7.8	24.9
3.50	17	7.8	7.8	32.7
3.60	14	6.5	6.5	39.2
Valid 3.70	14	6.5	6.5	45.6
3.80	17	7.8	7.8	53.5
3.90	12	5.5	5.5	59.0
4.00	19	8.8	8.8	67.7
4.10	15	6.9	6.9	74.7
4.20	8	3.7	3.7	78.3
4.30	6	2.8	2.8	81.1
4.40	8	3.7	3.7	84.8
4.50	9	4.1	4.1	88.9
4.60	10	4.6	4.6	93.5
4.70	6	2.8	2.8	96.3
4.80	5	2.3	2.3	98.6
4.90	2	.9	.9	99.5
5.00	1	.5	.5	100.0
Total	217	100.0	100.0	

**CustomerAttrition**

	Frequency	Percent	Valid Percent	Cumulative Percent
1.00	20	9.2	9.2	9.2
1.17	11	5.1	5.1	14.3
1.33	8	3.7	3.7	18.0
1.50	4	1.8	1.8	19.8
1.67	12	5.5	5.5	25.3
1.83	11	5.1	5.1	30.4
2.00	16	7.4	7.4	37.8
2.17	16	7.4	7.4	45.2
2.33	12	5.5	5.5	50.7
2.50	15	6.9	6.9	57.6
2.67	7	3.2	3.2	60.8
2.83	3	1.4	1.4	62.2
3.00	23	10.6	10.6	72.8
3.17	7	3.2	3.2	76.0
3.33	6	2.8	2.8	78.8
3.50	1	.5	.5	79.3
3.67	5	2.3	2.3	81.6
3.83	10	4.6	4.6	86.2
4.00	7	3.2	3.2	89.4
4.17	6	2.8	2.8	92.2
4.33	3	1.4	1.4	93.5
4.50	5	2.3	2.3	95.9
4.67	4	1.8	1.8	97.7
4.83	1	.5	.5	98.2
5.00	4	1.8	1.8	100.0
Total	217	100.0	100.0	

## T-TEST

**One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
Efficiency	217	4.1032	.53198	.03611
Security	217	4.0015	.66859	.04539
SystemAvailability	217	3.5369	.56960	.03867
Fulfilment	217	3.9770	.60289	.04093
EmployeeCoutersy	217	3.9251	.72479	.04920
Reliability	217	3.9332	.60632	.04116
Privacy	217	4.1862	.61493	.04174
PersonalFactor	217	3.9779	.74552	.05061
CustomerSatisfaction	217	3.8161	.54012	.03667
CustomerAttrition	217	2.5453	1.07409	.07291

**One-Sample Test**

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Efficiency	30.549	216	.000	1.10323	1.0320	1.1745
Security	22.067	216	.000	1.00154	.9121	1.0909
SystemAvailability	13.884	216	.000	.53687	.4607	.6130
Fulfilment	23.871	216	.000	.97696	.8963	1.0576
EmployeeCoutersy	18.802	216	.000	.92512	.8281	1.0221
Reliability	22.672	216	.000	.93318	.8521	1.0142
Privacy	28.415	216	.000	1.18618	1.1039	1.2684
PersonalFactor	19.322	216	.000	.97788	.8781	1.0776
CustomerSatisfaction	22.259	216	.000	.81613	.7439	.8883
CustomerAttrition	-6.236	216	.000	-.45469	-.5984	-.3109

