

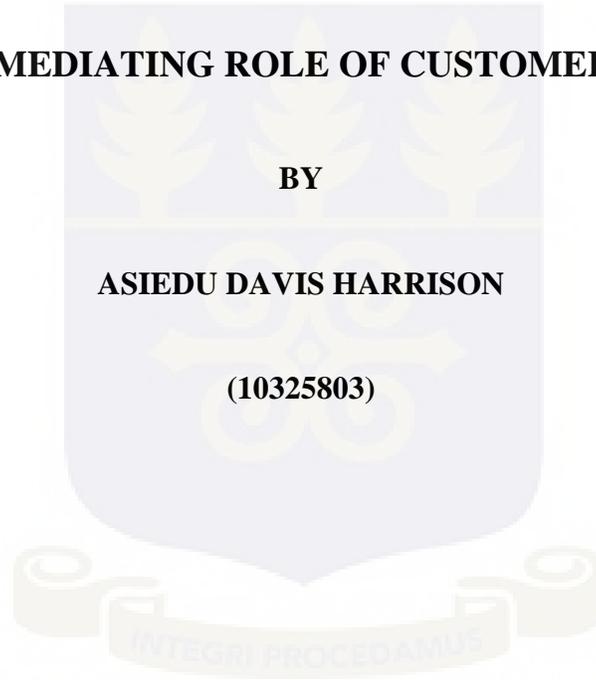
UNIVERSITY OF GHANA

**INTERNET BRAKING SERVICE QUALITY AND CUSTOMER
LOYALTY: THE MEDIATING ROLE OF CUSTOMER SATISFACTION**

BY

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**THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN
PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MPhil
MARKETING DEGREE**

JUNE, 2016

DECLARATION

I hereby declare that, this thesis is the result of my own research and has not been presented by anyone for any academic award in this or any other University. All references used in this work have been fully acknowledged.



CERTIFICATION

I hereby certify that this thesis was supervised in accordance with procedures laid down by University of Ghana, Legon.

.....	
PROF. BEDMAN NARTEH (PRINCIPAL SUPERVISOR)		DATE
.....	
DR. MAHAMA BRAIMAH (CO-SUPERVISOR)		DATE

DEDICATION

This work is dedicated to a number of important personalities whose contribution to my life have been immense. First and foremost, I dedicate this work to my wife Mary who has supported me through thick and thin and also encouraging me to be the best that I could ever be. Secondly, to Dr. Braimah Mahamah who prompted and guided me to apply for the MPhil programme and has been a constant source of encouragement. Last but not the least, I dedicate this work to my supervisor and boss, Prof. Bedman Narteh for believing in me and giving me the opportunity to learn under his feet. I dedicate this work to all of you and hope to continue to make you all proud in the coming years.



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ABSTRACT

Competition in the Ghanaian banking industry is at an all-time high for various reasons. Chief amongst these reasons is the deregulation and reforms the industry witnessed at the tail end of the 20th century. This has resulted in the influx of foreign banks which are mostly multinational, and who possess a financial clout that cannot be rivaled by most local banks. The heightened competition has paved the way for the introduction of many innovations such as electronic banking. Even though the introduction of internet banking by banks in Ghana has resulted in flexibility of banking operations, it still remains unclear how the application of Internet banking service quality impact customer loyalty. There has also been a general observations that quality service lead to customer loyalty. On this premise, the current study therefore explores the relationship between internet banking service quality and customer loyalty, and further assess the mediating role of customer satisfaction on the relationship. A positivist research paradigm was adopted together with a survey strategy. A quantitative approach was also adopted and questionnaires were utilized as the data collection instrument in this study. Items used in the questionnaire were developed from existing scales. Data was conveniently gathered from 420 bank customers in Accra who are actively using internet banking service. Out of this, the process of data screening and cleaning yielded 368 usable questionnaires which were coded using the Statistical Package for Social Sciences (SPSS). The data was analysed using Structural Equation Modelling (SEM), where the two-stage approach was used in assessing the measurement model and structural model. The study conceptualized Internet banking service quality as a construct consisting of six dimensions namely Efficient and Reliable Service, Fulfillment, Security/Trust, Site Aesthetics, Responsiveness/Contact and Ease of Use (Zavareh et al., 2012). The results of the analysis indicated that there is a direct and positive relationship between Internet banking service quality and customer loyalty. However the analysis revealed that customer satisfaction partially mediates the relations between Internet banking service quality and customer loyalty. Thus Internet banking service quality does result in customer loyalty via customer satisfaction, implying that when banks direct their Internet banking service efforts towards the creation of customer satisfaction, the outcome of customer loyalty can be achieved. As a result of the findings of this study, it is recommended that managers of banks in trying to have loyal customers should design the internet banking service to enhance customer's satisfaction taking into consideration all the dimensions of IBSQ.

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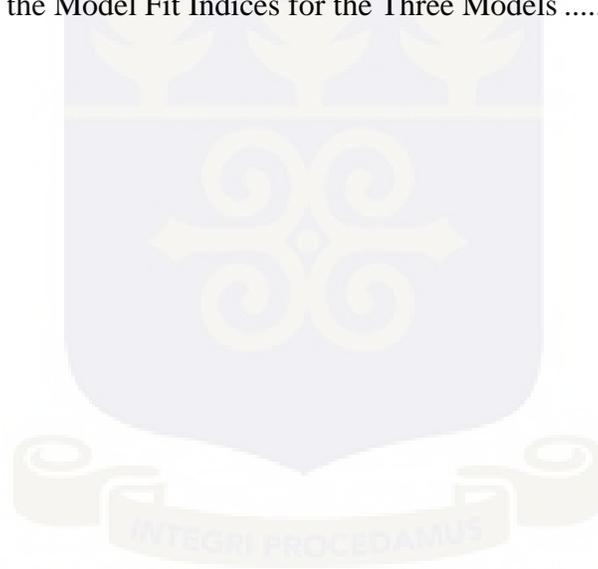
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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Information Communication Technology (ICT) is completely revolutionizing the approach by which business is conducted in virtually every industry (Carlson and O’Cass, 2010; Zavareh et al., 2012). One of the sectors that has been affected the most by technological advancement is the service industry. Accordingly, providers of these services have found alternative means of delivering services to customers. The use of electronic channels to communicate, sell and deliver services to customers has been one of the most profitable ways of doing business.

With the rapid growth and the extensive adoption of the internet by consumers, service quality through electronic platforms for electronic commerce has become one of the most critical issues for marketers in the service sector (Zeithamal et al., 2002). Attention is therefore increasingly been shifted from conventional marketing to electronic marketing where an information-rich website is established to deliver high quality electronic service (E-service) that will attract, satisfy and retain customers (Trocchia and Janda, 2003). Managers of firms that apply technology in their operations are now being challenged to ensure high quality in their electronic service (Heim and Field, 2007) E-service quality has therefore become very crucial in the determination of the success or failure of electronic commerce application.

The banking sector has witnessed a lot of competition in the last couple of years due to forces such as globalization, deregulation, changing of government legislation and information technology (Blankson et al., 2009). In order for banks to succeed in this stiff competitive environment, service providers in the industry have acknowledged the importance of improving service quality to excite if not satisfy customers. It has been argued by various scholars that such satisfaction of customers of the service will lead to trust which will eventually result in customer loyalty (Hur et al., 2010)

There seems to be a gradual shift from the traditional ways in which banks embark on their service delivery partly due to the advent of information communication technology. This has led to the proliferation of electronic-based banking products as substitutes for steering banking

services to customers (Narteh, 2012; Anabila et al., 2012). Electronic banking (E-banking) has transformed commercial banking services in recent times by closing geographical, industrial and regulatory gaps as well as creating ground-breaking products and services and more market opportunities for both banks and customers (Liao and Cheung, 2002; cited in Narteh, 2012). Benefits such as lower cost, wider reach, higher competitiveness and generation of higher long-term profits as a result of the application of E-banking in the banking sector has been acknowledged by the extant literature (Polatoglu and Ekin, 2001; Rotchanakitumnuai and Speece, 2003; Shah and Siddiqui, 2006).

1.2 PROBLEM STATEMENT/RESEARCH GAP

All banks according to Dobni (2002) have a common goal- to beat their competitors in the delivery of quality services, to satisfy their customers and also acquire new ones in a bid to get as much market share as possible. This has produced an environment characterized by keen competition among and between the various banks. The scenario portrayed above suitably describes the situation in the banking industry in Ghana which has seen the proliferation of both foreign and local banks like ECOBANK, GCB, Fidelity Bank, Stanbic Bank, adb and many others.

Competition in the banking industry is at an all-time high for various reasons of which foremost among them is the deregulation and reforms the industry witnessed at the tail end of the 20th century (Hinson et al. 2011). This has resulted in the influx of foreign banks which are mostly multinational and possess a financial clout that cannot be rivaled by most local banks.

Fang et al (2012) posit that leading banks do their best to encourage additional purchases from their loyal customers, whereas late starters struggle to reduce the switching rate and block customers out of the leaders. Since improved customer loyalty results in favorable behaviors like positive word-of-mouth campaign, customer's repurchasing and cross-selling (Hur et al., 2010; Stokburger-Sauer, 2010), banks direct all their effort towards enhancing customer loyalty.

In the bid to win the customer loyalty 'war' coupled with the advent of ICT, banks all over the world have developed and implemented a wide variety of E-banking channels such as internet

banking, ATM, internet transaction, mobile banking, telephone banking and electronic transfer of funds (Narteh, 2012) in the delivery of their services to customers. Given that most of these e-banking channels especially internet banking is being adopted by almost all the major commercial banks in Ghana, one would have wished to know the relationship between internet banking and customer loyalty. It is however unfortunate that literature is almost silent on such relationship especially in the context of Sub-Saharan Africa.

Although some studies have been conducted on the relationship between Internet banking and customer loyalty, a cursory assessment of these studies reveals that almost all of them were conducted in the advanced countries (Zavareh et al, 2012; Hanafizadeh et al., 2014; Adam and Marcet 2011). Zavareh et al, (2012) explored Internet banking quality dimensions and their effects on E-customer satisfaction. The study assessed the use of E-SERVQUAL scale to construct E-Service Quality (E-SQ) for internet banking services. In the analysis of the result of the study, the researchers indicated that six dimensions namely, efficient and reliable services, fulfillment, security/trust, site aesthetics, responsiveness/contact, and ease of use constituted E-SQ dimensions for internet banking services in the Iranian banking industry. The authors in conclusion pointed out that the dimensions identified for E-SQ in the Iranian banking industry were identical with what had been observed in other developed countries like USA, Hong Kong, Taiwan, Sweden and UK. They therefore recommended that the identified dimensions be tested in the developing countries. Adam and Marcet (2011) also investigated the non-linear effects of Internet banking quality dimensions on customer satisfaction. The study identified download speed as a must-be performance dimension that interacts negatively with site functionality as the only non-linearity for online retailers. However the authors of the study admitted that instead of investigating the relationships between attributes of E-service quality and customer satisfaction for online retailers, the research focused on the relationships for pre-transaction satisfaction when shopping on their websites and thus the substantive results do not address final satisfaction, which also reflects fulfillment issues (Posselt and Gerstner, 2005; Chakraborty & Mazumdar, 2014).

Generally, it is believed that, Internet banking service quality has brought about a positive shift in customers satisfaction and as a result helping to build and maintain long term customer relationship in the banking sector (Rotchanakitumnuai and Speece, 2003; Shah and Siddiqui,

2006) but could this be true about Ghana? Again, much attention has not been given to the subject matter resulting in the lack of empirical research on the impact of Internet banking service quality on customer loyalty in Ghana, and it is this gap in literature that the current study seeks to bridge.

A further review of literature indicates that most studies on Internet banking service quality were also descriptive and exploratory (Heidari, Mousakhani, and Rashidi, 2014; Gera, 2011; Chao et al, 2014; Hsin and Wang2011) which makes it imperative for further studies to either confirm or refute their findings. Gera, (2011) and Chao, (2014) for instance proposed that other studies on the impact of Internet banking service on customer satisfaction be conducted using wider samples of customers and in other context preferably in the developing economies which have relatively less technology development and will represent a greater diversity of nationalities in the online banking context. Kim, (2010) also asserted that the importance of E-service quality to the customer may be dependent on the type of business (Heim and field, 2007) and hence the findings of their study which was done in the public sector may not be applicable to other sectors. The authors therefore recommended that further research be carried in other sectors like the banking industry using a more robust analyses and a relatively larger sample size.

In the Ghanaian context, sparse research has been conducted in that regard. Internet banking: an initial look at Ghanaian bank (Woldie et al., 2008) focused on client-bank relationship and how internet adoption may improve qualitative relationship between banks and firms in Ghana. “Challenges of marketing E-banking services in a developing country” by Narteh, (2012) provided a conceptual framework for investigating challenges banks face in marketing E-banking services in Ghana and not the impact of Internet Banking quality on customer satisfaction and loyalty. Again Narteh, (2013) concentrated on the dimensions of Automated Teller Machine (ATM) which is an aspect of electronic banking channels leaving the other aspects – internet banking and telephone banking to be tackled by future research work. Challenges and barriers in adopting internet banking at a major bank in Ghana (Ofori-Dwumfuo and Dankwah, 2013), discussed the benefits and challenges of one bank and not the customers, and also the determinants of mobile banking adoption among bank customers in Ghana. Other studies by researchers like Cudjoe, Anim and Nyanyofio, (2015) and Daniel et al., (2013) deliberated on issues like factors that influence the adoption of online banking in Ghana. It can

therefore be acknowledged that some work has been done in the area but not so much to conclusively come out with the collaboration between Internet banking service quality and customer loyalty in the Ghanaian context .

Notwithstanding the enormous efforts put in by all these researchers, no conclusive study exist which vigorously examines the direct impact of Internet banking quality on customer loyalty in Ghana. This leaves a yawning gap in literature which this study seeks to fill. Additionally, as a result of how customers are becoming sophisticated in recent times, providers of banking services have also adopted the use of electronic channels to communicate, sell and deliver services to these customers. It has therefore become imperative to determine the effect of Internet banking service quality on customer loyalty, and further assess the mediating role of customer satisfaction.

Furthermore, it has empirically been proven that quality service in the off-line setting leads to customer satisfaction which eventually results in brand loyalty (Anabila, Narteh and Tweneboah-Kodu, 2012; Kim, 2013; Huang et al, 2014; Laszlo, 2015; Ran, 2015; Deghan and Haghghi 2015). However, there is sparse literature on the impact of internet banking service quality on customer satisfaction and eventually customer loyalty in Ghana.

The current study seeks to explore the relationship between internet banking service quality and customer loyalty, and further assess the mediating role of customer satisfaction in the relationship.

1.3 OBJECTIVES OF THE STUDY

In view of the research gap identified in the problem statement, this study seeks to explore the following objectives:

1. To ascertain the dimensions of internet banking service.
2. To examine the direct relationship between Internet banking service quality and customer loyalty.
3. To determine the mediating effect of customer satisfaction on internet banking service quality and customer loyalty in the Ghanaian banking industry.

1.4 RESEARCH QUESTIONS

In an effort to accomplish the research objectives stated above, the following research questions are posed:

1. What are the dimensions of internet banking quality?
2. Does internet banking quality directly result in customer loyalty?
3. How does customer satisfaction mediate the relationship between internet banking quality and customer loyalty?

1.5 SIGNIFICANCE OF THE STUDY

The adoption of Internet banking by banks in Ghana has been one of the major strategies that managers of these banks have used to attract and retain customers. Many banks have invested a huge chunk of their resources in the development of Internet banking to help serve their customers better. Internet banking indeed offers many benefits to banks. However, it is a common belief that for a bank to succeed in its undertakings, most programs if not all adopted by these banks must create an outcome of customer loyalty which will eventually reduce the rate of defection and rather increase rate of retention. This study when completed will therefore be significant because it will offer an inimitable view on how precisely Internet banking service quality leads to customer loyalty in the Ghanaian banking industry and further explain the mediating role of customer satisfaction in the relationship. The findings of this study will be relevant for scholars as well as industry practitioners. Below are some factors that highlight the significance of this study:

- **Contribution to Academia**

This thesis will contribute to academia by closing the knowledge and context gap on Internet banking service quality and customer loyalty from a developing country perspective specifically Ghana. The study, to the best of our knowledge is the first from a Ghanaian perspective that specifically examines Internet banking service quality and customer loyalty in the Ghanaian banking industry, and as a result, it would be a significant contribution to literature and

academia. The study will also serve as a reference point for future research on the research topic or similar research topics. It is worth mentioning that this thesis can also be used as a source document that can also engender debate and stimulate further discussions on the issue of customer satisfaction as a mediator between Internet banking service quality and customer loyalty.

- **Contribution to Industry**

In the wake of increased competition and technological sophistication and advancement, this study will be a welcome relief to industry practitioners and marketers in the banking industry in Ghana as it would inform them on specific Internet banking service quality dimensions to be developed in order to reduce customer churn but rather increase customer retention and loyalty rates. The study will further enable managers of banks to gauge the intuitive relationship between Internet banking service quality and customer loyalty and have a richer diagnostic perspective of their customer attrition with the resultant effect of working towards having more loyal customers. Furthermore, information on the relationship between Internet banking service quality and customer loyalty may provide actionable benchmarks that individual banks may use to guide their service policies to aim at securing customer loyalty.

1.6 SCOPE AND LIMITATIONS OF THE STUDY

The focus of this thesis was on Internet banking service quality and customer loyalty in the Ghanaian banking industry. The study sought to discover how specifically customer satisfaction emanating from Internet banking service quality results in customer loyalty in the Ghanaian banking industry. Banks are spread all over the country and due to certain limitations and constraints it would be practically impossible to gather data from all the regions of Ghana, therefore the study was concentrated in Accra.

The study was constrained by factors such as time and money. The study needed to be completed in a limited time frame, thus posing a constraint. The financial implications of research cannot be overstated. This research required financing especially with regards to data collection, printing and binding costs and other costs that may arise in the course of the research.

1.7 CHAPTER DISPOSITION

The study was compartmentalized into six chapters. The content of each chapter is briefly described below:

Chapter one will introduce the study by illuminating the research context, highlighting the research gap, and outlining the research objectives and research questions. The chapter will additionally talk about the scope and limitations as well as the contributions of the study.

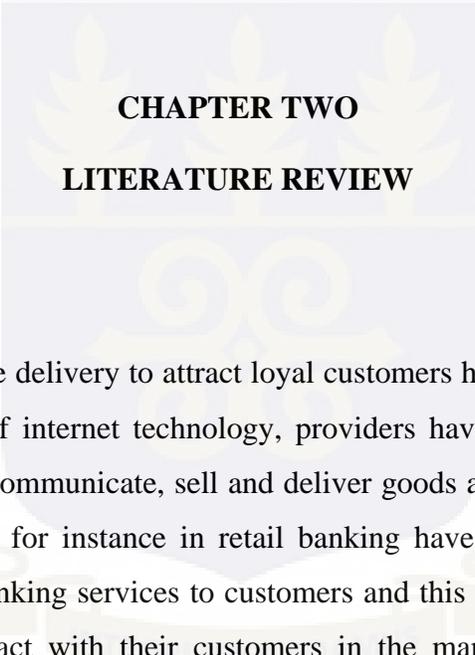
Chapter two will present a review of the relevant literature on Internet banking service quality and customer loyalty. Customer satisfaction in the context of internet banking will also be discussed.

Chapter three will specifically examine the context of the study and that is the Ghanaian banking industry.

Chapter four will also provide an exhaustive description of the methodology to be used in achieving the study's objectives and research questions. It will again provide a profile of the respondents to be selected, and the justification for the methodological choices including the data analysis techniques.

Chapter five will focus on the analyses and discussion of the empirical results. It will also present the major findings of the study discussing the key results of the study in relation to the literature.

Chapter six outlines the major conclusions of the study. It further outlines the theoretical contributions to academic knowledge, provide a number of managerial implications, and concludes with recommendations for further research.



CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

The concept of quality service delivery to attract loyal customers has evolved over the years and in the current dispensation of internet technology, providers have found alternative means of using electronic channels to communicate, sell and deliver goods and services to their cherished customers. Service providers for instance in retail banking have integrated electronic service delivery channels to bring banking services to customers and this according to Narteh (2013) is influencing how banks interact with their customers in the market space (Parasuraman and Zinkhan, 2002; Bauer et al., 2005).

Electronic banking (E-banking) which is an aspect of Self Service Technology (SST) has become an important instrument that enhances electronic business (Seitz and Stickel, 2002). The use of these electronic channels to deliver service in the banking industry has extensively been discussed by academicians and practitioners as well (Zeithaml et al., 2002; Lee and Lin, 2005; Ibrahim et al., 2006; Sayar and Wolfe, 2007; Ganguli and Roy, 2010). In discussing this channel of service delivery, scholars have broadly grouped E-banking into three categories namely internet banking, telephone banking and automated teller machines (ATM) (Joseph and Stone, 2003; Ibrahim et al., 2006).

This chapter presents a comprehensive review of relevant literature pertaining to the concepts and theory that will underpin this work. Furthermore, literature on the development of Technological Acceptance Model (TAM), Self-Service Technology, internet banking, customer loyalty and customer satisfaction will be reviewed in an attempt to create the link between internet banking service quality and customer loyalty and the benefits that banks stand to gain as they adopt the technology.

2.1 TECHNOLOGY ACCEPTANCE MODEL (TAM)

The Technology Acceptance Model (TAM) is increasingly becoming indispensable in the explanation of the factors accounting for consumer's adoption of technology. TAM which was first developed by Davis and Bagozzi in 1989 (Davis, 1989; Davis et al., 1989) has been used by several researchers to explain how a person accepts or declines the use of information system innovations by studying people's behaviour (Aldas-Manzano, et al 2009) This theory was precisely tailored to the acceptance of information systems, such that the two variables namely perceived usefulness (PU) and perceived ease of use (PEOU) could be used to predict people's attitude towards the use of technological innovation and also serve as the basis for Behavioural Intention which may lead to actual use. Davis et al, (1989) explained PU as a factor which is based on a person's "subjective probability that using a specific application system will increase his or her job performance within an organizational context" and PEOU as the one which determines "the degree to which the user expects the target system to be free of effort". These two variables predict attitude towards use and serve as the basis for Behavioural Intention which leads to actual use. The TAM works on the assumption that if individual makes intent to take an action, and then he/she will be free to act without restrictions (Davis et al., 1989). Pikkarainen et al, (2004) in their study "Consumer acceptance of online banking: an extension of the technology acceptance model, Internet Research" argued that, PEOU is the level at which a potential consumer of a technology believes a technology or an Internet banking system is effortless. They went further to explain that PU is also at the level at which a prospective user of a technology

perceives that the use of the technology will enhance his or her performance or satisfaction. PU and PEOU which are the main variables of TAM, have a direct impact on Internet banking adoption (Suping & Yizheng, 2010). A consumer's inclination to adopt and use a new technology affects his/her perceptions of service quality, and as such unique scales such as technology anxiety (Meuter et al., 2003) and technology readiness index (Parasuraman, 2000) are used for the measurement of service quality in technology-enabled services. This is illustrated in figure 1.

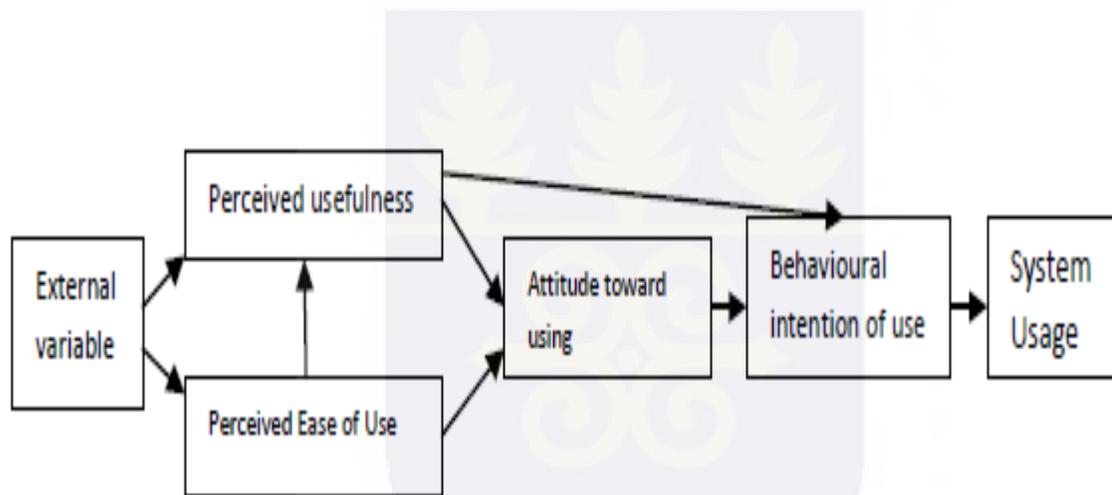


Figure 1: Technology Acceptance Model

(Technology Acceptance Model (TAM), source: adopted from DAVIS et al, 1989).

2.2 SELF-SERVICE TECHNOLOGY

As consumers become more sophisticated in accessing various services, providers of these services with the help of modern technology have also become very innovative in the delivery of their services to customers. Self-Service Technologies (SSTs) according to scholars have gained popularity in the delivery of quality service to customers by service providers (Ibrahim et al., 2006; Casalo et al., 2007; Loonam and O'Loughlin, 2008). SSTs have been explained by various

scholars as the technological interfaces that allow customers to produce service without the direct involvement of the service provider. Meuter et al (2005) cited in Johns and Perrot, (2008) postulates that, Self-Service Technologies can be used to improve customer service despite limited number of staff. Service providers use these SSTs to assist customers to get answers, pay bills, track delivery times and undertake other services which do not require staff involvement, and hence allowing direct transaction (Loonam and O'Loughlin, 2008; Tan et al., 2010). Meuter et al, (2005) again in their study asserted that firms are adopting SSTs rapidly for three main reasons – to decrease cost, reach new customer segment and of course increase customer satisfaction and loyalty. In their studies on Self-service technology, Curran and Meuter (2005) contended that SSTs in banking enable customers to access banking services with very minimal or virtually no direct contact and support from the banking staff. Eriksson and Nilsson (2007) also noted that the use of SSTs has become more pronounced in the banking industry owing to its ability of standardizing service delivery, providing expanded service delivery option as well as reducing labour cost. SSTs have enable firms to streamline transaction process and reduce overhead cost and this has potentially increased revenue. Customers on the other hand have also gained extensive control over the service process and thereby contribute to their own satisfaction (Bendapudi and Leone, 2003; Meuter and Bitner, 1997). Customers who use SSTs to access service like booking a hotel, and internet banking are directly involved in the provision of the service and as a result contribute to their own satisfaction or dissatisfaction (Hof, 1999). Nambisan and Baron, (2007), argue that involving customers in the service delivery can enhance the service experience which will ensure that service delivery needs of the customer are met. Meuter et al (200) found out the three main sources of customer dissatisfaction in the use of SSTs and enumerated them as (1) process failure due to poor or unreliable internet service (2) poor design and implementation of the technology and (3) failure due to the customer's inability to effectively utilize the technology. This according to the study can be very detrimental to the service provider since it may lead to customers switching service providers, or customers reverting to the interpersonal delivery alternative which may eventually overload the service firm employee and hence increasing the waiting time of other customers or worse still the customer may decide to use the service later or quit using it at all and this may potentially lead to loss of revenue (Tax and Brown 1998; Tax, Brown and Chandraheskaran 1998). Contrariwise, Meuter

et al (200) in their studies argued that SSTs has a great potential to delight customers if it is applied well (Oliver, Rust, and Varki 1998).

There is a gap in literature regarding the contribution of SSTs to customer satisfaction leading to customer loyalty in developing countries where technological infrastructure is in a sorry state in comparison with what pertains in the advance countries and this is what the study seeks to address. Scholars have referred to internet banking as one of the tools of SSTs providers (Ibrahim et al., 2006; Casalo et al., 2007; Loonam and O'Loughlin, 2008; Chong et al., 2010) and as result the focus of this studies is going to be on it. The next section will discuss Internet banking as an aspect of the Self-Service Technology.

2.3 INTERNET BANKING

2.3.1 Tracing the Origin and History of Internet Banking

Attempt by firms to provide the most effective and efficient products and services to outsmart their competitors and also to satisfy their customers has been in existence for a long time. (Hur et al., 2010; Stokburger and Sower, 2010). In view of this, service providers have constantly been looking for and adopting new and innovative ways to improve service delivery in a bid to fight competition (Dobni, 2002; Narteh, 2012). The advent of Information Communication Technology (ICT) came as a big relief for practitioners. According to Vladimir, (1996) the application of ICT in doing business which later became known as E-business probably began with electronic data exchange in the 1960s. However Melão, (2009) postulated that it was not until the 1990s that E-business emerged as a principal feature of many organisations. He further claimed that industry players hoped that E-business was going to revolutionize the way in which businesses were conducted in its entirety. For instance industry players anticipated that there was going to be a complete transformation of how organisations interact with customers, employees, suppliers and partners. The terms E-banking and internet banking according to Beheshtifar and Nezhad, (2014) is less than two decades in the world and that it entered the international banking literature after the pervasive development of computing networks in the world around the 1990s

(Beheshtifar, and Nezhad,2014). A short review of literature reveals that Internet banking service was first launched in the United Kingdom by the Nottingham Building Society in 1983 and it quickly spread to other countries. The first online banking service in the United States was however developed by Stanford Federal Credit Union, which was a financial institution in October 1994 (Ofori-Dwumfuo and Dankwa, 2013). In Ghana, the initial forms of ICT employed by banks were mostly office automation devices such as telephones, telex and the facsimile. The use of these technology tools to transact banking business persisted (Abor, 2004), until later in the 1980s when the personal computer (PC) gained popularity. Narteh, (2012) argued that the most radical electronic banking innovation in Ghana and globally has been the Automated Teller Machine (ATM) and the several electronic cards. Literature has established that the first major cash card which was called the `Sika Card` and a product of Social Security Bank, was introduced in the country in May 1997 (Abor, 2004). Currently most of the banks in addition to ATMs, have implemented internet banking, telephone banking, SMS alerts among a host of other electronic tools to deploy banking services to their customers.

As the impact of ICT in businesses becomes greater, a number of marketing scholars and practitioners have shown interest in researching into how service providers are using E-banking to satisfy customers (Joseph and Stone, 2003; Loonam and O'Loughlin, 2008). Some of these scholars have identified internet banking, SMS banking, mobile banking (m-banking), Automated Teller Machines (ATMs), telephone banking, personal computer banking and electronic cheque clearing systems as the common types of E-banking (Abor, 2004). Customers often use these channels in a complementary way (Dabholkar, 1996; Seitz et al., 2002). E-banking has therefore been defined by Shahriari, S. (2014) as “the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels.” It could be deduced from the above definition that the entire broad channels of E-banking service delivery such as internet banking, telephone banking and ATM has been covered. However the focus of this thesis is on internet banking because of its distinctiveness and how extensive it has been adopted by banks in Ghana in the delivery of quality service to delight customers.

2.3.2 Internet Banking Defined

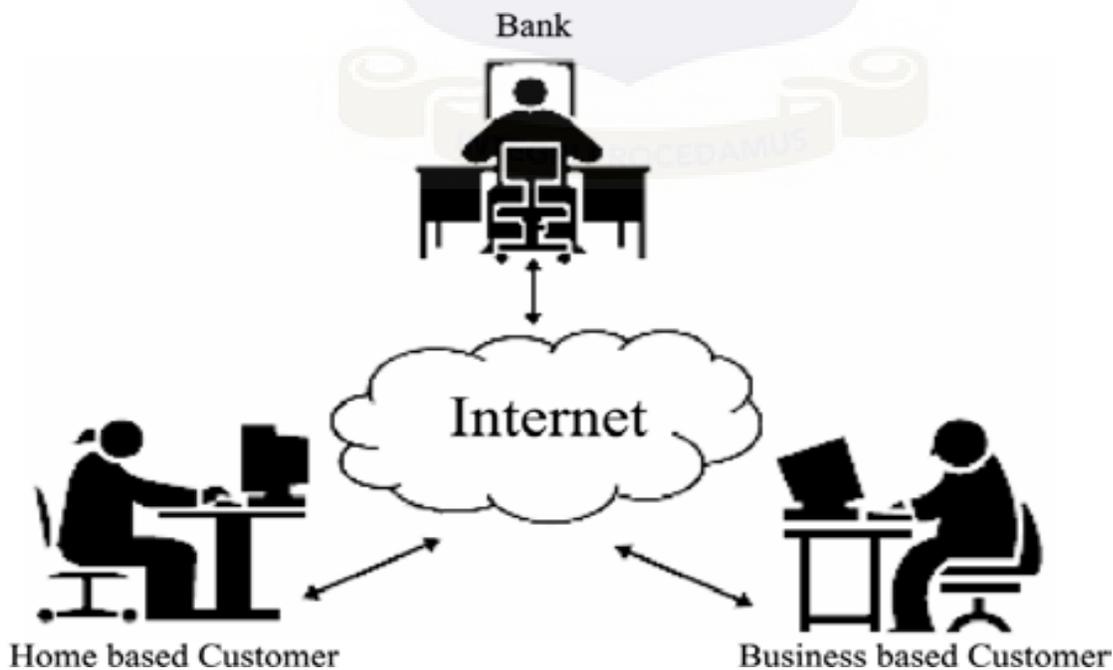
Internet banking has been conceptualized from different perspectives by various marketing scholars (Furst et al., 2002). Internet banking has been perceived in some quarters as just an aspect of technology that enhances electronic business (Seitz et al, 2002). There have therefore been several attempts by scholars to defined internet banking. Daniel (1999) defined internet banking as a key information service of a bank to serve its customers via the internet. Al-Abed, (2003) lend support to this definition by describing it as “a facility provided by banking institutions to enable its customers execute bank related transactions through the Internet electronically without having to visit the brick-and-mortar bank.” These two definitions underscore the fact that internet banking serves as a medium by which banking service providers use to deliver service such as transfer of funds between accounts, checking of balance in one’s bank account and paying of bills (Fox, 2006).The Report by the Basel Committee on Banking Supervision (1998) also defined Internet banking services as the provision of various banking products and services like bank account management, electronic bill payment and financial advice over the Internet. Mukherjee and Nath (2003) not wanting to be left out also defined Internet banking as a type of banking activity through which consumers can perform banking transactions such as checking account balances and making payments via telecommunication network. Encarta MSN (2007) further defined Internet banking as services of banks in which the customers can pay bills and check account information by the use of the Internet.

It can be ascertained from the definitions above that although various scholars have tried to define internet banking in their own way, there seems to exist a common strand that connect all the definitions which is the delivery of banking services via the internet. Having appreciated the numerous definitions by the various marketing scholars and industry practitioners as regards internet banking, it is defined in this work as “the use of the internet as a remote delivery channel for banking services such as transfer of funds between accounts, checking of balance in one’s bank account and paying of bills”.

There has always been confusion between the terms “Internet banking” and “personal computer banking” that scholars have tried to clarify. In an attempt to extricate the two terms, Bernstel (2000) described “Internet banking” as the delivery and accessing of banking services via the World Wide Web. He further argued that, internet banking requires a customer of a bank to log

on to the bank’s web page by using web browser with the actual software that resides on the bank’s server but does not require the user access to the banks’ private network. This according to Bernstel (2000) is not the case in “personal computer banking” where the customer is required to fill in details offline before sending it over the bank’s private network. Internet banking offers service providers the opportunity to provide a variety of attractive automated services to their customers (Furst et al., 2002; Eriksson and Nilsson, 2007). Some of these services include 1. The availability of enquiry and transaction services round-the-clock, 2. Worldwide connectivity, 3. Easy access to transaction data, both recent and historical and 4. Direct customer control of international movement of funds without intermediation of financial institutions in customer’s jurisdiction (Ofori-Dwumfuo and Dankwa, 2013). A review of the extant literature reveals that most researchers and practitioners have agreed that Internet banking is truly an innovative means of service delivery channel that offers the customer less waiting time and more convenience than traditional branch banking with a significant lower cost structure than traditional delivery channels. In addition to reduction in operational costs to the banks, Internet banking also results in higher levels of customer satisfaction and retention (Llewellyn, 1997; Methlie, 1998; Mols, 2001; Liu, 2008).

Figure 2: Internet Banking Environment



Internet Banking Environment: (Source: Adopted from Hutchinson & Warren, 2003; page 68)

2.4 EXAMINING SERVICE QUALITY LITERATURE

2.4.1 Service Quality Traditional Channels

Marketing literature is full of studies on service quality (Parasuraman et al., 1988) because quality has been considered by scholars as a key element in the building of a successful business (Angur et al., 1999; Akhtar et al., 2011). Most studies have shown that high levels of perceived customer service quality especially in the banking sector (Akhtar et al., 2011) usually exert positive influence on customer satisfaction leading to firm profitability (Parasuraman et al., 1988, 1991; Cronin and Taylor, 1992). Service quality in the banking sector is regarded to be the contributing factor in the increase of customer satisfaction and hence the bank profitability (Ladhari et al., 2011). Additionally, service quality has the benefits of decreasing customer defection, escalating customer loyalty, enhancing corporate image (Arasli et al., 2005; Baumann et al., 2007) and finally improving long-term customer relations (Camarero, 2007). Ndubisi et al. (2011) asserted in their study “The antecedents of relationship quality in Malaysia and New Zealand” that firms generally satisfy and retain their customers if they are able to deliver consistent quality services over a long period of time.

Korda and Snoj, (2010) claimed that service quality as a term originated from the product quality and customer satisfaction literature. Scholars have conceptualised service quality as the customer’s evaluation of the overall superiority of the product or service delivered and it is centered on the difference between the customer’s pre-consumption performance anticipations and the post-consumption performance of the product or service (Parasuraman et al., 1988; Culiberg and Rojs̃ek, 2010; Korda and Snoj, 2010).

Several models have been developed by marketing scholars to measure service quality. Two of such extensively applied models used in studying service quality are the SERVQUAL model developed by Parasuraman et al. (1988) and SERVPERF model by Cronin and Taylor (1992). The SERVQUAL model is founded on the assumption that service quality depends on five main elements namely reliability, tangibles, empathy, assurance and responsiveness (Parasuraman et

al., 1988). Several studies on service quality according to literature are based on people-delivered service (Parasuraman et al., 2005) and as such new dimensions of service quality should be considered in situations where machines are used in place of human beings. It is on the basis of the foregoing that quality issues with E-services has received a wide academic research over the last couple of decades (Zeithaml et al., 2002; Parasuraman et al., 2005; Lee et al., 2011; Boshoff, 2007; Cristobal et al., 2007; Nusair and Kandampully, 2008; Alanezi et al., 2008; Heringto and Weaven, 2009; Ho and Lin, 2010; Ganguli and Roy, 2010). The next section therefore reviews literature on service quality in the e-service.

2.4.2. Electronic Service Quality

The concept of service quality in the current technological age has reached an entirely different level; incorporating the new quality parameters which are quite pertinent for technology induced services. The extant literature on service quality has acknowledged this and goes further to assert that electronic service quality has become a crucial factor in differentiating service offers and building competitive advantage due to the fact that the cost of comparing alternatives in the online environment is relatively low as compared to the traditional channels (Santos, 2003; Bauer et al., 2005). Zeithaml et al. (2002) defined electronic service quality as “the extent to which a web site facilitates efficient and effective shopping, purchasing and delivery of products and services”. It could be deduced from the above definition that both the pre-service and post-service delivery experiences on the web are captured. Bauer et al. (2005, p. 156) argued that “the most important step in providing a sophisticated level of service through e-banking portals is to identify and measure the dimensions of portal quality”. Marketing scholars seem to agree on a common ground that traditional service quality dimensions cannot be wholly be used to evaluate electronic service quality (Parasuraman et al., 2005; Nusair and Kandampully, 2008; Shachaf et al., 2008; Khan, 2010).

There have been two main routes along which research into electronic service quality has been carried out. The first route has been the approach of some researchers using the traditional service quality dimensions to advance their research into electronic service quality (Gefen, 2002;

Lee and Lin, 2005). Lee and Lin (2005) in applying this approach modified the scale of Parasuraman et al.'s SERVQUAL to ascertain the major factors that influence customer's perception of electronic service quality of online sites. The study subsequently established design, reliability, responsiveness and trust as dimensions of online store quality. The other group of researchers in using the second approach argue that electronic service environment is entirely different, dominated by people-machine interface, and as such requires a new set of quality dimensions (Parasuraman et al., 2005; Nusair and Kandampully, 2008; Shachaf et al., 2008; Khan, 2010). Loiacono et al. (2002) accordingly developed a new model called Webqual to evaluate the quality of web sites. The 12 dimensions identified in the Webqual are informational-fit-to-task, interaction, trust, response time, design, intuitiveness, visual appeal, integrated communication, innovativeness, flow, emotional appeal, business processes and viable substitute. Parasuraman et al. (2005) on their part also advanced a multi-item scale for the valuation of electronic service quality, which they named as E-S-QUAL. The E-S-QUAL consisted of four dimensions namely efficiency, fulfillment, system availability and privacy. Service recovery has also been viewed by scholars as a significant factor affecting customers' perceptions of service quality in the technology-based services. Parasuraman et al. (2005) as a result, developed another scale for electronic service recovery quality (E-RecS-QUAL) which also comprised of three dimensions – responsiveness, compensation and contact. Van Riel et al. (2001) on their part found user interface, core service and supplementary services as the key dimensions of e-service quality. E-service quality has also been viewed from the standpoint of process, outcome and recovery quality (Collier and Bienstock, 2006). Not wanting to be left out, Zavareh et al., (2012) in their study “E-Service Quality Dimensions and Their Effects on E-Customer Satisfaction in Internet Banking Services” adapted and modified the e-SQ dimensions based on E-SERVQUAL developed by Parasuraman et al (2005). After a Confirmatory Factor analysis (CFA) was conducted and relating it to a principal component with varimax rotation in order to validate the underlying structure of e-SQ of Iranian internet banking services the overall constructs constitute of e-SQ and e-CS converted well. The researchers therefore concluded that there were six e-SQ dimensions namely Efficient and reliable services, Fulfilment, Security/trust, Site aesthetic, Responsiveness/contact and finally Ease of use which this study intends to adopt. Additional dimensions considered by other scholars to assess e-service quality are website appearance, ease of use, linkage, layout and content, reliability, efficiency, support,

communication, security, incentives, performance, feature, storage capability, serviceability, trust, responsiveness, customization, web store policies, reputation, assurance and empathy (Madu and Madu, 2002; Santos, 2003).

Tsoukatos et al, (2007) cited in Zavareh et al., (2012) however argued that crossing national boundaries expose theories, concepts and instruments to a lot of institutional and environmental factors making it go through some modifications. It can therefore be concluded that not all of the service quality dimensions advanced by the various scholars and discussed above can be applied equally in every firm and every country in the evaluation of e-service quality. The attention of this study is therefore focused on internet banking quality in Ghana.

2.4.3 Internet Banking Service Quality

Internet banking quality as the name implies is a special case of electronic service quality. Santos (2003) defined e-banking service quality as the consumers' overall evaluation and judgment of excellence and quality of electronic service offering in the virtual market place. This definition covers all the broad aspects of E-banking service delivery channels such as internet banking, telephone banking and ATM. The focus of this study is however on Internet banking. The study therefore defines internet banking service quality as the customers' overall evaluation and judgment of the excellence of services provided through Internet banking channels.

2.4.4 Internet Banking Service Quality Dimensions

In trying to develop comprehensive dimensions to measure Internet banking service quality, marketing scholars have conducted several research into how customers judge E-service quality (Parasuraman et al., 2005; Babakus et al., 2003; Chang and Wang, 2007; Chiu et al., 2005; Zeithaml et al., 2002; Zavareh et al, 2012). This has therefore resulted in scholars coming out with several dimensions for the evaluation of internet banking. However, this study adopts the six dimensions- efficient/ reliable services, security and trust, fulfillment, site aesthetic, responsiveness/contact ease of use established by Zavareh et al (2012).

2.4.4.1 Efficient and Reliable Service

Chang, Wang and Yang, (2009) defined efficiency in Internet banking as the ability of a customer to get to the bank's website, find his/her desired product and information related with it, and check out with least effort. Reliability on the other hand was defined by Weijters et al., (2007) as "the correct technical functioning of a self-services technology and the accuracy of service delivery". This means that an Internet banking system could be described as reliable if it is able to honour the commitments of the bank in areas such as billing accuracy, record maintenance and deliver the service within adequate time limit (Saha and Zhao, 2005). Several scholars have identified efficiency and reliability as critical in the determination of E-service quality (Dabholkar, 1996; Parasuraman et al., 1988; Zeithaml & Bitner, 2000). In adding his voice to the relevance of efficiency and reliability, Van Gorder (1990) stuck out his neck to say that reliability is the most crucial characteristics of an E-service system that the customer can use in the evaluation of service quality. Zeithaml and Bitner (2000) in acknowledging the important role that efficiency and reliability played in the determination of E-service quality by customers advised E-service providers to be circumspect in the design and implementation of the e-service system since customers are specifically influenced by the reliability of new technology because it might be associated with risks such as the technology malfunctioning (Shamdasani et al., 2008). In conclusion, Dabholkar (1996) in his study discovered that reliability and accuracy are most appropriate measure for measuring service that has to do with technology (Parasuraman et al., 1988).

2.4.4.2 Fulfillment

Fulfillment according to literature refers to the magnitude to which the act of using technology is perceived to provide the customer's desire in its own right, apart from any performance consequences that may be expected. Weijters et al., 2007, p. 8; Langeard et al., 1981; Shamdasani et al., 2008). In the words of Saha and Zhao, (2005) cited in Jiang et al.(2011), fulfillment entails making up to the service commitments, having enough product in stock and making the service accessible within the stipulated time. Davis et al. (1992) also revealed in their study that customers evaluate more favourably the excitement generated in using an SST.

2.4.4.3 Security and Trust

It has been observed with great concern by scholars and practitioners that the two most pressing worries that determine customers drive to adopt or decline the use of Internet banking are security and trust issues (Hutchinson and Warren, 2003; Johns et al., 2008; Suping & Yizheng, 2010; Moga et al., 2012; Khare et al., 2012). Customer security has now become a serious challenge for many users of Internet banking due to the rather unfortunate development of internet fraud. Security breaches according to Rotchanakitumnuai & Speece, (2003) has the potential of causing a number of problems such as the destruction of operating systems, disclosure of classified information, and disruptions of information access and exchange (Gerrard and Cunningham, 2003; Boateng et al, 2008). It is as a result of the aforementioned that the users of internet banking services have become more wary about their privacy issues including the disclosure of their personal information. According to Guttman (2004) E-cash and other electronic transaction engage a high degree of security and as result Internet banking has become one of the most vital future challenges (Gerrard and Cunningham, 2003). In an attempt for Internet banking service providers to secure their customers from fraudsters, scholar have propounded several strategies to deal with the problem. One of such scholars is Labuschagne, (2000) who proposed a security framework which comprised of an eight security requirement to ensure the security of internet users. The security requirements are identification and authentication, authorization, confidentiality, Integrity and non-repudiation. The others are availability, privacy and auditability. Based on this security framework, Internet banking service providers have developed user names and passwords which are often very complex as some of the measures put in place to protect the customer.

Trust on the other hand has been conceptualized by marketing researchers as a set of beliefs such as strength, ability, and predictability of an E-service which deals predominantly with the honesty, compassion and proficiency of the service (Austin et al., 2006; Ganesan, 1994; Sirdeshmukh, Singh, & Sabol, 2002). Dwyer and Tanner, (2002) also defines trust as “the belief in the integrity, honesty and the reliability of another person” and this is what marketers have struggled to achieve from their customers over the years (Gefen, 2000;; Moorman, Zaltman, & Deshpande, 1992). Morgan & Hunt, (1994) furthermore posited that trust occurs when one party (the customer) has confidence in the other party (the service provider). Trust can be considered

as very important in the development of long-term customer relationships. The conceptual model developed by Kim and Prabhakar (2000) actually confirms ones belief that trust in the electronic channel and perceived risks of E-commerce are the major determinants of the adoption of Internet banking.

2.4.4.4 Site Aesthetics

Site aesthetics according to Jun and Cai (2001) refers to the attractiveness of the website. It is related to easy-to-remember URL address, well-organized, well-structured and easy-to-follow catalogue, simple site navigability, concise and understandable content and lastly reasonable terms and conditions. The importance of an attractive website cannot be overemphasised because according to Reinecke, (2013) it takes a split of a second for a person to make lasting judgment about a website for the first time. The first impression created by someone at seeing a website is influential enough to alter the opinions of the site's usability and trustworthiness (Van Schaik, and Ling, 2009; Tractinsky et al., 2006). Research has established that the impulsive emotional reaction people have on products or services is heavily influenced by what they first see about the products or the service (Sonderegger, 2010 p. 403-410). This aesthetic reaction does not only precede judgments of products and services but also websites and even goes further to influence the person's interaction which is referred to as the "halo effect". Websites that are perceived as beautiful or attractive are also perceived as usable (Hartmann et al., 2008) and trustworthy (Lindgaard et al, 2011). Zheng et al (2009) postulate that users form an opinion about a website's appeal pre-attentively, before the brain has time to consciously evaluate the incoming stimulus. The aesthetic quality of a product influences consumers' attitudes, and it is a key determinant of its marketplace success (De Angeli, Sutcliffe, and Hartmann, 2006). Not only is attractiveness an important quality of a website, its effect seems to exceed the site and influence other judgements (Lavie, and Tractinsky, 2004). For instance, in addition to associating positive personality traits with attractive employees of a firm, customers tend to attribute more positive features to the firm's product or service as well.

2.4.4.5 Responsiveness/Contact

An occasional system failure in the delivery of Internet banking services can be expected since technology cannot be viewed as perfectly faultless. It is only prudent therefore on the part of

Internet banking service providers to put up mechanisms to correct such failure as a matter of urgency and hence responsiveness. Responsiveness has been described by literature as the speed, timeless, and accessibility of a service delivery (Parasuraman et al., 2005; Kim et al., 2006; Nusair and Kandampully, 2008; Shachaf et al., 2008). Responsiveness evaluates the extent to which the banks put in place procedures to recover services when there is a system failure regarding Internet banking. Contacts also include the list of the bank's street and e-mail addresses, phone and fax numbers, accessibility of service representatives, availability of chat room, bulletin board and other communication channels. Effective service recovery system which may involve contact has been shown to have a positive impact on customer satisfaction and eventually customer loyalty (Magnini et al., 2007). Most electronic service quality scales have responsiveness as a major dimension (Parasuraman et al., 2005; Kim et al., 2006; Nusair and Kandampully, 2008; Shachaf et al., 2008). With Internet banking, responsiveness quality deals with the bank's capacity to handle customer complaints rising from transactional failures. Acceptable recovery practices may vary from a simple apology to compensating customers against losses incurred such as monies illegally withdrawn from their accounts (Narteh, 2013). Responsiveness has been identified by literature as an imperative dimension of Internet banking service quality (Shachaf et al., 2008; Khan, 2010; Kumbhar, 2010).

2.4.4.6 Ease of Use

The fundamental objective of applying technology in doing business today would have been completely flawed if transaction of businesses were not made easier than before. Even though technology is sometimes perceived to be intimidating to some customers of banks, Internet banking service providers are advised to simplify banking transactions to the barest minimum so as to encourage customers to use the facility. Ease of use is one of the concepts that were investigated in the Technology Acceptance Model (TAM) (Davis, 1989). Davis, (1989) defined Ease of Use as "the degree to which the prospective user expects the target system to be free of effort. Chong et al. (2010) asserted that the probability of a customer using an internet service to transact banking business will be greater if he or she realises that the technology is easy to use and hassle-free. Dabholkar (1996) posited that most customers are concerned about ease of use in order to save effort and at the same time reduce social risk. It has strongly been argued by scholars that ease of use is one of the essential factors in determining the adoption and use of

various internet technologies (Davis, 1989; Dabholkar & Bagozzi, 2002). For instance Gounaris and Koritos (2008) concluded from their study that, perceived ease of use is one of the main factors used to predict customer adoption of electronic banking. Different names such as user-friendliness (Joseph and Stone, 2003; Al-Hawari et al., 2005) user-friendly system (Mobarek, 2007) and easiness (Kumbhar, 2010) are used in literature to describe this dimension.

2.4.5 Benefit of Internet banking

Statistics show that the number of banks adopting internet banking in the delivery of quality service to their customers the world over is ever increasing and this is enough evidence to prove that the advantages of using the service is enormous (Rotchanakitumnuai and Speece, 2003; Shah and Siddiqui, 2006). The benefit of using internet banking is not limited to the banking institution only but the customer as well (Furst et al 2000). Researchers and practitioners have identified lower costs of service delivery, wider geographical reach, higher competitiveness and generation of higher and long-term profits (Polatoglu and Ekin, 2001; Rotchanakitumnuai and Speece, 2003; Shah and Siddiqui, 2006) as some of the benefits connected with the introduction of Internet banking services. The deployment of internet banking by banks is successfully reducing the operational costs of these banks by letting customers have a direct access to their banking transactions without the need of visiting physical branches of the banks (Liu, 2008). Large banks that hitherto were spending huge sums of money in running physical branches are now the biggest beneficiaries in adopting Internet banking services (Liu, 2008). According to Llewellyn, (1997) the advent of Internet banking has transformed the way financial institutions conduct their business in several areas such as distribution, production and payment. Internet banking has empowered banks to make the production and distribution of their banking services more efficient. Eventually, the increasing use of Internet banking will allow banks to reduce the number of their employees in the bricks-and-mortar branch offices and even replace some with ones who will concentrate on advisory services and sales (Rod, Ashill and Shao, 2009). It is therefore not surprising that Banks that offer Internet banking services have become serious competitors to traditional banks, which solely or rely more on their interpersonal interactions, especially in cities (Llewellyn, 1997). Methlie, (1998) also opined that Internet banking has been successful in generating higher consumer satisfaction because of its being fast, simple and

uncomplicated in its application processes, least technical errors, a varied range of funding options and small account deposit requirements. Another benefit of Internet banking according to Jayawardhena and Forley (1998) is that, it offers an opportunity to the banks to delegate task to the customer and this makes the banks save a lot of time and all the expenses that would have been incurred as payments to staff employed to carry out those functions would have been catered for and even minimize the errors that would have been committed by the staff. The clerical work also gets reduced considerably with Internet banking. Hence expenses on paper slips, forms and even stationery is reduced drastically leading to potential increase in profit margins (Rod, Ashill and Shao, 2009).

Customers of banks that use internet banking also have their fair share of the benefits. Internet banking offers convenience to the customer (Laukkanen et al., 2008). Among other things that customers can conveniently do in the comfort of their homes or anywhere are requesting for their financial statement, transfer or receive money into their account, apply for a loan, buy or sell stocks and other securities using their account. Customers with the aid of internet banking can even open new account or close an old one without being physically present at the branch and also with no involvement of laborious paperwork. Internet banking is making life much easier and banking transaction also greatly faster and extra pleasant for customers as well as bankers with the increasing acceptance of digital signatures the world over (Peterson, 2006).

2.5 CUSTOMER LOYALTY

2.5.1 Definitions

Researchers and practitioners in industries like manufacturing, education, entertainment, retail and banking have always held the view that the survival of their businesses is anchored on the loyalty of their customers (Berry, 1995; Zineldin, 2006). This is an undisputed fact because competition among firms has been the hallmark of most industries in the world currently (Coyles & Gokey, 2005). Scholars have over the years tried to conceptualise and defined customer loyalty in several ways. Aaker, (1991) defined customer loyalty as “a customer’s inclination or plans to make a repeated purchase from a particular firm as result of the belief that the value received from that seller is superior to the value available from other alternatives.” Jacoby & Kyner (1973) also defined loyalty as “the non-random purchase shown over time by one

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decision-making unit or other, either on behalf of an individual family or organization regarding one or more alternative brands out of a set of similar brands”. Oliver (1999) likewise defined customer loyalty as “a deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour.” It can be deduced from the numerous definitions quoted above that the common strand that run through is the repeated purchase by a customer. A customer is therefore said to be loyal if he or she demonstrate repeated buying behaviour even in the center of competing brands.

2.5.2 Types of Customer Loyalty

The concept of customer loyalty has over the years occupied a center stage in marketing research. (Desai & Mahajan, 1998; Yim & Kannan, 1999; Zins, 2001; Beerli et al., 2004; Chiu et al., 2005; Toufaily, Ricard & Perrien, 2013). A search through the extant literature on customer loyalty reveals that there are three major types of customer loyalty namely active loyalty, passive loyalty and true loyalty.

- ***Active Loyalty***

Fathollahzadeh et al., (2011) in their work “Designing a new model for determining customer value satisfaction and loyalty towards banking sector of Iran” described an active loyal customer to be the one who engages in word of mouth (W.O.M) advertising for a firm and also demonstrate an intention to use its product or service. In the words of Kitapci & Dortyol, (2009), a customer who spreads favourable messages about a firm to other customers or potential customers on his/her own accord perfectly depicts the one who display active loyalty. A customer can only do this if only he/she is committed and loyal to the firm and its products and or services (Jamal & Anastasiadou, 2009). It has been established by scholars that customers or potential customers tend to believe the message propagated by other consumers as compared to

advertisement and other forms of controlled communications (Mazzarol et al., 2007). It is on the basis of this, that active loyalist have become indispensable to the growth of every organization as they serve as influencers, and this can help take some of the load off the firm in terms of advertising and corporate communications (Kandampully & Suhartanto, 2000). It is therefore only natural for one to state that firms must do everything to satisfy and motivate active loyalists and ensure that their loyalty is consolidated and appreciated (Lee et al., 2011).

- ***Passive Loyalty***

Passive customers are not as passionate about the firm as the active loyalists in the sense that they do not deliberately spread good messages about the firm and their products and services as activists will do (Sweeney et. al., 2008); rather, they are defined by their commitment to the firm in spite of not being fully satisfied with the products or services delivered (Akhtar et al., 2011). Ahluwalia et al., (2000) opined that Passive loyalty customers display actions which are difficult to understand and control given that the firm cannot really determine whether they are loyal for convenience factors and whether they will switch when presented with a better alternative. It is now abundantly clear what firms are likely to select when presented with the options of choosing between active loyalty and passive loyalty. However in considering active loyalty, firms must not entirely neglect the passive loyalty.

- ***True Loyalty***

This is the last type of loyalty and as the name implies, these customers choose to remain faithful to a company or firm, even when they are not offered with the best in terms of quality products/services (Ahluwalia et al., 2000). True loyalty customers are less likely to propagate negative messages about the firm and they are often considerate in giving the firm breathing space to work on their weaknesses and consolidate their strengths (Gounaris & Stathakopoulos, 2004).

2.5.3 Dimensions of Customer Loyalty

Scholars have revealed that Customer loyalty consists of four dimensions and these are cognitive, affective, conative and actions loyalties (Oliver 1999; Evanschitzky & Wunderlich, 2006). In throwing more light on these dimensions Evanschitzky & Wunderlich, (2006) defined cognitive loyalty as “the type of loyalty that is determined by information of the offering such as price, quality and so forth”. Since cognitive loyalty is directed at the cost benefits of an offering and not the brand itself, Evanschitzky & Wunderlich, (2006) described it as the weakest form of loyalty because it is easier for competitors to lure these customers with substitute and superior offerings (Lam et al., 2004). Affective loyalty was also defined as “a favourable attitude towards a specific brand or a product”. Affective loyalty according to scholars (Bitner, 1990; Evanschitzky & Wunderlich, 2006) to a large extent depends on the level of satisfaction the customer has in relation to a firm’s product/services. Satisfaction therefore plays a critical role in facilitating the development of affective loyalty. In creating affective loyalty, the customers’ first encounter is very crucial because there is enough evidence in literature to demonstrate that customer satisfaction is a transaction-specific assessment that measures customers’ feelings in relation to a particular product or service encounter (Høst & Knie-Andersen, 2004). Factors such as the persistence attractive offerings served by competing firms (Sambandam & Lord, 1995) and the increased development of the customers’ liking for a competitor’s offering based on the images and associations conveyed through marketing communications (Oliver 1999).

Evanschitzky & Wunderlich, (2006) again conceptualised conative loyalty as an attitudinal loyalty accompanied by a craving and fulfilled by an action. This means that the customer must first have a favourable attitude towards the company and its product or service and follow this with a demonstration of a desire and action towards the brand. Although literature has revealed that conative loyalty is stronger than affective loyalty, it further reports that frequent disappointments during service delivery can trigger the decline of conative loyalty (Evanschitzky & Wunderlich, 2006 Hedrick; Beverland & Minahan (2007).

The last to be discussed among the four dimensions of loyalty is the action loyalty. Kuhl & Beckmann, (1985) in putting forward argument against the three dimensions of loyalty previously discussed, asserted that they constitute intentions of the customer which may not automatically translate into the final decision of patronising in the service or buying the product

because not all intentions lead to actions. Finally Evanschitzky & Wunderlich, (2006) defined action loyalty as the state of loyalty where consumers apply considerable effort in addition to their enthusiasm to acquire a product or service and at the same time disregarding competitor's offerings.

2.5.4 Measures of Customer Loyalty

Scholars have conceptualised loyalty from two different perspectives and these are attitudinal and behavioural (Hallowell, 1996; Eshghi et al., 2007). It will therefore be safe to state that loyalty is best understood by considering both behavioural loyalty and attitudinal loyalty. Customer loyalty has long been acknowledged by scholars and practitioners as one of the most crucial factors contributing to the success of a firm (Lewis & Soureli, 2006; Kotler & Armstrong, 2010). Building a loyal customer base is critical to the development of a sustainable competitive advantage (Dick & Basu (1994).

This study considers using the attitudinal and behavioural methods in defining and evaluating customer loyalty as they have been established and endorsed in numerous research works (Bowen & Chen, 2001; Wu, 2011; Jones & Farquhar, 2003). Attitudinal loyalty is defined as the measure of loyalty that recognises the psychological and emotional commitment of a consumer to a brand. Attitudinal loyalty assesses the customer's attitude and perception of value of the brand (Jacoby & Chestnut, 1978; Chaudhuri & Holbrook, 2001). Examples of measures of attitudinal loyalty include preference, or a commitment to repurchase (Gremler & Brown, 1996; Fathollahzadeh et al., 2011). Some researchers tend to favour attitudinal measurements of loyalty to the other mainly because they tend to capture the psychological and emotional connection to loyalty and are used to understand the cognitive elements that form the basis of consumer purchasing motives and future intentions (Bowen & Chen, 2001; Aydin & Ozer, 2005).

Behavioural measurements of customer loyalty on the other hand tend to measure the observable demonstrations of customer loyalty such as buying, frequency of buying and, repeated purchase of a product or service (Rundle-Thiele, 2005; Yanamandram & White, 2006). Given that the banking industry thrives on multiple purchases and service encounters, behavioural measures would be appropriate for measuring customer loyalty in the banking industry. This current study

will therefore seek to combine the two methods namely attitudinal and behavioural loyalty in the measurement of customer loyalty.

2.6 CUSTOMER SATISFACTION

Customer satisfaction has arguably been considered as one of the most essential aspect of the marketing concept and this has resulted in capturing most of the attention of marketers and researchers alike (Jamal, 2004). There has been a plethora of definitions of customer satisfaction put forward by several scholars (Kotler, 1997; Gronholdt, Martensen, and Kristensen, 2000). Kumar, Scheer and Kotler, (2000) described customer satisfaction as a person's feeling of pleasure or disappointment as a result of comparing a product's or a service perceived performance in relation to his or her expectations. In the words of Giese and Cote, (2000) "customer satisfaction is a summary affective response of varying intensity with a time-specific point of determination and limited duration directed toward focal points of product acquisition and/consumption." Anderson and Srinivasan (2003) on the other hand defined electronic satisfaction as "the contentment of the customer with respect to their prior purchasing experience with a given electronic commerce corporation". It can therefore be concluded from all the definitions that, the concept of satisfaction denotes the necessary existence of a goal that the consumer wants to accomplish and this can be summarized as the customer's overall evaluation of a product or service in terms of whether that product or service has met his/her needs and expectation. Even though it is quite difficult to state the exact nature of the relationship between customer satisfaction and loyalty, numerous studies have indicated that customer satisfaction is a crucial element of customer loyalty (Bloemer et al., 1999; Al-Hawari and Ward, 2006).

A search through literature reveals that scholars have recognised two main variables namely cognitive and affective measures of customer satisfaction (Oliver, 1980; Bearden and Teel, 1983; LaBarbera and Mazursky, 1983; Oliver and DeSarbo, 1988; Westbrook and Oliver, 1991; Mano and Oliver, 1993). Literature on service marketing has conventionally defined customer satisfaction as a cognitive based occurrence (Westbrook and Oliver, 1991). Scholars have predominantly studied cognition in terms of confirmation/disconfirmation paradigm which postulates that expectations emanates from the customer's beliefs about the level of performance

that a product/service would provide (Oliver, 1980). Cognition therefore measures perceived performance, equity, fairness, need fulfillment and price performance in addition to disconfirmation and expectation (Tarn 1999; Oliver and DeSarbo, 1988; Oliver and Burke, 1999; Herrmann, Xia and Monroe, 2007). The weakest of these measures according to Spreng and Sonmez, (2000) is expectancy disconfirmation. In an attempt to improve upon the measurement of satisfaction, the discovery of affective variable was made by scholars (Burns and Neisner, 2006). In establishing the importance of affective dimension, Liljander and Strandvik, (1997) argued that satisfaction can never be understood in its entirety without the study of the affective variable. Homburg et al., (2006) affirmed that the affect experienced during the purchase and consumption of the product or service can have a substantial impact on satisfaction conclusions drawn by the consumer. Studies have shown that there exist a positive between emotional measures of satisfaction and repurchase intents (Falk, Hammerschmidt, and Schepers, 2010). Positive affect or negative affect has its own relative impact on satisfaction and as can be predicted, each is either positively or negatively related to post-purchase word of mouth (Westbrook and Oliver, 1991). Satisfaction is also favorably connected with arousal and pleasure (Ladhari, 2007).

The importance of Customer satisfaction in marketing cannot be over emphasised because studies have demonstrated that satisfaction encourages repeat purchase, stimulates positive word-of-mouth recommendations, and builds brand loyalty (Homburg et al., 1996). Advanced levels of customer satisfaction have been shown to reduce the customers' perceptions of the potential benefits of competitors, and thus increases repurchase intentions with the present supplier (Yaya, Marimon and Casadesus, 2011). Research works on customer satisfaction and loyalty of bank customers have established that satisfaction, market position, service reliability, and efficiency usually result in loyalty (Bloemer et al., 1998) and once the customer has become loyal, he or she is willing to pay more for services rendered (Pont and McQuilken, 2005). In an empirical study by Methlie and Nysveen, (1999) a positive relationship was found between online customer satisfaction and affective and conative loyalty. However, another study by Al-Wugayan et al., (2008) failed to establish a relationship between satisfaction and loyalty and it is in the light of this that the current study seeks to examine the mediating role that customer satisfaction plays between internet banking and customer loyalty.

2.7 CONCEPTUAL FRAMEWORK

As has been established so far, this study proposes to examine the direct relationship between Internet banking service quality and customer loyalty, while considering the mediating role of customer satisfaction. Although some studies have been conducted in internet banking, it can be argued that none has been carried out to adequately deal with all the dimensions of internet banking service quality against an outcome of customer loyalty. In this study, the conceptualization of Internet banking service quality by Zavareh et al, (2012) is being adopted.

The conceptual framework that is presented therefore presents Internet banking service quality as a six dimensional construct consisting of efficient and reliable services, fulfillment, security/trust, site aesthetic, responsiveness/contact and ease of use. These are related directly to customer loyalty. The framework also checks a mediation role by customer satisfaction on the relationship between Internet banking service quality and customer loyalty.

Figure 3 below depicts the conceptual framework developed for the study, with its interacting variables and relationships:

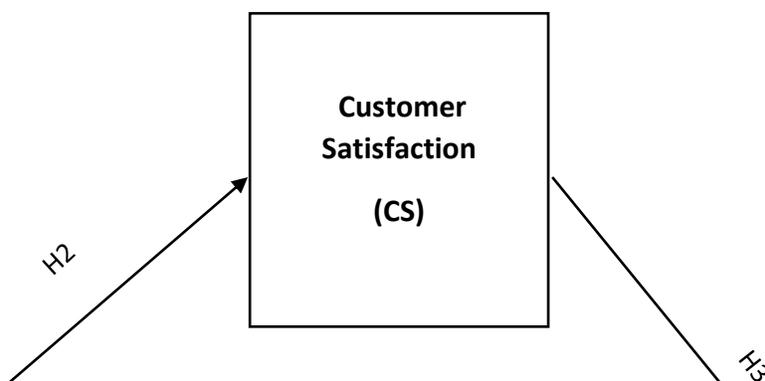
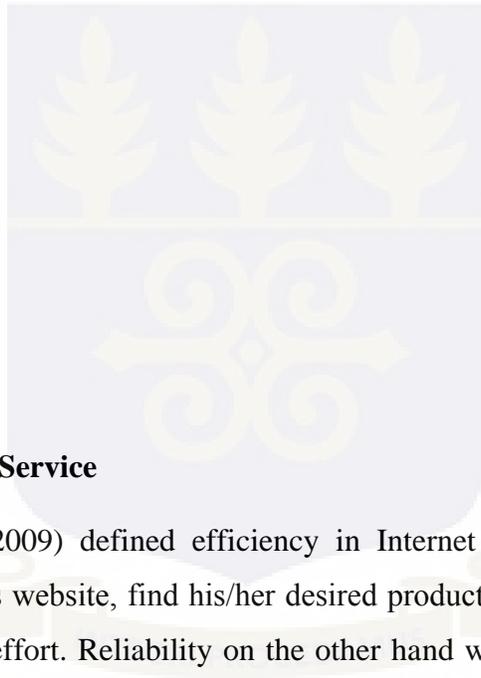


Figure 3: Conceptual Framework



2.7.1 Efficient and Reliable Service

Chang, Wang and Yang, (2009) defined efficiency in Internet banking as the ability of a customer to get to the bank's website, find his/her desired product and information related with it, and check out with least effort. Reliability on the other hand was defined by Weijters et al., (2007) as "the correct technical functioning of a self-services technology and the accuracy of service delivery". This means that an Internet banking system could be described as reliable if it is able to honour the commitments of the bank in areas such as billing accuracy, record maintenance and deliver the service within adequate time limit (Saha and Zhao, 2005). Several scholars have identified efficiency and reliability as critical in the determination of e-service quality (Bagozzi and Warshaw 1990; Davis et al., 1992; Parasuraman et al., 1988; Zeithaml, 2000). In adding his voice to the relevance of efficiency and reliability, Van Gorder (1990) stuck out his neck to say that reliability is the most crucial characteristics of an e-service system that the customer can use in the evaluation of service quality. Zeithaml (2000) in acknowledging the

important role that efficiency and reliability played in the determination of E-service quality by customers advised E-service providers to be circumspect in the design and implementation of the e-service system since customers are specifically influenced by the reliability of new technology because it might be associated with risks such as the technology malfunctioning (Shamdasani et al., 2008). In conclusion, Dabholkar (1996) in his study discovered that reliability and accuracy are most appropriate measure for measuring service that has to do with technology (Parasuraman et al., 1988).

These arguments suggest that efficiency and reliability as a dimension of Internet banking Service quality is likely to affect customer loyalty. Consequently, the first hypothesis of this study is stated as follows:

H1a: There is a positive relationship between efficient and reliable service and customer loyalty.

2.7.2 Fulfillment and Customer Loyalty

Fulfillment according to literature refers to the magnitude to which the act of using technology is perceived to provide the customer's desire in its own right, apart from any performance consequences that may be expected. Weijters et al., 2005, p. 8; Langeard et al., 1981; Shamdasani et al., 2008). In the words of Saha and Zhao, (2005), fulfillment entails making up to the service commitments, having enough product in stock and making the service accessible within the stipulated time. Davis et al. (1992) also revealed in their study that customers evaluate more favourably the excitement generated in using an SST. Finally, Dabholkar (1996) learnt that customers are likely to repeat the use of an e-service if the previous consumption fulfilled some need, desire, goal and above all offered them a pleasurable experience (Oliver, 1999; Shamdasani et al., 2008). This aptly implies that customers because of their needs will often choose the supplier that in exchange for the paid price, offer them the most pleasurable fulfillment (Osman et al., 2013). These assertions result in the second hypothesis which is stated as:

H1b: There is a positive relationship between fulfillment and customer loyalty

2.7.3 Security and Trust and Customer Loyalty

It has been observed with great concern by scholars and practitioners that the two most pressing worries that determine customers drive to adopt or decline the use of Internet banking are security and trust issues (Hutchinson and Warren, 2003; Johns and Perrott, 2008; Suping & Yizheng, 2010; Moga et al., 2012). Customer security has now become a serious challenge for many users of Internet banking due to the rather unfortunate development of internet fraud. Security breaches according to Min and Galle (1999) has the potential of causing a number of problems such as the destruction of operating systems, disclosure of classified information, and disruptions of information access and exchange (Gerrard and Cunningham, 2003; Boateng et al, 2008). It is as a result of the aforementioned that the users of internet banking services have become more wary about their privacy issues including the disclosure of their personal information. According to Guttman et al., (2004) e-cash and other electronic transaction engage a high degree of security and as result Internet banking has become one of the most vital future challenges (Gerrard and Cunningham, 2003). In an attempt for Internet banking service providers to secure their customers from fraudsters, scholar have propounded several strategies to deal with the problem. One of such scholars is Labuschagne, 2000 who proposed a security framework which comprised of an eight security requirement to ensure the security of internet users. The security requirements are identification and authentication, authorization, confidentiality, Integrity and non-repudiation. The others are availability, privacy and auditability. Based on this security framework, Internet banking service providers have developed user names and passwords which are often very complex as some of the measures put in place to protect the customer.

Trust on the other hand has been conceptualized by marketing researchers as a set of beliefs such as strength, ability, and predictability of an e-service which deals predominantly with the honesty, compassion and proficiency of the service (Doney & Cannon, 1997; Ganesan, 1994; Sirdeshmukh, Singh, & Sabol, 2002). Dwyer and Tanner, (2002) also defines trust as “the belief in the integrity, honesty and the reliability of another person” and this is what marketers have struggled to achieve from their customers over the years (Gefen, 2000; Wang, and Emurian, 2005). Morgan & Hunt, (1994) furthermore posited that trust occurs when one party (the customer) has confidence in the other party (the service provider). Trust can be considered as

very important in the development of long-term customer relationships. The conceptual model developed by Kim and Prabhakar (2000) actually confirms one's belief that trust in the electronic channel and perceived risks of e-commerce are the major determinants of the adoption of Internet banking. It can confidently be stated from the foregoing argument that customer's privacy which is one of the key pointers of trustworthiness in recent times is a decisive feature in building electronic loyalty. The relevance of security and trust to Internet banking quality based on the points discussed above can therefore not be overemphasized. It is therefore hypothesized that;

H1c: There exist a positive relationship between security and trust in Internet banking and customer loyalty.

2.7.4 Site Aesthetics and Customer Loyalty

Site aesthetics according to Jun and Cai (2001) refers to the attractiveness of the website. It is related to easy-to-remember URL address, well-organized, well-structured and easy-to-follow catalogue, simple site navigability, concise and understandable content and lastly reasonable terms and conditions. The importance of an attractive website cannot be overemphasised because according to Chen et al, (2015) it takes a split of a second for a person to make lasting judgment about a website for the first time. The first impression created by someone at seeing a website is influential enough to alter the opinions of the site's usability and trustworthiness (Van Schaik, and Ling, 2009; Tractinsky et al., 2006). Research has established that the impulsive emotional reaction people have on products or services is heavily influenced by what they first see about the products or the service (Sonderegger, 2010 p. 403-410). This aesthetic reaction does not only precede judgements of products and services but also websites and even goes further to influence the person's interaction which is referred to as the "halo effect". Websites that are perceived as beautiful or attractive are also perceived as usable (Hartmann et al., 2008) and trustworthy (Lindgaard et al, 2011). Zheng et al (2009) postulate that users form an opinion about a website's appeal pre-attentively, before the brain has time to consciously evaluate the incoming stimulus. The aesthetic quality of a product influences consumers' attitudes, and it is a key determinant of its marketplace success (De Angeli, Sutcliffe, and Hartmann, 2006). Not only

is attractiveness an important quality of a website, its effect seems to exceed the site and influence other judgements (Lavie, and Tractinsky, 2004). For instance, in addition to associating positive personality traits with attractive employees of a firm, customers tend to attribute more positive features to the firm's product or service as well. It is based on the argument put forward by scholars above that it is hypothesised in this study that:

H1d: There is a positive relationship between site aesthetics and customer loyalty.

2.7.5 Responsiveness/Contact and Customer Loyalty

An occasional system failure in the delivery of Internet banking services can be expected since technology cannot be viewed as perfectly faultless. It is only prudent therefore on the part of Internet banking service providers to put up mechanisms to correct such failure as a matter of urgency and hence responsiveness. Responsiveness has been described by literature as the speed, timeless, and accessibility of a service delivery (Parasuraman et al., 2005; Kim et al., 2006; Nusair and Kandampully, 2008; Shachaf et al., 2008). Responsiveness evaluates the extent to which the banks put in place procedures to recover services when there is a system failure regarding Internet banking. Contacts also include the list of the bank's street and e-mail addresses, phone and fax numbers, accessibility of service representatives, availability of chat room, bulletin board and other communication channels. Effective service recovery system which may involve contact has been shown to have a positive impact on customer satisfaction and eventually customer loyalty (Magnini et al., 2007). Most electronic service quality scales have responsiveness as a major dimension (Parasuraman et al., 2005; Kim et al., 2006; Nusair and Kandampully, 2008; Shachaf et al., 2008). With Internet banking, responsiveness quality deals with the bank's capacity to handle customer complaints rising from transactional failures. Acceptable recovery practices may vary from a simple apology to compensating customers against losses incurred such as monies illegally withdrawn from their accounts (Narteh, 2013). Responsiveness has been identified by literature as an imperative dimension of Internet banking quality (Shachaf et al., 2008; Khan, 2010; Kumbhar, 2010). It is therefore hypothesized in this study that;

H1e: There is a positive relationship between responsiveness and contact and customer loyalty.

2.7.6 Ease of Use

The fundamental objective of applying technology in doing business today would have been completely flawed if transaction of businesses were not made easier than before. Even though technology is sometimes perceived to be intimidating to some customers of banks, Internet banking service providers are advised to simplify banking transactions to the barest minimum so as to encourage customers to use the facility. Ease of use is one of the concepts that were investigated in the Technology Acceptance Model (TAM) (Davis, 1989). Davis, (1989) defined Ease of Use as “the degree to which the prospective user expects the target system to be free of effort. Chong et al. (2010) asserted that the probability of a customer using an internet service to transact banking business will be greater if he or she realises that the technology is easy to use and hassle-free. Dabholkar (1996) posited that most customers are concerned about ease of use in order to save effort and at the same time reduce social risk. It has strongly been argued by scholars that ease of use is one of the essential factors in determining the adoption and use of various internet technologies (Davis, 1989; Dabholkar & Bagozzi, 2002). For instance Gounaris and Koritos (2008) concluded from their study that, perceived ease of use is one of the main factors used to predict customer adoption of electronic banking. Different names such as user-friendliness (Joseph and Stone, 2003; Al-Hawari et al., 2005) user-friendly system (Mobarek, 2007) and easiness (Kumbhar, 2010) are used in literature to describe this dimension. In the view of all these authors Ease of Use stands very tall in the determination of Internet banking quality. This study therefore identifies Ease of Use as one of the dimensions of Internet banking service quality and hence hypothesised that;

H1f: There is a positive relationship between Ease of Use and customer loyalty.

2.8 INTERNET BANKING SERVICE QUALITY AND CUSTOMER LOYALTY

Customer loyalty incorporates the behaviour of a consumer’s repeated purchases and attitudinal self-commitment towards a particular product or service (Romaniuk and Nancy-Thiel, 2013; Møller, 2011). The behaviour of a consumer that can be described as loyalty to a particular brand normally occurs as a response to certain attributes of the product/service/brand. E-loyalty on the other hand can be described as customer’s loyalty towards an e-service. The relationship between

Internet banking service quality and customer loyalty has been proposed by numerous studies done mainly in the developed countries (Chang, Wang and Yang, 2009; O’Cass, 2010; Finn, 2010 Zavarah et al, 2012). It can however be argued that technology in such countries is in its advanced stages making it somewhat easy for customers to adopt Internet banking in such countries. It will therefore not be out of place for one to find out whether the results of the studies conducted in the developed countries (The impact of Internet banking quality on customer loyalty) will be valid in a developing country like Ghana.

2.9 INTERNET BANKING SERVICE QUALITY AND CUSTOMER SATISFACTION

Just as customer satisfaction has taken a center stage in traditional marketing literature, e-satisfaction has also gained prominence in e-commerce related literature (Kandulapati et al., 2014). After a review of studies which considered the antecedent of e-satisfaction, it could be deduced that most of the variables attributed to generate e-satisfaction are related to the web site and are often associated with Internet banking service quality. For instance Szymanski and Hise (2000) found that consumer perceptions of online convenience, merchandising (product offerings and product information), site design, and financial security have significant impact on E-satisfaction assessments (Sahadev and Purani, 2008). Again, Montoya-Weiss et al. (2003) established that among the factors contributing to Internet banking service quality are the design of an effective web site and that according to the study includes navigation, information content, graphic style, and security. They went further to state that these factors affect customers’ overall satisfaction in Internet banking or online financial services. However, in his study of E-service quality and its consequences in India, Gera, (2011) found that Internet banking quality was not a significant antecedent of e-satisfaction which according to him seemed very surprising because almost all the studies in the offline context have service quality as important causal construct of satisfaction. He therefore recommended that further studies be carried out to empirically establish the relationship between E-service quality possibly in the banking industry (Internet banking) and E-satisfaction. A positive relationship between Internet banking quality and customer satisfaction has been established by researchers in most previous studies (Loiacono et al., 2002; Zeithaml et al., 2002; Zhang et al., 2008). In view of the above, it is hypothesised that;

H2. Internet banking service quality has a positive effect on Customer satisfaction.

2.10 CUSTOMER SATISFACTION AND CUSTOMER LOYALTY

Studies have come out with empirical evidence to support the assertion that customer satisfaction has a significant impact on repurchase intention and loyalty (Carlson and O’Cass, 2010; AbuShanab et al., 2010; Gera, 2011). Anderson and Srinivasan (2003, p. 417) in their study of the impact of satisfaction on loyalty in the context of electronic commerce, concluded that customer satisfaction has a substantial influence on loyalty. Yen and Lu (2008) also established from their study that Internet banking quality dimensions like efficiency, privacy protection, contact, fulfillment, and responsiveness have statistically significant and positive effects on customers’ satisfaction, which in turn is positively related to their intentions to make a repeated purchase of a product or reuse a service. Zhou et al., (2010) also found that Internet banking quality and customer satisfaction are significant predictors of customer loyalty. Other studies of e-retail sites have also establish that users who have a satisfactory experience with a web site are more likely to revisit the site, purchase goods or services in the future, talk about the site with others and recommend the site to others seeking advice (Collier and Bienstock, 2006; Cristobal et al., 2007; Ho et al.,2010). Several authors have established that satisfaction leads to an increased probability that consumers will say positive things about an organization and recommend the firm to other customers (Dabholkar, 1996; Casalo et al., 2008; Van Dolen et al., 2007). Satisfaction has therefore emerged as a strong predictor of loyalty in the context of the new information and communication technologies (Kim and Yoon, 2004; Methlie and Nysveen, 1999). It is therefore hypothesised in this study that;

H3: Customer Satisfaction has a direct and positive impact on loyalty.

2.11 CHAPTER SUMMARY

This chapter has carried out a review of studies on Internet banking as an aspect of electronic banking to ascertain the current state of research, as well as the gaps of knowledge yet to be explored and addressed. Amidst the on-going discourse on Internet banking, the principal assumptions have been the challenge of IBSQ dimensions applicable in different context. A number of research on the adoption of Internet banking has been carried out in the Ghanaian

banking industry and a lot more has also been done on the impact of quality banking services (in the context of off-line) on customer loyalty. However a little has been done to determine the impact of quality banking service in the context of online and specifically using Internet banking. The current study therefore focuses on making contribution to literature in two ways; first by exploring the direct relationship between IBSQ and customer loyalty and also to ascertain the dimensions of IBSQ applicable in the Ghanaian banking industry and secondly to test the mediating effect of customer satisfaction on the relationship.



CHAPTER THREE

CONTEXT OF THE STUDY

3.0 INTRODUCTION

This chapter is dedicated to describing the setting of the Ghanaian banking industry. This chapter seeks to unveil the structure of the industry, the major players and the level of competition prevalent in the industry. Also the deregulation of the late 1990's is discussed, especially as it paved the way for the transformation of the industry from what it was, to what it is today.

3.1 THE GHANAIAN BANKING INDUSTRY: HISTORY, DEVELOPMENTS AND CURRENT ISSUES

The number of banks in Ghana according to statistics has shot up over the years from nine (9) in 1988 to twenty-seven (27) in 2011 (Saka, Aboagye & Gemegah, 2012). It is further revealed that in 1988, only two banks were operating in Ghana, both of which were foreign-owned banks. The banking industry consisted of twenty-six (26) banks in 2008, with a majority of these banks still under foreign ownership. Hinson et al. (2011) disclose that the decade spanning from 1989 to 1999 resulted in a financial service overhaul in Ghana. This period was characterized by financial sector reform with the sole aim being the rehabilitation of the nation's financial system which had suffered from undue political interference and influence. Also other factors such as weak management, insufficient capital, inappropriate accounting systems, absence of keen competition, and an overwhelmingly huge non-performing loans had all had an impact on the industry, requiring the much needed overhaul. As it later turned out, that period in the history of the financial service industry in Ghana has come to define the new era: the era where customer sovereignty is emphasized and where banks are aware that the presence of keen competition allows no room for error and complacency.

The study by Hinson et al. (2009) has been very profound in highlighting one of the catalysts of the new change currently being experienced in the Ghanaian banking industry. Their study found that the industry deregulations have paved way for the entrance of new foreign banks, led mostly by Nigerian banks. Ghana's relationship with Nigeria is a warm and cordial one, but this certainly does not extend to areas such as soccer and banking which has experienced a very keen competition over the years. Thus, the entry of these Nigerian banks has kept all other banks in

the country on their toes, with all banks aware of the need to deliver quality services in order to remain competitive (Hinson et al., 2011).

Beyond the competition in the industry that necessitated the deregulation of the late 1990's, the Ghanaian banking industry has also witnessed a great deal of technological advancements and change. A number of reports indicate that there has been a massive investment in various technological platforms that have positively affected the way banks and other financial institutions conduct their business (PWC/Ghana Bankers Association, 2009; Ghana Banking Survey Report, 2008). Indeed, the presence of improved technology in any industry is a precipitator of change and advancement and that is the exact scenario that has played out in the banking industry in Ghana. Various technologies such as advanced computer systems, money counting machines, communication servers, internet and broadband facilities, data management software, automated teller machines (ATM) and Internet banking are all evidence of the evolution of technology in the Ghanaian banking industry.

The study by Narteh (2013) on service quality in automated teller machines in Ghana emphasised the critical role of technology in the Ghanaian banking industry. Technology has made it easier for banks to store and retrieve customer information, and to network bank branches all across the country, making it convenient for bank customers to access their funds irrespective of their location. Electronic banking (e-banking) has transformed commercial banking services in recent times by closing geographical, industrial and regulatory gaps as well as creating ground-breaking products and services and more market opportunities for both banks and customers (Liao and Cheung, 2002; Narteh, 2012). Benefits such as lower cost, wider reach, higher competitiveness and generation of higher long-term profits as a result of the application of e-banking in the banking sector has been acknowledged by the extant literature (Polatoglu and Ekin, 2001; Rotchanakitumnuai and Speece, 2003; Shah and Siddiqui, 2006). Through technology, the work of bank employees is not only more comfortable, but also more efficient and effective. This is not to say that the industry is without operational flaws, as banking in Ghana is sometimes characterized by long waiting times in the banking hall. Nonetheless, the situation that pertains today can best be described as an enormous improvement over the days when tellers used to count cash physically, spending several hours in the bank long after closing time and also customers always walking to their banks over trivial issues like checking of

account balance and putting in request for a cheque book. These days, there is more order and systematic flow in the industry making it easier to serve customers well. Like in other industries, the banking industry in Ghana has had its fair share of storms and turbulences, although Hinson *et al.* (2011) report that the industry displayed a commendable robustness in the wake of the global financial system meltdown. The robustness of the Ghanaian banking industry was apparently further corroborated by Buchs & Mathisen (2008) who revealed that the pre-tax returns on assets and equity of Ghanaian banks are among the highest in Sub-Saharan Africa.

In the face of such evidence as has been adduced above, it can only be fair to acknowledge that, the banking industry in Ghana represents one of the strongest industries in Ghana. Although the story of the banking industry in Ghana seems rosy and pleasant to read, a report by PricewaterhouseCoopers (PWC) indicates that the year 2013 was one of the banking industry's toughest years since the financial sector reforms. According to the report, despite the fact that the industry's growth in total assets came to 33%, there was a slump in deposit mobilization in the industry. The report attributes this slump to the activities of the government, savings and loans companies and other financial houses (PWC, 2014). Clearly, the industry needs to brace itself for future challenges that may result from increased activities of savings and loans companies and other financial service firms.

With regard to innovation, the industry attempted to rub shoulders with banking industries in more advanced countries by launching the E-Zwich card in 2008 (www.business.myjoyonline.com; published 27 August, 2012). Though the initiative was laudable and commendable, it has not been met with the expected levels of success. Domfeh *et al.*, (2012) reports that "the rate at which financial consumers in the country apply for access to the e-zwich cards has dwindled since the electronic payment system was introduced in 2008". The implication is that either the conceptualization or implementation of the initiative was not handled appropriately. It is also quite surprising that the banking industry in Ghana has been sluggish as far as the embrace of agency banking and mobile money transfer systems are concerned. Whilst the telecommunications firms in Ghana embrace mobile money transfer and cover much ground with product packages such as MTN Mobile Money, Vodafone Cash, Airtel Money and Tigo Cash, the banking industry as at early 2015 only had Fidelity Bank

spearheading financial inclusion through agency banking (www.ghanaweb.com; published 26 March, 2014).

It is the hope of many people that the trend will change for more banks to embrace agency banking as a means to financial inclusion and providing a greater array of financial service solutions to Ghanaians.

3.2 BANKS IN GHANA

The 2014 Ghana Banking Survey reveals that the banking industry in Ghana is inundated with several banks comprising of twenty-eight (28) universal banks, one hundred and thirty-seven (137) rural banks as well as fifty-eight (58) non-banking institutions including finance houses savings and loans, and leasing and mortgage firms. The table on the next page presents details of the various banks in Ghana; their ownership structure, country of origin, number of branches and quartile classification:

Table 1: Classification of Banks in Ghana

No.	Bank Name	Majority Ownership	Country of Origin	No. of Branches	Year of Incorporation	Quartile ranking
1	Access Bank	Foreign	Nigeria	39	2008	Third Quartile
2	Adb	Local	Ghana	78	1995	Second Quartile
3	Bank of Africa	Foreign	Mali	19	1997	Third Quartile
4	Bank of Baroda	Foreign	India	2	2007	Fourth Quartile
5	Barclays Bank	Foreign	UK	59	1917	First Quartile
6	Cal Bank	Local	Ghana	19	1990	Second Quartile
7	Ecobank	Foreign	Togo	78	1990	First Quartile
8	Energy Bank	Foreign	Sao Tome	7	2010	Fourth Quartile
9	Fidelity Bank	Local	Ghana	43	2006	First Quartile
10	First Atlantic	local	Ghana	8	1994	Fourth

	Bank					Quartile
11	First Capital Plus Bank	Local	Ghana	15	2009	Fourth Quartile
12	GCB Bank Ltd.	Local	Ghana	158	1953	First Quartile
13	GN Bank	Local	Ghana	103	2014	Fourth Quartile
14	GT Bank	Foreign	Nigeria	28	2004	Third Quartile
15	HFC Bank	Local	Ghana	28	1990	Third Quartile
16	National Investment Bank	Local	Ghana	29	1963	Second Quartile
17	Prudential Bank	Local	Ghana	31	1993	Third Quartile
18	Sahel-Sahara Bank	Foreign	Libya	15	2008	Fourth Quartile
19	SG-Ghana	Foreign	France	45	1975	Third Quartile
20	Stanbic Bank	Foreign	South Africa	26	1999	First Quartile
21	Standard Chartered Bank	Foreign	UK	25	1896	First Quartile
22	The Royal Bank	Local	Ghana	11	2011	Fourth Quartile
23	Unibank	Local	Ghana	22	1997	<i>Unknown</i>
24	United Bank of Africa (UBA)	Foreign	Nigeria	27	2004	Second Quartile
25	Universal Merchant Bank	Local	Ghana	22	1971	<i>Unknown</i>
26	UT Bank	Local	Ghana	30	1995	Second Quartile
27	Zenith Bank	Foreign	Nigeria	28	2005	Second Quartile
28	FNB Bank	Foreign	South Africa	12	2014	Fourth Quartile

Source: PricewaterHouse Coopers (PWC), 2014.

The table above shows the details of the twenty-eight (28) banks operating in Ghana. Fourteen (14) are foreign owned banks whilst the other fourteen (14) are indigenous banks, with local ownership. This indicates that the ownership of banks in Ghana is equally distributed across

foreign and local ownership. This is a vast improvement from the ownership structure of the late 1990's where most banks were under foreign ownership.

3.3 QUARTILE GROUPING

Banks in the Ghanaian banking industry have been grouped according to quartiles based on their operating assets (PWC, 2010). The motive for such grouping was to enable reasonable comparison and dialogue with regard to the performance of banks in the industry. According to PWC (2010), the operating assets of banks is a key determinant of their operating performance and the value they create for their shareholders. The quartile divisions are significant in that banks are known to seek to maximize returns on investment, and in that regard, classifications according to operating assets gives an indication of how well banks in the industry are performing. PricewaterhouseCoopers in their latest report on the state of the Ghanaian banking industry reveals that banks operating in Ghana have been grouped into four quartiles. The various quartiles give an indication of the operating performance and strength of banks in the industry. Table 1 above gives a detailed classification of the various quartile classifications of banks in Ghana.

3.4 THE GHANAIAN BANKING INDUSTRY: PROSPECTS AND FUTURE CHALLENGES

The Ghanaian banking industry has without a shred of doubt taken giant strides since the financial reforms of the late 1990's. These reforms have created a robust industry that is to a large extent insulated from the ripple effects of activities in the global banking industry. In recent times, the number of banks in the industry has seen an upward rise, and presently not less than twenty-eight (28) banks operate in the industry.

According to a report by PricewaterhouseCoopers (PWC), the future of banking in Ghana is hinged on four (4) factors namely, competition, legislation and regulations, technology and domestic economic performance (PWC, 2014). With regard to competition, the report stipulates that internal industry competition is the greatest threat as opposed to external forces entering or

seeking to enter the industry. PWC (2014) also reiterates that the savings and loans companies as well as the rural and community banks will pose a substantial threat to banks in the near future.

On the issue of telecommunication firms posing a threat to Ghanaian banks through their mobile money transfer activities, the PWC report indicates that the absence of legislature granting telecommunications firms the license to perform banking activities means that they cannot be considered a direct and a serious threat to banks in the industry. On the other hand though, the report suggests that most bank executives are of the view that the best way to manage the possible threat that telecom firms may pose through their mobile money activities is to partner with them and develop product/service innovations that can be useful in reducing the population of unbanked Ghanaians.

Moving forward, PWC (2014) reports that legislation will be a key driver of change in the Ghanaian banking industry. The PWC report indicates that a majority of bankers surveyed held the view that legislation and regulations would be amongst the top three factors that would drive the future of the industry. Many bankers were of the view that direct market interventions made by the regulatory body, Bank of Ghana, would have an effect on the operations of banks. It was also observed that the introduction of a Valued Added Tax (V.A.T.) rate of 17.5% would cause more tension as it were in the industry because banks were already experiencing shrinking profits largely attributed to some regulatory measures put in place by the Bank of Ghana. The report further revealed that banks were united in the view that should V.A.T. be imposed on banks, the cost would ultimately be passed on to the customer given that banks had to protect the interest of their shareholders.

Furthermore, another factor upon which the future of the banking industry in Ghana hinges is technology. Technology has pervaded the banking industry in Ghana and industry reports suggest that it looks likely to play an even more crucial role, especially with respect to electronic banking services (PWC, 2014). The implication is that banks would seek to obtain more leverage from technology and find alternative ways to deliver customer excellence.

Lastly, the performance of the domestic economy is another factor that will influence the happenings in the banking industry. Factors such as inflation, interest rates and levels of government borrowing will impact on the operations of banks (PWC, 2014). Suffice it to say that

the performance of the domestic economy will play a huge role in the future of banking in Ghana.



CHAPTER FOUR

METHODOLOGY

4.0 INTRODUCTION

One of the most essential aspects of any research is the activity of data collection, being it primary or secondary and the method of analysis employed. In this chapter, the methodology of the research is reviewed. Among the things that will be discussed in the chapter are research paradigms, approach, research purpose, research strategy, and population/sample frame. The others are sample size, sampling technique and data collection instruments. The purpose of this chapter is therefore to identify the methodological approach employed in the conduct of this research.

4.1 THE ESSENCE OF METHODOLOGY IN RESEARCH

It could favourably be argued that research has played and continues to play a crucial role in businesses and the society at large. However, what really constitute “research” has been the subject of discussion by scholars for some time now (Walliman. 2005; Saunders, Lewis & Thornhill, 2009). Walliman (2005) on his part went further to stress on the point that research goes beyond the mere collection of facts or information with no clear purpose, reordering facts or information and without appropriate interpretation of the data gathered.

Saunders et al., (2009) defined research as “something that people undertake in order to find out things in a systematic way, thereby increasing their knowledge.” Based on the points discussed by scholars and raised above, it could be established that, the essence of research does not depend on the mere collection of data or information, but rather the systematic process involved in discovering the facts or the information. In adding their voice to the argument, Ghauri and Grønhaug (2005) affirmed that the systematic nature of research implies that it is based on logical relationships and not mere beliefs and assumptions. These assertions emphasise the fact that every research needs to be conducted in a methodical and organized manner. Consequently, every research needs to have a sound methodological foundation and also a provision of a sound

justification for the choice of that method. The next section discusses the philosophical perspective within which the research was conducted.

4.2 PHILOSOPHICAL PERSPECTIVES

The importance of research findings as an addition to knowledge cannot be overemphasized and it is on the basis of this that a discussion on research philosophy has become an inseparable aspect of research (Henrichsen, 1997). The ability of researchers to identify their philosophical stance before the selection of the research strategy to be employed in conducting the research is critical since the stance adopted forms the foundation of the research work (Johnson & Clark, 2006; Johnson et al., 2007). Saunders et al., 2009 described research philosophy as subjects pertaining to the development and nature of knowledge.

Blaikie (1993) opined that it is imperative to consider different research paradigms and matters of ontology and epistemology since these parameters describe perceptions, beliefs, assumptions and the nature of reality and truth. These parameters has the potential of influencing the manner in which the research is conducted from the proposal through to conclusions. It has therefore become important for a researcher to understand and deliberate on these aspects so that the approaches compatible to the nature and aims of a particular analysis are adopted, and to ensure that the researcher's biases are understood, exposed, and possibly reduced.

Ontology as a term associated with research paradigm was described by Blaikie (1993) as 'the science or study of being'. He went further to describe it in relation with the social sciences as the 'claims about what exists, what it looks like, what units make it up and how these units interact with each other'. Ontology therefore questions the principal assumptions that researchers have as regards how the world operates and the commitment researchers have to particular views (Saunders *et al.*, 2009). In simple terms, ontology defines ones view (whether claims or assumptions) on the nature of reality, which may be an objective reality that really exists, or only a subjective reality, created in the mind of the person. Saunders *et al.*, (2009) describe two aspects of ontology as objectivism and subjectivism. They explained that objectivism postulates that social entities exist in reality external to social actors concerned with their existence whereas subjectivism theorises that social phenomena are created from the perceptions and resultant actions of the social actors concerned with their existence.

Closely attached with ontology and its consideration of what constitutes reality is epistemology which refers to the theory of knowledge, its components, sources, limits and justification. It also considers views about the most suitable ways of questioning the nature of the world (Easterby-Smith, Thorpe and Jackson, 2008) and again what constitute knowledge and also the sources and parameters of knowledge (Eriksson and Kovalainen, 2008).

Based on previous studies, scholars have put forward four main research philosophies and these are Positivism, Interpretivism, Realism and Pragmatism (Saunders *et al.*, 2009; Easterby-Smith, Thorpe and Jackson, 2008; Eriksson and Kovalainen, 2008). The next section discusses these philosophies.

4.2.1 Positivism

The positivism paradigm originated from the natural science and is characterised by the testing of hypotheses developed from prevailing theory through the measurement of visible social realities (Flowers, 2009). Positivism was the main epistemological paradigm in social science from the 1930's to the 1960's (Easterby-Smith, Thorpe and Jackson, 2012). The proponent of the positivism paradigm argue that the social world exists externally to the researcher and its attributes can be measured directly through surveillance (Gray, 2013). Positivists are viewed as natural scientists who desire to work with an observable social reality with an end product having theoretical generalizations similar to those formulated by natural scientists. The primary principles of positivism are values of reason, truth and validity and there is also an emphasis on pure facts collected through direct observation and experience and measured empirically using quantitative methods such as surveys and experiments with statistical analysis (Blaikie, 1993; Saunders, Eriksson and Kovalainen, 2008; Easterby-Smith, Thorpe and Jackson, 2012; Hatch and Cunliffe, 2006). It is therefore the belief of the Positivists that a research strategy to collect data must use a prevailing theory to formulate hypotheses which will later be tested and confirmed (Remenyi and Williams, 1998).

4.2.2. Interpretivism

The Interpretivism paradigm is described by certain scholars as the post-positivism (Blaikie, 1993) and others as anti-positivism (Hatch and Cunliffe, 2006) because according to these

scholars, there is a primary difference between the issues of natural and social sciences. Interpretivists postulate that there are several realities (Denzin and Lincoln, 2003). Interpretivism involves an ontology which views social reality as a sequence of procedures that results in social actors negotiating the meaning of a phenomenon (Blaikie, 1993). In interpretivism, the fundamental argument that is championed is that there is a difference between subject matters of natural and social sciences and accordingly, individuals and groups make sense of, or interpret situations based on their experiences, memories and expectations (Flower, 2009). The interpretivists contend that meaning is created over time and through a combination of experiences which generate different interpretations. They go further to explain that the varied interpretations that result from the various experiences must be well understood given that they form a social reality which affects people. The interpretivists therefore emphasise on the decoding of the meanings and interpretations of social actors and to see the world through their eyes, creating a viewpoint that is the reflection of several experiences (Saunders, Lewis & Thornhill, 2007). The Interpretivists tend to usually favour the qualitative research approach than the quantitative owing to its emphasis on language and also the subjective nature of its ontology (Eriksson & Kovalainen, 2008).

4.2.3 Realism

The next research paradigm to be discussed is the realism which takes aspects from both positivist and interpretivist positions. The realists argue that real structures exist independent of human awareness, but that knowledge is socially formed and the knowledge of reality is as a result of social conditioning (Saunders, Lewis and Thornhill, 2007). Blaikie (1993), contends that reality may exist irrespective of science or observation, and as such there is legitimacy in recognising realities that are simply claimed to exist or act, whether proven or not. Realism just as Interpretivism, recognises that natural and social sciences are different, and that social reality is pre-interpreted. The point of difference however occur when the realists agree with the positivist position that science must be empirically-based, balanced and objective and hence it argues that social matters may be studied 'scientifically' as social objects, not only through language and dialogue. Saunders *et al.* (2009) posit that realists are able to put forward a clearer meaning out of their data through the two types of realism; direct realism and critical realism.

Direct realism advocates that what one sees is what one gets, whereas critical realism postulates that the world is usually perceived through one's senses and as a result are generally vulnerable to deception. It is therefore the belief of realism as a research paradigm that reality exists on numerous levels and as such for to comprehend to reality, research must be carried out using several approaches and at multiple levels (Chia, 2002).

4.2.4 Pragmatism

The last research paradigm to be discussed is the pragmatism which is premise on the fact that the most significant factor to consider in the determination of the most appropriate epistemology, ontology and axiology to adopt in a research work is mainly dependent on the research question. The research question according to pragmatists will determine the suitability of a paradigm over the other. Pragmatists again argue that, researchers can work with different variations of epistemology, ontology and axiology (Saunders *et al.*, 2009). Pragmatists further note that it is in the best interest of the researcher to view the research philosophy adopted as a continuum, or a melting pot of differences, with each serving a unique purpose and not seeking to antagonise other paradigms (Tashakkori & Teddlie, 1998).

This study adopted a positivist stance. Hypothesis were developed from existing theory and tested via Structural Equation Modelling (SEM). The adoption of the positivist's stance also reflected in the presentation of the research findings as objective facts and established truths (Crotty, 1998). Furthermore, the positivistic stance was also chosen because it permitted the use of highly structured large samples as well as quantitative approach to research (Saunders *et al.*, 2009).

4.3 RESEARCH PURPOSE

Every successful research is secured by a purpose which gives direction to the research process. Scholars have grouped research based on the purpose it serves into three categories namely, exploratory, descriptive and explanatory. However just as research questions can be multi-dimensional so can a research purpose also. Thus, a research purpose can be both descriptive and

exploratory, exploratory and explanatory or exploratory and descriptive. The next section discusses the different types of research purposes as has been described by various scholars.

4.3.1 Exploratory Studies

Exploratory studies seeks to explore an area where little is known or little research has been done (Hair et al, 2006). Researchers in exploratory research usually perform the preliminary studies by seeking to gain insights into a research problem, clarify the problem and offer guidance for the conduct of subsequent research (McDaniel & Gates, 2002). The fundamental principle of exploratory research is therefore to gain fresh insights and perspectives on a new research subject or problem and also offer direction for the conduct of subsequent research.

A search through literature reveals that there are three main ways of conducting exploratory research and these are searching through literature, interviewing experts on the subject and lastly conducting focus group interviews or discussions (Saunders *et al.*, 2009).

4.3.2 Descriptive Studies

Descriptive studies on the other hand seeks to systematically describe a phenomenon or situation or problem. Researchers in this kind of studies try to throw more light (describe) on what is happening by asking the ‘what’ and ‘how’ questions, but they do not go the extra mile in trying to explain what is happening (Hair, Bush & Ortinon, 2006). Robson (2002) on his part stated that descriptive research essentially attempt to expose or reveal a precise profile of persons, events or situations.

4.3.3 Explanatory Studies

Explanatory studies as the name implies seeks to understand and explain a phenomenon or situation or problem. Saunders *et al.*, (2009) explains that an explanatory research tries to establish causal relationships between variables. An explanatory research usually asks the

questions ‘why’ and ‘how’ a particular phenomenon occurs or explains the relationship between two or more factors of a phenomenon. The researcher does not merely describe the characteristics of the phenomenon, but rather analyses and explains why or how something is happening (Eriksson & Wiedersheim-Paul, 2001). It is logical therefore to classify this study as explanatory since it seeks to establish the relationship between Internet banking quality and customer loyalty

4.4 RESEARCH APPROACH

A search through literature reveals that there are two main approaches to research and these are qualitative and quantitative research approaches (Hair *et al.*, 2008; Kent, 2007). Research methodology experts like Kent (2007) contends that, although there is a difference between qualitative and quantitative research, one cannot stick his neck out to say that quantitative data is solely based on numbers whilst qualitative is not because words may be coded as numbers for the purpose of data analysis in certain cases. It is worthy to note that each of the approaches has its own unique attributes and as a result, one cannot be said to be superior to the other (Hair *et al.*, 2008). The sub-section below describe each research approach.

4.4.1 Qualitative Research

Qualitative research seeks to explore the meanings, attitudes, values and beliefs people associate with a phenomenon in order to establish a better understanding, rather than to test to support or disprove a relationship (Hancock, 1998). Hair *et al.* (2008) defined qualitative research as “the collection of data in the form of text or images using open-ended questions, observations or “found” data”. It can be deduced from the above definition that qualitative research is about the explanation of a social phenomenon, which helps the researchers to understand the world around them and thereby ascribe reasons as to why things are the way they are (Hancock, 1998). Qualitative research methods basically seek to highlight the exploration and in-depth examination of a complex situation which cannot always be easily quantified or expressed in numerical terms (Beedles, 2002). The attention of the researcher in qualitative research is usually focused on understanding the research participants rather than answering predetermined questions with little or no room for explaining their choices (Hair *et al.*, 2008). Data for

qualitative research include words, phrases, text or images that are structured into systematic records by individuals who design the research context within which the study is to be conducted (Kent, 2007). The importance of qualitative research cannot be overlooked since its findings can be used to support and further clarify that of quantitative research due to its richness and expansive nature (Fielding and Fielding, 1986).

- ***Advantages of Qualitative Research***

Some advantages of qualitative research have been identified in literature and a few of such have been discussed below:

Qualitative research approach enables the researchers to explore every facet of the research phenomenon and this allows them to critically analyse the phenomenon in order to find the underlying explanations to it (Allwood, 2012).

Kent (2007), talks about the nonrestrictive nature of qualitative approach to research as an advantage. As has been alluded to earlier, the qualitative research approach does not put any restriction on the researcher in gathering his data. The respondents in this kind of research are virtually free to air their views and opinions on the research issues without being gagged and this actually gives the researcher a lot of insight into the problem.

Additionally, in situations where quantitative study has failed to clarify the research problem, qualitative approach to the research has been favoured to do the magic. Qualitative studies are noted to be particularly useful in unravelling the mysteries surrounding certain research phenomenon (Kent, 2007).

- ***Disadvantages of Qualitative Approach***

A few of the weaknesses of the qualitative approach to research are discussed below.

Scholars contend that the qualitative approach to research lacks the capacity to quantify data and also generalise research findings (Miles & Huberman, 1984; Beedles, 2002). This eventually

makes the findings of qualitative research applicable only to the sample whereas in quantitative research, generalization is allowed.

Furthermore, in the process of data collection in qualitative research, the researcher may be biased in his/her subjective interpretation of the phenomenon and this may adversely affect the findings of the research (Bendoly et al., 2010).

4.4.2 Quantitative Research

Quantitative research is defined by Hair *et al.* (2008) as “research that places emphasis on using formal questions and predetermined response options in questionnaires or surveys administered to large numbers of respondents”. It has further been explained by other experts in research methodology as a kind of approach that embodies numerical records that are constructed by deciding on the cases, the variables and sets of values to be used before the data collection takes place, and then undertaking a process of measurement (Karolchik, 2008). Thus Quantitative research in summary seeks to assign numerical measures and interpretations in explaining research phenomena.

- ***Merits of Quantitative Research***

Saunders *et al.*, (2009) posit that quantitative approach to research is beneficial because it seeks to establish causal effects and causal relationships between variables and phenomenon. It therefore enables researchers to recognise variables of interest and evaluate the causal effects thereof.

Secondly, in justifying the importance of quantitative research, Beedles (2002) asserted that no approach compares with quantitative research when it comes to the provision of concise answers to research questions through the acquisition and analysis of information that can be gathered from the survey data. Thus, the quantitative research approach assists researchers to generalise on their research findings which eventually becomes beneficial and useful to businesses as a means of dealing with certain phenomenon.

Furthermore, quantitative research approach is beneficial in measuring specific features of identified constructs through a structured data collection process where a large sample is used, in order that a projection of the findings could be made to cover the entire population (Davis, 2000).

Lastly, quantitative research approach adequately identify the specific research problem for the researcher to know the precise information he/she is looking for in the study.

- ***Disadvantages of Quantitative Approach***

Having exhausted the positive side of the quantitative research approach, it is only logical for one to expect the negative side as well and a few of such are pointed out below.

The quantitative approach to research often deprives the researcher the opportunity to understand how social experience is created and given meaning because the approach prescribes that for the sake of objectivity, researchers should put a distance between themselves and the objects under study (Yilmaz, 2013).

Again, due to its emphasis on generalization, quantitative research approach disregards the individual cases in the dataset and focuses on the aggregation of results and this has the potential of eliminating the possibility of gaining understanding on an aspect of the phenomenon that may not be captured in the general results (Kent, 2007).

The current study adopts the quantitative approach owing to its ability to identify and predict research phenomena in numerical terms and at the same time offering an opportunity for generalisation.

4.5. RESEARCH STRATEGY

Scholars have described research strategy as an instrument used by researchers to answer research questions in order to achieve research objectives (Bryman & Bell, 2011; Biggam, 2015; Saunders *et al.*, 2009). A review of literature reveals that there are three basic factors accounting

for the choice of a particular research strategy and these are the kind of research questions posed, the control a researcher has over actual behavioural events and lastly, the focus on contemporary in contrast to historical phenomenon (Yin, 2003). Other methodology experts also contend that the choice of a research strategy is dependent on the nature of research questions and objectives, the magnitude of prevailing knowledge, the amount of time required and the availability of other resources, as well as the philosophical underpinnings of the researcher (Saunders *et al.*, 2009). Yin (2003) refers to experiment, survey, archival research and case study as some of the primary research strategies in the field of the social sciences. In addition to the strategies outlined by Yin (2003), Saunders *et al.*, 2009 outlined action research, grounded theory and ethnography as the other research strategy. The next sub-sections discuss these research strategies.

4.5.1. Experiment

The first to be discussed is the experimental research strategy and this according to scholars originated from the natural sciences. Experiment, which was until recently a research strategy reserved for the natural sciences is now being embraced by the social sciences. Hair *et al.*, (2008) posit that experiments are causal research designs that are used to ascertain cause-and effect relationships between variables and also determine why events occur. The purpose of this strategy is to measure causal relations and to determine how a change in one independent variable affects the dependent variable (Hakim, 2000). There are two main degrees of experiments and these are simple and complex experiments. Simple experiments involve an effort by researchers to determine the link between two variables whereas complex experiments deal with the size of the change being displayed in the variables and also the relative significance of two or more predictor variables. Experiment as a research strategy can therefore be applied by marketers in research works that involve a critical examination of causal variables (Hair *et al.*, 2008).

4.5.2. Survey

Kerlinger (1973) defined survey research as a study on large and small populations in which a researcher selects samples from the preferred population to discover relative occurrence,

distribution and interrelations. Saunders *et al.*, (2009) on their part described survey as a research strategy that allows the gathering of a large amount of data from a substantial population in a very economical way. Thus, Surveys are research procedures for collecting large amounts of raw data using question-and-answer formats. The primary objective of quantitative survey methods is the provision of facts and estimates from a large, representative sample of respondents (Hair *et al.*, 2008). Surveys acquire data by the use of questionnaires administered to a sample of the population which allows the use of descriptive and inferential statistics. It is however worth noting that focusing on questionnaires as the main hallmark of a survey design rather than emphasizing on the entire survey process as some researchers are accustomed to, is inimical to the success of the research process (Fowler *et al.*, 2002; Dillman, 2000). Several researchers favour the use of survey as a research strategy due to its ability of assisting the researcher to gain more control over the research process and also making it possible for the researcher to generalize his/her findings as a representative of the entire population at a lower cost as against collecting the data for the whole population (Saunders *et al.*, 2009).

4.5.3. Archival Research

Archival research is a research strategy that uses past and present administrative records and documents as the main source of data to explain the evolution of research phenomenon over time (Bryman 1989; Saunders *et al.*, 2009). Even though the term archival is associated with ancient events, it can be used in reference to contemporary as well as historical documents (Byrman, 1989). The archival research strategy is mostly applied in studies where the researcher seeks to answer research questions that purport to close the gap between the past and the future (Saunders *et al.*, 2009). The ability to answer the questions is however dependent on the existence and the nature of the administrative records and documents available to the researcher. It therefore becomes difficult sometimes for researchers to apply this strategy because data may be lost or you may be declined access for confidentiality reasons. Even in circumstances where administrative records and documents are accessible to the researcher it may not have the exact information needed to answer the research question(s) or achieve the research objectives.

4.5.4. Case Study

Case studies are exploratory research techniques applied by researchers who wish to gain an understanding of the context of the research and the processes being enacted (Morris and Wood 1991; Hair *et al.*, 2008). According to Robson, (2002) case studies are research strategies for conducting research involving an empirical investigation of a specific current phenomenon within its real life context using various sources of evidence. Saunders *et al.*, (2009) argues that this strategy is in direct contrast with the experimental strategy where the research is carried out within a highly controlled environment and again different from the survey strategy where the ability to discover and understand the context is limited by the number of variables for which data is being collected.

Yin, (2003) describes four different case study strategies namely single case, multiple case, holistic case and embedded case. A single case study is used in a situation where the subject under study is exceptional in nature and requires special attention to understand and interpret the research phenomenon. Multiple case on the other hand is used in instances where there is the need to confirm findings amongst multiple cases to validate and certify that particular findings are an accurate predictor of the phenomenon (Saunders *et al.*, 2009). A research strategy is termed a holistic case if it concerned with an organization as whole whilst embedded case goes beyond dealing with the organization as a whole to examine also a number of logical sub-units within the organization.

4.5.5. Action Research

The first use of the term action research in 1946 is accredited to Lewin. Although various scholars have tried to explain the term in their own way, a search through the extant literature reveals four main themes. Brannick and Coghlan (2007) highlight the first theme as an emphasis on the purpose of the research whereas the second theme deals with the involvement of practitioners in the research that is a cooperative and democratic partnership between practitioners and researchers. The third theme focuses on the iterative nature of the process of diagnosing, planning, taking action and evaluating whilst the last theme emphasises on the

implications beyond the immediate project; in other words, it must be clear that the results could inform other contexts (Saunders *et al.*, 2009).

Methodology experts have described action research as a strategy where a sponsor identifies a need within an organization and tasks a research team to undertake research to find solutions to the problem and suggest ways by which the findings can be implemented in the organization (Gray, 2013). Action research has been observed to be a collaboration between industry practitioners and researchers, where an emphasis is placed on instigating and effecting change in organizational settings (Saunders *et al.*, 2009).

4.5.6. Grounded Theory

Grounded theory is described by scholars as a research strategy that combines the inductive and the deductive approaches to develop and build theory that can be used to predict and explain behaviour (Goulding, 2002; Saunders *et al.*, 2009). The most prominent thing in the grounded theory is the development and the building of theory that aims at explaining behaviour (Goulding, 2002).

In the application of grounded theory as a research strategy, data collection commences the process without the formulation of an initial theory. Theory is subsequently developed from the data collected which in turn lead to the generation of extrapolations which are then tested in further observations and experiments to either confirm or dispute the predictions.

Suddaby (2006) however cautions researchers using this approach as a research strategy to be careful not to set literature aside which may have an adverse effect on the research. It can therefore be stated that the application of the grounded theory requires the researcher to possess mastery of the subject area in which he/she is researching in.

4.5.7 Ethnography

Ethnography is a research strategy that seeks to investigate a phenomenon within the setting in which it naturally occurs. Saunders *et al.*, (2009) described this approach as a strategy which enables the researcher to immerse himself or herself in the social world of the research subjects

in a way that allows him or her to concisely capture the phenomenon from the standpoint of the subjects, and in a way that is closer to the truth.

In Ethnography, the process begins with the researcher finding a setting or group that will enable him or her to find answers to the research question and also meet his or her research objectives. This is followed by seeking for access to such setting and finally developing a strategy to deal with the members of the social context in which the research is set to be carried out (Saunders *et al.* 2009).

Although Ethnography is considered most appropriate in carrying out certain research works, it is generally believed to be time consuming, as it involves the researcher immersing him/herself into the lifestyle and culture of the people to obtain a closer picture of the phenomenon and to accurately report on the findings. Again, Saunders *et al.* (2009) opine that the adoption of this strategy requires absolute dedication on the part of the researcher which may come at a great cost to him or her.

4.6. TIME HORIZON

An important aspect of research that is worth noting is an idea about the time-scales the researcher wants to adopt; being it a “snapshot” taken at a particular time or more of a “diary” which will be a depiction of happenings over a given period (Gray, 2014; Saunders, 2009). It is based on this that scholars have come out with two time horizons that are used by researchers in seeking for explanations to research phenomena. The two time frames are cross-sectional studies and longitudinal studies.

4.6.1. Cross-Sectional Studies

Cross-sectional studies are studies that seek to take a snapshot of a research phenomenon at a particular point in time. In cross sectional studies, data is collected at a given point in time and the main emphasis lies on capturing the phenomenon at a specified moment in time (Gray, 2014). Cross-sectional studies have been noted to employ survey strategies in an attempt to

describe and adequately explain an incidence at a given point in time (Robson, 2002; Saunders *et al.*, 2009).

4.6.2. Longitudinal Studies

Longitudinal studies on the other hand makes a more comprehensive description of events over a relatively longer period of time. This study approach is considered ideal for researchers that seek to study change and evolution of a research phenomenon over a period of time. The main strength of this study approach is its ability to make long observations over a period of time, thus enabling the researcher to exercise a measure of control over the variables being studied (Saunders *et al.*, 2009). Longitudinal studies equip researchers with the ability to identify explanatory factors and study how they impact on other dependent variables (Gray, 2014).

The current study sought to determine how customer satisfaction mediates Internet banking quality and customer loyalty in the Ghanaian banking industry and as a result, a cross-sectional study was adopted. The justification for adopting this time horizon was due to the fact that Ghana's banking industry as at the year 2015 had reached competitive levels where twenty-eight (28) banks were vying for supremacy and substantial market share. In view of this, the phenomena the study sought to explain was best served by a cross-sectional study that sought to "take a snapshot" of events occurring in the industry and determine the role branding plays in fostering customer loyalty amongst customers of banks in Ghana.

4.7. RESEARCH DESIGN

The overall plan and the various methods used by researchers to collect and analyse data is referred to as the research design. It is imperative for researchers to structure their designs based on the objectives of the research or the research questions (Hair *et al.*, 2008). In the current study, the research was commenced with a positivist research paradigm which steered the research towards a quantitative approach. The research problem was formulated from existing theories. A deductive approach was adopted in this study to test how customer loyalty mediates Internet banking service quality and customer loyalty using the dimensions of Internet banking service quality put forward by Zavareh *et al.*, (2012).

Data was gathered through the use of a questionnaire which was formulated based on electronic banking literature as well as scales obtained from previous studies covering the areas of Internet banking, customer satisfaction and customer loyalty. The survey strategy was chosen due to its consistent use in quantitative based studies. A cross-sectional study was chosen due to its ability to capture a research phenomenon at a given point in time (Gray, 2014). Justification for this choice of research design stems from the fact that in utilizing an explanatory research, this study sought to uncover the causal relationships between Internet banking service quality and customer loyalty, considering the mediating role of customer satisfaction. Formulated hypotheses were put to test to determine the direct and indirect relationship between Internet banking service quality and customer loyalty in the Ghanaian banking industry.

4.8. POPULATION, SAMPLE SIZE AND SAMPLING TECHNIQUES

The single and most important goal of every researcher is to gain an understanding of a phenomenon. It therefore follows that at some point in the research process, data will be collected from respondents or participants. Before the researcher arrives at this crucial point of data collection, the population of the study, sample size and the sampling technique to be used in the study must be determined.

4.8.1. Population

The whole group under study as identified by the objectives of the research project is referred to as population (Burns & Bush 2000). A target population consists of the complete group of elements that are identified for investigation based on the objectives of the research (Hair *et al.*, 2008). Population has also been described by Malhotra, (1996) as the collection of elements or objects that possess the facts sought by the researcher and about which inferences are to be made. The population for this study consisted of all customers of the banks in Ghana that use internet banking as one of the electronic channels through which customers are served. As can be envisaged, it is practically impossible to conduct a survey on all the customers of these banks and hence a theoretical sample as has been suggested by some researchers was used (Attewel &

Rule, 1991; Malhotra, 1996). Theoretical samples are samples chosen for the collection of new data to prove or disprove a theoretical assertion (Burns & Bush 2000).

4.8.2. Sample Size and Sampling Technique

A sample is a subgroup of the entire population under study (Dillon, Madden & Firtle, 1993). Samples are important in research because it can be inconceivably daunting for a researcher to include all elements or members of the population in a survey of which this study is no exception. In cases where it is irrational and impossible to conduct a census of all the members of a population, sampling is the best alternative available to the researcher. Sampling basically involves the selection of a relatively small number of elements from a larger defined group of elements, and expecting that the information gathered from the small group will enable accurate judgments about the larger group (Hair *et al.*, 2008). It was based on this principle that a relatively small number of bank customers were selected, not in proportion to the overall number of bank customers in Ghana, but with the hope that the information gathered would to some extent describe the sentiments of the majority of bank customers in Ghana. Although some scholars have questioned the legitimacy of such an approach, other renowned researchers have also favoured the method and further assert that sampling actually makes it possible for a study to achieve a higher overall accuracy as opposed to a census. In sampling, the smaller number of elements that need to be sampled ensure that more time can be given to the design and testing of a research questionnaire that sufficiently captures the variables the researcher seeks to measure. It is also worth mentioning that the fewer number of cases that are chosen to represent a sample indicates that respondents will be willing to offer more detailed information and the researcher will also be able to devote more time to obtaining accurate or unbiased data (Henry, 1990; Saunders *et al.*, 2009). In relation to the sample size, a sample of four hundred and twenty bank customers (420) were chosen as the sample for the conduct of this study. The sample size is justified given that a number of researchers have declared that a sample size of two hundred (200) is sufficient statistical power for data analysis (Hair *et al.*, 2010; Wilson & Henseler 2007).

A review of literature reveals that there are primarily two sampling methods which are probability and non-probability sampling technique. Probability sampling technique is a sampling method where each member of the population has an equal chance of being selected to

form part of the sample (Aaker, Kumar & Day, 1995). Probability sampling is usually referred to as representative sampling and occasions the use of survey-based research strategies that are used to acquire inferences from the sample with regard to the objectives of the research. Saunders *et al.* (2009) postulate that the process of probability sampling is divided into four stages which comprise of identifying a suitable sampling frame based on research objectives or questions, deciding on a suitable sample size, selecting the most appropriate sampling technique as well as selecting the sample, and finally checking to ensure that the sample is representative of the population. Some of the techniques employed by Probability sampling include simple random selection, systematic sampling, stratified sampling and cluster sampling.

Non-probability sampling on the other hand describes the sampling method where the selection of the sample is usually based on the researcher's discretion and personal judgment. In non-probability sampling, all respondents do not have an equal chance of being selected (Malhotra, 1996; Wong, 1999). Non-probability sampling include techniques such as judgmental/purposive sampling, convenience sampling, snowball sampling or quota sampling (Saunders *et al.*, 2009).

In certain instances in business and market research, it may be difficult for a researcher to obtain a suitable sampling frame for the conduct of his or her research. In such circumstances, non-probability sampling techniques become ideal for such a study because it will provide the researcher with a range of options to choose from that will aid in the selection of samples based on the subjective judgment of the researcher (Saunders *et al.*, 2009). The current study finds itself in such a position given that it was practically not possible to obtain a sampling frame of all the customers of banks in Ghana that have registered and actually utilize Internet banking to access banking service. It was also quite difficult to apply a probability sampling technique that would be closer to obtaining a sample worthy of a true reflection of the customer base of Ghanaian banks. Based on the challenges discussed above coupled with the limited time frame within which to conduct this study was to be conducted, the non-probability sampling method was used in obtaining a sample for the survey. The study adopted the convenience sampling in selecting four hundred and twenty (420) customers of banks in Ghana who are active users of Internet banking service. Convenience sampling refers to the non-probability sampling method where samples are drawn based on pure convenience (Hair *et al.*, 2008). In convenience sampling, the researcher, usually due to difficulties in applying probability sampling techniques,

opts to adopt a technique where he can select respondents who are easily accessible (Kent, 2007).

4.9. DATA COLLECTION SOURCES

Kent, (2007) described data as facts or things that are known to be true. It quite indisputable that every researcher needs data to fall on at some point in the research work. Two forms of data collection have been widely discussed in the literature; primary and secondary data collection. Primary data is information collected specifically for the research problem at hand whereas secondary data refers to data that already exists and can be found in libraries or other public institutions or within organizations (Dillon, Madden, & Neil 1993). Saunders *et al.* (2009) posit that, secondary data sources contain a wealth of information that researchers can benefit from without necessarily having to gather fresh data. However, some scholars believe that the peculiar research needs of a researcher may steer them towards primary data collection (Kent, 2007; Wilson, 2006). Primary data is generally obtained through questionnaires, though some researchers also use observations as a means of obtaining the data. Primary data collection has been described as a costly exercise and as a result researchers are advised to check out existing data before going to the field to collect new data (Wilson, 2006; Kent, 2007).

Secondary data refers to the data that is readily available (Hair *et al.*, 2008). Secondary data sources are easy to obtain and involve less hustle than primary data collection. Secondary data is composed of raw data and published summaries that have been gathered by other researchers and for other purposes other than the research at hand (Saunders *et al.*, 2009). Wilson (2006) postulates that it is important to obtain secondary data prior to the collection of primary data due to the following reasons:

- (1) Secondary data can help to clarify or redefine the research requirements as part of a program of exploratory research
- (2) Secondary data may alert the researcher to potential problems or difficulties he or she is likely to encounter

(3) Secondary data may satisfy the research needs without the requirement for further primary research

There are basically two sources of secondary data: data available within the organization (internal data) and information available from public and electronic sources originating from outside the organization (Wilson, 2006). In this study, primary data was collected in line with the positivists belief that reality consists of what can be observed, and that it can be subjected to scientific observation and empirical enquiry (Saunders *et al.*, 2009). Consequently, the current study sought to gather primary data to test the relationship between Internet banking service quality and customer loyalty in the Ghanaian banking industry. The study therefore gathered primary data through the use of questionnaires.

4.10 QUESTIONNAIRE DEVELOPMENT AND ADMINISTRATION

Questionnaires have been defined as a structured technique for collecting data and consist of a series of questions, verbal or written, that a respondent answers. It is a formalized set of questions for obtaining information from respondents (Malhotra, 1996). Questionnaires allow the researcher to identify the variables they want to measure and test them later in the process of data analysis. Questionnaires have been described as formalized schedules or forms which contain an assembly of carefully formulated questions for information gathering (Wong, 1999).

4.10.1 Development of Questionnaire

The researcher of this study relied heavily on literature in the development of the questionnaires specifically the works of Parasuraman *et al.* (2005); Collier and Bienstock, (2006) and Zavareh *et al.*, (2012) to understand the dimensions of Internet banking service quality and its impact on customer loyalty and also checking the mediating role of customer satisfaction. The questionnaire was thus developed and structured into three parts with sections labelled Internet banking service quality dimensions, customer satisfaction, and customer loyalty.

The section on Internet banking service quality (IBSQ) dimensions contained thirty-three (33) questions, with questions measuring IBSQ dimensions such as efficient and reliable service,

fulfillment, security/trust, site aesthetics, responsiveness/contact and finally ease of use. The other two sections had questions on customer satisfaction and customer loyalty. In section one, the first five questions sought to measure efficient and reliable service, questions 6 to 11 contained questions measuring fulfillment, the next five questions (questions 12 to 16) contained questions measuring security and trust, questions 17 to 21 had questions measuring site aesthetics, the next four questions also sought to measure responsiveness and contact and lastly questions 26 to 33 contained items measuring ease of use. In the second section, ten (10) questions measuring customer satisfaction were set. The section on customer loyalty contained eight (8) questions. A Likert Scale on a range of 1-5 measuring “strongly agree” responses to “strongly disagree” was used in the development of the questionnaire. The choice of this scale was justified by the fact that the self-completion questionnaire enables respondents to answer without the aid of an interviewer and to some extent reduces bias (Bryman & Bell, 2011).

4.10.2 Scale Development

The section briefly discusses the scales that were used in the development of the questionnaire. Before the development of the questionnaire, a search of scales measuring Internet banking service quality dimensions, customer satisfaction and customer loyalty was carried out. In relations with scales on Internet banking service quality dimensions, the researcher made extensive use of studies by Zavareh et al., (2012), Narteh (2013) and Kundu and Datta (2012). For customer satisfaction, studies by Flavian et al., (2006); Janda et al., (2002) and Oliver, (1980) were particularly helpful in getting the scales for the construct. Finally scales on customer loyalty were selected from the works of Söderlund, (2006); Parasuraman et al., (2005); Yang & Tsai, (2007); Zeithaml et al., (1996) and Aldas-Manzano et al. (2010);. Thus all the scales used were obtained from previous studies. Table 2 below presents the number of items for the various constructs and their corresponding sources.

Table 2: Scale Development Items

Constructs	Number of Items	Sources
IBQ Dimensions	33	
Efficient and Reliable Service	5	Zavareh et al (2012); Finn, (2010); Gupta and Bansal (2011)
Fulfillment	6	Zavareh et al (2012); Finn, (2010)

Security/Trust	5	Doney & Cannon, (1997); Flavian & Guinaliu, (2006); Roy et al., (2001); Casalo et al.,2007; J. Aldas-Manzano et al. (2010); O’Cass & Fenech, (2003); Ranganathan & Ganapathy, (2002) Kumbhar (2012); Narteh (2013)
Site Aesthetics	5	Reinecke, Yeh, and Miratrix, (2013); Zavareh et al (2012); Finn, (2011)
Responsiveness/Contact	4	Jayawardhena (2004), Bauer et al. (2005), Li and Suomi (2009), Gupta and Bansal (2012), Kumbhar (2012), and Wu et al. (2012)
Ease of Use	8	O’Cass, (2010); Zavareh et al (2012); Finn, (2010)
Customer Satisfaction	14	Flavian et al.,(2006); Gwinner, (2002); Oliver et al.,(1997) J. Aldas-Manzano et al. (2010); Chen, (2012);
Customer Loyalty	8	Parasuraman et al., (2005); Yang & Tsai, (2007); Zeithaml et al., (1996) J. Aldas-Manzano et al. (2010); Ha and Park (2012); Chang et al., (2009)

4.10.3 Pre-Testing Questionnaire

The initial questionnaire developed contained fifty-two (52) elements. After a discussion with the supervisor and some PhD students at the department of Marketing and Entrepreneurship in the University of Ghana Business School (UGBS), it was pointed out that questions under IBSQ dimension-‘security and trust’ was more skewed towards security than trust. The necessary modification was made after the recommendation and the final questionnaire containing fifty-five questions was developed. A pre-test of the questionnaire was conducted using twenty-five (25) MBA students of UGBS and the result was quite positive.

4.10.4 Administration of Questionnaires

Four hundred and twenty (420) questionnaires were printed and distributed to respondents. Four hundred and twenty (420) bank customers in Accra who have registered and are actively using Internet banking service were thus conveniently sampled for the study. In the administration of the questionnaire, the researcher first inquire from the potential respondent whether he or she has duly registered and actively using Internet banking to access banking services. If the answer to

the question is in the affirmative, he or she is politely requested to fill the questionnaire. However, a customer of a bank is not allowed to fill the questionnaire if he or she has registered with his or her bank to use their Internet banking platform and is not actively using it or has not registered at all. The questionnaire was thereby administered in university campuses and churches and in certain instances leads were followed to visit the potential respondents at their various homes and work places. This resulted in customers of various banks in Ghana participating in the survey. Of the twenty-eight (28) banks in Ghana, twenty-two (22) were represented.

4.10.5 Reliability and Validity

Reliability and validity of a scale are some of the most important concept in every research work (Bollen, 1989). Zikmund (2003), defined reliability as “the degree to which measures are free from random error and as a result yield consistent results”. Malhotra (2003) also defined reliability as “the extent to which a scale produces consistent results if repeated measurements are made on the variables of concern”. Validity on the other hand is referred to as the ability of a scale to measure what it has been intended to measure (Zikmund, 2003). It has been observed that there are instances where a measure may be consistent and reliable, but not accurate or better still valid (Holmes-Smith *et al.*, 2006). An instrument can thus be said to be valid if it adequately measures what it is supposed to measure and reliable if it is consistent and stable (Sekaran, 2000). It can therefore be concluded that, for a research to be certified as a quality work, it needs to be put through the litmus test of validity and reliability. Thus it is in the best interests of a researcher to subject his work to tests of reliability and validity. This is due to the fact that the greater the fit between the conceptual and operational definitions, the greater the measurement validity (Neuman, 2003).

Measures that have been used to assess reliability in structural equation modelling include Cronbach’s (1951) coefficient alpha, Construct Reliability (CR) and Average Variance Extracted (AVE). For validity, content, construct, criterion and external validity are examined.

Thus the reliability and validity of an instrument is absolutely necessary in the process of developing a good research work, especially in quantitative studies.

- ***Cronbach Alpha***

Cronbach alpha is one of the most popular means of testing for the reliability of scales used in a research (Reynaldo & Santos, 1999). Cronbach's alpha is widely regarded as a good measure that ascertains whether the scales a researcher used in measuring a given construct were able to adequately measure the construct or not (Cronbach, 1951). The advantage of this method over others is its ability to measure the internal consistency of a research instrument and at the same time checking for the average correlation of items in a survey instrument, all in an attempt to check for reliability (Reynaldo & Santos, 1999). Based on the fact that Cronbach's alpha has been established by scholars to be a good measure of internal consistency, it has been used as one of the measures used in checking for the internal consistency of this studies. George & Mallery (2003) opine that Cronbach alpha values that range from 0.7 upwards are acceptable and provide a good indicator of internal consistency. Gliem & Gliem (2003) however are of the view that whilst a high value for Cronbach alpha is a good indicator of the internal consistency of items in a scale, it does not account for unidimensionality. They further posit that in testing for unidimensionality, factor analysis can be used. Hence, confirmatory factor analysis (CFA) was used in checking for unidimensionality of items in the scale in this study.

- ***Composite Reliability***

Another measure of internal consistency which is usually preferred to Cronbach's alpha is composite reliability (Raykov & Shrout, 2002). It was propounded by Werts, Linn & Joreskog (1974), and has the ability to proportionately weigh indicant contribution. Composite reliability is also referred to in some quarters as construct reliability (Fornell & Larcker, 1981; Holmes, Smith & Rowe, 1994). It is held that the cut-off for composite reliability should be 0.7 (Chin, 1998). The threshold of 0.7 was therefore upheld in this study.

- ***Average Variance Extracted***

Average Variance Extracted (AVE) is one of the measures used in checking for convergent validity in the structural equation modeling (SEM). This measure owes its existence to the ingenuity of Fornell & Larcker (1981), who composed the statistic. In applying the AVE to check for convergent validity, values are assessed to ascertain whether they are greater than 0.50. It is widely believed that AVE should be greater than 0.50 to indicate convergent validity.

4.11 DATA ANALYSIS TECHNIQUES

After the collection of data, the researcher needs to analyse it and draw meaning from it in order to explain the phenomenon under investigation and it is in this vain that this section seeks to describe the technique used in carrying out such analysis.

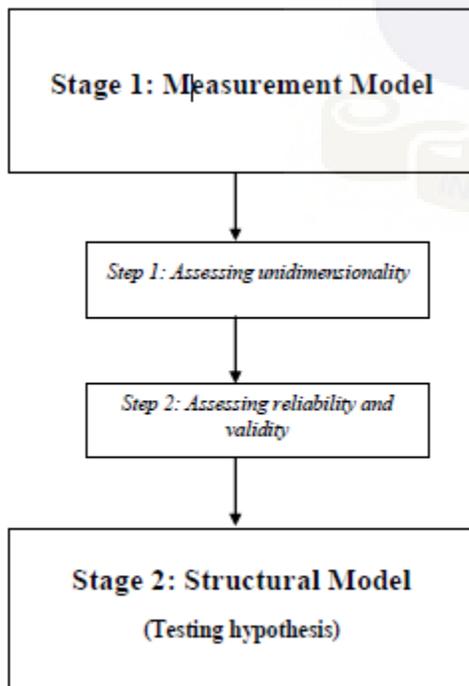
The results of data analysis usually serve to confirm or refute theory. The unit of analysis for the study was individual customers of banks in Ghana who have registered and are actively using Internet banking as an electronic channel to access banking services. Given that the current study was deductive in nature, the process and results of the data analysis was important in confirming the concept of Internet banking service quality and how it impacts on customer loyalty. Given that the study was quantitative in nature, the assertions of Cooley (1978) were taken into consideration; “the purpose of statistical procedures are to aid in establishing the plausibility of the theoretical model and to estimate the degree to which the various explanatory variables influence the dependent variable”. Structural Equation Modelling (SEM) was thus employed as the data analysis technique for the study.

4.11.1 Structural Equation Modelling (SEM)

Structural Equation Modelling (SEM) is a technique which incorporates a whole range of standard multivariate analysis methods, including regression, factor analysis and analysis of variance (Hair *et al.*, 2010). Structural equation modelling adopts a hypothesis-testing approach, also known as confirmatory approach (Byrne, 1994). In structural equation modelling, the precision of the analysis serves to enhance the authenticity of research findings. SEM was chosen for this study because it assumes there is a causal structure among a set of latent variables, and estimates that the observed variables are indicators of the latent variables

(MacLean & Gray, 1998). Given that this study sought to determine how Internet banking service quality results in customer loyalty, SEM was imperative given the causal variables that came to the fore in the framework for the study. SEM was chosen because it enabled a Confirmatory Factor Analysis (CFA) to be conducted to test whether the hypothesized relationships played out in the predicted manner in the data. Figure four below aptly describes the two-staged model used in this study.

Figure 4: Two-stage Structural Model Used in this Study



4.11.2 Confirmatory Factor Analysis (C.F.A.)

The study adopted a Confirmatory Factor Analysis (CFA) to check for the variables that best explained the constructs. CFA is regarded as a powerful and flexible technique for assessing unidimensionality (Dunn *et al.*, 1994). Unidimensionality refers to an assumption that underlies the calculation of reliability, and is achieved when indicators of a construct have an acceptable fit on a single-factor model (Hair *et al.*, 1995). It is believed that unidimensionality models hold great significance due to their ability to offer precise tests for convergent and discriminant validity of factor measurement (Anderson & Gerbing, 1988). In this study, CFA was used to verify that a set of items empirically measure a single dimension as they are supposed to. CFA was used to determine whether the number of factors and the loadings of measured indicators confirmed theory. Per the advice of Dunn (1994), items that loaded weakly on the hypothesised factors were removed from the scale resulting in a unidimensional scale. Hair *et al.* (2010) have espoused that in using CFA, a factor loading of 0.50 and above on a specified factor is acceptable. This was the benchmark that was adopted in the conduct of this study.

4.11.3 Descriptive Statistics

As part of the process of data analysis, descriptive statistics were run to profile the respondents in the study and also to offer an ample description of the data. Descriptive statistics are used to summarize and describe the data obtained from a sample of respondents (Hair *et al.*, 2008). The Statistical Package for Social Sciences (S.P.S.S.) was used in running the descriptive statistics and results of that analysis are displayed in the next chapter of this thesis.

4.12 ETHICAL CONSIDERATIONS

The potential for the occurrence of unethical practices in every research work is quite high. In trying to obtain data in order to facilitate a quick expedition of the research work, the researcher may be tempted to resort to unethical practices (Hair *et al.*, 2009). It is in the light of this that ethical considerations occupy an important position in research so that the research process is conducted devoid of malpractice. Kent (2007) defined ethics as “moral principles or standards

that guide the ways in which individuals treat their fellow human beings in situations where they can cause actual or potential harm, whether economic, physical or mental". Saunders *et al.* (2009) warned that the research design should not result in any form of harm, embarrassment or material disadvantage to the respondents in the study. This sound advice was heeded in carrying out this study and hence ethical considerations were complied with.

4.12.1 Ethical Considerations Applied in this Study

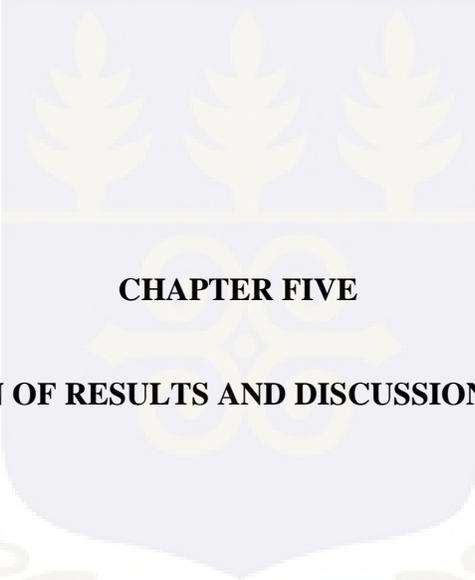
In this study, respondents were made fully aware of the reasons for which they were participating in the study, and anonymity and confidentiality were assured. Also potential respondents who declared their unpreparedness to take part in the survey were excused with no hard feelings attached. As such, the four (4) pillars of ethical consideration proposed by Saunders *et al.* (2009) were adhered to in this study. They postulated that important ethical considerations for every study ought to cover the following:

- (a) **Privacy:** That the researcher guarantee respondents of privacy and the assurance that their identity will not be exposed or disclosed to a third party.
- (b) **Confidentiality:** The researcher should ensure that sharing of information about the respondents without their consent would not occur.
- (c) **Anonymity:** The researcher owes it a duty to give respondents the opportunity to conceal their identity.
- (d) **Misuse of Findings:** The researcher has to assure respondents that findings obtained from the research would not be misused.

4.13 CHAPTER SUMMARY

This chapter sought to clearly explain the methods adopted by the researcher in the conduct of the study. Discussions related to the philosophical stance, research approach, research strategy and all other relevant and pertinent methodological issues were adequately discussed with the necessary justifications rendered. The chapter again outlined the methods and procedure used to

identify respondents, developing the questionnaire, collecting information, and analyzing the research data. The next chapter will thereby examine the empirical data collected and the subsequent analysis for the study.



CHAPTER FIVE

PRESENTATION OF RESULTS AND DISCUSSIONS OF FINDINGS

5.0 INTRODUCTION

This chapter examines the results obtained from the analysis of data gathered in this study. The order in which the result are presented closely follow the research objectives proposed in chapter one of the study. Responses from the survey participants which comprised of bank customers in Ghana who have registered and actively using Internet banking to access banking services, are presented. As has been established in the preceding chapters, this study seeks to establish the impact of Internet banking service quality on customer loyalty. Customer satisfaction is used as a mediator to assess the indirect paths of the proposed relationships. The chapter thus focuses on a discussion of the descriptive statistics obtained from the data analysis, as well as the structural analysis conducted using structural equation modelling through AMOS 20.0.

5.1 DEMOGRAPHIC PROFILE OF RESPONDENTS

Respondents of the questionnaire have been profiled with respect to age, gender, education, number of banks, and number of years with main bank. Table 5 gives a detailed profile of the demographic features of respondents that participated in the study.

Table 3: Demographic Variables

Demographic Variables	Frequency	Percentage%
Age		
Under 20	54	14.7
21-30	155	42.1
31-40	137	37.2
41-50	20	5.4
Above 50	2	.5
Total	368	100.0
Gender		
Male	208	56.5
Female	155	42.1
Total	363	98.6
Educational Qualification		
SHS	5	1.4
Diploma	52	14.1
Degree	226	61.4
MBA/MPhil	78	21.2
PHD	4	1.1
Others	-	-
Total	365	99.2
Number of Banks		
1 Bank	62	16.8
2Banks	152	41.3
3Banks	141	38.3
More than 3 Banks	13	3.5
Total	368	100
Number of Years with Main Bank		
0-3 Years	118	32.1
4-6 Years	175	47.6
7-9 years	59	16.0
10 Years and Above	13	3.5
Total	365	99.2

The first demographic variable that was obtained was the age distribution of respondents. Most of the respondents fell within the (21-30) age bracket representing 42.1%. The next demographic characteristic that was obtained from the respondents, was gender. The results obtained from the study indicated that majority of respondents that participated in the study were males (56.5%). However the ratio of male to female participants in the study was not that great and as a result, one can confidently conclude that the study was not gender biased. With respect to educational qualifications, the results obtained in the study revealed that majority of respondents had first degrees, indicating that most respondents to a large extent were computer literate and hence capable of using Internet banking to access banking services. It also indicated that the respondents had a fair understanding of the concept of customer satisfaction and customer loyalty. Respondents were also probed with regard to the number of banks they banked with. The result as can be ascertained from the Table above showed that most of the respondents in the study banked with 2 banks, whilst quite a number of them also had three or more banks they banked with.

5.2 DATA EDITING, CODING, SCREENING AND ENTRY

Prior to doing many of the statistical analysis after data collection, there are a host of important things that a researcher must do to prepare the data for analysis (Saunders *et al.*, 2009). Some of the Activities needed to be carried out before the analysis of the data are data editing, coding, screening and entry. These activities are to ensure that the data set contains no coding errors, whilst also making sure that variables have been recorded appropriately and all missing values dealt with and rectified (Baumgartner and Homburg, 1996).

5.2.1 Data Editing and Coding

Data editing is the next important thing that a researcher must consider doing in the process of preparing the data for analysis. Scholars have over the years emphasized that data editing is a critical component of the data processing and analysis (Zikmund, 2003; Pallant, 2003). It is however pertinent to note that the data must first be entered before editing and thereby making data entry another important component of statistical analysis preceding data editing. In this

thesis, the guidelines stipulated by Sekaran (2000) were applied and as a result, only questionnaires in which respondents completed at least 75% of the questionnaires were selected for the analysis. Consequently, missing data were considered as missing values and were treated accordingly, and this is discussed in a subsequent section of this chapter.

5.2.2 Data Screening, Data Entry and Treatment of Missing Data

The data was entered and screened for analysis after the coding of the questionnaire into the Statistical Package for Social Sciences (S.P.S.S.) has been done. Screening of data involved the process of going through the data and checking for the presence of missing data and outliers which could skew the data and subsequently the results of the analysis (Coakes, 2006).

Four hundred and twenty (420) questionnaires were distributed during the study and three hundred and ninety-eight (398) were obtained representing a response rate of 94.7%. The process of data screening revealed that eighteen (18) questionnaires were unusable owing to large sections of incomplete data or biased responses. The importance of reporting missing data and the procedure for treating same has been underscored by several researchers (Peng, Harwell, Liou, & Ehman, 2006; Saunders et al., 2006; Scheffer, 2002). After the data entry process in the current study, it was detected that some of the responses from respondents contained missing data. Buhi, Goodson, & Neilands, (2008) postulate that the minimum threshold acceptable for the tolerance of missing data is a completion rate of at least 75% of the questionnaire. Out of the three hundred and eighty (380) questionnaires available for data analysis, twelve (12) were deleted for failing to meet the minimum threshold for missing data. Thus three hundred and sixty-eight (368) responses were usable with regard to the missing data.

5.3 DESCRIPTIVE STATISTICS

Before embarking on various robust statistical analyses, scholars have stressed the importance of subjecting the data obtained to descriptive analyses before any further data validation and analyses be carried out (Pallant, 2011). These descriptive statistics include measures of central tendency like the mean, standard deviation, range of scores, skewness and kurtosis. The table below displays the descriptive statistics of the variables used in the survey instrument. They

specify the extent to which the respondents agreed or disagreed with the statements in the questionnaire. It could be deduced from the Table that the highest mean was 3.8 (the internet banking website is well organized) while the lowest was 3.37 (the service delivered through the internet banking service web pages is quick). Thus most respondents felt that their bank's internet website is well organised. The 55 variables displayed in Table 3 represent the components of the eight main constructs depicted in the conceptual framework for the study; Efficient and Reliable Service (ERS), Fulfillment (FUL), Security/ Trust (SEC_TRUST), Site Aesthetics (ST_AESTH), Responsiveness/Contact (RES_CON), Ease of Use (EASE), Customer Satisfaction (CUS_SAT) and Customer Loyalty (CUS_LOY).

Table 4: Descriptive Statistics of Variables

Scale Item	Variable Code	Mean	Std. Deviation
the service delivered through the internet banking service web pages is quick	ERS1	3.37	.93
when my bank's internet banking section promises to do something by a certain time, it does it	ERS2	3.58	.98
I am able to complete a transaction quickly through my bank's web site	ERS3	3.45	.92
My bank's Internet banking section functions all the time	ERS4	3.53	.99
My bank's Internet banking section provides consistent services	ERS5	3.45	.92
The organisation and structure of my bank's Internet banking service web page are easy to follow	FUL1	3.64	1.02
My bank accurately delivers promises put out on its web site	FUL2	3.60	.86
The internet banking part of my bank launches and runs right away	FUL3	3.58	.95
The transactions of the Internet banking part of my bank are always accurate	FUL4	3.59	.88
The Internet banking service satisfies most of my banking needs	FUL5	3.66	.98
The Internet banking service of my bank provides fast services	FUL6	3.59	.97
My personal information is never misused by my bank	SEC_TRUST1	3.73	.99
I feel safe in my Internet banking transaction with the bank	SEC_TRUST2	3.66	.92
I have trust and security in the internet banking service of my bank	SEC_TRUST3	3.68	.90
My bank's website and internet banking services have good reputation	SEC_TRUST4	3.74	.87
The information presented by my bank on its website is trustful	SEC_TRUST5	3.76	.90
My bank's Internet banking web page is attractive	ST_AESTH1	3.61	.87
My bank's Internet banking web page is visually pleasing	ST_AESTH2	3.62	.92
The layout of my bank's Internet banking web page is good	ST_AESTH3	3.64	.93
The combination of colours used on the Internet banking web page of my bank is good	ST_AESTH4	3.65	.97

The graphic quality of the web page of the Internet banking is good	ST_AESTH5	3.68	.90
My bank promptly respond to my request through their web site	RES_CON1	3.57	.96
My bank quickly resolves my online transaction problems	RES_CON2	3.64	.92
Internet banking problems I encounter are settled to my satisfaction	RES_CON3	3.60	.99
The Internet banking customer services of my bank are easily accessible by telephone and other means	RES_CON4	3.69	.93
The web page content of the Internet banking is readable	EASE1	3.78	.90
The Internet banking option is easy to understand	EASE2	3.73	.90
The Internet banking website is well organized	EASE3	3.83	.91
The Internet banking web page does not ask me to input a lot of information	EASE4	3.53	.98
I can easily find what I need on the web site of my bank	ESAE5	3.73	1.83
The graphic representation of my bank's web site helps me to use their Internet banking services	EASE6	3.65	.97
I am able to use my bank's Internet banking utilities of web site without a lot of effort	EASE7	3.68	.93
The language used on my bank's web site is easy to understand	EASE8	3.71	.95
I have enough information about Internet banking and all its benefits	CUS_SAT1	3.59	.93
I did the right thing by choosing to use the Internet banking services of my bank	CUS_SAT2	3.70	.90
I enjoy the experience offered by the Internet banking service of my bank	CUS_SAT3	3.70	.91
The Internet banking service of my bank is exactly what I need	CUS_SAT4	3.65	.94
I am comfortable with using Internet banking services	CUS_SAT5	3.70	.91
Internet banking is easy to use	CUS_SAT6	3.70	.90
Internet banking makes my banking life a lot easier	CUS_SAT7	3.72	.91
Internet banking has improved my banking transactions	CUS_SAT8	3.73	.94
Internet banking enhances my banking experience	CUS_SAT9	3.73	.94
I prefer using my bank's internet banking services than walking to their branch office	CUS_SAT10	3.68	.95
Internet banking enables me to utilize several banking services faster	CUS_SAT11	3.69	.92
Internet banking saves me time in my bank transaction	CUS_SAT12	3.77	.92
Cyber-crime and other social vices has made the use of internet banking unattractive to me	CUS_SAT13	3.52	.95
Lack of user protection laws has made it difficult for me to use the internet banking services of my bank	CUS_SAT14	3.48	1.02
I will always use my bank's Internet banking services	CUS_LOY1	3.80	2.76
I will always make my bank's Internet banking my preferred choice for banking services	CUS_LOY2	3.60	.94
I will recommend the Internet banking service to my family and friends and other customers of the bank	CUS_LOY3	3.67	.92
I will patronize other services from this bank	CUS_LOY4	3.71	.94
I will use the Internet banking service for my business' banking transaction in the event I set up a business	CUS_LOY5	3.81	2.82

Even if other banks profess to be better than my bank, I will still be loyal to my bank because of their Internet banking services	CUS_LOY6	3.58	1.01
Even if my bank does not win awards, I will not switch to award-winning banks	CUS_LOY7	3.67	.98
I will point out the positive aspects of my bank's Internet banking services if anybody criticises it	CUS_LOY8	3.69	1.03

5.4 ASSESSMENT OF NORMALITY

The scale data was examined to check the normality of distribution after the treatment of missing data via the Median Imputation (MDI) method in SPSS. Scholars have advanced that for a researcher to employ SEM in the analysis of a data, the variables in the dataset must be normally distributed (Hair *et al.*, 2010; Kline, 2005). As a result, it was imperative to assess the normality of variables to be used in the analysis. In this study, Skewness and Kurtosis were used in testing for normality of the dataset. This method assumes that the variables can be said to be normally distributed if values for Skewness and Kurtosis are not significant. According to Hair *et al.* (2010), for studies that make use of large sample sizes, that is sample sizes above 200 respondents, small deviations from normality can be significant, though not substantive. Skewness is a measure of the asymmetry of distribution, whilst kurtosis is a measure of the point where the distribution of variables in the dataset peak (Kim, 2013). According to Hair *et al.* (2010), a data can be considered normal when the values for skewness and kurtosis fall within the range of +1 or -1. The current study utilized SPSS in testing for normality. The resulting figures in Table 5 below indicate that the data was normally distributed.

Table 5: Descriptive Statistics and Other Measures

Constructs	Mean	Std. Deviation	Kurtosis	Skewness
Efficiency and Reliable Service	3.4834	.79585	.112	-.771
Fulfillment	3.6267	.76717	-.004	-.702
Security and Trust	3.7125	.75062	.478	-.784
Site Aesthetics	3.6448	.76000	.355	-.854

Responsiveness /Contact	3.6226	.80555	.303	-.856
Ease of Use	3.6896	.75073	.568	-1.043
Customer Satisfaction	3.6946	.71976	.945	-1.106
Customer Loyalty	3.6695	.79336	.214	-.891

5.5 ANALYSIS AND RESULTS OF STRUCTURAL EQUATION MODELLING

Structural Equation Modelling (SEM) was used in testing the hypothesis arising from the theoretical model. Hair et al., (2010) postulated that, the accurate representation of the reliability of each construct in a research work is best conducted in two stages to avoid any interaction between the measurement and structural models. Hence, the two-stage approach endorsed by Anderson & Gerbing (1988) was adopted in this study.

5.5.1 Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) was run on the established constructs to determine its dimensionality. One of the main advantages of CFA according to scholars is its ability to estimate multiple interrelated dependence relationships (Hair et al. 2010; Bagozzi and Yi, 2012). Structural equation modelling (SEM) using AMOS 20.0 was used to perform the confirmatory factor analysis. The initial output generated from the AMOS 20.0 software revealed some unfit indices. There was therefore the need for modification and further purifications (Kline, 2005). Hair et al.,(2010, p.713) in dealing with the issue stated that “the most common change would be the deletion of item that does not perform well with respect to the model integrity, model fit, or

construct validity”. Accordingly, the original measurement model was then subjected to modification according to the sizes of factor loadings, cross loadings, measurement errors, and correlation between measurement errors.

The AMOS 20.0 software output after the investigation suggested the modification of some items via stage-by-stage deletion of some weak variables. As a result, items were dropped step-by-step to ensure that the deletion of each item was absolutely necessary. In the first modification, one item each was deleted from Efficient and Reliable Service, Fulfillment and Ease of Use. In the second modification, two items were deleted each from Customer Satisfaction and Customer Loyalty. Thus, seven items were deleted after the CFA which left the new purified constructs with forty-eight items which provided the best fit indices.

There are a number of goodness-of-fit measures that need to be combined to assess the results from three perspectives: overall fit, comparative fit to a base model and model parsimony (Hair et al. 2010; Byrne, 2013). Bollen (1989) however asserted that the determination of an acceptable fit ultimately rests with the researcher. Based on the above, the commonly acceptable fit indices (Root Mean Squared Error of Approximation ($RMSEA \leq 0.08$), Goodness of Fit Index ($GFI \geq 0.90$), Normed Fit Index ($NFI \geq 0.90$) and Comparative Fit Index ($CFI \geq 0.90$) were used to test for the fitness of the model (Bagozzy and Yi, 2012; Hair et al., 2014).

5.5.2 Factor Loadings Table

The factor loadings table represents an indicator of how well a given set of indicants measure an assigned construct. Loadings with readings of 0.50 and above are deemed to adequately measure the constructs they have been assigned to (Falk & Miller, 1992). Loadings are used in the assessment of convergent and discriminant validity (Uma, 2000), and the final CFA results depicted in the tables below show a good fit.

Table 6a: CFA Results for Final Measurement Model

Item Description	Factor Loadings	t-Values	R ²	CR	A
Efficient and Reliable Service				0.88	0.84
the service delivered through the internet banking service web pages is quick	0.79				
when my bank's internet banking section promises to do	0.78***	16.50	0.06		

something by a certain time, it does it					
I am able to complete a transaction quickly through my bank's web site	0.78***	16.23	0.06		
My bank's Internet banking section functions all the time	0.71***	14.54	0.06		
Fulfillment				0.89	0.89
The organisation and structure of my bank's Internet banking service web page are easy to follow	0.79				
My bank accurately delivers promises put out on its web site	0.72***	15.06	0.05		
The internet banking part of my bank launches and runs right away	0.75***	15.86	0.05		
The transactions of the Internet banking part of my bank are always accurate	0.76***	16.05	0.05		
The Internet banking service satisfies most of my banking needs	0.72***	15.06	0.05		
The Internet banking service of my bank provides fast services	0.77***	16.40	0.05		
Security/Trust				0.88	0.88
My personal information is never misused by my bank	0.72				
I feel safe in my Internet banking transaction with the bank	0.81***	15.21	0.06		
I have trust and security in the internet banking service of my bank	0.76***	14.51	0.06		
My bank's website and internet banking services have good reputation	0.77***	14.66	0.06		
The information presented by my bank on its website is trustful	0.79***	14.82	0.06		

Table 6b: CFA Results for Final Measurement Model

Item Description	Factor Loadings	t-Values	R ²	CR	A
Site Aesthetics				0.88	0.88
My bank's Internet banking web page is attractive	0.81				
My bank's Internet banking web page is visually pleasing	0.78***	16.83	0.06		
The layout of my bank's Internet banking web page is good	0.76***	16.34	0.06		
The combination of colours used on the Internet banking web page of my bank is good	0.79***	15.12	0.07		
The graphic quality of the web page of the Internet banking is good	0.74***	15.77	0.06		
Responsiveness/Contact				0.86	0.86
My bank promptly respond to my request through their web site	0.77				
My bank quickly resolves my online transaction problems	0.77***	14.98	0.06		
Internet banking problems I encounter are settled to my satisfaction	0.80***	18.02	0.05		
The Internet banking customer services of my bank are	0.78***	14.03	0.07		

easily accessible by telephone and other means					
Ease of Use				0.88	0.88
The Internet banking option is easy to understand	0.69				
The Internet banking website is well organized	0.70***	15.02	0.06		
The Internet banking web page does not ask me to input a lot of information	0.77***	14.11	0.08		
The graphic representation of my bank's web site helps me to use their Internet banking services	0.77***	14.07	0.08		
I am able to use my bank's Internet banking utilities of web site without a lot of effort	0.79***	14.39	0.08		
The language used on my bank's web site is easy to understand	0.74***	13.52	0.08		

Table 6c: CFA Results for Final Measurement Model

Item Description	Factor Loadings	t-Values	R ²	CR	A
Customer Satisfaction				0.92	0.94
I have enough information about Internet banking and all its benefits	0.74				
I did the right thing by choosing to use the Internet banking services of my bank	0.73***	15.58	0.06		
I enjoy the experience offered by the Internet banking service of my bank	0.72***	16.27	0.05		
The Internet banking service of my bank is exactly what I need	0.77***	15.48	0.06		
I am comfortable with using Internet banking services	0.73***	14.38	0.06		
Internet banking is easy to use	0.78***	15.64	0.06		
Internet banking makes my banking life a lot easier	0.75***	15.01	0.06		
Internet banking has improved my banking transactions	0.79***	15.81	0.06		
Internet banking enhances my banking experience	0.73***	14.45	0.06		
I prefer using my bank's internet banking services than walking to their branch office	0.75***	14.98	0.06		
Internet banking enables me to utilize several banking services faster	0.73***	14.57	0.06		
Internet banking saves me time in my bank transaction	0.73***	14.64	0.06		
Customer Loyalty				0.94	0.94
I will always make my bank's Internet banking my preferred choice for banking services	0.79				
I will recommend the Internet banking service to my family	0.77***	16.45	0.05		

and friends and other customers of the bank					
I will patronize other services from this bank	0.79***	16.91	0.05		
Even if other banks profess to be better than my bank, I will still be loyal to my bank because of their Internet banking services	0.76***	16.18	0.06		
Even if my bank does not win awards, I will not switch to award-winning banks	0.76***	16.04	0.06		
I will point out the positive aspects of my bank's Internet banking services if anybody criticises it	0.76***	16.16	0.06		

Table 6a to 6c above present summaries of the results of the CFA conducted to test the multidimensionality of the constructs. The loadings for the factors fell within range and satisfied the threshold of 0.50 as posited by Hair *et al.* (2010). The t-values all yielded satisfactory results whilst the results for the R^2 also fell within acceptable range.

Construct reliability (CR), which is referred to in some quarters as internal consistency (IC) or composite reliability (CR) (Werts *et al.*, 1974) gives an indication of the measurement of unidimensionality and is considered to be a better indicator than Cronbach's Alpha (Chin, 1998). The CR values obtained after the CFA was conducted were 0.88 for Efficient and Reliable Service, 0.89 for Fulfillment, 0.88 for Security/Trust, 0.88 for Site Aesthetics, 0.86 for Responsiveness/Contact, 0.88 for Ease of Use, 0.92 for Customer Satisfaction and 0.90 for Customer Loyalty. These values were high, ranging between 0.86 and 0.94 confirming the reliability of each construct. These results provide evidence of unidimensionality and indicated that the constructs were suitable.

The tables also reported the Cronbach alpha and the values obtained were 0.84 for Efficient and Reliable Service, 0.89 for Fulfillment, 0.88 for Security/Trust, 0.88 for Site Aesthetics, 0.86 Responsiveness/Contact, 0.88 for Ease of Use, 0.94 for Customer Satisfaction and 0.67 for customer loyalty. These values fell within acceptable range and indicated a strong internal consistency. According to Gliem & Gliem (2003), "Cronbach's alpha reliability coefficient normally ranges between 0 and 1, and the closer the coefficient is to 1.0, the greater the internal consistency of the items in the scale". Thus, the results from the factor loadings tables confirm that convergent and discriminant validity has been obtained.

5.5.3 The Measurement Model

The measurement model enables one to analyze the causal relationships in the structural model (Bagozzi, 1981). The first stage of the analysis in this work was executed through the specification of the causal relationships between the observed variables and the underlying theoretical constructs. The essence of this stage was to ascertain the veracity of the unidimensionality of the composite and latent constructs. This stage was used to ensure that a set of items achieved their objective of empirically measuring a single dimension. The measurement model is presented in Table 7:

Table 7: Measurement Model Fit Indices for the Proposed Model

Measurement model fit Indices for the proposed model

Goodness-of-fit Indices	Benchmark	value
Absolute goodness of fit measure		
Chi-square (CMIN)	$P \geq 0.05$	1755.79
Degree of Freedom		1147.00
Chi-square/degree of freedom	≤ 2	1.531
Absolute badness of fit measure		
Root Mean Square Error of Approximation	≤ 0.08	0.038
Incremental fit measure		
Normal Fit Index (NFI)	≥ 0.90	0.879
Comparative Fit Index (CFI)	≥ 0.90	0.954
Tucker Lewis Index (TLI)	≥ 0.90	0.949

Parsimony Fit Measure

Parsimony Comparative of Fit Index (PCFI)	≥ 0.50	0.858
Parsimony Normed of Fit Index (PNFI)	≥ 0.50	0.791

Table 7 above reports the measures used to test the fitness of the model. The use of at least three fit indices has been recommended as essential in verifying the fitness of the model. Popular indices used in structural equation modelling include absolute, incremental and parsimonious measures (Hair *et al.*, 2010; Holmes-Smith, 2006). These three measures were adopted in this study. From table 7, it can be deduced that the various measures indicate that the fitness of the model are beyond reproach. The Chi-square value was 1755.79 which indicates a statistical significance at $P \geq 0.05$. The Root Mean Square Error of Approximation (RMSEA) was the second measure that was deployed to test for the fitness of the model. The RMSEA value obtained (0.05) was within acceptable range of 0.38 or less, further validating the fitness of the model (Byrne, 2010; Diamantopoulos & Siguaw, 2000).

The incremental fit measures were used because they provide a comparison between the proposed model and the null model (Hair *et al.*, 2010). The Normed Fit Index (NFI) was the first incremental measure reported, and the value obtained was 0.87, which indicated a near perfect fit (Hair *et al.*, 2010). The Comparative Fit Indices (CFI) was also used as a measure to support the NFI given that the NFI does not control for degrees of freedom. CFI values are said to be acceptable when they fall within the range of 0.90 or greater. The CFI value obtained for this study was 0.95, further certifying the fitness of the model. The Tucker-Lewis Index (TLI) had a good value which fell within the accepted range of 0.94 or greater (Hair *et al.*, 2010). All the incremental fit measures indicated that the model was fit.

Parsimonious fit measures were used to test the degree to which a model achieves fitness for each estimated coefficient. With this measure, the closer the values are to 1, the better the fitness of the model (Hair *et al.*, 2010). The values obtained after analysis were 0.85 and 0.79 indicating that the model was certified to be fit.

Table 8: Correlation Table

	Mean	SD	ERS	FUL	SEC_TRUST	ST_AESTH	RES_CON	EASE	CUS_SAT	CUS_LOY
ERS	3.4834	0.79585	0.59							
FUL	3.6267	0.76717	0.799	0.57						
SEC_TRUST	3.7125	0.75062	0.746	0.772	0.59					
ST_AESTH	3.6448	0.76000	0.752	0.757	0.761	0.60				
RES_CON	3.6226	0.80555	0.743	0.746	0.732	0.728	0.61			
EASE	3.6896	0.75073	0.766	0.752	0.763	0.830	0.781	0.55		
CUS_SAT	3.6946	0.71976	0.796	0.780	0.782	0.784	0.762	0.861	0.56	
CUS_LOY	3.6695	0.79336	0.774	0.757	0.745	0.743	0.735	0.799	0.874	0.59

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

Note: Variances extracted (VE) are on the diagonal; squared correlations are off-diagonal. The VEs for each construct are far greater than the corresponding inter-construct square correlations, thereby supporting discriminant validity.

The correlation table above indicates that the squared correlations of the individual constructs are lesser than the AVEs, thus supporting discriminant validity. A number of researchers have postulated that discriminant validity is achieved when the squared correlations of the individual constructs are lesser than the AVEs. In certifying this approach of assessing the discriminant validity, researchers have gone further to explain that, the AVE of each construct needs to be compared to the squared correlation between each pair of constructs. If the AVE's are larger than any squared correlation, then discriminant validity has been achieved (Anderson & Gerbing 1988; Segars 1997). It could be deduced from the table above that the squared correlations of the individual constructs are lesser than the AVEs and thus supporting discriminant validity.

5.5.3 The Structural Model

The second phase of the SEM analysis was based on the structural test. A structural model refers to the aspect of a model that specifies how latent variables interact and are related to each other (Arbuckle, 2005). Byrne (2010) also asserts that structural equations drive the assessment of the

hypothesized relationships between the latent variables which enable the hypothesis of the study to be tested statistically. Table 9 below presents the results obtained from the second phase of analysis in SEM. All the values obtained fell within acceptable range.

Table 9: Measurement Model Fit Indices for the Proposed Model

Goodness-of-fit Indices	Benchmark	value
Absolute goodness of fit measure		
Chi-square (CMIN)	$P \geq 0.05$	0.000
Chi-square/degree of freedom	≤ 2	63.93
Absolute badness of fit measure		
Root Mean Square Error of Approximation	≤ 0.08	0.414
Incremental fit measure		
Normal Fit Index (NFI)	≥ 0.90	0.99
Comparative Fit Index (CFI)	≥ 0.90	0.11
Tucker Lewis Index (TLI)	≥ 0.90	-0.19
Parsimony Fit Measure		
Parsimony Comparative of Fit Index (PCFI)	≥ 0.50	0.11
Parsimony Normed of Fit Index (PNFI)	≥ 0.50	0.12

5.5.4 Analysis of Hypothesized Relationships

To test the mediating role of customer satisfaction, the procedure for testing mediation employed by Mathieu and Taylor (2006) which seeks to compare models was followed to estimate a number of models; First, the direct relationship, the indirect relationship and finally the full model . Structural equation modeling techniques have long been advocated as preferable to regression techniques for testing mediational relationships because they permit one to model

both measurement and structural relationships and yield overall fit indices (Baron and Kenny 1986). There were eight (8) hypothesized relationships, all of which were tested in the conduct of the analysis.

5.5.4.1 Analysis of Hypothesis for Direct Relationship between Internet Banking Service Quality (IBSQ) and Customer Loyalty

The first set of analysis evaluated the direct relationship between (IBSQ) and customer loyalty. The table below presents the results obtained for the direct relationships hypothesized in this study:

Table 10: Analysis of Hypothesized Relationships

Path	Hypothesis	Std.β	S.E.	t-Values	p-values	Outcome
Efficient and Reliable service → Customer Loyalty	H1a	0.33	0.27	8.24	***	Supported
Fulfillment → Customer Loyalty	H1b	0.15	0.02	3.91	***	Supported
Security/Trust → Customer Loyalty	H1c	0.22	0.02	5.52	***	Supported
Site Aesthetics → Customer Loyalty	H1d	0.90	0.02	2.23	0.26	Not Supported
Responsiveness/Contact → Customer Loyalty	H1e	0.13	0.02	3.42	***	Supported
Ease of Use → Customer Loyalty	H1f	0.45	0.02	11.46	***	Supported
GENDER → Customer Loyalty		0.41	0.04	1.01	0.30	
EDUCATION → Customer Loyalty		-0.05	0.03	-1.28	0.20	
AGE → Customer Loyalty		0.12	0.02	2.84	0.00	

The above table indicates the hypothesized relationships (H1a-H1f) for the direct relationship between the individual dimensions of Internet Banking Service Quality and customer loyalty. Efficient and Reliable service and customer loyalty, Fulfillment and customer loyalty, Security/Trust and customer loyalty, Site Aesthetics and Customer Loyalty, Responsiveness/Contact and customer loyalty and finally Ease of Use and Customer loyalty were analysed.

The results of the analysis indicated that the direct relationship between IBSQ and customer loyalty was good considering the fitness of the model. All the loadings of the dimensions (H1a, H1b, H1c, H1e and H1f) of IBSQ except one (H1d) as shown in table 9 were significant and supported. This means that Efficient and Reliable service, Fulfillment, Security/Trust, Responsiveness/Contact and Ease of Use as individual constructs had predictive power on customer loyalty. Site Aesthetics on the other hand could not predict customer loyalty as its respective value was not significant.

Some researchers in other studies have found a significant impact of variables such as age, educational level and gender on customer loyalty especially in relation to technology and as a result these variables were used as control measures to further test the fitness of the model in this study. It was subsequently discovered that these variables (age, gender and educational level) contrary to the findings of the earlier researchers have no significant impact on customer loyalty as can be witnessed from table above. Following the significant loadings of most of the dimensions of IBSQ on customer loyalty as discussed above, the fitness of the model as can also be witnessed from table 9 above was also not bad. The table below presents the results obtained for measurement model fit Indices for the direct relationship hypothesized in this study:

Table 11: Measurement Model Fit Indices for the Direct Relationship

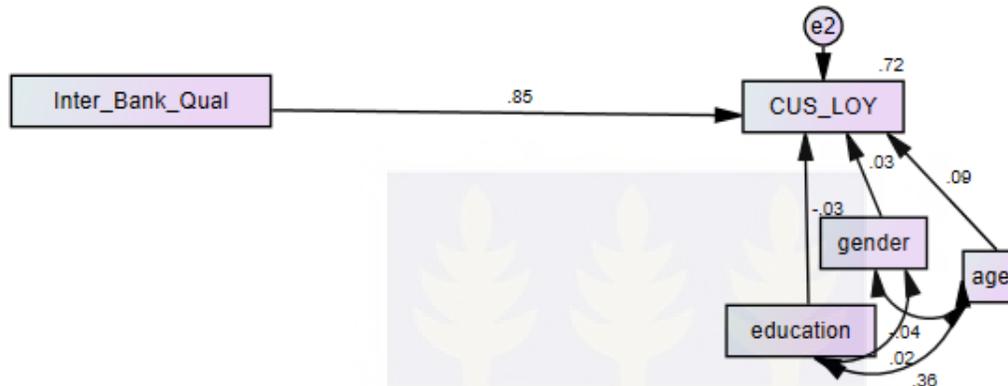
Goodness-of-fit Indices	Benchmark	value
Absolute goodness of fit measure		
Chi-square (CMIN)	$P \geq 0.05$	7.687
Degree of Freedom (DF)		3.00
Chi-square/degree of freedom	≤ 2	2.188
Absolute badness of fit measure		
Root Mean Square Error of Approximation	≤ 0.08	0.065
Incremental fit measure		
Normal Fit Index (NFI)	≥ 0.90	0.984
Comparative Fit Index (CFI)	≥ 0.90	0.990
Tucker Lewis Index (TLI)	≥ 0.90	0.950

Parsimony Fit Measure

Parsimony Comparative of Fit Index (PCFI)	≥ 0.50	0.198
Parsimony Normed of Fit Index (PNFI)	≥ 0.50	0.197

The path diagram for the direct relationship between IBSQ and customer loyalty is presented in figure 5:

Figure 5: Path Diagram for Testing the Direct Relationship

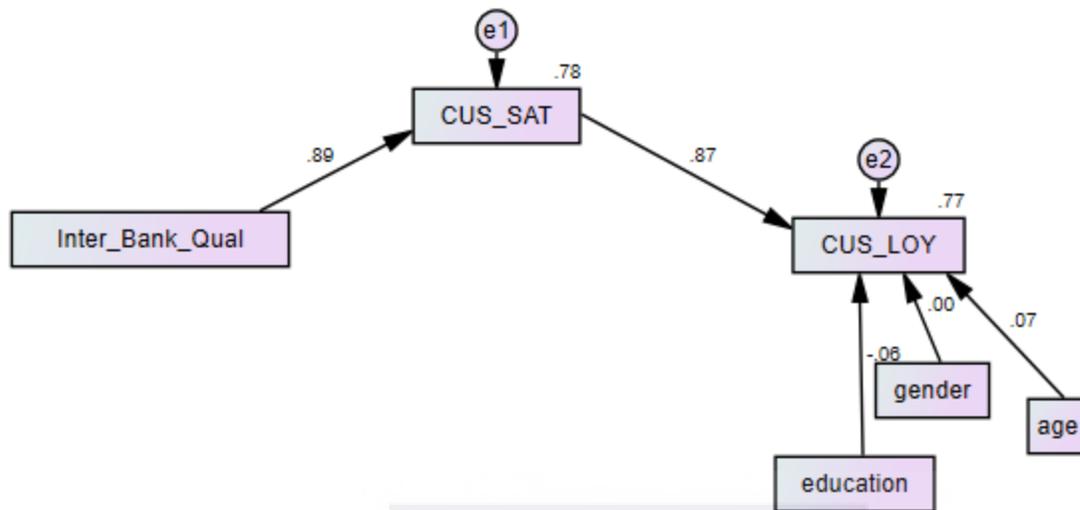


It follows from the results of the analysis therefore that, IBSQ on its own can indeed impact on customer loyalty. However based on the objectives of the studies, the mediator-customer satisfaction needed to be introduced to check its impact on the relationship between IBSQ and customer loyalty.

5.5.4.2 Analysis of Hypothesized Relationship for Mediation Effect

The second batch of hypotheses tested in this study comprised of hypotheses seeking to unravel the mediation effect of customer satisfaction on the relationship between Internet Banking Service Quality and Customer Loyalty. This was to ascertain if customers who are satisfied with the Internet banking services of a bank are likely to be more loyal to the bank than those who are indifferent about being satisfied with the service. To examine the proposed impact of customer satisfaction on the relationship between IBSQ and customer loyalty, a structural equation modeling via AMOS 20.0 with the maximum-likelihood estimation method was again employed to test the model illustrated in Figure 6:

Figure 6: Path Diagram for Testing Indirect Relationship



As shown in Table 2, significant relationships were all in the hypothesized directions. Specifically, IBSQ was significantly related to customer satisfaction and customer satisfaction also related significantly with customer loyalty.

Path	Hypothesis	Std.β	S.E.	t-Values	p-values	Outcome
IBQ → Customer Loyalty	H1	0.35	0.06	6.66	***	Supported
IBQ→ Customer Satisfaction	H2	0.88	0.02	35.35	***	Supported
Customer Satisfaction→ Customer Loyalty	H3	0.56	0.05	10.58	***	Supported
GENDER→ Customer Loyalty		0.00	0.03	0.35	0.72	
EDUCATION→ Customer Loyalty		-0.04	0.03	-1.89	0.05	
AGE→ Customer Loyalty		0.07	0.02	2.73	0.00	

Table 12: Results from Analysis of the Hypothesised Relationships for the Mediation Effect

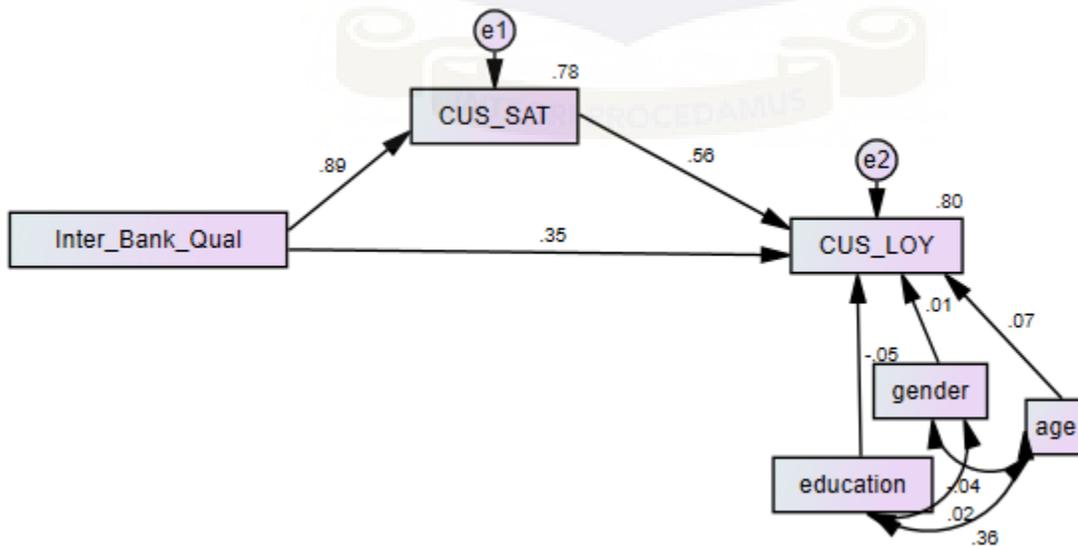
Table 13 below shows figures of the model fitness for the indirect path of the relationship through customer satisfaction. It can be deduced from the figures on table 13 that the model fit indices for the indirect relationship was bad and in fact worse than that of the direct relationship. The structural model for the full model with the mediator therefore became imperative.

Table 13: Measurement Model Fit Indices for the Indirect Relationships

Goodness-of-fit Indices	Benchmark	value
Absolute goodness of fit measure		
Chi-square (CMIN)	$P \geq 0.05$	107.016
Degree of Freedom (DF)		10.00
Chi-square/degree of freedom	≤ 2	10.702
Absolute badness of fit measure		
Root Mean Square Error of Approximation	≤ 0.08	0.163
Incremental fit measure		
Normal Fit Index (NFI)	≥ 0.90	0.905
Comparative Fit Index (CFI)	≥ 0.90	0.912
Tucker Lewis Index (TLI)	≥ 0.90	0.816
Parsimony Fit Measure		
Parsimony Comparative of Fit Index (PCFI)	≥ 0.50	0.434
Parsimony Normed of Fit Index (PNFI)	≥ 0.50	0.431

Lastly, we fit a full structural model that adds a direct path from IBSQ to customer loyalty to the hypothesized model as shown in Figure 8 below.

Figure 7: Path Diagram for Testing Hypothesized Model



Indeed the evidence from table 14 below shows a significant improvement over the two previous models (i.e. the direct relationship and the indirect relationship)

Table 14: Measurement Model Fit Indices for the Full Structural Model

Goodness-of-fit Indices	Benchmark	value
Absolute goodness of fit measure		
Chi-square (CMIN)	$P \geq 0.05$	13.126
Degree of Freedom (DF)		6.00
Chi-square/degree of freedom	≤ 2	2.188
Absolute badness of fit measure		
Root Mean Square Error of Approximation	≤ 0.08	0.057
Incremental fit measure		
Normal Fit Index (NFI)	≥ 0.90	0.988
Comparative Fit Index (CFI)	≥ 0.90	0.994
Tucker Lewis Index (TLI)	≥ 0.90	0.977
Parsimony Fit Measure		
Parsimony Comparative of Fit Index (PCFI)	≥ 0.50	0.994
Parsimony Normed of Fit Index (PNFI)	≥ 0.50	0.282

In summary, the different model tests provided us with valuable information about the mediating mechanisms inherent in hypothesised model of this study. From the direct effect only model, IBSQ was found to be positively related to customer loyalty. From the no direct effect or the indirect model, the relationship between IBSQ and customer loyalty with the mediator (customer satisfaction) and without the direct path from IBSQ to customer loyalty was also found to be positively related. Finally, the full model (which is the hypothesised model of the study)

informed us that the relationship between IBSQ and customer loyalty was fully mediated by customer satisfaction.

Table 15 below presents information on the comparison of the three models. It could be observed that among the three models the one which presented the least acceptable model fit was the indirect path. The direct path could have been the model to present the best fit indices considering only the Chi square figure (direct = 7.687, indirect = 107.016, full = 13.126). However, further analysis where the chi-square is divided by the degree of freedom presents a completely different story (direct = 2.562, indirect = 10.702, full = 2.188). Accordingly, it is concluded that the hypothesised model (i.e. the fully mediated model) is preferable to the other two models (Anderson and Gerbing 1988). Table 15 below presents the results from a comparison of the three models.

Structural model fit Indices for the Proposed Model			
Goodness-of-fit Indices	Direct	Indirect	Full
Absolute goodness of fit measure			
Chi-square (CMIN)	7.687	107.016	13.126
Degree of Freedom (DF)	3	10	6
Chi-square /degree of freedom	2.562	10.702	2.188
Absolute badness of fit measure			
Root mean Square Error of Approximation (RMSEA)	0.65	0.163	0.057
Incremental fit measure			
Normed Fit Index (NFI)	0.984	0.905	0.988
Comparative Fit Index (CFI)	0.99	0.912	0.994
Tucker Lewis Index (TLI)	0.95	0.816	0.977
Parsimony fit measure			
Parsimony Comparative of Fit index (PCFI)	0.198	0.434	0.284
Parsimony Normed of Fit index (PNFI)	0.197	0.431	0.282

5.6 DISCUSSION OF RESULTS

Internet banking service quality was defined in this study as the customers' overall evaluation and judgment of the excellence of services provided through Internet banking channels. Several Scholars (Zeithaml et al. 2001, 2002; Parasuraman et al., 2005; Babakus et al., 2003; Chang, 2007; Chiu et al., 2005; Zeithaml et al., 2002; Zavareh et al, 2012) have come out with various dimensions to measure Internet banking quality. However, the six dimensions - efficient/ reliable services, security and trust, fulfillment, site aesthetic, responsiveness/contact ease of use established by Zavareh et al (2012) were adopted in this study. The results of the analysis indicates that all the dimensions except site aesthetic had a direct relationship with customer loyalty. This finding takes an alternative view to the results obtained by Lindgaard et al, (2011) who found that site aesthetics was crucial in the determination of Internet banking quality of banks. The results of the analysis revealed that as far as customers in the Ghanaian banking industry were concerned, site aesthetics had little or no influence in their remaining loyal to a particular bank. It can therefore be resolved per the analysis of this study that, the dimensions of Internet banking service quality applicable in the Ghanaian banking industry are Efficient/ Reliable Services, Security/ Trust, Fulfillment, Responsiveness/Contact and Ease of Use.

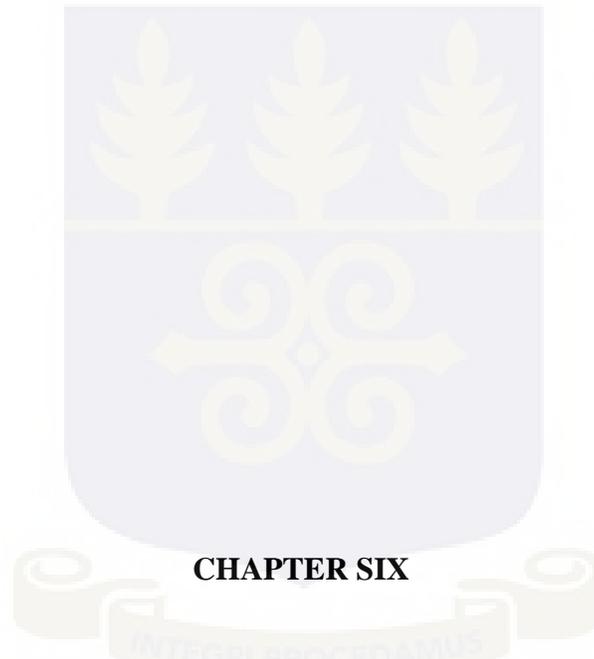
The second and third hypothesized relation were supported as per the results of the analysis. A significant and positive relationship was found to exist between IBSQ and customer satisfaction and also between customer satisfaction and customer loyalty. It therefore follows from the findings of the study that customer satisfaction has a direct impact on customer loyalty and as a result is classified as a good predictor of customer loyalty in the Ghanaian banking industry. This goes to validate the findings by studies conducted by other scholars. The results of the study affirmed that customer satisfaction had a significant influence on customer loyalty and hence mediating the relationship between Internet banking service quality and customer loyalty. This therefore makes customer satisfaction a good predictor of customer loyalty in the banking industry in Ghana. This finding supports the works of other scholars (Carlson and O'Cass, 2010; Gounaris et al., 2010; Gera, 2011) who found that there exist a strong relationship between Internet banking service quality and customer satisfaction. Their findings suggested that effort put in by banks to deliver quality internet banking service would enhance customer satisfaction

and thereby resulting in customer loyalty. This supports the second hypothesized relation, where Internet banking quality was found to have a significant impact on customer satisfaction. The third hypothesized relationship was also supported, meaning that customer satisfaction directly results in customer loyalty in the Ghanaian banking industry. The factor loadings for the hypothesised relation were most significant and their composite reliability substantially exceeded that of the direct and indirect models. Yen and Lu (2008) found that customer satisfaction were useful in eliciting desired behavioural and attitudinal responses from customers. The findings also goes to confirm the study by Gounaris et al., (2010) who found that customer satisfaction was a key factor in influencing customer loyalty. It is again consistent with the findings of Aldas-Manzano (2010) who discovered that IBSQ dimensions like trust and frequency of use do not on their own account for customer loyalty. Valvi and Fragkos, (2012) and Sajtos, Kreis & Brodie (2015) also discovered that differences in advertising spending to get the customer satisfied and not only the provision of the service account for variations in customer loyalty drivers across multiple service industries. Their finding lends credence to the findings obtained in this study which highlighted the significance of customer satisfaction in customer loyalty. Also, Gera, (2011) was unequivocal in asserting that customer satisfaction has a strong link with customer loyalty. These empirical works lend credence to the findings of this study and contribute towards a deeper understanding of how Internet banking service can be steered towards outcomes such as loyalty.

Lastly it was found that, of the six components of Internet banking quality, only Site Aesthetics had no direct relationship with customer loyalty. Site aesthetics according to scholars pertains to the attractiveness of a website and refers to easy-to-remember URL address, well-organized and appropriate use of colours, well-structured and easy-to-follow catalogue, simple site navigability, concise and understandable content (Tuch et al., 2012; Tractinsky et al., 2006; Reinecke, 2013). The findings of this study therefore presumes that the beauty or attractiveness of a bank's website does not form part of the germane issues in the decision of a customer who uses internet banking service to remain loyal to a bank.

5.7 CHAPTER SUMMARY

This chapter has provided a discussion of the results obtained from the empirical survey in relation to literature and the conceptual framework for the study. By first providing a brief background to the study, the chapter assessed the findings obtained from the research in conjunction with the research question posed in the introductory part of the study with the aim of achieving the research objectives. The chapter has duly discussed in detail, the dimensions of Internet banking service quality and the role of customer satisfaction in the relationship between IBSQ and customer loyalty. The next chapter throws more light on the research conclusions and the implications of the issues discussed above for academic and managerial practice.



SUMMARY, CONCLUSIONS AND MANAGERIAL IMPLICATIONS

6.0 INTRODUCTION

The previous chapter provided details about the analysis and results obtained in the study. This chapter is the final chapter of this thesis and provides the summary of the research, conclusions, implications and directions for future research. Salient lessons obtained in this study are presented and recommendations are made for stakeholders.

6.1 SUMMARY OF THE STUDY

This thesis developed and empirically tested a model that leads to a better understanding of the relationship between Internet banking service quality and customer loyalty in the Ghanaian banking industry. The study sought to determine the IBSQ dimensions resulting in customer loyalty and to show how this relationship is mediated by customer satisfaction. Specifically the study sought to examine the direct relationship between Internet banking service quality and customer loyalty, as well as to determine the mediating effect of customer satisfaction on IBSQ and customer loyalty. The study thus sought to answer the question: “does Internet banking service quality directly lead to customer loyalty?” as well as “does customer satisfaction mediate the relationship between IBSQ and customer loyalty?”

Having already set out the objectives for the study, a literature review was conducted where existing literature on electronic service quality, electronic banking, customer satisfaction and customer loyalty were reviewed. In the review, it came to light that Zavareh et al., (2012) following Zeithaml et al., (2002) and Parasuraman et al (2005) had conceptualized Internet banking service quality as a six-dimensional construct consisting of Efficient/Reliable Services, Security and Trust, Fulfillment, Site Aesthetic, Responsiveness/Contact and Ease of Use. Thus the study adopted these six dimensions in empirically measuring Internet banking service quality. The review also discussed issues relating to customer loyalty, and it was established that behavioural and attitudinal measurements of customer loyalty were amongst the frequently used measures of customer loyalty. A conceptual framework was developed based on the review of literature. The framework further led to the formulation of hypothesis which was used to ascertain the relationship between Internet banking service quality and customer loyalty and the mediating role of customer satisfaction. A questionnaire was then developed based on existing scales. Scales for Internet banking service quality (Parasuraman et al., 2005; Collier and Bienstock, 2006; Zavareh et al., 2012) and customer loyalty (Soderland, 2006) were obtained and incorporated in the questionnaire design. The conceptual framework was subsequently operationalized through a survey, where four hundred and twenty (420) questionnaires were administered to respondents over a period of three weeks. Three hundred and ninety-eight (398) questionnaires were obtained representing a response rate of 94.7%. However after the process of data cleaning, it emerged that eighteen (18) questionnaires had to be discarded due to large

portions of missing data as well as biased responses. An additional twelve (12) questionnaire inputs had to be deleted for failing to meet the minimum threshold for missing data imputation. Thus, the sample that was analysed comprised of three hundred and sixty-eight (368) responses from respondents.

A contextual review of the banking industry in Ghana revealed that there were twenty-eight (28) banks currently operating in the Ghanaian banking industry (PWC, 2014). The data gathered captured responses from customers of twenty-two (22) banks in Ghana, indicating that the study had to a large extent captured a diversity of views from customers of most of the banks in Ghana.

The data gathered in the study was analyzed using descriptive statistics in the Statistical Package for Social Sciences (S.P.S.S.), as well as confirmatory factor analysis in Amos version 20.0. The choice of analytic technique was premised on the fact that the SEM enables a rigorous analysis of quantitative data that seeks to evaluate model fitness and select the best model that fits the data (Tabachnick & Fidell, 2001). Confirmatory factor analysis was used to ascertain and evaluate the validity and reliability of the constructs in the study, and this was consistent with other studies on electronic banking (Narteh, 2013) that adopted the SEM approach in the analysis of data. As far as descriptive statistics were concerned, two hundred and-eight (208) respondents were males, whilst one hundred and fifty-five (155) respondents were females, representing 56.5% and 42.1% respectively. Most of the respondents surveyed were also in the (21-30) age bracket indicating that most of the respondents were millennials who are perceived to be highly technology savvy. Furthermore, majority of respondents had first degree, suggesting that they were to a large extent computer literate and would find the use of technology to access banking service quite easy and effortless. Most respondents had bank accounts with at least two (2) banks, indicating that multi-bank loyalty was a prominent feature in the Ghanaian banking industry.

6.2 MAJOR FINDINGS

The results from the analysis are presented in this section as the major findings of the study.

6.2.1 What are the Dimensions of internet Banking Quality?

Internet banking service quality was defined in this study as the customers' overall evaluation and judgment of the excellence of services provided through Internet banking channels. The first question of this study thereby sought to determine the dimensions of Internet Banking Quality applicable in the Ghanaian context. Several Scholars (Zeithaml et al. 2001, 2002; Parasuraman et al., 2005; Babakus et al., 2003; Chang, 2007; Chiu et al., 2005; Zeithaml et al., 2002; Zavareh et al, 2012) have come out with various dimensions to measure Internet banking quality. However, the six dimensions - efficient/ reliable services, security and trust, fulfillment, site aesthetic, responsiveness/contact ease of use established by Zavareh et al (2012) were adopted in this study. The results of the analysis indicates that all the dimensions except site aesthetic had a direct relationship with customer loyalty. This finding takes an alternative view to the results obtained by Lindgaard et al, (2011) who found that site aesthetics was crucial in the determination of Internet banking quality of banks. The results of the analysis revealed that as far as customers in the Ghanaian banking industry were concerned, site aesthetics had little or no influence in their remaining loyal to a particular bank. It can therefore be resolved per the analysis of this study that, the dimensions of Internet banking service quality applicable in the Ghanaian banking industry are Efficient/ Reliable Services, Security/ Trust, Fulfillment, Responsiveness/Contact and Ease of Use.

6.2.2 Does Internet Banking Quality Directly Result in Customer Loyalty in the Ghanaian Banking Industry?

The second research question sought to determine whether Internet banking service quality resulted in customer loyalty in the Ghanaian context. The findings obtained for the study indicated that of the six dimensions measuring IBSQ, only Site Aesthetics had no direct relationship with customer loyalty, implying that the other dimensions of IBSQ were good predictors of customer loyalty. However, the direct relation between IBSQ and customer loyalty did not present the best model fit indices of the three models and thereby making IBSQ only, not the best predictor of customer loyalty. These results indicate that the activities put in place by banks to deliver only quality Internet banking service without considering what will get the

customer satisfied cannot alone contribute to customer loyalty amongst customers of banks in Ghana.

6.2.3 Does Customer Satisfaction Mediates the Relationship between Internet Banking Service Quality and Customer Loyalty in the Ghanaian Banking Industry?

The third research question sought to determine whether customer satisfaction mediated the relationship between Internet banking service quality and customer loyalty in the Ghanaian banking industry. The results obtained in the study indicated that customer satisfaction successfully mediated the relationship between Internet banking service quality and customer loyalty in the Ghanaian banking industry. As discussed earlier, the study operationalized the IBSQ dimensions espoused by zavareh et al (2012) resulting in IBSQ being measured according to Efficient/ Reliable Services, Security and Trust, Fulfillment, Site Aesthetic, Responsiveness/Contact and Ease of Use. Although IBSQ somewhat directly contributed to customer loyalty, it was found that customer satisfaction mediated the relationship between IBSQ and customer loyalty. This finding confirms the assertions by Aldas-Manzano et al., (2011) who found that customer satisfaction has shown to have a very strong positive relationship with customer loyalty in the context of Internet banking service. With customer satisfaction acting as a mediator, it implied that IBSQ dimensions could better predict customer loyalty. The results of the analysis revealed that the IBSQ elements that customers of Ghanaian banks found most significant were Responsive/contact, Fulfillment and Security/Trust. According to the results, Responsiveness/Contact were found to aid customers of banks to have the problems they encounter in using Internet banking service quickly resolved. Security/Trust were also found to encourage customers in remaining loyal to a bank since customers felt that their personal information is never misused and that the information presented by their banks on its website is trustful. The role of customer satisfaction as a mediator between IBSQ and customer loyalty was no surprise as literature recognizes customer satisfaction as a mediator in most electronic banking studies (Collier and Bienstock, 2006; Cristobal et al., 2007; Bansal et al., 2004; Wolfenbarger and Gilly, 2003; Aldas-Manzano, 2010).

Thus the verdict in response to the question on whether customer satisfaction mediates the relationship between IBSQ and customer loyalty is satisfactorily answered. The findings of the study is conclusive enough to certify that customer satisfaction mediates the relationship between IBSQ and customer loyalty. Impliedly, banks must ensure that Internet banking service is geared towards the satisfaction of the customer as this is critical to customer perception and loyalty behaviour towards the bank.

6.3 CONCLUSION

Internet banking quality is conceptualised to comprise of six dimensions: Efficient/ Reliable Services, Security and Trust, Fulfillment, Site Aesthetic, Responsiveness/Contact and Ease of Use. Of these six elements, the current study specifically identified Efficient/ Reliable Services, Security and Trust, Fulfillment, Responsiveness/Contact and Ease of Use appear to be good predictors of customer loyalty in the banking industry in Ghana. However, Site Aesthetic was found not to be a good predictor of customer loyalty. Customer satisfaction was also identified as very prominent in consolidating customer loyalty behaviours amongst bank customers. The conclusion was that this finding could be based on the contextual factors as other studies had been successful in proving how Internet banking service quality could result in desired customer loyalty.

Furthermore, it has been confirmed that customer satisfaction plays an imperative role in the banking industry in Ghana, as it successfully mediated the relationship between internet banking quality and customer loyalty. It can therefore be concluded that, IBSQ lead to customer loyalty, but the relationship is better strengthened when customers are first satisfied. This has a lot of implications for managing Internet banking in retail banks.

6.4 MANAGERIAL IMPLICATIONS OF THE STUDY

The current study has underscored many relevant Internet banking service issues and their repercussions on customer loyalty. A lot of insights has been provided by customers of banks, in an industry in Ghana that is known for its intense level of competition. Traditionally, banks have sought to distinguish themselves from their competitors and deliver value to customers. However

in trying to deliver value whilst at the same time staying on top of the competition, banks have resorted to the application of ICT to deliver quality and competitive service. In this study it was discovered that amongst the six IBSQ dimensions, responsiveness/contact and fulfillment are the most important determinants of customer loyalty. It is therefore instructive to know that banks need to invest in the right elements of IBSQ to elicit the required behaviour of customers.

The IBSQ model provides pointers to managers of banks on how to improve the internet banking service experience of the Ghanaian customers. The dimension of the IBSQ highlights the need to design the internet banking service to enhance customer's transactions with their banks via the bank's website. Embedded in this dimension is the need to ensure that the internet banking service is efficient and reliable and easy to use. An easy-to-read language, appealing graphics and ease of navigation will make the website of the bank easy to use. Although internet service in the country cannot be described as being in the best of conditions, managers of banks must do their best to make sure that the internet banking section of the bank is functional all the time and provide customers with consistent and fast services. It has therefore become imperative for marketing managers of banks in the Ghanaian banking industry to pay more attention to the training of their staff especially those in the IT section to provide swift recovery of the service when there is a system failure.

Customers who access banking service through internet banking instead of the banking halls expect certain outcomes to emanate from their efforts. The banks must therefore ensure that they design their website to fulfill customers' expectations. The website must provide enough information for the customer. In addition, the internet banking must ensure fast services so that customer would not have to literally go to the banks to compound the problem of delays associated with transactions in the banking halls.

The recovery dimensions such as responsiveness and contact could also be used to improve customer satisfaction with the use of internet banking. Even though internet banking minimises most errors associated with tellers in the banking hall, there are sometimes failures such as interruption in the network, complete system failure, delay of service and illegal withdrawals. The banks must put in place measures to reduce customer frustrations during transactional failures. In addition, since banking service is accessible via internet banking on a 24 hour a day schedule, it must also be backed by a 24-hour service recovery schedule. For appropriate internet

banking service recovery, a contact person or toll free number must be available so that customers can immediately report problems which must be promptly addressed. Again, serious complaints by customers can be investigated by the bank and where appropriate, due compensation paid to them or in other circumstances an unqualified apology rendered all in an attempt to get the customer satisfied.

This study sought to determine whether Internet banking quality resulted in customer loyalty, and whether customer satisfaction mediated the relationship thereof. The study to our knowledge and the best of our searching ability is the first from a Ghanaian perspective that specifically examines the mediation effect of customer satisfaction on the relationship between Internet banking service quality and customer loyalty, and as a result, a significant contribution to literature and academia. Whilst the findings of the study are informative and have made a useful contribution to literature, it is imperative that future researchers take up the mantle to introduce other mediators or moderators such as perceived service quality, customer satisfaction or trust, especially given that literature has identified such factors as antecedents to customer loyalty.

6.6 LIMITATIONS OF THE STUDY

Like other studies, there are some limitations associated with this work. Firstly, the dimensions of IBSQ - Efficient/ Reliable Services, Security and Trust, Fulfillment, Site Aesthetic, Responsiveness/Contact and Ease of Use central to the model and the objectives of the study according literature are not the only variables that could explain and affect the relationship between IBSQ and customer loyalty and that there are other dimensions that could be considered.

Secondly, the sample for the study was drawn from the capital city of Ghana, meaning that all customers were pooled from one region and as a result, the views of bank customers from other regions in Ghana were not considered in this study. The question therefore lingers as to whether the findings would have been different had customers from all regions in Ghana or better still other countries been included in the study. This makes it difficult to generalize the findings to other countries and contexts and future research is recommended to consider wider sample to cover the whole of the country or other developing countries



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APPENDIX

QUESTIONNAIRE

The researcher is a final year MPhil Marketing student of the University of Ghana Business School. The researcher seeks in this study to determine whether Customer Satisfaction Mediate the relationship between Internet Banking Quality and Customer Loyalty in the Ghanaian

Banking Industry. This activity is in partial fulfillment of the requirements leading to the award of a Master of Philosophy degree in Marketing.

The information provided will be solely used for the purpose of research and confidentiality is guaranteed. In this regard, kindly take a few minutes to complete this questionnaire.

Section A: Demographic Information of Respondents

1. Age: Under 20 [] 21-30 [] 31-40 [] 41-50 []
Above 50 []

2. Gender: Male [] Female []

3. Education: SHS [] Diploma [] Degree [] MBA/MPHIL []
PHD [] Others:.....

4. Number of banks you bank with: 1bank [] 2 banks [] 3 banks []
More than 3 banks []

5. Name of main bank:.....

6. Number of years with main bank: 0-3 years [] 4-6 years [] 7-9 years []
10 years and above []

Section B: Internet Banking Quality and Customer Loyalty: The Dimensions of Internet Banking Quality

On a Likert Scale of 1 to 5, please indicate the extent to which you agree or disagree with the following statements regarding Internet banking quality and customer loyalty in the Ghanaian banking industry. Tick or circle the appropriate number on the Likert Scale, with 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree.

No.	Internet banking quality dimensions	1	2	3	4	5
	Efficient and Reliable Services					
1	The service delivered through the Internet banking service web pages is quick					
2	When my bank’s Internet banking section promises to do something by a certain time, it does so					
3	I am able to complete a transaction quickly through my bank’s web site					
4	My bank’s Internet banking section functions all the time					
5	My bank’s Internet banking section provides consistent services					
	Fulfillment					

6	The organisation and structure of my bank's Internet banking service web page are easy to follow					
7	My bank accurately delivers promises put out on its web site					
8	The internet banking part of my bank launches and runs right away					
9	The transactions of the Internet banking part of my bank are always accurate					
10	The Internet banking service satisfies most of my banking needs					
11	The Internet banking service of my bank provides fast services					
	Security/Trust					
12	My personal information is never misused by my bank					
13	I feel safe in my Internet banking transaction with the bank					
14	I have trust and security in the internet banking service of my bank					
15	My bank's website and internet banking services have good reputation					
16	The information presented by my bank on its website is trustful					
	Site aesthetics					
17	My bank's Internet banking web page is attractive					
18	My bank's Internet banking web page is visually pleasing					
19	The layout of my bank's Internet banking web page is good					
20	The combination of colours used on the Internet banking web page of my bank is good					
21	The graphic quality of the web page of the Internet banking is good					
	Responsiveness/contact					
22	My bank promptly respond to my request through their web site					
23	My bank quickly resolves my online transaction problems					
24	Internet banking problems I encounter are settled to my satisfaction					
25	The Internet banking customer services of my bank are easily accessible by telephone and other means					
	Ease of use					
26	The web page content of the Internet banking is readable					
27	The Internet banking option is easy to understand					
28	The Internet banking website is well organized					
29	The Internet banking web page does not ask me to input a lot of information					
30	I can easily find what I need on the web site of my bank					
31	The graphic representation of my bank's web site helps me to use their Internet banking services					

32	I am able to use my bank's Internet banking utilities of web site without a lot of effort					
33	The language used on my bank's web site is easy to understand					
	Customer satisfaction					
34	I have enough information about Internet banking and all its benefits					
35	I did the right thing by choosing to use the Internet banking services of my bank					
36	I enjoy the experience offered by the Internet banking service of my bank					
37	The Internet banking service of my bank is exactly what I need					
38	I am comfortable with using Internet banking services					
39	Internet banking is easy to use					
40	Internet banking makes my banking life a lot easier					
41	Internet banking has improved my banking transactions					
42	Internet banking enhances my banking experience					
43	I prefer using my bank's internet banking services than walking to their branch office					
44	Internet banking enables me to utilize several banking services faster					
45	Internet banking saves me time in my bank transaction					
46	Cyber-crime and other social vices has made the use of internet banking unattractive to me					
47	Lack of user protection laws has made it difficult for me to use the internet banking services of my bank					
	Customer Loyalty					
48	I will always use my bank's Internet banking services					
49	I will always make my bank's Internet banking my preferred choice for banking services					
50	I will recommend the Internet banking service to my family and friends and other customers of the bank					
51	I will patronize other services from this bank					
52	I will use the Internet banking service for my business' banking transaction in the event I set up a business					
53	Even if other banks profess to be better than my bank, I will still be loyal to my bank because of their Internet banking services					
54	Even if my bank does not win awards, I will not switch to award-winning banks					
55	I will point out the positive aspects of my bank's Internet banking services if anybody criticises it					

