

**THE ADOPTION OF E-BANKING SERVICES BY RETAIL CUSTOMERS IN  
KUMASI METROPOLIS**

**KNUST**

**BY**

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## DECLARATION

I hereby declare that this submission is my own work towards the Master of Business Administration (Strategic Management option) and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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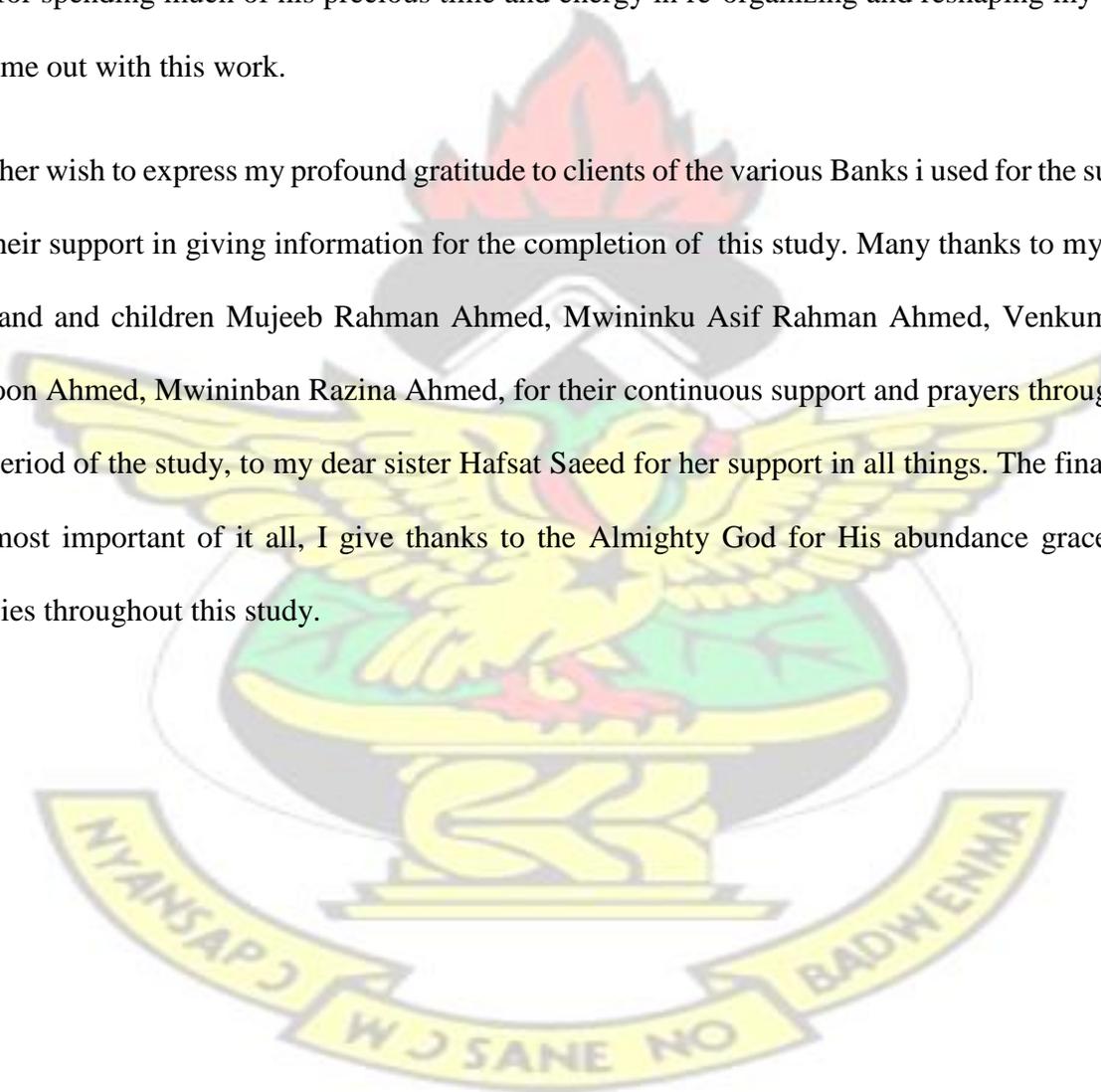
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## DEDICATION

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## ABSTRACT

The study sought to assess internet adoption among bank retail clients within the Kumasi metropolis. The specific objectives were to assess retail bank clients' knowledge and awareness on the various e-banking services, to examine the level of patronage of e-banking products among bank retail clients, to identify challenges affecting the adoption of e-banking services among retail clients, and to examine the effect of e-banking service adoption on banks' operations in the Kumasi Metropolis. The research design adopted for this study was descriptive. The population comprised of retail clients within Kumasi metropolis. Convenience sampling technique was used to select 400 bank retail clients. Questionnaires were used in collecting primary data from customers. At the end, the study found that the most popular e-banking products clients were aware of was the ATM/Master/VISA cards. This was followed by E-zwich, internet banking, and SMS banking. The less popular ones were telephone banking, credit cards, and use of company's website. The operational benefits received by clients from banks were affected positively by internet adoption. The study also found that generally, clients were satisfied with e-banking services of their respective banks, and this affected their loyalty level positively. Additionally, the study revealed that most clients used e-banking services mostly once a month; most clients have also used e-banking services for more than three years, with cash withdrawal as the major reason of using e-banking services. The frequent breakdown of the system e.g. ATMs, was the most significant challenge to e-banking. It is therefore recommended that, banks pay very critical attention to performance of their systems, especially ATMs.

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# CHAPTER ONE

## GENERAL INTRODUCTION

### 1.1 Introduction

This chapter introduces the entire study. Issues discussed include the background of the study, problem statement of the research, objectives of the research, research questions, scope, justification of the research, overview of methodology and the general structure of the study.

### 1.2 Background to the Study

Since the first online banking services were provided to customers in USA on October 1994, online banking services have spread rapidly all over the world (Ma, 2012). Arguably, the growth of Electronic banking in a country depends on many factors, such as success of internet access, new online banking features, household growth of internet usage, legal and regulatory framework. E-banking has been noted for offering speedier, quicker and dependable services to customers for which they may be relatively satisfied than that of manual system of banking. Ebanking system not only generates latest viable return, it can get its better dealings with customers (Gupta, 2008; Kannabiran & Narayan, 2005). These rapid changes in business operations in contemporary times in the form of technological improvement require banks in Ghana to also serve their customers electronically. Traditionally, banks have been in the forefront of harnessing technology to improve their products and services.

The banking environment in the 21st century is highly complex and competitive and therefore requires information and communication technology to take centre stage in the operations of banks (Stevens, 2002). E-banking is critical in the transformation drive of banks in areas such as products

and services and how they are delivered to customers. Thus, it is seen as a valuable and powerful tool in the development, growth, promotion of innovation and enhancing competitiveness of banks (Gupta, 2008; Kamel, 2005). Given the significant role of e-banking in the developmental drive of banks, information technology has been found to lead to improvement in business efficiency and service quality and hence attract customers, satisfy, as well as retain them (Kannabiran & Narayan, 2005).

In Ghana, many banks have introduced e-banking services to make banking more convenient to customers. Even though customer satisfaction is an ambiguous and abstract concept, actual manifestation of the state of satisfaction will vary from person to person, product to product and service to service. The state of satisfaction depends on a number of factors which consolidate as psychological, economic and physical factors. Today, almost all banks in are adopted ICT as a mean of enhance service quality of banking services. They are providing ICT based e-services to their customers which is called as e-banking, internet banking or online banking etc. It brings connivance, customer centricity, enhance service quality and cost effectiveness in the banking services and increasing customers' satisfaction in banking services (Kannabiran & Narayan, 2005). Customers are beginning to evaluate banks in the light of e-service era. This study therefore sought to examine the level of internet banking adoption among retail customers in the Ghanaian context.

### **1.3 Statement of Problem**

E-banking are deployed by banks to improve their service delivery, decongest queues in the banking hall, enable customers withdraw cash 24/7, aid international payment and remittance, track personal banking transaction, request for online statement, or even transfer money to a third party account. Despite the effort of banks to ensure that customers reap the benefits of e-banking,

the bank is met with complaints from customers as regards, malfunctioning automated teller machines (ATMs), network downtime, online theft and fraud, non-availability of financial service, payment of hidden cost of electronic banking like Short Message Services (SMS), for sending alert, mandatory acquisition of ATM cards, non-acceptability of some ATM cards for international transaction amongst others (Madueme, 2009).

Studies also show that many banks are saddened by the low patronage of e-banking services especially among retail customers (Agboola, 2006; Mohammed and Siba, 2009). Many banking halls continue to be besieged with long queues. Public information also point to the high illiteracy level which makes it difficult for many retail customers to use these innovative ebanking services. Interestingly, very few elite even make use of electronic banking services. This study therefore aimed at examining the level of electronic banking service adoption among bank retail customers within the Kumasi Metropolis.

#### **1.4 Objectives of the Study**

The main goal of the study is to ascertain the adoption of E-Banking by Ghanaian retail customers. The following specific objectives would be looked at;

- i. To assess bank retail customers' knowledge and awareness on the various e-banking services in the Kumasi Metropolis.
- ii. To examine the level of patronage of e-banking products among bank retail customers in Kumasi Metropolis.
- iii. To identify challenges affecting the adoption of e-banking services among retail customers in the Kumasi Metropolis.

- iv. To examine the effect of e-banking service adoption on banks' operations in the Kumasi Metropolis.

## **1.5 Research Questions**

The following research objectives have been outlined to guide the study:

- i. What is the level of awareness and bank retail customers' knowledge on various e-banking services within the Kumasi Metropolis?
- ii. What is the level of patronage of e-banking products among bank retail customers in Kumasi Metropolis?
- iii. What challenges hinder the adoption of e-banking services among bank retail customers within the Kumasi Metropolis?
- iv. What is the effect of e-banking service adoption on banks' operations within the Kumasi Metropolis?

## **1.6 Scope of the Study**

This study focused on the electronic banking activities of selected banks within the Kumasi Metropolis. It was limited to customers of selected banks. In terms of theoretical boundary, the study covered themes such as the product adoption curve, E-banking (internet banking) and innovation as a concept. In terms of geographical scope, the study covered bank retail customers within the Kumasi Metropolis. All commercial banks located within the Kumasi Metropolis were considered for the study. Few rural banks operating e-banking services were also included. The duration for the study was 8months.

## **1.7 Justification of the study**

This research provides an overview of electronic banking adoption by bank retail customer within the Kumasi Metropolis. The information and issues raised in this research served as a useful feedback to players in the banking industry. It also paved way for strategies to be adopted to improve internet banking penetration as well as getting the results from marketing efforts to help gain competitive advantage through increased sales.

The study is expected to provide useful information about electronic banking challenges and how these could be addressed. The findings of the study would also engender discussions on the safety and security of bank electronic transactions in the country. For customers, it is an opportunity to enjoy better services. It also created an avenue for customers to register their complaints about e-banking challenges. For future researchers, the study adds to empirical literature in the area of electronic banking.

## **1.8 Brief Overview of Methodology**

The study sought to ascertain the adoption of electronic banking among bank retail customers and its impact on bank operations. The research design was explanatory and descriptive. From Saunders et al. (2009), there are three forms of research design: exploratory, explanatory and descriptive. The major sources of data for the study included both primary and secondary.

Primary data was gathered by means of questionnaires.

The population of this study comprised retail customers of selected banks within the Kumasi Metropolis. Bank retail customers within Kumasi exceed 100,000 but for the purpose of this study, a sample of 400 customers was used. Data collected was analysed using frequency tables, mean,

standard deviation and regression. The main statistical tool for the analysis would be the Statistical Package for Social Sciences (SPSS) version 17.

## **1.9 Structure of the Study**

The study is organized into six (6) chapters. Chapter One presents the general introduction, the problem statement, the objectives, the research questions, justification, the scope and limitations of the study. The Second Chapter reviews existing literature that primarily deals with discussions and review of literature related to the concepts of the research. The conceptual and regulatory framework of internet banking is also made known in this chapter. Chapter Three presents the research methodology. It contains research method selection, case study design, discussion of validity and reliability issues and the method of data analyses. This chapter also covers the profile of the case study areas. The Fourth Chapter comprises compilation and analysis of data whilst Chapter Five presents discussion of results. Chapter Six provided summary and concise highlight of the various findings, conclusion and recommendations.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter reviews previous studies conducted on the topic under consideration. The review covers the concept and terminologies of electronic banking, history and popularity e-banking in recent times. It also touched on the concept of customer satisfaction and how e-banking contributes to having a delighted customer.

#### 2.2 Overview of Electronic banking

There are different schools of thought when it comes to defining electronic banking (e-banking); whilst some fail to see any distinction between e-banking and internet banking, others manage to draw some line of distinction. For instance Daniela and Dospinescu (2004) define electronic banking as customers' access to bank services by safe intermediaries without any physical presence. Timothy (2012) on the other hand describes electronic banking as the use of the Internet as a remote delivery channel for providing services, such as opening a deposit account, transferring funds among different accounts and electronic bill presentment and payment. This can be offered in two main ways. First, an existing bank with physical offices can establish a Website and offer these services to its customers in addition to its traditional delivery channels. Second, is to establish a virtual bank, where the computer server is housed in an office that serves as the legal address of such a bank. Virtual banks offer their customers the ability to make deposits and withdraw funds via ATMs (Automated Teller Machines) or other remote delivery channels owned by other institutions, for which a service fee is incurred. In the opinion of Ahasanul (2009)

Electronic banking (e-banking) is the newest delivery channel of banking services. It is often not surprising to see researchers use e-banking and internet banking interchangeably. In line with this study, internet banking is considered a subset of e-banking. However, both terms may be used interchangeably.

Electronic banking also forms part of what is generally known as new products/services in the Ghanaian banking industry. Commercial banks in Ghana are gradually embracing the e-banking product/service and radical changes are taking place in the Ghanaian financial landscape (Ovia, 2005). This according to Army (2006) is in line with directives that banks must have a global reach and be competitive at the international level. With internet banking for instance, opportunities are also created for small banks to compete on more equal footing with other larger banks in the world (Agboola, 2006). Customers who are increasingly raising the stake of expectations for quality products and customer service can quickly find it at a click of the mouse. Gupta (2008) observed that, banks and customers could engage in dialogue and learn from each other through this service. Mohammed and Siba (2009) found that with e-banking service, customers can also access the balance and transactions on their account and perform other banking services such as transfer of funds from one account to the other, carry out transactions with other bank customers etc. Studies by Ovia (2005), Mahdi and Zhila (2008) and Gonzaliz (2008) have revealed that, at least 50% of the over 800 banks in Africa offer one form of online banking service or the other.

Although internet banking which forms part of e-banking has become highly fashionable, the developing countries are still struggling hard to catch up with their counterparts in the developed countries. According to reports released in 2006 by the National Space Research and Development Agency, only about 2% (about 480,000) of Ghanaians approximately 24 million populations actively use the internet at the time (Ovia 2005; Mohammed & Siba ;2009). The report

put internet access points in the country at 685,459, with offices having 530,968 of this, representing 77.4%; homes, 122,431 points, representing 18.9%; and cyber cafes accounting for the remaining 32060 points, representing 4.7% of the total internet access points available in the country.

## **2.3 Forms of Electronic Banking**

Electronic communication means are particularly coming to the forefront. These are more convenient, faster, and often cheaper for clients. Banking experience shows it is suitable to use combinations of several communication means, depending on individual segments, clients, and types of operations, products and situations. Electronic banking is a service that specifically uses electronic communication forms. Electronic banking can be divided on the basis of the instruments used: telephone connection, personal computers, means of payment [bank cards] and self-service zones (Kala & Přádka, 2000).

### ***2.3.1 Electronic Banking Using a Telephone Connection***

Telephone banking and the first banking services using classic telephone lines for communication date back to the turn of the sixties and seventies of the previous century. These services grew very rapidly and at the close of the 20th century mobile phones also started to be used in banking with the development of information and communication technologies. In this period banks quickly responded to the dawning of a new era in using mobile telephones worldwide and began communicating with their clients by SMS messages, with GSM banking later becoming a natural component of electronic banking. Each financial institution offers this under a different name, but the essential product remains the same. A mobile phone can be used to communicate with a so-called telephone banker or an automated telephone system, just as well as a fixed line (Kannabira

& Narayan, 2005). However, opportunities for mobile phone usage in communication with a bank are much greater. Mobile phone use represents a direct communication channel that spread on a massive scale through which clients have immediate access to typing a bank operation, ordering services or working with accounts. Electronic banking using a telephone connection can be divided into phone banking (ATS, client advisor) and mobile banking (SMS banking, GSM SIM Toolkit and WAP).

Phone banking is the provision of banking services using a classic telephone line. A bank client can obtain the necessary information on dialing a telephone number specified in advance. Before the requested banking service information is provided, the client's identity is determined using contractually agreed terms (Kala & Přádka, 2000). Using this banking service enables bank clients to obtain information concerning active and passive banking products, but a client can also actively use the bank payment system and request, for example, a payment order or a collection order, open or cancel a term deposit or a current account. In this case a fax connected to the telephone serves as an output communication channel.

### **2.3.2 SMS Banking**

SMS banking uses short text messages sent through the client's mobile phone. SMS text messages can be used for both passive and active operations similarly as with classic telephone banking. A client can automatically receive information about his/her account balance: an SMS is sent to the client immediately after a certain operation is performed, or on request: a client sends the bank a correctly formatted message which processes it and answers the client's request by SMS. Information sent on request mostly concerns current interest rates or currency exchange rates. Providing these is simple for the bank because this is publicly accessible information that needs

no protection (Kannabira & Narayan, 2005). A client however can request information about the balance in his account, which is not public information and must be protected when it is provided. Passwords are used for this purpose or technologies based on the principle of an electronic key. A client however is required to know the code of every transaction including constant and variable symbols.

### ***2.3.3 Internet Banking***

Internet banking can be used from the home or the office, as well as an internet café, although the latter is not recommended for security reasons. In order to handle his account a user just needs an internet browser (such as MS Explorer or Netscape Navigator). A client cannot avoid visiting the bank though, because he must first ask for an identification code. After opening the bank's web site the client simply selects internet banking and, further to proper identification, can perform passive or active operations. Good internet banking should provide a maximum of services (Mohammed & Siba, 2009).

No less important are the graphic interface, clarity, simplicity, and unambiguity of usage. The intelligibility of texts determines simplicity and speed of understanding of the meaning of menu items, data fields, and general text information displayed to the client. Safety for concrete applications is assured by client authentication, verification of data and data protection by encryption. Client identification is done using passwords or codes. The client chooses some of these and the bank assigns others. It is recommended to choose a password made up of various types of characters, which can be a combination of numbers, lower case and capital letters, and special symbols. Banks usually protect large volume transactions with additional security means, such as an encryption (authentication) calculator, or a token, which generates nonrecurring random

passwords, which a client types on confirming an order. The token itself is protected by certain security features. Work with it is only enabled after the client types a four-digit PIN code, whereby the user can change the PIN at any time. In the event of three failed attempts to type the correct PIN the token blocks itself. After 60 seconds of inactivity a token automatically switches itself off and once switched back on, it again requests the PIN.

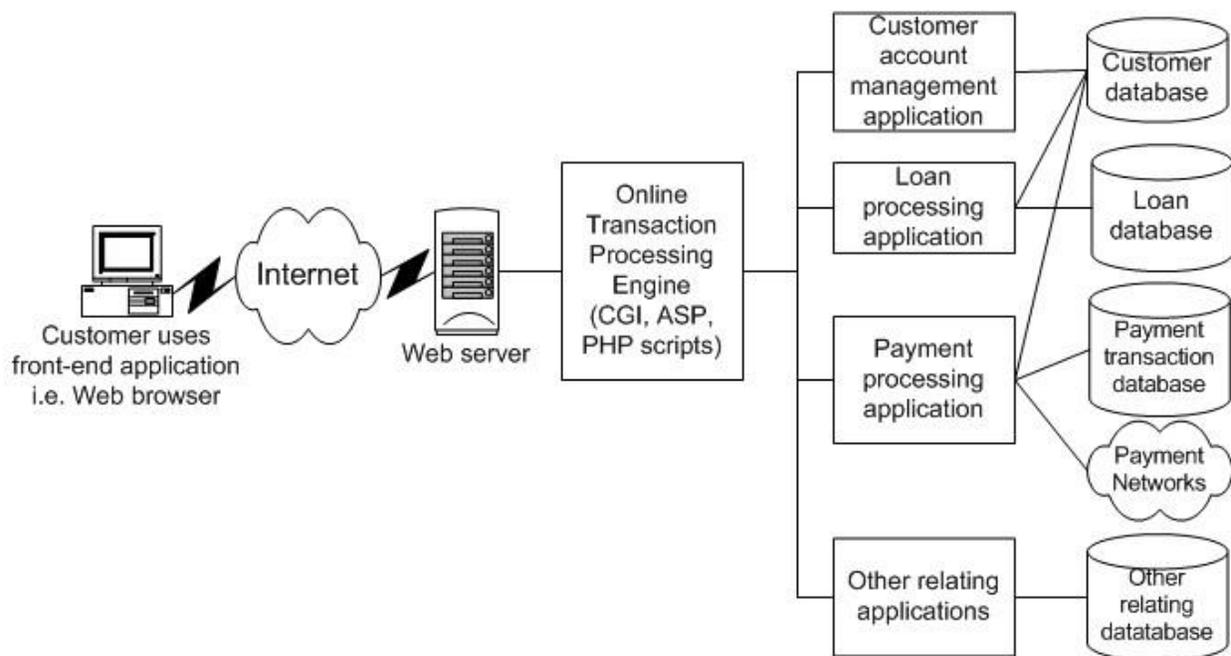


Figure 2.1: Internet banking application architecture – adopted from Leong et al. (1998) and Turban et al. (2000)

## 2.4 Innovation Diffusion Theory and E-banking

This theory developed by Roger in 1983 explains individuals' intention to adopt a technology as a modality to perform a traditional activity. The critical factors that determine the adoption of an innovation at the general level are the following: relative advantage, compatibility, complexity, —trialability‖ and —observability‖ (Roger, 1983). It is concerned with the manner in which a new

technological idea, artefact or technique, or a new use of an old one, migrates from creation to use. According to (IDT) theory, technological innovation is communicated through particular channels, over time, among the members of a social system. The stages through which a technological innovation passes are: knowledge (exposure to its existence, and understanding of its functions); persuasion (the forming of a favourable attitude to it); decision (commitment to its adoption); implementation (putting it to use); and confirmation (reinforcement based on positive outcomes from it) (Madueme, 2009).

Early users generally are more highly educated, have higher social status, are more open to both mass media and interpersonal channels of communication, and have more contact with change agents. Mass media channels are relatively more important at the knowledge stage, whereas interpersonal channels are relatively more important at the persuasion stage. Innovation decisions may be optional (where the person or organization has a real opportunity to adopt or reject the idea), collective (where a decision is reached by consensus among the members of a system), or authority-based (where a decision is imposed by another person or organization which possesses requisite power, status or technical expertise). Important characteristics of an innovation include: relative advantage (the degree to which it is perceived to be better than what it supersedes); compatibility (consistency with existing values, past experiences and needs); complexity (difficulty of understanding and use); trialability (the degree to which it can be experimented with on a limited basis); observability (the visibility of its results). Different adopter categories are identified as: innovators (venturesome); early adopters (respectable); early majority (deliberate); late majority (skeptical); laggards (traditional) (Roger, 1983). Earlier adopting individuals tend not to be different in age, but to have more years of education, higher social status and upward social mobility, be in larger organizations, have greater empathy,

less dogmatism, a greater ability to deal with abstractions, greater rationality, greater intelligence, a greater ability to cope with uncertainty and risk, higher aspirations, more contact with other people, greater exposure to both mass media and interpersonal communications channels and engage in more active information seeking (Mohammed & Siba, 2009). Important roles in the innovation process include: opinion leaders (who have relatively frequent informal influence over the behavior of others); change agents (who positively influence innovation decisions, by mediating between the change agency and the relevant social system); change aides (who complement the change agent, by having more intensive contact with clients, and who have less competence credibility but more correctness or trustworthiness credibility).

## **2.5 Adoption of E-Banking Services**

As discussed in the opening chapters, there are different forms of e-banking services. However, more attention is given to internet banking. The term —internet banking| is used to describe the case where banks' customers conduct banking transactions on the internet. In the contemporary context, this mainly implies usage of computers, but also allows for other possible devices like mobile phones, digital TVs, etc. for accessing internet branches. —Internet branch| is used as the name of the platform where the transactions are made (Ceren & Wolfe, 2007). An internet branch is an integral part of a bank's web site and in general, the web site provides the entrance doorway to the internet branch. Customers normally enter a bank's web site and then click on a link to enter the internet branch. Internet branches are secure sites that require authentication for customers to enter and make transactions. Therefore, banks, which only use their web sites as online brochures to give information about their services and products, are not considered to be offering internet banking services. However, a financial institution that only provides an information inquiry

service (checking an account balance or statement, etc.) but does not allow monetary transactions (transfer of funds, etc.) does meet the definition of an internet branch.

—Internet-only bank (also referred to as a —virtual or —branchless bank) is a relatively new concept used to define banks that do not have a physical appearance like branches but offer services only through an internet branch and ATMs to deposit or withdraw funds (Ceren & Wolfe, 2007). Examples include Barclays Bank, GCB, ADB, etc.

Internet banking is attractive for customers as it makes it possible to conduct banking transactions anytime and anywhere, faster and with lower fees compared to using traditional bank branches. Despite all the apparent advantages for customers, adoption rates vary across countries. In general, it can be said that not as many customers as banks would desire use internet banking services (with the exception of the Scandinavian countries). The reasons for this are important since consumer acceptance and adoption is found to be the key factor in determining the feasibility and successful implementation of new and technology-based banking services (Dover, 1993).

According to a Eurobarometer survey (2002), internet banking is the sixth application in order of importance of use, preceded by e-mail and on-line searches for information on news/topics, travel, training/education and health. Internet branches can be viewed as —partial alternatives to physical branches, ATMs and phone banking but not perfect substitutes, in the sense that customers prefer to conduct only some specific transactions through the internet. This is partly because of constraints imposed through regulations (for example, there is a limit to withdraw with ATM per day) and technology and also because of customers' personal perceptions about the internet and internet banking. For example, Durkin (2004) argues that customer motivation to adopt internet banking services is an appreciation of how they make decisions regarding the adoption of the

internet as an innovation. Several studies have been undertaken to identify the factors effecting customers' decisions on whether or not to avail of internet banking.

The —theory of planned behaviour and —diffusion of innovations theory were used in some researches like Liao et al. (1999) and Tan and Teo (2000). According to Tan and Teo (2000), a person's intention to adopt internet banking is determined by attitude and perception. Attitude is a person's perception towards internet banking, which could be a subjective norms (social influence that may affect a person's intention to use internet banking). Perceived behavioural control is the beliefs about having the necessary resources and opportunities to adopt internet banking. An intention to adopt internet banking services, in turn, is expected to affect the actual adoption of internet banking. They find the following six factors are the most influential, perceived relative advantage; perceived relative compatibility (with one's values about living and working); perceived security and privacy risk of internet banking; prior experience with the internet; need for a delivery channel like the internet, which is easily accessible and convenient; and trial ability of internet branches.

These are collectively important factors for customers in their decisions to adopt internet banking. Trust was added to these six factors by Suh and Han (2002). Since internet branches are considered as alternatives to other distribution channels, customers' satisfaction regarding these channels is also important. Low service quality and a discouraging fee structure of the branches together with an insufficient number of branches (Centeno, 2004) and unsuitable opening hours of branches positively affect the usage of internet branches, while greater satisfaction with branch services is likely to have a negative effect (Devlin & Yeung, 2003). Additionally, satisfactory experiences with other non-branch distribution channels like ATMs and phone banking also contribute

positively to the tendency to use internet branches (Devlin & Yeung, 2003). However, Walker and Johnson (2005) find that regular use of internet banking does not always imply willing or satisfied use or that the customer has a sense of relationship with the service provider.

The extent to which customers switch to internet branches is mainly determined by each individual's expectations regarding security, accuracy, transactions speed, user-friendliness, user involvement and convenience, all of which are components of —perceived usefulness‖ (Liao & Cheung, 2002). In selecting a bank for internet banking, reputation of the bank and variety of services offered by the bank are the most important factors, according to Tan and Teo (2000). These are followed by size and ownership of the bank. A majority of studies highlight the fact that —security‖ is the biggest single concern for customers when faced with the decision to use internet banking. Security has always been an issue, but its scope has changed from mere doubts about the privacy of personal information to worries of financial loss (Black et al., 2002). The financial sector is trying to make customers conscious of the dangers and is proactive in creating ways of protecting them from these threats. Simultaneously, specialist technology firms are working on ways to develop higher degrees of security.

According to White and Nteli (2004), —security‖ is the most important attribute for UK internet banking customers. It is followed by —responsiveness of service delivery (speed and timeliness)‖, —ease of use‖, —credibility of the bank‖, and —product variety‖. Their research divides the respondents into two clusters, where cluster 1 consists of —traditional bank‖ customers and cluster 2 consists of —non-traditional bank‖ customers. Analysing the results within clusters reveals that —security‖ falls to 4<sup>th</sup> position for cluster 2 while it gains more importance (a higher percentage of mean score compared to results for the overall group) for cluster 1. The most important attributes

turn out to be —ease of use and —responsiveness for cluster 2. The authors also find that users of internet branches perceive the service quality they experience to be satisfactory. Additionally, based on research conducted through focus group interviews with UK bank customers, Black et al. (2002) find that consumers' confidence in their ability to use the internet as a channel for banking transactions strongly effected its adoption. Furthermore, they suggest that the internet is considered to be a means of saving time and gaining control over personal financial management by confident internet users.

Based on research of Turkish internet banking users, Akıncı et al. (2004) find that the selection of an internet banking service provider is effected by security, reliability and privacy. They identify three segments underlying the selection of the bank: first, —Speed seekers (who view download speed, transaction speed, user-friendliness of the site and privacy); second, —cautious users (who value the reliability of the bank, security of the internet branch, variety of services offered and loyalty); and finally, —exposure users (who are more open to influence of external factors like advertising and suggestions of others). Turkish customers are found to be satisfied with the internet banking services they use, with those who have more experience of internet banking and use more of its services being more satisfied and more likely to make recommendations to others (Polatoglu & Ekin, 2001).

## **2.6 Customer Satisfaction with Electronic banking**

The study of satisfaction dates back to the research of Cardozo (1965) and Howard and Sheth (1969) on the influence of expectations on satisfaction. These studies are considered the starting point of scientific interest in satisfaction, its origins and consequences (Campo & Yague, 2009).

Based on the proposals of Giese and Cote (2000) and later adaptations by Moliner (2004), the satisfaction is approached according to two criteria, a —conceptuall criterion which defines satisfaction through processes and/or types of consumer responses; and a —referentiall criterion that reflects aspects of the situation in which these processes and/or responses occur. Given that these are not necessarily mutually exclusive criteria, the main definitions in the literature may provide different and complementary approaches that serve to improve our understanding of satisfaction.

Regarding the first set of definitions, which responds to the —conceptuall criterion, three approaches can be taken: the evaluation process, which is understood as a process of evaluating certain variables (product performance, needs and expectations); the cognitive response, which is the result of a consumption experience that is manifested as a consequence of an evaluation or the cognitive comparison of variables (expectations and performance, efforts and rewards, etc.) versus the affective response, which is a result of the consumption experience manifested as the affective comparison of variables (happiness, surprise or displeasure); and the process of evaluation and affective response, which is expressed as satisfaction linked to both cognitive judgements and affective reactions resulting from acquisition, consumption or use (Giese & Cote, 2000).

With regard to the second set of definitions related to the —referentiall criterion, the conceptualisation of consumer satisfaction can be interpreted from the point of view of a specific transaction as a post-choice evaluative judgement and/or an emotional response by the consumer concerning a given purchase, consumption or use. In contrast, the cumulative view evaluates the overall experiences of the user. After reviewing the literature and following the transaction specific

approach, we understand satisfaction as the general attitude manifested by consumers as a result of experience accumulated through buying behaviour (Giese & Cote, 2000).

Specifically, satisfaction with online service has been studied extensively by many authors since the late 1990s (McHaney and Cronan, 1998; Kuo and Wu, 2008). Sheng and Liu (2010) and Kuo and Wu (2012) confirm that improved user satisfaction with this type of service favours future purchase intention and increased loyalty (Eid, 2011). However, in the financial sector, the study of online satisfaction as an element of consumer decision-making behaviour in virtual environments has only recently attracted attention in marketing research (Lassala et al., 2009). Within the context of e-banking, Mattila (2001) conceded that customer satisfaction is a key to success in internet banking and banks use different media to customize products and services to fit customers' needs. Research into the adoption and use of e-banking services has grown in many parts of the world, but the centre of attention has been largely on determinants of online banking adoption, not on user satisfaction (Pikkarainen et al., 2006). Riquelme et al. (2009) demonstrated that satisfaction with electronic banking is directly related to the services that an entity offers through this channel. Casalo et al. (2008) showed that satisfaction with previous interactions with the bank's web site had a positive effect on customer loyalty and positive word-of-mouth (WOM).

In addition, in response to the strategic changes that the financial sector is undergoing, some recent authors have approached the study of electronic banking based on the antecedents of adoption by users. In this sense, Yoon (2010) verifies that design, speed, security, information content, and customer service have a significant influence on customer satisfaction with electronic banking. This paper focuses only on the direct influence of these constructs on satisfaction without

considering the relation of the constructs with each other. Further, Poon (2008) states that antecedents of user satisfaction with electronic banking include accessibility, convenience, design and content. However, this research does not provide an explicit model that includes the satisfaction construct. Finally, Ahmad and Al-Zubi (2011) state that accessibility, comfort, content, design and speed, among others aspects, determine the level of user satisfaction, though they did not focus on analysing the role of these constructs as direct determinants of satisfaction.

According to Kotler and Armstrong in 2004, customer satisfaction is the extent to which a product's perceived performance matches a buyer's expectation. Customer satisfaction is normally measured in the context of product and services, but another important variable is the customer expectations about the product or services, when the expectations are higher, they are difficult to satisfy and if the expectations are lower, then they are easy to satisfy. Therefore, it is resulted that customer satisfaction depends upon expectations and behaviors (Walidin, 2007; Waskita, 2007). Customer satisfaction is defined as a feelings or judgment by customers towards products or services, after they have used them (Jamal & Naser, 2003).

In a study conducted by Zeithmal et al. in 1990, they laid down the scope of customer satisfaction in the following five points, *tangibility* (appearance, physical facilities, equipment, personnel, and communication materials); *reliability* (the ability to perform the promised service, dependably and accurately); *responsiveness* (willingness to help customers and provide them prompt service; *assurance* (the knowledge and courtesy of employees and their ability to inspire trust and confidence); and *empathy* (caring, individualized attention the firm provides to its customer). Customer lodge a complaint when he is dissatisfied with the product or service (Yeung et al., 2002), customers' dissatisfaction can be fully eliminated to optimum level if their complaints are

resolved (Oliver, 1981), but reducing of dissatisfaction is not always leads to satisfaction (Dabholkar, 1994) adopted from Musiime and Biyaki (2010).

The rise of internet-based services has changed the way that firms and consumers interact. Eservice is conceptualised as an interactive information service (Rowley, 2006) providing a mechanism for firms to differentiate their service offering and build competitive advantage (Santos, 2003). Key themes within the e-service quality literature include the dimensions and measurement of e-service, elements of the web experience and the relationship between the webexperience, trust, customer satisfaction, intention to purchase, and loyalty (Rowley, 2006). This emphasis on the role of technological service facilitators contrasts to traditional service quality research which emphasises the human element of service delivery (Jabnoun & Al-Tamimi, 2003).

Previous e-service quality research has attracted criticism for adopting traditional SERVQUAL dimensions in online environments, developing scales without sufficient empirical validation, focusing on the evaluation of web site quality rather than entire service quality dimensions, and excluding the assessment of the consumer buying process (Kim et al., 2005; Parasuraman et al., 2005). For instance, Szymanski and Hise (2000) examine satisfaction assessments rather than customer service or fulfilment in the context of online convenience, merchandising, site design and financial security (Zeithaml et al., 2002) and Yoo and Donthu (2001) develop a four-item SITEQUAL scale focusing mainly on web site characteristics including ease of use, aesthetic design, processing speed and security.

On identifying these deficiencies, Zeithaml et al. (2002) develop an e-service quality measure (eSQ), consisting of five dimensions namely, *information availability; ease of use; privacy/security; graphic style; and reliability*. In a subsequent study (Parasuraman et al., 2005)

examining e-service quality in online shopping sites, this is reduced to four dimensions, *efficiency; fulfilment; availability; and privacy*. In an examination of e-service quality provided by online book and CD stores, Ribbink et al. (2004) also support five dimensions, *assurance; ease of use; escape; responsiveness; and customisation*. While the research into the nature of e-service quality remains exploratory, at this stage e-service quality appears to be multidimensional in nature. Importantly, we note that existing research into e-service quality is based on the examination of actual service quality performance. The opportunity now exists to extend this by assessing the degree to which the measures are fully representative of customer expectations.

There are many studies assessing e-service quality in banking contexts, with most emphasising the importance of technical aspects of web site delivery. Tsikriktsis (2002) finds two dimensions of customer culture related to quality expectations in online banking. Jayawardhena (2004) determines that customers place importance upon downloading speed, navigatability and search feature efficiency, and concludes that banks should focus on building trust through ensuring the security and privacy of customer information. In the context of online retail brokerage services, Chen and Hitt (2002) establish that system quality, product line breadth and product line quality impact upon consumer switching behaviour and retention.

Other research investigating electronic delivery channels (including internet banking, ATMs and telephone banking) confirms banking success and profitability as being dependent upon service quality (Al-Hawari & Ward, 2006; Santos, 2003). However, as Al-Hawari and Ward (2006) indicate, a significant relationship between internet service quality and consumer satisfaction is yet to be established, and this gap provides the impetus for an examination of how important attributes

of online delivery such as web site content, information accuracy, security, timeliness of information and web site aesthetics are to consumers.

## **2.6 Risks/Disadvantages of Electronic Banking**

Like the opportunities, the Electronic Banking has many challenges like security threats, complex operations and technology barriers, cited in Ahmed and Saima (2008) adopted from Sathye and Mols (1999). A major concern in both money and banking is a lack of trust between customers and the banks (Schaefer, 2005). Customers need trustworthy and secure information system like web sites and other bank storage applications. Any loss or breach in system, could suffer the customer edge (Loiacono, 2000). Delay of service delivery and slow response, cause customer dissatisfaction that whether the transaction has been done or not, (Jun & Cai, 2001). According to Liao and Cheung (2002), beliefs of customers in respect of accuracy, security, transaction speed, user friendliness, user involvement and convenience, are the most important attributes in the perceived usefulness of electronic based banking.

Access to financial data by someone else, other than the customer itself, or confidentiality is another barrier in adoption of electronic banking (Gerrard & Cunningham, 2003). White and Nteli (2004) found that there is a significant increase in internet users in UK but rather to use internet and electronic banking due to fear of security and safety concerns.

There are no specific laws or regulatory rules and regulations to govern electronic banking, and protect customers, from an unauthorized access to their data. Larpsiri et al., (2002) found that there is no clarity, either the online transactions documents are accepted, like other hard documents used in normal conventional banking system or not. Other risks associated to electronic banking, are

job losses, lack of opportunities to socialize and the development of a lazy society (Black et al., 2001).

Perceived risk (PR) is commonly thought of as felt uncertainty regarding possible negative consequences of using a product or service. Perceived risk was defined by Bauer (1960) to have a two-dimensional structure; namely, adverse consequences, and uncertainty. It has formally been defined as a combination of uncertainty plus seriousness of outcome involved' (Bauer, 1967). 'Consequence' is the degree of importance and/or danger of the outcomes derived from any consumer decision; 'uncertainty' is the subjective possibility of these outcomes. Cunningham (1967) identified two major categories of perceived risk (a) performance and (b) psychosocial. Further he classified the performance component into three types (i) economic, (ii) temporal, (iii) effort; and classified psychosocial into two types—(i) psychological and (ii) social. Cunningham (1967) further typified perceived risk as having six dimensions—(1) performance, (2) financial, (3) opportunity/time, (4) safety, (5) social and (6) psychological loss.

**Table 2.1 Description and definition of perceived risk facets**

<b>Dimensions</b>	<b>Definition</b>
1. Performance risk	The possibility of the product malfunctioning and not performing as it was designed and advertised and therefore failing to deliver the desired benefits (Grewal et al., 1994)
2. Financial risk	The potential monetary outlay associated with the initial purchase price as well as the subsequent maintenance cost of the product (Grewal et al., 1994). The current financial services research context expands this facet to include the recurring potential for financial loss due to fraud

3. Time risk	Consumers may lose time when making a bad purchasing decision by wasting time researching and making the purchase, learning how to use a product or service only to have to replace it if it does not perform to expectations
4. Psychological risk	The risk that the selection or performance of the producer will have a negative effect on the consumer's peace of mind or self-perception (Mitchell, 1992). Potential loss of self-esteem (ego loss) from the frustration of not achieving a buying goal.
5. Social risk	Potential loss of status in one's social group as a result of adopting a product or service, looking foolish or untrendy.
6. Privacy risk	Potential loss of control over personal information, such as when information about you is used without your knowledge or permission. The extreme case is where a consumer is "spoofed" meaning a criminal uses their identity to perform fraudulent transactions Source: Featherman and Pavlou (2003).

Source: Researcher's Construct, 2015.

Many researchers have used the six basic dimensions in their studies (for example, Cheron & Ritchie, 1982; Mitra et al., 1999; Stone & Gronhaug 1993; Kim & Prabhakar 2002, Featherman & Pavlou 2003). Kim and Prabhakar (2002) explained the effect of perceived risk on accepting technology such as Internet banking by demonstrating that the more perceived risk one has, the less likely he will accept new technology. Many researchers evaluated the role of perceived risk on adoption of SSTs in the banking context (for example Lee 2009, Kuisma et al., 2007, Featherman & Pavlou 2003).

Whilst risk is present in every choice situation, it would seem self-evident that these risk dimensions will be present in varying proportions depending on the product or service category under consideration. Services are seen to be riskier than goods, particularly in terms of social risk, physical risk and psychological risk (Murray and Schlacrer, 1990).

## **2.7 Electronic Banking Adoptions in Ghanaian Banking Sector**

In the Ghanaian banking industry, IT investments and adoption have become a very important component in achieving organizational goals due to competition. In recent times, electronic and communications technologies have been deployed extensively in banking for many years to advance the agenda of banks (Acquah, 2006). The earliest forms of electronic and communications technologies used by the banks were mainly office automation devices. Telephones, telex and facsimile were employed to speed up and make more efficient, the process of servicing clients. However, with coming of new partners in banking industry, as competition intensified and the PC got proletarian, Ghanaian banks began to use them in back-office operations and later tellers used them to service clients. The advancements in computer technology have led to application and adoption of new IT investments that have changed the banking landscape in the country (Bawumia, 2007).

Arguably, the most revolutionary electronic innovation in this country has been the ATM. In Ghana, banks with ATM offerings have them networked and this has increased their utility to customers (Acquah, 2006). Other technological innovations in banking sector include internet banking, telephone banking, Electronic funds transfer, among others. For most people, electronic banking would more likely be a source of competitive advantage in the future.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter presents the scientific and analytical framework for the study. This involves the research paradigm, purpose of the study, population, sample and sampling procedure, data collection methods, data analysis, quality of research and research ethics.

#### 3.2 Research Paradigm

A paradigm is a way of examining social phenomena from which particular understandings of these phenomena can be gained and explanations attempted (Saunders et al., 2009). According to Burrell and Morgan (1979) is particularly helpful in summarizing and clarifying the epistemologies and ontologies above.

According to Saunders et al. (2009), there are four research paradigms, namely, functionalist; interpretive; radical humanist and radical structuralist. Burrell and Morgan (1979) note that the purposes of the four paradigms are to help researchers clarify their assumptions about their view of the nature of science and society, to offer a useful way of understanding the way in which other researchers approach their work and to help researchers plot their own route through their research; to understand where it is possible to go and where they are going.

This current study adopts the functionalist paradigm because of its objectivist and regulatory dimensions. This study is objective and regulatory because it is concerned with the rational explanation of e-banking adoption among retail banking customers. As Burrell and Morgan (1979,

p26) note: it is often problem-oriented in approach, concerned to provide practical solutions to practical problems’.

### **3.3 Purpose of the Study**

According to Punch (2005), two distinctions can be made with regard to the research purpose. The first distinction is between research mainly aimed at description and research mainly aimed at understanding or explanation. The second distinction is between fundamental and applied research. But generally, the purpose of a study has three common methods, the exploratory, descriptive and the explanatory. An exploratory study is a valuable means of finding out what is happening; to seek new insights; to ask questions and to assess phenomena in a new light’ (Robson, 2002, p59). It is particularly useful if you wish to clarify your understanding of a problem, such as if you are unsure of the precise nature of the problem (Saunders et al., 2009). It is developed based on grounded theory which was intended as a flexible approach to formulate theory based upon generic principles of theoretical saturation, constant comparison method of analysis and theoretical saturation (Glaser & Straus, 1967).

This study was explanatory in nature because it established causal relationships between variables (e-banking adoption and operational benefits). The emphasis here is on studying a situation or a problem in order to explain the relationships between variables. The study was also descriptive in nature because it sought to portray an accurate profile of respondents (bank retail clients) (Robson, 2002). Descriptive design may be an extension of, or a forerunner to, a piece of exploratory research or a piece of explanatory research. It is necessary to have a clear picture of the phenomena on which you wish to collect data.

### **3.4 Population and Sampling Procedures**

This section considers the population of the study, the sample size and sampling technique.

#### ***3.4.1 Population***

A population is the total of all the individuals who have certain characteristics and are of interest to a researcher. Polit and Hungler (1999) refer to the population as an aggregate or totality of all the objects, subjects or members that conform to a set of specifications. The population of this study comprised of retail customers of all banks in Kumasi metropolis. Banks with branches in Kumasi include Fidelity, UMB, Barclays, Unibank, SGSSB, Stanbic, Ecobank, GCB, GT, StanChart, UBA, HFC, Energy, Cal and First Capital plus Banks amongst others.

#### ***3.4.2 Sample and Sampling technique***

A sample is a section of the population selected randomly or otherwise to represent the population (Punch, 2006). Sampling is very important as far as collecting data from primary sources are concerned. The study adopted a convenience sampling technique. According to Saunders et al. (2009), convenience sampling (haphazard sampling) involves selecting haphazardly those cases that are easiest to obtain for your sample. Customers were selected from the premises of banks in Kumasi. The researcher sought permission from the managers of the branches visited by producing an introductory letter from the School of Business, KNUST. The study adopted a convenience sampling technique in drawing 400 customers from selected banks within Kumasi. A convenience sampling involves selecting cases that are easiest to obtain for the sample. Although this technique is prone to bias and influences, these problems are less important where there is little variation in

the population (as in the case of this study). This and time constraint justified the choice of this sampling technique.

### **35 Sources of Data**

According to Polit and Hungler (1999), data is information obtained in a course of a study. Data is information in raw or unorganized form (such as alphabets, numbers, or symbols) that refer to, or represent, conditions, ideas, or objects. Data can be categorized as primary or secondary. Primary data is defined as consisting of materials that you have gathered yourself through systematic observation, information from archives, the results of questionnaires and interviews and case study which you have compiled (Jankuwics, 2002). Primary data are information collected by a researcher specifically for a research assignment. This study made use of primary data because it has not been published yet and is more reliable, authentic and objective. Primary data has not been changed or altered by human beings and therefore its validity is greater than secondary data. Secondary data on the other hand, represents a primary data that was collected by someone else or for a purpose other than the current one ([www.businessdictionary.com](http://www.businessdictionary.com)).

### **3.6 Data Collection Tools**

The study made use of questionnaire as a research instrument. Questionnaire was appropriate for the study because Saunders et al. (2009) indicated that both experiment and case study research strategies can make use of this research instrument. It was also used because data collected using questions can be stable, constant and has uniform measure without variation. It also reduces bias caused by the researcher's presentation of issues. There are various definitions of a questionnaire as identified by Oppenheim (2000). Some authors like Kervin (1999) reserve it exclusively for questionnaires where the person answering the question actually records their own answers.

Others like Bell (2005) use it as a more general term to include interviews that are administered either face to face or by telephone. This study adopts the definition of deVaus (2002) as a general term to include the technique of data collection in which each person is asked to respond to the same set of questions in a predetermined order.

The questionnaire used was structured, and divided into five sections. Section A was Demographics, section B Awareness of e-banking products, Section C level of e-banking patronage, Section D e-banking challenges, and Section E was Operational benefits using ebanking. Some of the questions were dichotomous (Yes or No), and others were Likert scale (1 to 5). There were some very few open ended questions.

### **3.7 Data Analysis**

The data gathered for the study was quantitative in nature. According to Saunders et al. (2009), quantitative data can be divided into two distinct groups viz. categorical and quantifiable. Categorical data refer to data whose values cannot be measured numerically but can be either classified into sets (categories) according to the characteristics that identify or describe the variable (gender). Quantifiable data are those whose values are measured numerically as quantities. This means that quantifiable data are more precise than categorical as you can assign each data value a position on a numerical scale (factors of bank selection).

According to Bernard (1998), data analysis consists of systematically looking for patterns in recorded observations and formulating ideas that account for those patterns. The quantitative data was analysed with the Statistical Package for Social Science (SPSS) 17.0. Percentages, mean, standard deviation, frequencies, t-test, and linear regression were used in the analysis.

### **3.8 Quality of the Research**

In order to reduce the possibility of getting the answers wrong, attention need to be paid two particular on research design: reliability and validity (Saunders et al., 2009).

#### **3.8.1 Validity**

Validity is defined as a measure of truth or falsity of the data obtained through using the research instrument. It is classified as internal and external validity of the measuring instrument (Burns & Grove, 2001). Content validity is the extent to which the content of the instrument appears to comprehensively examine the scope it is intended to measure (Bowling 1997). This was ensured by a thorough review of literature, the basis of which the research instrument (questionnaire) was developed. Other steps were taken to ensure the validity of the study. Firstly, the questionnaire was pilot tested, which enabled the researcher to make the necessary adjustments for the final questions. The improved questionnaire was used to gather data from a reliable source; bank retail clients. And finally, data was collected within 3 weeks, and within this short period of time, no major event has been changed with related topic.

#### **3.8.2 Reliability**

Reliability is the degree of consistency with which the instrument measures an attribute (Polit & Hungler, 1999). It further refers to the extent to which independent administration of the same instrument yields the same results under comparable conditions (De Vos & Fouche, 1998). The less variation the instrument produces in repeated measurements of an attribute the higher the reliability. Reliability can be assessed by the following three questions (Easterby-Smith et al.,

2002: p.53). Will the measure yield the same results on other occasions?; Will similar observation be reached by other observers? and is there transparency in how sense was made from the raw data?

Cronbach's alpha was used to measure the internal consistency. That is, how closely related a set of items are as a group. In social science research like this study, a reliability coefficient of .70 or higher is considered —acceptable.

### **3.9 Research Ethics**

Ethics was defined by Blumberg et al. (2005, pp.92) as the 'moral principles, norms or standards of behaviour that guide moral choices about our behaviour and our relationships with others'. Research ethics therefore relates to questions about how researcher formulates and clarifies the research topic, design research and gain access, collect data, process and store data, analyse data and write up our research findings in a moral and responsible way. Research ethics observed in this study are in accordance with those stated by Polit and Hungler (1999), namely the principles of beneficence, of respect for human dignity and of justice.

#### ***3.9.1 The principle of beneficence***

The principle of beneficence includes freedom from harm, freedom from exploitation and the risk benefit ratio. With regard to the freedom from harm, there was no physical harm produced by participating in the study. Psychological discomfort might have resulted from the nature of the questions asked. An opportunity was provided for each participant to ask questions and to air his or her feelings.

Freedom from exploitation was observed by not exploiting the participant's vulnerabilities. Careful explanations were provided to these participants about their right to refuse to participate in the study.

Pertaining to the risk benefit ratio, the risk implied the anticipated psychological discomfort resulting from the questions asked. The benefit was the body of knowledge that highlighted ebanking adoption and its effect on operational benefits of the banks.

### ***3.9.2 The principle of respect for human dignity***

This principle includes the right to self-determination and the right to full disclosure. The right to self-determination was followed by providing the participants with the right to refuse to participate in the study, the right to discontinue the study if they felt uncomfortable, the right not to answer specific questions if they did not want to disclose that information and the right to ask for clarification if they were not sure about any aspect of the research project, any specific question, or the use of contraceptives in general. Addressing the participants' right to full disclosure, the researcher described the nature of the study.

### ***3.9.3 The principle of justice***

The principle of justice encompasses the right to fair treatment and the right to privacy. The right to fair treatment: the participants were tactfully treated by respecting their beliefs, habits, culture and lifestyle. An opportunity was provided for each participant to ask questions and to air his or her feelings.

The right to privacy was respected because the researcher offered each participant privacy by administering questionnaires to the respondents individually and by treating data collected with

confidence. Anonymity was adhered to by ensuring that no completed questionnaire could be linked to any specific participant.

# KNUST



## CHAPTER FOUR

### DATA ANALYSIS DISCUSSION

#### 4.1 Introduction

This study sought to ascertain the adoption of E-Banking by Ghanaian retail clients. Data was gathered from 400 banks retail clients in Kumasi metropolis. Clients selected were from Access, Barclays, Cal, Ecobank, FAB, GCB, HFC, SG, Stanbic, Stanchart, UBA, UMB, Uni, and Zenith Bank. The response rate was approximately 89 percent ( $400/450 \times 100$ ). Thus out of 450 questionnaires distributed, a total of 400 was retrieved and used for the analysis. Percentages, one sample t-test, mean, standard deviation and linear regression were used in the analysis. This analysis was done with the aid of SPSS (v.17).

#### 4.2 Demographics

*Table 4.1 Demographics*

Demographics	Options	Percentages (%)
Age	18-25 years	34.5
	26-30 years	33.8
	31-35 years	23.2
	36-40 years	6.0
	Over 40 years	2.5
Gender	Male	55.5
	Female	44.5
Educational Status	No formal education	6.0
	Basic	5.0
	SHS	21.8
	Tertiary	67.2
Years of being a client to the bank	0-2 years	31.0
	3-5 years	39.2
	6-8 years	19.8

	9 and above	10.0
Type of Account	Current	40.2
	Savings	59.8

*Source: Field work, 2015.*

Demographic variables in the study are important because they could affect the choice of responses. This results from the fact that, they represent an independent variable the influences respondents' choice.

The age distribution indicates that, 34.5% of the respondents were aged 18-25 years, 33.6% were aged 26-30 years, 23.2% were aged 31-35 years, 6% were aged 36-40 years, and 2.5% were aged over 40 years. This shows most of the respondents were youthful (below 35 years), and this puts the respondents in a better position to make meaning contributions to the study. The study is about and e-banking, and electronics activities are usually undertaken by the youth.

The distribution on gender indicates that, male were slightly more than females. The males constituted 55.5% and the females 44.5%. This shows a fair distribution, and would minimize the biases in response.

Respondents with no formal education constituted 6%, those with basic education 5%, those with SHS qualification 21.8%, and the majority 67.2% were tertiary certificate holders (Diploma, HND, Masters, PhD, etc.).

The study shows that, about 70% of the respondents had been with their respective banks for than 3 years. This gives them some level of experience to make judgment on their banks. 31% of the respondents had been with their banks for up to 2 years, 39.2% had been a clients for 3-5 years, 19.8% had been a clients for 6-8 years, and 10% had been a client for more than 8 years.

The type of account operated mostly by the respondents was the Savings account. This constituted 59.8% of the respondents and 40.2% also operated the current account.

### 4.3 Test of Reliability

Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability. A reliability coefficient of .70 or higher is considered —acceptable in social science research. The study showed a high internal consistency with all the items used in measuring the five sections on the questionnaire. That is ebanking awareness, e-banking patronage, e-banking challenges, e-banking benefits, and ebanking satisfaction. This makes it appropriate for further analysis.

**Table 4.2 Reliability analysis**

Scale	Cronbach's Alpha	Number of Items
E-banking Awareness	.710	7
E-banking Patronage	.706	7
E-banking Challenges	.927	16
E-banking Benefits	.943	20
E-banking Satisfaction	.717	4

*Source: Field work, 2015.*

#### 4.4 Retail Bank Customers' Knowledge and Awareness on the Various E-Banking Services

From the table 4.3 presented below, it could be said the level of awareness of the various ebanking products was high. 89% of the respondents were knew about ATM / Master Card / VISA Card, 61.6% knew about e-Zwich, 56% knew about internet banking, and 55% knew about SMS banking.

However, less than half of the clients knew of their respective bank's website, telephone banking and credit card. 48.5% knew about company's website, 32.8% knew about telephone banking, and only 27.5% knew of credit card.

**Table 4.3 Awareness of E-banking products**

<b>E-Banking</b>	<b>Yes (%)</b>	<b>No (%)</b>
ATM / Master Card / VISA Card	89.0	11.0
Internet Banking	56.3	43.7
Telephone Banking	32.8	67.2
SMS Banking	55.0	45.0
Credit Card	27.5	72.5
Company website	48.5	51.5
E-Zwich	61.6	38.4

*Source: Field work, 2015.*

#### 4.5 Level of Patronage of e-Banking Products among Bank Retail Clients

Out of the respondents who used ATM services of their respective banks, 55.8% used it once in a month, 37% used it twice in a month, 6.2% used it thrice in a month, and 1% used in four time in a month. For those who used internet banking, 84.2% used it once a month, 10.5% used it twice in

a month, and 5.2% used it thrice in a month. 88% of telephone banking users used it once a month, and 12% used it twice in a month. 84.2% of the clients who used SMS banking used it once a month, 11.5% used it twice a month, and 4.2% used it thrice a month. 91.8% of credit card users, used it once a month, and 8.2% used it twice a month. 86.5% of clients who used banks' website, did so once every month, 8.5% used it twice a month, and 5% used it thrice a month. 94.5% of e-zwich users used it once every month, 4.8% used it twice a month, and 0.8% used it thrice every month.

**Table 4.4 Level of e-banking patronage**

	Once (%)	2 times (%)	3 times (%)	4 times (%)
ATM / Master Card / VISA Card	55.8	37.0	6.2	1.0
Internet Banking	84.2	10.5	5.3	-
Telephone Banking	88.0	12.0	-	-
SMS Banking	84.2	11.5	4.3	-
Credit Card	91.8	8.2	-	-
Company website	86.5	8.5	5.0	-
E-Zwich	94.5	4.8	0.7	-

**Source: Field work, 2015.**

From table 4.5 below, 46% of the clients had used e-business for the past 2 years, 35% had used for 3-5 years, 14.5% had used for 6-8 years, and 4% had used for above 9 years. Approximately 64% of the clients had used e-banking services for more than 3 years. This indicates clients have some level of experience to contribute to the topic under consideration.

**Table 4.5 E-banking transactions and years of patronage**

<b>E-Banking</b>	<b>Options</b>	<b>Percentages (%)</b>
Years of E-banking patronage	0-2 years	46.0
	3-5 years	35.5
	6-8 years	14.5
	9 and above	4.0
E-banking transactions	Withdrawal	80.5
	Deposit	14.2
	Investment	1.8
	Money Transfer	3.0
	Balance enquiry	.5

*Source: Field work, 2015.*

Clients mostly used e-banking services for cash withdrawals. The majority 80% of the clients used e-banking to withdraw cash, 14.2% used e-banking to deposit cash, 1.8% used e-banking for investment purposes, and 0.5% used e-banking for balance enquiry. This is not surprising as most of the clients had an ATM or VISA card from their respective institutions.

#### **4.6 Challenges Affecting the Adoption of E-Banking Services**

In determining the challenges, mean standard deviation and t-test was conducted. The mean represents the average score of each of the items, while the standard deviation (SD) provides an indication of how far the individual responses to a question vary or —deviate from the mean. SD tells us the distribution of responses; are they concentrated around the mean, or scattered far and wide? SD generally does not indicate —right or wrong or —better or worse, so a lower SD is not necessarily more desirable. However, in a normal distribution, 68.26 percent of all scores will lie within one standard deviation of the mean; 95.34 percent of all scores will lie within two standard

deviations of the mean; and 99.74 percent of all scores will lie within three standard deviations of the mean.

For a single sample test, the hypothesis was set as:  $H_0: U = \text{or} > U_0$  and  $H_a: U < U_0$ . With  $H_0$  representing the null hypothesis,  $H_a$  representing the alternative hypothesis and  $U_0$  representing the hypothesized mean. The  $U_0$  is the critical rating below which the variable is considered important. The Likert scale was, 1=Strongly agree, 2=Agree, 3=Neutral, 4=Disagree, and 5=Strongly disagree. Under this section, the lower ratings of 1 and 2 were chosen for the rating scale as *strongly agree* and *agree* respectively while the  $U_0$  was set at 2.5, with 95% as the significance level in accordance with the antecedent.

Three things must occur at the same time for an item to be accepted as measuring a particular dimension. 1) It must have a mean score of less than 2.5; 2) it must have a t-value of equal or greater  $\pm 1.65$ ; and 3) it must be statistically significant at 0.05 ( $p\text{-value} = \text{or} < 0.05$ ). The absence of any would mean the rejection of that variable.

**Table 4.6 Challenges of e-banking**

Challenges	<i>Test Value = 2.5</i>				
	Mean	SD	T-value	Sig. (2-tailed)	Mean Difference
C14	2.2475	1.04593	-4.828	.000	-.25250
C15	2.4100	1.01463	-1.774	.077	-.09000
C1	2.4225	1.13676	-1.364	.173	-.07750
C9	2.4525	1.13179	-.839	.402	-.04750
C13	2.4550	.99521	-.904	.366	-.04500
C16	2.4575	1.21733	-.698	.485	-.04250
C2	2.4900	1.00370	-.199	.842	-.01000
C7	2.5575	1.20221	.957	.339	.05750
C3	2.5675	1.02620	1.316	.189	.06750
C8	2.6400	1.24872	2.242	.025	.14000

C10	2.6800	.84521	4.259	.000	.18000
C4	2.6900	1.03032	3.688	.000	.19000
C11	2.7000	1.11495	3.588	.000	.20000
C6	2.7225	1.11741	3.982	.000	.22250
C12	2.7325	1.09037	4.265	.000	.23250
C5	2.7600	1.21494	4.280	.000	.26000

\*See appendix for full meaning of variables *Source:*

***Field work, 2015.***

The study identified one significant challenge that affected e-banking. That was the frequent breakdown of the system such as ATMs (C14). This had a mean of lower than 2.5, t-score of greater than 1.65, and was statistically significant at 0.05 (p-value was .00). Lack of adequate security, lack of privacy, slow internet connection, power outages, limited customization, and ebanking transactional errors, all had a mean of lower than the hypothesized mean of 2.5, however, the t-test was not statistically significant for all.

Clients were neutral with lack of confirmation that instruction has been complied with, contented with existing modes of banking, limited range of services offered, lack of knowledge about the service, unaware of accompanying procedures, limited computer skills, lacking the human touch, pricing concerns, and internet banking webpage are confusing.

**4.7 Effects of E-banking Services**

The study found 3 statistically significant benefits associated with e-banking. According to the retail clients sampled, e-banking enables them to check their transaction details and statement regularly (C6), e-banking has less queues (C5), and prompt reply when using e-banking (C10).

They all had a mean of less than 2.5, and t-score of greater than 1.65.

**Table 4.7 Benefits of e-banking**

Operational e-benefits of banking	<i>Test Value = 2.5</i>				
	Mean	SD	<i>T-value</i>	<i>Sig. (2-tailed)</i>	Mean Difference
B6	2.3200	1.17134	-1.866	.032	-.1800
B5	2.4200	1.13040	-1.754	.041	-.0800
B10	2.4300	1.20737	-1.697	.044	-.0700
B4	2.6100	1.12964	1.948	.052	.11000
B9	2.6500	1.07954	2.779	.006	.15000
B1	2.6525	1.21674	2.507	.013	.15250
B15	2.6925	1.10499	3.484	.001	.19250
B20	2.7050	1.13189	3.622	.000	.20500
B7	2.7650	1.17611	4.506	.000	.26500
B3	2.8125	1.04406	5.986	.000	.31250
B12	2.8450	1.27673	5.404	.000	.34500
B8	2.8825	1.10078	6.950	.000	.38250
B11	2.8850	1.18333	6.507	.000	.38500
B16	2.9300	1.09686	7.841	.000	.43000
B2	2.9450	1.06528	8.355	.000	.44500
B18	2.9850	1.08292	8.957	.000	.48500
B14	2.9750	1.05933	8.968	.000	.47500
B13	3.0150	1.09671	9.392	.000	.51500
B17	3.0625	1.07073	10.507	.000	.56250
B19	3.1175	1.19258	10.356	.000	.61750

\*See appendix for full meaning of variables *Source:*

*Field work, 2015.*

The respondents were neutral with e-banking is more convenient, e-banking is more reliable, e-banking is more flexible, e-banking reduces transaction costs, e-banking provides speedy and quick service, performing a transaction on e-banking is easy, e-banking is readily accessible, information granted by clients during e-banking is secured, e-banking services covers most of transactional needs, e-banking has clear and comprehensive information, transactions through e-banking are accurate, e-banking offers independence, the pleasant feelings when using e-banking, customer service in e-banking has consistent standard, e-banking has a wide variety of services available, the use of e-banking reflects social status, and e-banking improves service delivery accuracy. These all had a mean of approximately 3 (neutral).

**Table 4.8 Level of client satisfaction**

<b>Satisfaction</b>	<b>Options</b>	<b>Percentages (%)</b>
Satisfaction	Yes	56.5
	No	43.5
Level of satisfaction	Very satisfied	13.2
	Satisfied	37.5
	Indifferent	20.2
	Not satisfied	14.8
	Not satisfied at all	14.2
E-banking affecting service delivery positively	Yes	55.5
	No	44.5
Switching of bank	Yes	25.8
	No	74.2

**Source: Field work, 2015.**

The level of clients' satisfaction with e-banking was also sought. Clients were asked whether they were satisfied with e-banking, and 56.5% respondents yes, with the others responding in negative. 13.2% were very satisfied, 37.5% were satisfied, 20% were indifferent, 14.8% were not satisfied, and 14.2% were not satisfied at all.

Respondents agreed e-banking affected service quality positively. 55.5% responded yes, with 44.5% responding no. Clients were asked whether or not they would switch their bank to other banks. Only 25.8% of them said yes, with the majority 74.2% responding no. This indicates clients were loyal to their banks.

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**Table 4.9 Regression analysis on e-banking service adoption on banks' operations**

	<b>R</b>	<b>R Square</b>	<b>B</b>	<b>t-score</b>	<b>Sig.</b>
(Constant)	.197	.039	2.902	21.742	.000
Using Ebanking			-.273	-4.001	.000

**Source: Field work, 2015.**

**Note:**

*R* represents the correlation or relationship between the dependent and the independent variables

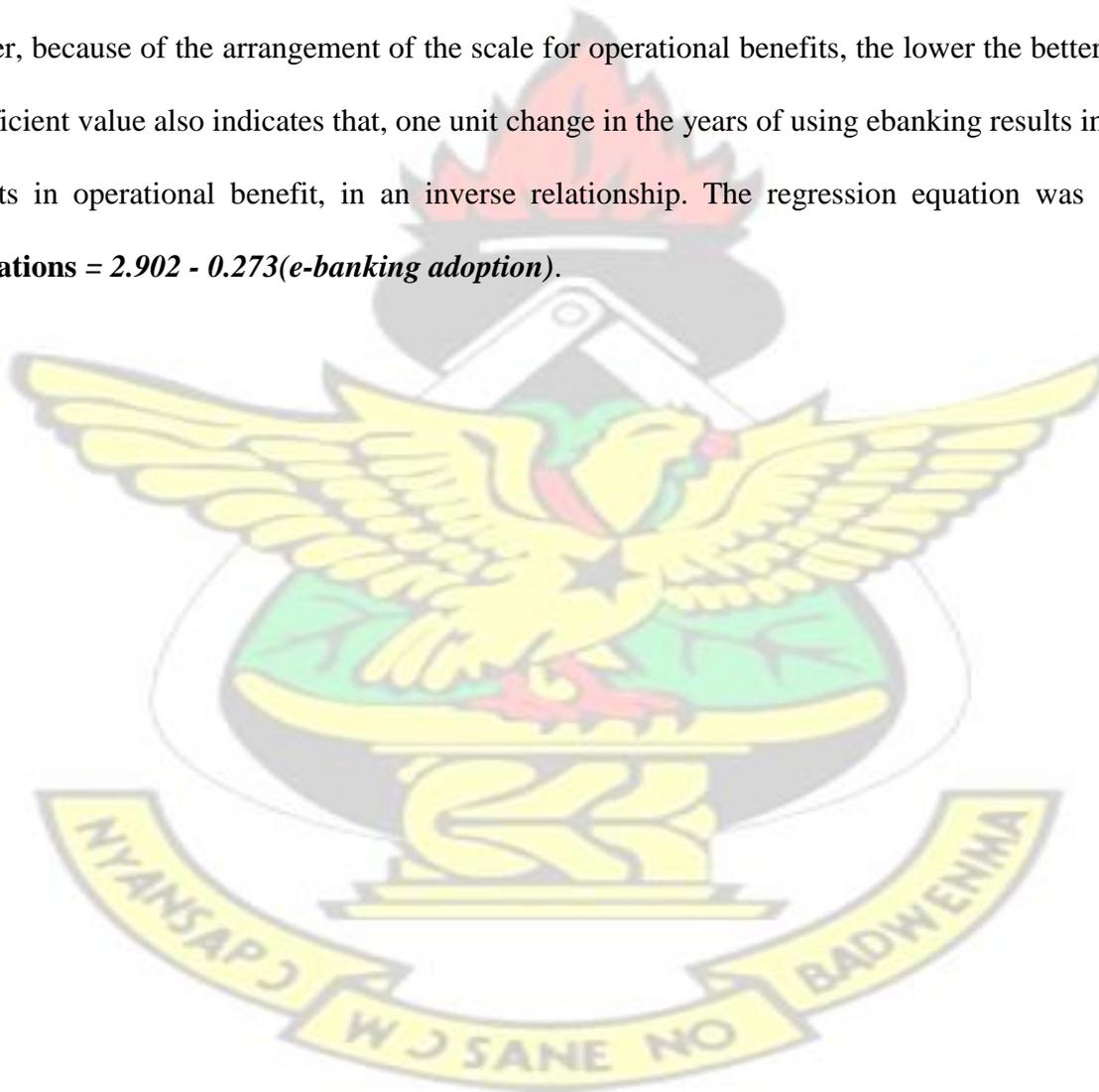
*R<sup>2</sup>* represents how much of the dependent variable can be explained by the independent variables.

*B* represents the coefficients of the independent variables.

*Sig.* represents the statistical significance level of the model (the acceptable level of significance for this research was 0.05).

As part of the objectives, the study sought to identify the impact of e-banking adoption on banks' operations. A simple linear regression was modeled to explain the effect. The regression output showed a weak relationship between e-banking adoption and operational benefits of the bank. The R-value (correlation) was .197, and any value that falls between 0.0 to 0.3 is considered as weak. The R<sup>2</sup> indicates that 3.9% of the changes that occurred in operational benefits being attributed to internet adoption.

The B (coefficient) value was -.273. The responses of the operational benefits were given in scale format, with the scale given as 1=Strongly agree, 2=Agree, 3=Neutral, 4=Disagree or 5=Strongly disagree. The lower the mean the better the operational benefits; the responses for the years of patronizing e-banking was given as 0-2 years, 3-5 years, 6-8 years, above 9 years. The coefficient value was negative, indicating an inverse relationship between variables. This means that, as the number of years in using the e-banking increases, the satisfaction figure decreases; and as indicated earlier, because of the arrangement of the scale for operational benefits, the lower the better. The coefficient value also indicates that, one unit change in the years of using ebanking results in 0.27 effects in operational benefit, in an inverse relationship. The regression equation was **bank operations = 2.902 - 0.273(e-banking adoption)**.



## CHAPTER FIVE

### DISCUSSION OF RESULTS

#### 5.1 Introduction.

This chapter discusses the results from the analysis. The discussions were made around the objectives of the study. That is, to assess retail bank customers' knowledge and awareness on the various e-banking services, to examine the level of patronage of e-banking products among bank retail customers, to identify challenges affecting the adoption of e-banking services among retail customers, and to examine the effect of e-banking service adoption on banks' operations in the

#### 5.2 Retail Bank Customers' Knowledge and Awareness on the Various E-Banking Services

Electronic banking as the use of the internet or electronic as a remote delivery channel for providing services, such as opening a deposit account, transferring funds among different accounts and electronic bill presentment and payment. The awareness of its existence by the clients of the banks, is a key determinant of e-banking success. The more clients are aware of the presence of products through the e-banking, the more likely they are to attempt purchase. The study revealed that, clients were mostly aware of ATM/Master/VISA cards, followed by Ezwich, internet banking and SMS Banking. It wasn't surprising ATM was ranked first; because that is obvious in almost all banks. Almost every bank provides ATM service to its clients. This makes cash withdrawal convenient to clients, even at odd time. According to Ceren and Wolfe (2007), ATMs are the most common electronic banking product.

E-zwich was an electronic form of savings and deposit that was introduced nationwide in Ghana. It was meant to serve as an electronic form of payment just as debit and credit cards. Card owners could purchase goods and service and pay from their E-zwich account. However, this aspect has not been successful yet. Most clients just deposit and withdraw cash, because companies and businesses they are to buy from do not have the machines. Internet banking are also banking transactions conducted online. This could take the form of cash transfers, payment, etc. According to Mohammed and Siba (2009), good internet banking should provide a maximum of services.

SMS banking uses short text messages sent through the client's mobile phone. SMS text messages can be used for both passive and active operations similarly as with classic telephone banking. A client can automatically receive information about his/her account balance: an SMS is sent to the client immediately after a certain operation is performed, or on request: a client sends the bank a correctly formatted message which processes it and answers the client's request by SMS. Information sent on request mostly concerns current interest rates or currency exchange rates.

### **5.3 Level of Patronage of e-Banking Products among Bank Retail Clients**

The study indicates that, most of the respondents have been using e-banking for more than 3 years, and it is mostly used for cash withdrawal. A few clients also used e-banking for deposits, investment purposes, money transfers, and balance enquiry. According to Roger in 1983, the critical factors that determine the adoption of an innovation at the general level are the following: relative advantage, compatibility, complexity, trialability and observability. It is concerned with the manner in which a new technological idea, artefact or technique, or a new use of an old one, migrates from creation to use. The stages through which a technological innovation passes are:

knowledge (exposure to its existence, and understanding of its functions); persuasion (the forming of a favourable attitude to it); *decision (commitment to its adoption)*; implementation (putting it to use); and confirmation (reinforcement based on positive outcomes from it) (Madueme, 2009). Despite all the apparent advantages for customers, adoption rates vary across countries. This current study found out that, most of the clients of banks used e-banking services once a month, and few twice and thrice a month. This was not surprising because, in general, it can be said that not as many customers as banks would desire use internet banking services (with the exception of the Scandinavian countries).

#### **5.4 Challenges Affecting the Adoption of E-Banking Services**

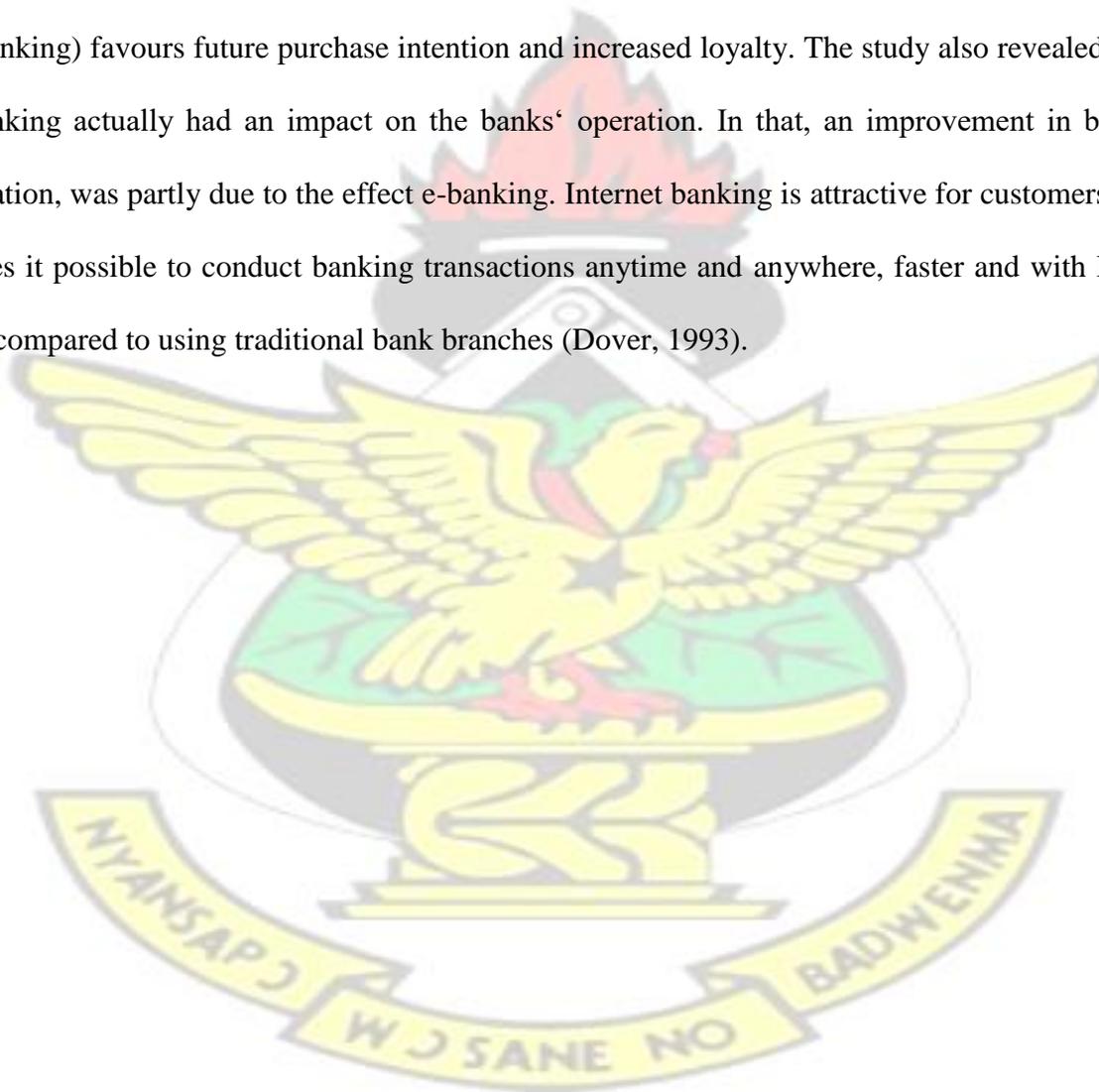
Just as the opportunities, the e-banking has many challenges like security threats, complex operations and technology barriers. Service failure was the most significant challenge to ebanking usage in Ghana. This was termed as performance risk by Grewal et al. (1994). This is the possibility of the product malfunctioning and not performing as it was designed and advertised and therefore failing to deliver the desired benefits. One advantage of the advent of ebanking has to do with its 24/7 service provisioning. It becomes therefore very frustrating when a clients' needs for example to withdraw cash at an odd time for an important agenda, and say the ATM machines are out of use. And this is very usual with the ATMs of most banks in Ghana.

That explains the reason it was the only statistically significant challenge to e-banking.

#### **5.5 Effects of E-banking Services**

The implementations of e-banking services have seen lots of benefits both to users and service providers. Some general benefits associated with e-banking are time savings, less queues, 24/7 service availability, as a young bank customer, you are just learning how to manage your money

and observe your spending patterns. From this current study however, it was realized that, ebanking enables clients to check their transaction details and statement regularly, e-banking has less queues, and prompt reply when using e-banking. Generally, clients of the selected banks were satisfied with the service provided by their respective banks. E-banking also affected service delivery positively, and clients were loyal to their respective banks. Sheng and Liu (2010) and Kuo and Wu (2012) confirm that improved user satisfaction with this type of service (e-banking) favours future purchase intention and increased loyalty. The study also revealed that, e-banking actually had an impact on the banks' operation. In that, an improvement in banks' operation, was partly due to the effect e-banking. Internet banking is attractive for customers as it makes it possible to conduct banking transactions anytime and anywhere, faster and with lower fees compared to using traditional bank branches (Dover, 1993).



## CHAPTER SIX

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 Introduction

This chapter presents the summary of findings of the study and focus on the findings, conclusions drawn from the findings and recommendations.

#### 6.2 Summary of Findings

This section provides a summary of findings made in chapters four and five. The essence is to provide concise findings made without using tables and graphs.

##### *6.2.1 Retail Bank Customers' Knowledge and Awareness on the Various E-Banking Services*

The most popular e-banking products clients were aware of included ATM/Master card/VISA cards. This was followed by E-zwich, internet banking, and SMS banking. The less popular ones were telephone banking, credit cards, and use of company's website.

##### *6.2.2 Level of Patronage of e-Banking Products among Bank Retail Clients*

Just as in the case of awareness, ATMs were the most patronized e-banking service in Ghana; however, most clients used e-banking services mostly once a month. Very few clients used ATM, internet banking, telephone banking, SMS banking, credit cards, company's website, and e-zwich for more than twice in a month. Most of the clients have however used e-banking services for more than three years, with cash withdrawal as the major reason of using e-banking.

Few used e-banking for deposits, investments, cash transfer, and balance enquiry.

### ***6.2.3 Challenges Affecting the Adoption of E-Banking Services***

Although there are lots of challenges associated with e-banking as previous researchers had noted, this study only found one significant e-banking challenge. And that is the frequent breakdown of the system e.g. ATMs.

### ***6.3.4 Benefits of E-banking Services***

The study found 3 statistically significant benefits associated with e-banking. According to the retail clients sampled, e-banking enables them to check their transaction details and statement regularly, e-banking has less queues, and prompt reply when using e-banking. Generally, clients were satisfied with e-banking services of their respective banks, and this affected their loyalty level positively. E-banking also affects service delivery positively. Using regression analysis, the study also found out that, operational benefits received by clients from banks were affected positively by internet adoption.

## **6.3 Conclusions**

Prior to the study, thorough literature was reviewed to understand the concept under study. This also served as a guide to the researcher. After the study, it was concluded that the most popular e-banking products clients were aware of was the ATM/Master card/VISA cards. This was followed by E-zwich, internet banking, and SMS banking. The less popular ones were telephone banking, credit cards, and use of company's website. The operational benefits received by clients from banks were affected positively by internet adoption. E-banking enabled clients to check their transaction details and statement regularly, e-banking has less queues, and prompt reply when using e-banking.

Generally, clients were satisfied with e-banking services of their respective banks, and this affected their loyalty level positively. ATMs were the most patronized e-banking service in Ghana. However, most clients used e-banking services mostly once a month. Most of the clients have however used e-banking services for more than three years, with cash withdrawal as the major reason of using e-banking. The frequent breakdown of the system e.g. ATMs, was the most significant challenge to e-banking.

#### **6.4 Recommendations**

After undertaking the research to investigate the e-banking adoption by bank retail clients in Ghana, the researcher made the following recommendations;

The study found ATM services as the highest patronized e-banking service, however, it faced a challenge of frequent breakdown of the system. This makes clients get very frustrated, and affects overall service quality of the banks. It is therefore recommended that, banks pay very critical attention to performance of their systems, especially ATMs.

The study further recommends that, banks make conscious effort to publicize the availability and benefits of the other e-banking products. Clients must be encouraged to visit company's website by maybe putting some promotional offers online. The benefits of e-banking is not only associated to the clients but the banks as well. It helps the banks to reduce cost, and deliver faster services. There could be special discount on the charges of e-banking products.

Privacy risk must also be addressed by the banks. In e-banking, there is a potential loss of control over personal information, such as when information about you is used without your knowledge or permission. The extreme case is where a consumer is \_\_spoofed\_\_ meaning a criminal uses

their identity to perform fraudulent transactions. The banks must take practical steps to bring that to the barest minimum.

The study indicated that credit card was the less popular e-banking. But the researcher recommends a promotion of credit cards. Hitherto, Ghanaians were not accustomed to online purchases and transactions, but trend has changed now. In Ghana we now have two active online stores, Tonaton and OLX, and these could be really enhanced when online payment modes are also made available.



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# KNUST

## APPENDIX

### SURVEY GUIDE

This survey is to look at the adoption of e-banking services among retail customers within Kumasi metropolis. In meeting this objective, you have been duly selected as a member of the sample to provide relevant and objective data needed to satisfy the quest for this study. Your answers will be treated in strict confidence and used for academic purpose only.

#### Section A: Demographics

**Q1. Age:** 18-25 years [ ] 26-30 years [ ] 31-35 years [ ] 36-40 years [ ]  
Over 40 years [ ]

**Q2. Gender:** Male [ ] Female [ ]

**Q3. Educational Status:** No formal education [ ] Basic [ ] SHS [ ]  
Tertiary [ ]

**Q4. Bank's name** .....

**Q5. For how long have you been a customer of this bank?**

0-2 years [ ] 3-5 years [ ] 6-8 years [ ] 9 and above [ ]

**Q6. Type of account:** Current [ ] Savings [ ] Others specify .....

**Section B: Awareness of E-Banking Products**

**Q7.** Are you aware of the following e-banking products of your bank?

<b>E-banking</b>	<b>Yes / No</b>
ATM / Master Card / VISA Card	
Internet Banking	
Telephone Banking	
SMS Banking	
Credit Card	
Company website	
E-Zwich	

**Section C: Level of E-Banking Patronage**

**Q8.** Kindly indicate the number of times you use the following e-banking services in a *month*.

<b>E-banking</b>	<b>No. of Usage in a Month</b>
ATM	
Internet Banking	
Telephone Banking	
SMS Banking	
Credit Card	
Company website	
E-Zwich	

**Q9.** What is the number of times you patronize general banking service in a *month*? .....

**Q10.** For how long have you been patronizing e-banking services of this bank?

0-2 years [ ] 3-5 years [ ] 6-8 years [ ] 9 and above [ ]

**Q11.** For which of the following transactions do you use e-banking services?

- |                       |                        |                     |
|-----------------------|------------------------|---------------------|
| Withdrawal [ ]        | Deposit [ ]            | Demand Draft [ ]    |
| Investment [ ]        | Bill Payment [ ]       | Money Transfer [ ]  |
| Repayment of Loan [ ] | Pass Book Updating [ ] | Balance enquiry [ ] |

**Section C: E-Banking Challenges**

**Q12.** Kindly indicate the extent to which you agree or disagree with the following as e-banking challenges. Please tick (✓) either 1=Strongly agree, 2=Agree, 3=Neutral, 4=Disagree or 5=Strongly disagree.

Challenges	1	2	3	4	5
1. Lack of adequate security					
2. Lack of privacy					
3. Lack of confirmation that instruction has been complied with					
4. Contented with existing modes of banking					
5. Limited range of services offered					
6. Lack of knowledge about the service					
7. Unaware of accompanying procedures					
8. Limited computer skills					
9. Slow internet connection					
10. Lacking the human touch					
11. Pricing concerns					
12. Internet banking webpage are confusing					
13. Power outages					
14. Frequent breakdown of the system e.g. ATMs					
15. Limits customization					
16. E-banking transactional errors					

**Q13.** What are some other challenges you encounter using the e-banking service?

.....

.....

.....

.....

**Section D. Operational Benefits of Using E-banking**

**Q14.** Kindly indicate the extent to which you agree with the following statements. Please tick (√) either 1=Strongly agree, 2=Agree, 3=Neutral, 4=Disagree or 5=Strongly disagree.

Variables	1	2	3	4	5
1. E-banking is more convenient					
2. E-banking is more reliable					
3. E-banking is more flexible					
4. E-banking reduces transaction costs					
5. E-banking has less queues					
6. E-banking enables me to check my transaction details and statement regularly					
7. E-banking provides speedy and quick service					
8. Performing a transaction on e-banking is easy					
9. E-banking is readily accessible					
10. Prompt reply when using e-banking					
11. Information granted by customers during e-banking is secured					
12. E-banking services covers most of my transactional needs					
13. E-banking has clear and comprehensive information					
14. Transactions through e-banking are accurate					
15. E-banking offers independence					
16. The pleasant feelings when using e-banking					
17. Customer service in e-banking has consistent standard					
18. E-banking has a wide variety of services available					
19. The use of e-banking reflects my social status					
20. E-banking improves service delivery accuracy					

**Q15.** What are some other benefits you enjoy as a result of using e-banking service?

.....  
 .....

.....  
Q16. Are you satisfied with the e-banking services of your bank? Yes [ ] No [ ]

Q17. Indicate your level of satisfaction with e-banking: Very satisfied [ ] Satisfied [ ] Indifferent [ ] Not satisfied [ ] Not satisfied at all [ ]

Q18. Has the introduction of e-banking affected service delivery positively?  
Yes [ ] No [ ]

Q19. If you have the opportunity, would you leave your bank because of service delivery?  
Yes [ ] No [ ]

