

UNIVERSITY OF CAPE COAST

E-BANKING SERVICE QUALITY AND CUSTOMER SATISFACTION: A  
STUDY OF GCB BANK IN ACCRA

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STUDY OF GCB BANK IN ACCRA

BY

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## DECLARATION

### Candidates Declaration

I hereby declare that this dissertation is the result of my own original research and that it has not been presented for another degree in this university or elsewhere.

Candidate's Signature..... Date.....

Name: Richard Sarbeng

### Supervisor's Declaration

I hereby declare that the preparation and presentation dissertation were supervised in accordance with the guidelines on supervision of the dissertation laid down by of the University of Cape Coast.

Supervisor's Signature..... Date.....

Name: Prof. Siaw Frimpong

## ABSTRACT

The study examined the effects of e-banking on customer satisfaction of GCB Bank. The study employed the quantitative approach of a descriptive design of which the targeted population were customers of five branches of GCB Bank in the Accra Metropolis. A total respondent of two hundred (200) e-banking users were purposively selected. Questionnaires were the main data collection instruments. It was found that respondents were aware, understood e-banking service and therefore used it. Respondents expected security issues to be low as compared to their awareness of cost and charges of banking services. On the other hand, respondents perceived that it was easy to use e-banking services as compared to its security and cost of using it. Moreover, by adopting the SERVQUAL model there was a negative gap analysis of the e-banking service quality. Thus, expectations of the respondents outweighed the perceptions of the respondents. Therefore, there is low level of customer satisfaction provided by GCB Bank on e-banking service quality. Furthermore, respondents found e-banking useful. However, poor network services, frequent breakdown of system, especially, ATM and insecurity affected customer satisfaction to a great extent. Therefore, the study recommended that the GCB Bank should review their charges on e-banking services. Also, the GCB Bank should improve upon their service quality, especially, on responsiveness, reliability and security issues. Moreover, the operations department of GCB Bank should ensure effectiveness and efficiency in its systems as well as good network.

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**DEDICATION**

To my wife and children

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### ABBREVIATION

AVR	-	Automated Voice Response
ATM	-	Automatic Teller Machine
E-banking	-	Electronic Banking
ICT	-	Information and Communication Technology
KPI	-	Key Performance Indicator
PBC	-	Perceived Behaviour Control
PC	-	Personal Computer
SERVQUAL	-	Service Quality
SWIFT	-	Society for Worldwide Interbank Financial Telecommunications
IDT	-	Innovation Diffusion Theory
WAEMU	-	West African Economic Monetary Union

## CHAPTER ONE

### INTRODUCTION

In recent years there has been improvement and increase in the number of bank customers due to the importance of the service delivered by the banking sector and has increase the role banks play in the development of the economy in Ghana.

The satisfaction of customers in relation to marketing, can be attributed or measure on how the expectations of customers are met based on the products or services rendered by an organization. There has been an increase in the awareness by customers within industries that provide service. There is an increase in share of market, profits and the satisfaction of customers due to improvement in the service quality. In recent times more importance has been put on the quality by way of customer satisfaction.

#### **Background to the study**

Timothy (2012) indicated years ago, that one of the easiest businesses was banking; client prefer to keep their monies with the various banks.

Technology has improved the way banks operate in recent years remarkably.

The application of the concepts of ICT, methods, guidelines and application of strategies to banking systems has become an issue of essentials significance and concerns to all banks and indeed a requirement for local and global attractiveness in the banking industry. Due to the innovation in technology in the financial sector, this has brought tremendously dynamic changes and expects the banks to provide better solutions to their clients by the use of internet facilities.

To ensure the maximization of the satisfaction of customers within the sector of banking, it has become expedient for banks to use internet banking facilities to optimize their customers' satisfaction.

Electronic banking was a term defined by Allen, McAndrews and Strahan (2001) as a means of the obtaining of data by a bank to its customers by the use of a computer. There is a robust service that banks use to provide information to their customers by offering the clients the opportunity to access their accounts and other transactions through the internet (Daniel, 1999).

The way banks interact with their clients is greatly changing due to increase and improvement in the internet facilities of various banks. E-commerce has improved the way banks operates due to payment and orders made online. This has allowed the banks to offer services through the medium of internet, which can be called banking through the internet. Internet banking has offered banks opportunity to motivate their customers to maintain their portfolio of accounts with the banks.

In recent terms, hardly will one find a bank within a country which do not provide electronically banking services. Most sectors across the globe both developed and developing countries have now resort to the use of internet banking facilities as a challenging strategy (Chemiyot, 2010). Banks decide to implement, investigate, analyse, endeavour to reduce cost, saves time and improve the support services of their customers through internet banking. The services provided through internet banking allow customers to have access and make enquiries about their accounts.

Banking started in Ghana as far back as 1894 when the Bank of British, West Africa, was established. Over 26 banks according to the Ghana

Banking Survey 2012 have been licensed to operate in Ghana, one of which is GCB Bank Ltd which is under study. Many banks in Ghana have adopted internet banking systems since 1990. They have however, been striving and facing challenges in providing better banking services to meet customers' needs and hence satisfaction. Such challenges include network availability in the country, customer privacy and security issues among others.

These gripes have made a portion of the customers not habitually use e-banks and thusly lead to an expansion of line inside a bank. Line inside a bank has prompted pointless congestion of customers inside a bank which influences execution of the bank. GCB Bank Limited is the long existing commercial bank since Ghana gained independence in 1957. GCB Bank's growth has been synonymous with its customer base. It now has about 185 branches nationwide with Greater Accra Municipality having the highest number of branches (that is, 55 branches). Moreover, GCB Bank is now using enhanced IT system to introduce internet banking (Commercial Plus), Smart Pay (Fee Transfers), MasterCard among others. Subsequently, this investigation expects to respond to a general inquiry; Are there any consumer satisfaction in GCB Bank on e-banking service quality?

There are differences in the services rendered in relation to prices and forms of electronic services rendered. Majority of the banks rely on electronic banking services for transactions such as buying, selling and rendering of other services by means of electronic websites. This is known as an electronic banking. This reason gave the researcher a clue to research the topic about electronic banking services quality and its influence on customer satisfaction at some selected GCB Bank Ltd branches in Accra.

### **Statement of problem**

Current literature suggest that electronic banking brings about competitive advantage for banks by minimizing cost of operation and improving customer satisfaction needs. Burnham (1996) indicated that for banks to continue their operations and survive competitions, electronic banking services needs to be provided by the banks since electronic banking is now the order in the world.

Therefore, banks in both developing and developed countries have put in place measures to ensure that they provide the best of service to their clients by rendering electronic banking facilities with sophisticated software and equipment. In this modern world of operating banks, those with electronic banking facilities will capture the clients of the other banks that do not provide such services. (Orr, 1999).

The question which arises from the above argument is whether customers prefer to be in long queue with their cheque booklets, wasting much time at the banking halls whiles they can conveniently undertake such transactions at the comfort of their homes or offices or wherever they find themselves electronically. It is in light of this and other reasons that the study attempts to address it or enquire why such problems occur and, in most cases, persist in the major banks in Ghana with much emphasis on GCB Bank Ltd in Accra.

### **Purpose of the study**

The main purpose of the study is to assess the influence of e-banking service quality on the satisfaction of the customers of GCB Bank.

### **Research objectives**

Specifically, the study seeks to:

1. Assess the level of customers' awareness of e-banking services.
2. Examine the customers' perception on e-banking service.
3. Evaluate the customers' expectation on e-banking service.
4. Access the gaps in e-banking service quality.
5. Analyze the challenges that customers faced in using e-banking

### **Research Questions**

1. Are customers aware of e-banking services?
2. What is the customers' perception on e-banking service?
3. What is customers' expectation on e-banking service?
4. What are the gaps in e-banking service quality?
5. What are the challenges that customers faced in using e-banking?

### **Significance of the study**

This study will add to knowledge and serve as a source of reference to academia. This study likewise tries to help the participants of the banking industry recognize and figure out techniques to advance e-banking service. For instance, the study will be helpful in drafting administrative system on electronic banking for state organizations, for example, the Bank of Ghana as well for non-governmental institutions such as consumer protection agency.

The fact that different banks providing electronic banking will draw on the outcome of this research and determine how to enhance the delivery of electronic banking services is in close relation to the above-stated point. This is particularly true for analysing GCB Bank Ltd. It will greatly benefit from the study's findings. In turn, the strength and weaknesses of the services it

provides will be highlighted to them. It will gain a major benefit from the study's recommendations. Lastly, if GCB bank decides to implement these recommendations, it will help them grow their businesses.

### **Delimitation of the study**

The study's scope is centred on two major areas. This involves the study's conceptual and geographical scope. Contextually, the research emphasizes the potential impact of e-banking services on the delivery of customer service. There are various and evolving forms of electronic banking such as Automated Teller Machine (ATM), internet banking, mobile phone banking, debit cards, e-zwich phone banking, SMS banking, home banking, and network banking just to mention a few.

Nonetheless, due to numerous e-banking facilities in Ghana, four of the numerous e-banking services have been randomly selected. In doing so, all current electronic banking services were listed and those available in Ghana were selected from which four of them were selected randomly by means of a survey to decide which ones were available to GCB Bank which has been selected for study.

Furthermore, the study's geographical scope is situated within the Metropolis of Accra. Nevertheless, there are many branches of GCB Bank within the Accra metropolis, and as such it is virtually impossible for the researcher to study all the customers in these banks, thus choosing five (5) branches of GCB Bank.

### **Limitations**

Although appropriate in this study, using cross-sectional survey design preclude details of the cause-effect relationship. Therefore, theoretically and

practically, the study cannot give in-depth knowledge on, for instance, reasons why customers perceived e-banking services of GCB Bank to be good or poor. Secondly, because the data will come from one source, the probability that common method variance bias was implicated is likely. Lastly, due to cost and inadequate resources to cover the whole customers of GCB, portion of the customers were selected to represent the whole which may also introduce sampling error among others that may affect the generalization of the findings.

Therefore, appropriate sample size was used to select adequate respondents to represent the whole. Moreover, descriptive survey was used to give a snap shot or describe the service satisfaction of e-banking among the customers of GCB Bank in Accra Metropolis.

### **Organization of the study**

The study is categorized into five main chapters. Chapter one comprises background of the study, statement of the problem, research questions, objectives of the study, significance of the study, scope and limitation and organization of the study. Chapter two, on the other hand, is made up of the relevant literature review that will spell out succinctly the various concepts of e-banking, e-banking service quality variables and customer satisfaction. Chapter three touches on the research methodology. It laid much emphasis on the various technologies that was employed in the data collection exercise and the instruments used, the research designed method used, the models and data analysis method used. “Further, chapter four focuses on data analysis and presentations. Chapter five crowns the study with summary, conclusion and recommendations.

## CHAPTER TWO

### LITERATURE REVIEW

#### Introduction

This chapter reviews literature on related issues concerning e-banking service and customer satisfaction since it was the main goal of the study.

The concepts under consideration includes e-banking, e-banking service quality variables, customer, customer satisfaction among others. Moreover, a brief overview of the 2018 Ghana Banking Survey, forms of e-banking, benefits and challenges of e-banking are discussed as well as the empirical evidence on related studies on the relationship between e-banking service and customer satisfaction.

This chapter also deals with essential theories that guide the study. Many researchers have proposed different theories in this area to clarify the ideas or factors. Similar research has also been carried out to act as empirical studies. Therefore, it is important for the researcher to review some of these theories and previous work on the subject. Although most of these works were published in different contexts and settings, their contribution to this study's success is very important. Two major sections are broadly discussed in this chapter.

First is the theoretical review which is concerned primarily with the different theories that describe electronic banking and how it satisfies the customer. The second section focused on empirical studies that other researchers performed.

## **Concept Definitions**

This sub-section deals with the definitions of concepts related to the study. This includes electronic banking (e-banking), customer and customer satisfaction.

### **Electronic banking**

Pikkarainen, Karjaluoto, (2004) characterized e-banking as an internet portal, by which clients can utilize various types of banking services going from bill payment to making investments . Aside from cash withdrawals, e-banking offers customers access to distinctive types of bank transactions by simply clicking a mouse (De Young, 2001). Essentially, using e-banking as an alternative for virtual banking has become a strategic tool rather than a mere approach to achieving competitive advantage with the emergence of globalization and fiercer rivalry.

As indicated by Timothy (2012), e-banking identifies with the use of the internet as a remote transport framework, for instance, the opening of a bank account, the transfer of funds between different accounts, and the display and payment of bills through electronic means. This can be achieved in two basic ways. A bank with physical offices can build a website and offer these products to its customers beyond its traditional conveyance networks. Also, the bank can build up a virtual account to locate the PC database in an office that acts as the bank's lawful location. Banks provide their customers with the opportunity to make deposits and withdraw funds via ATMs (Automated Teller Machines) or other remote transit systems held by various foundations for which administrative expenses are charged.

## **Forms of Electronic Banking**

### *Automated Teller Machines (ATMs)*

Rose (1998) describes ATMs as follows: "an ATM joins a work station, database structure and money vault in one unit, allowing clients to enter the bank's accounting framework with a plastic card containing a PIN or by punching a unique code number into the work station related with the bank's electronic records 24 hours out of every day". It gives customers a scope of banking services. The vast majority of them are outside the premises of the banks. At first they were supposed to go about as cash distribution machines. Regardless, because of the fast-innovative development, ATMs go to the degree of giving client bank account balances and bill payments. To gain competitive advantage, banks are utilizing this electronic banking system. The blend of robotization and human tellers during banking hours gives the bank more effectiveness. It also saves time in the delivery of customer service as customers are not delayed in banking halls and can spend their time along these lines in other productive pursuits. ATM is a proficient technique for accomplishing higher overall revenues in that it accomplishes higher effectiveness after some time than human tellers. Automated Teller Machines (ATM) decreases the workload of bank employees, according to Loverock (2011) – ATMs minimize the workplace pressure on bank employees and eliminate queues in bank premises. Furthermore, the capacity of ATMs to operate after hours of banking ensures continued productivity.

### *Telephone Banking*

Telephone Banking (Telebanking) can be considered as a form of remote or virtual banking, which is essentially the delivery of branch financial

services via telecommunication devices where the bank customers can perform retail banking transactions by dialing a touchtone telephone or mobile communication unit, which is connected to an automated system of the bank by utilizing Automated Voice Response (AVR) technology” (Balachander & Jennifer, 2001).

As Leow (1999) has suggested, telephone banking provides clients and banks many advantages. It provides comfort, easy access, and it also saves time for customers. Telephone banking services are less expensive than branch-based services. It has almost all the advantages of ATMs just that it lacks the efficiency provided by the ATMs ‘cash dispensing. In their various offices and residences, consumers have access to banking services.

### ***Personal Computer Banking***

Personal Computer Banking is a type of service that provides a restrictive network for bank customers to access their banking data through software installed on their personal PC. By having access, the customer can perform a lot of banking services. The importance of PC skills has contributed to the expansion of PC use. It promotes the growth of PC banking positively. In their homes and offices, consumers have access to banking services (Abor, 2005).

### ***Internet banking***

Internet banking according to Essinger (1999) gives customers access to their bank accounts through a website and allow them to carry out certain transactions on their account, subject to strict security checks. To the Chicago Federal Reserve Board of the Office of the Controller of the Currency (OCC) Internet Banking Handbook (2001), Internet banking is defined as "the

provision of traditional (banking) services over the internet" Internet banking provides customers convenient and flexible services. Almost all banking transactions can be transacted online by customers. One might monitor accounts, request the bank, and also transfer funds to other people on different accounts, it's the most financially innovative way to yield higher profitability. Another advantage of internet banking is that it provides customers with 24/7 access.

### ***Branch Networking***

Branch networking can be described as computerization and the incorporation into a Wide Area Network (WAN) system of centralized customer data processing and sharing of geographically diverse stand-alone bank branches (Abor, 2005). It offers fast inter-branch transactions and therefore removes the impact of time and distance. Nearly all Ghanaian banks have networked various branches across the country. Wherever a customer has opened their accounts, they can access it anywhere.

### ***Mobile Banking***

Mobile banking is a very recent addition to Ghana's electronic banking services. It is, practically, cell phone banking. Mobile banking is a platform or system where consumers are updated automatically if their account changes. These changes can occur in the nature of debit and credit accounts or any charges to account. A mobile banking transaction may be an account request that does not include a fee such as checking account balance, checking credit limits, checking transaction history or involving payment transactions such as mobile payments, mobile purchases, mobile money transfers (Karthikeyan et al., 2017). A mobile phone with a well-functioning

text messaging system is all it needs for mobile banking. The category includes SMS banking. To alert their account customers, this system uses short text messages (Chovanova, 2006).

### **Benefits of E-Banking**

It is difficult to overemphasize the benefits of e-banking. It ensures that it offers the client and the bank itself a lot of benefits. Competitive advertising and a better appreciation of market demands are the main benefits of e-banking service. As such, banks that provide e-banking services are considered pioneers in the implementation and advancement of technology. Therefore, they enjoy a greater brand identity. The other advantage can be measured in terms of profit. Growing institution's primary objective is to increase profits with which it is impossible to exclude banks. Some claim that e-banking can do away with the banking methods that have been laborious and less competitive to date.

The internet revolution is far more affordable than a branch or even portable exchanges for e-banking exchanges. In spite of the fact that there are open doors for banks, there are various difficulties, for example, the headway of IT frameworks, the obscure furthest reaches of the business area, the breakdown of current limits, the entry of rising contenders and growing new activity plans

E-banking has various advantages for the two banks and clients, as per Rotchanakitumnuai and Speece (2003). Clients can check accounts, move cash, and access different financial items and administrations with e-banking. Clients don't have to visit banks to make exchanges (Cheng, Lam and Yeung, 2006). E-banking accept an essential piece of the economy which

permits purchasers and dealers to make benefit through the trading of products and enterprises while limiting physical experiences (Bakos, 1998). Wind (2001), indicated that various banks were awakened by parts relating to that their pay by extending market degree to complete e-banking. Electronic banking is ascribed to the developing utilization of Mastercard. Clients can look far and wide without having to carry paper cash.

### **Challenges Customers' face when using E- banking products**

An analysis by Daft (1982) revealed that the development of e-banking might be a good idea, but as far as customers are concerned, they may face some serious risk to the particular form of innovation. Daft described what he referenced as a key hazard. Money related establishments ' the board should know and comprehend e-bank-related dangers and give answers for them. Lack of foresight and venture choices on e-banking may build the key danger of a monetary establishment. The expense of setting up e-banking services is high. It is costly to make a trusted brand as it requires the acquisition of costly innovation. A portion of the issues looked by shoppers when utilizing electronic financial frameworks incorporate the danger of misrepresentation, system or framework disappointments and other unexpected occasions prompting the organisation's inability to transmit banking items and administrations. This hazard might be inalienable in various items and administrations (Earl, 2000). Baron further remarked that financial exercises can broaden their foundation exercises and the degree of their exchange or operational hazard, especially if the organization makes creative innovative administrations that are not regulated. Consequently, money related

establishments should offer solid types of assistance to help clients consistently increase simple access.

Certain issues identified with electronic banking differ from the sort of innovation picked, absence of information and in the end usage. Besides, Earl (2000) built up that while directors comprehend their organization and hierarchical procedures, their labourers do not have what it takes and information to react to programming innovations and illuminate their customers.

To grasp worldwide innovation, an adequate degree of framework and human limit building ought to be set up before developing countries can get to worldwide innovation for their requirements. In some developing nations, most organizations and shoppers don't approach the foundation important to permit them to process electronic instalments. Worldwide e-banking has a couple of repercussions. It is acknowledged in every practical sense that low value-based expense may make leading worldwide banking electronically considerably less testing. Cross-outskirt exercises offer open doors for certain banks to harvest economies of scale. In any case, a more elevated level of supervision is required. In answer, most monetary organizations have just corrected their guidelines to accomplish their fundamental targets, to guarantee the security and sufficiency of the local financial framework, to urge showcase soundness and to ensure client rights and open trust in the financial segment.

### **Customers level of Awareness of E-banking products**

Customers will promote a product or service only when they are aware of its existence and its potential use. Knowing customers' level of awareness

of e-banking services would enable banks improve upon their e-banking policy making.

A study by Kwarteng (2016) indicated that customers become aware of e-banking services through notices at the bank, advertisement in the various media platforms and phone calls from the banks staff. Results from Kwarteng (2016) revealed that 51.5% of the respondent cited that they become aware of e-banking services through notices within the banks. Also 32.4% of the respondents cited that they become aware through ads on different media platforms and 23.5% cited their awareness from calls from the banks' telephone.

Mchomba (2018) also revealed that most customers were aware of e-banking services from their respective banks and they were fully satisfied with them.

### **The Concept of a Customer**

A client who, as indicated by Collins English Dictionary (2009), is otherwise called a customer, purchaser or buyer is commonly used to allude to an individual or organisation's current or potential buyer or client of products called the provider merchant or seller. Sometimes, in any case, the term client regularly envelops any individual that utilizes or uses another's services by default.

Customer is gotten from "custom" connoting "inclination". A customer is right now who as frequently as potential visits a particular shop, and who makes it an affinity to purchase product or organization in the shop rather than elsewhere, and with whom the retailer expected to keep up or keeps up a relationship with to keep their "custom", which means foreseen purchases later

on (Concise Oxford English Dictionary 11e, 2004). The articulations "the customer is big enchilada" or "the customer is god" or "the customer is for each situation right" propose the estimation of customers to associations, though sometimes the last articulation is every now and again used.

### **Concept of Customer Satisfaction**

Kotler (2003) asserted that satisfaction is a person's feelings of pleasure or disappointment resulting from comparing a product's performance in relation to its expectations. Customer satisfaction is most widely used in the business and commerce industry. It is a term explaining about a measurement of the kind of products and services provided by a company to meet its customer's expectation. That is, the satisfaction of a customer is dependent on the perception and expectation related to the services being offered by the financial institutions to its bankers. It is seen by analyst as a company's Key Performance Indicator (KPI) (Kotler, 2003).

In a fierce competitive market where businesses compete for customers, customer satisfaction is seen as a key differentiator and increasingly has become a key element of business strategy. It has been stated that satisfied customers are key to long-term business success (McColl-Kennedy & Scheider, 2000). It is as a global issue that affects all organizations, regardless of its size, whether profit or non-profit, local or multi-national.

Companies with more satisfied customer base also experience higher economic returns (Yeung & Ennew, 2000).

Many researchers have conceptualized customer satisfaction as an individual's feeling of pleasure (or disappointment) resulting from comparing

the perceived performance or outcome in relation to the expectation (Oliver, 1980; Brady & Robertson, 2001). It can be seen that exact definition and measure of customer satisfaction that fit into every situation is very difficult and in the statements of Oliver (1980), "everyone knows what satisfaction is until asked to a definition. Then it seems, nobody knows .

### **A brief overview of Ghana Banking Survey 2018**

As indicated by the review, the Bank of Ghana had just actualized intercessions fully expecting a portion of the improvements that emerged in the Nigerian financial industry, and furthermore to limit the likelihood of "another, more grounded financial industry" before long slipping into issues that are the aftereffect of frail corporate governance practices.

The study uncovered that bank administrators were engrossed with improving the operational productivity of their organizations, just as expanding their acquiring potential. Thus, they are probably going to send some portion of their new/expanded capital into projects or activities that will assist them with achieving these.

Advanced, improved help delivery, and upgraded client experience were among the basic words and expressions utilized by bank officials in their discussions. Many bank officials were of the view that these were critical to accomplishing expanded market nearness or more profound market infiltration, and were significant for accomplishing cost effectiveness in tasks just as expanded procuring potential. The customary course to advertise including branch development by means of block and cement was portrayed as obsolete and appeared to need support among most of bank administrators who likewise depicted it as not practical.

As per Ghana Banking Survey 2018, investment technology would likewise be focused at improving banks' hazard the executives frameworks to guarantee that capital is satisfactorily ensured and liquidity is judiciously overseen in similarity with regulatory prerequisites. Moreover, innovation speculations would focus on by and large guarding the business against the increased digital security chances in an advanced working condition.

Strangely, bank officials were less worried about new item advancement, seeing that the business was flooded with numerous items as of now. In their view, the test has been with showcase entrance or potentially practical dispersion of these items. Subsequently, the emphasis will be on enhancing around how to digitize these items and convey them broadly utilizing advanced channels.

### **Theoretical Literature Review**

The basis of this research is focused on Innovation Diffusion Theory and the Contrast Theory.

#### **Innovation Diffusion Theory**

The Innovation Diffusion Theory (IDT), postulated by Roger in 1983, explains the aim of people to adopt a technology as a methodology for carrying out a traditional activity. As for innovation in general, the determinants are: relative advantage, complexity, reliability, capacity to check and perceptibility. In order to improve upon their operational efficiency, many financial institutions like the banks have adopted ICT through the development of websites and mobile applications to suit their customers' needs. This theory is really about how another innovative thought, process, or

some usage of an old one, moves from creation to utilization. As per IDT, from a social context, technological innovation is communicated among members through different channels. The phases 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) (Arnaboldi and Claeys, 2008). Owing to cyber threats and fraud, internet banking has been improved likewise.

Early users are generally more highly educated, have a higher social status, are more open to both mass media and interpersonal communication channels, and have greater contact with agents of change.

Mass media channels at the knowledge stage are relatively more important whereas interpersonal channels at the persuasion stage are relatively more important. Innovation decisions may be optional (where the individual or organization has a real opportunity to accept or reject the idea) collective (where a decision is reached by consensus among system members) or authority-based (where a decision is enforced by another individual or organization with the power, status or technical expertise required).

Barnes and Corbitt (2013) advise managers to identify the advantages of each given technology and the benefits of using it and determine what technology to use in their operations, as well as the related costs and disadvantages of running the technology. He advises the general issues to consider as the quantity and variety of performance the technology can

achieve, the compatibility with the current technology used by the organization, and the technology's maturity level.

Internet banking relies heavily on ICT, as it takes place on the Internet.

Customers can access their accounts remotely, without desiring to access the bank physically.

### **Contrast Theory**

Hovland, Harvey and Sherif (1987) first proposed the theory of contrasts. Dawes, Singer and Lemons (1972) describes the theory of contrast as the tendency to magnify the disparity between one's own views and those portrayed by statements of opinion. Contrast theory provides an alternative view of the consumer post-use assessment process than that provided in assimilation theory, in that post-use assessments result in opposite conclusions about the impact of expectations on satisfaction.

In installing automatic teller machines, consumers can easily and at any time access funds in their accounts as opposed to the old system where money could only be withdrawn at the counter.

A bank that seeks to increase customer satisfaction needs to invest heavily in the ATM networks or join existing local or international networks such as a visa card or master card. While assimilation theory suggests consumers will seek to minimize the discrepancy between expectation and performance, contrast theory holds that a surprise effect occurs leading to magnification or exaggeration of the discrepancy. Any deviation in perception from expectations was exacerbated in the direction of deviation according to the contrast principle. If the company increases expectations in its ads, and instead the experience of a customer is just marginally less than that expected, it will

reject the product / service as totally unsatisfactory. Conversely, under-promising ads and over-supply will also exaggerate substantive disconfirmation (Rao and Prathima 2003). In line with this theory, commercial banks will strive to put in new products which will improve customer satisfaction while at the same time keeping up with market demands.

### **Assimilation-Contrast Theory**

In the perspective of post-exposure product efficiency, Anderson (1973) developed assimilation-contrast theory based on the Sherif and Hovland (1961) discussion of assimilation and contrast effect.

The theory of assimilation-contrast implies that if the result is within the latitude (range) of acceptance of a consumer, even though it might fall short of expectation, the difference was disregarded – assimilation will function and quality has been deemed appropriate. If performance falls within the rejection latitude, contrast will prevail and the difference has been exaggerated, the product / service has been deemed utterly unacceptable (Bauer 2006).

The assimilation-contrast theory was proposed as yet another way of explaining the relationships in the disconfirmation model between the variables. This theory combines the assimilation and the contrast theories. This paradigm posits satisfaction is a function of the magnitude of the discrepancy between the performance expected and perceived.

As with assimilation theory, consumers will continue to assimilate or change discrepancies in perceptions of product output to suit previous expectations, but only if there is a relatively small discrepancy (Frame & White, 2009).

Commercial banks should ensure as effective as possible the movement of funds from one account to another. This can be done via electronic transfers through internet banking, either by the bank or by the customer.

Assimilation-contrast theory attempts to demonstrate that both the paradigms of assimilation and contrast theory have applicability in the customer satisfaction analysis. Variables other than the magnitude of the discrepancy which could also influence whether the effect of assimilation or the effect of contrast would be observed, where product performance is difficult to judge, expectations can dominate and assimilation effects were observed, the effect of contrast would result in high circumstances of involvement.

The strength of expectations may also influence whether the effects of assimilation or contrast are observed (Frame & White, 2009). Commercial banks also have to keep to customers' expectations if they are to achieve the customer satisfaction they desire. If they do not, the customer will be dissatisfied and develop a negative attitude towards them, which may result in low customer loyalty.

### **Empirical Review**

Empirical literature survey offers proof based and factual reviews of related work done in the nation of origin or outside and in a similar report or related region. Woldie, Hinson, Iddrisu, and Boateng (2008) studied on how internet banking could support customers' (organizations) relationships with Ghanaian banks. Utilizing 180 organizations, the outcomes show that about 68% of the respondent organizations had known about internet banking, while

about 33% had never known about it. Fifty-five percent of firms guarantee they did not use internet banking because of security concerns. Most of them said they will consistently bank manually, even with electronic/internet banking being adopted.

In analysing internet banking, Khatri and Upadhyay (2013) used data from five banks and 60 of their clients. They found that while most of the banks' sampled customers already used the internet and had some knowledge of internet banking, they had not fully developed the attitude to use the internet banking facility. Khatri and Upadhyay (2013) pointed out that the country's under-utilization of internet banking is due to lack of knowledge and fear of security. The country's bad internet infrastructure development was also cited as the country's major internet banking problem. Santouridis, Trivellas and Reklitis (2009) examined Internet banking in Greece experimentally by breaking down the fulfilment of clients and the nature of electronic financial services. The researchers use the SERVQUAL model to measure the electronic banking services and from their findings found that the dimensions of assurance, responsiveness and reliability was significant and had a positive impact on the level of customer satisfaction. In their report, it was discovered that unwavering quality had the most elevated and most prominent effect on consumer loyalty and recommended that measurements that are not related with consumer satisfaction ought to be fortified by the financial segment. Nurpus (2010) played out an assessment of Bangladesh's electronic banking and consumer loyalty level. The researcher used a sample of 250 respondents to gather the information. SERVQUAL model was utilized by the researcher to assess the relationship between consumer satisfaction

level and electronic banking. The study demonstrated that there was a relationship between the degree of consumer satisfaction and the electronic financial services. Reliability, empathy, responsiveness and assurance were the key dimensions analysed, resulting in adequate customer satisfaction, whereas the tangible dimension had no relation to customer satisfaction. Sadeghi and Hanzaee (2010) analysed customer satisfaction factors in Iran's use of internet banking services. The study was conducted to establish variables that examined customer satisfaction with electronic banking services.

The researcher revealed that bank management reliability website design, image, accuracy, and impression were found to have the greatest impact on customer satisfaction level. Privacy and security variables also influenced customer satisfaction, but their effect was low. Navaratnaseelan and Elangkumaran (2014) examined the relationship between service quality and customer satisfaction by using the SERVQUAL model. In their study, service quality dimensions such as Tangibility, Reliability, Assurance, Empathy and Responsiveness were considered as independent variables and customer satisfaction as dependent variable. The findings revealed that service quality has a significant impact on customer satisfaction. Also Bebli (2012) studied on the topic: the impact of internet banking service quality on customer satisfaction in the banking sector of Ghana. Using the service quality dimension or the SERVQUAL model, the study found out that speed of delivery, ease of use, reliability, pleasure, control and privacy were all positively correlated and significant at 1% level.

As also indicated by Parasuraman, Zeithaml and Berry (1988) in their empirical work and using the if clauses, they argue that “if the expected quality of service and actual perceived performance is equal or near equal the customers can be said to be satisfied, while a negative discrepancy between perceptions and expectations or ‘performance-gap’ lead to customer dissatisfaction, and positive discrepancy leads to consumer delight”. The relationship between expectation, perceived service quality and customers’ satisfaction have been investigated in a number of researches (Zeithaml, Berry and Parasuraman 1996).

Ariff, Yun and Zakuan (2013) examined the relationship and impact of quality of electronic service on electronic loyalty in Malaysia's internet banking market. In general, the analysis was carried out on a particular commercial bank and 265 internet banking customers. The study finds a positive relationship between the satisfaction of internet banking and aesthetics (website attractiveness and appearance) and the rate at which customers were responded to. It indicates, however, a detrimental privacy relationship.

## **E-banking Service Quality Variables**

### **Reliability**

It involves two concepts, dependability and uniformity in performance. Reliability also means honouring the commitments in areas such as billing accuracy, proper record maintenance and delivering the service within acceptable time limit (Saha and Zhao, 2005). It also “refers to the correct technical functioning of a self-services technology and the accuracy of service delivery” (Weijters, Schillewaert, Rangarajan and Falk, 2005). Many

authors have detected that reliability is significant in the determination of service quality (Davis, Bagozzi and Warshaw 1992; Parasuraman et al., 1988; Zeithaml, Bitner and Gremler, 2003).

### **Security**

Assurance about security relates to the extent to which the web site guarantees the safety of customers' financial and personal information, an area which has witnessed a proliferation of research interest (Kimery and McCord, 2002). Security can be assured by providing a privacy statement and information about the security of the shopping mechanisms and by displaying the logos of trusted third parties. For example, displaying trusted third-party logo guarantees a certain level of security protection and has been shown to significantly influence how consumers regard the trustworthiness of e vendors (Jiang, David and Sharon, 2008).

### **Convenience**

Convenience has to do with customers' ability to use a product (e-banking products) with ease and at the customers' comfort. Convenience, also termed as Easy to use or user friendliness, is an important determinant for the customer preferring the internet banking (Beer, 2006). In a study conducted by Karjaluoto, Mattila and Pentto, (2012) reported ease of use of innovative product or service as one of the three important characteristics for adoption from the customer's perspective. The user friendliness of domain names as well as the navigation tools available in the web-sites is an important determinant for convenience.

### **Responsiveness**

Liu and Arnett (2000) in their study identified responsiveness as one of the prime factor that influence e-banking service quality feature for the customers. Responsiveness has to do with prompt services, quick responses and timeliness services. Responsiveness is an importance factor which influences the customers prefers to use e-banking products (Beer, 2006). Banks can make the information of products and services available on their site, which is, an advantageous proposition.

### **Cost and Charges**

The cost and charges in respect of e-banking has to do with the cost of internet bundles to get access and the charges or fees for using the e-banking products. To encourage the use of e-banking services, the banking institutions should communicate the fees and charges on e-banking products to customers and should however, be less costly.

### **Conceptual Framework**

Customers of firms consider certain factors as the benchmark for appreciating the service or product being offered (Ramola and Sundaram, 2012). According to Ramola and Sundaram (2012), each of the factors such as tangibility, reliability, convenience, assurance, accuracy, safety, ease of use, and responsiveness is very important for customer satisfaction for the service being offered. In light of the literatures reviewed this study looks at the e-banking service variables such as convenience, reliability, security, responsiveness and cost and charges as having influence on customer's satisfaction. The service should be reliable, in that the service has to be available every time the customer needs it. The service should be convenient,

meaning that a customer will be loyal to the service he/she is able to use with ease. The service should also provide privacy to customer's information and should be less costly to use. Customers are satisfied when the perceived service they are receiving is executed accurately and exceeds the expected service offered.

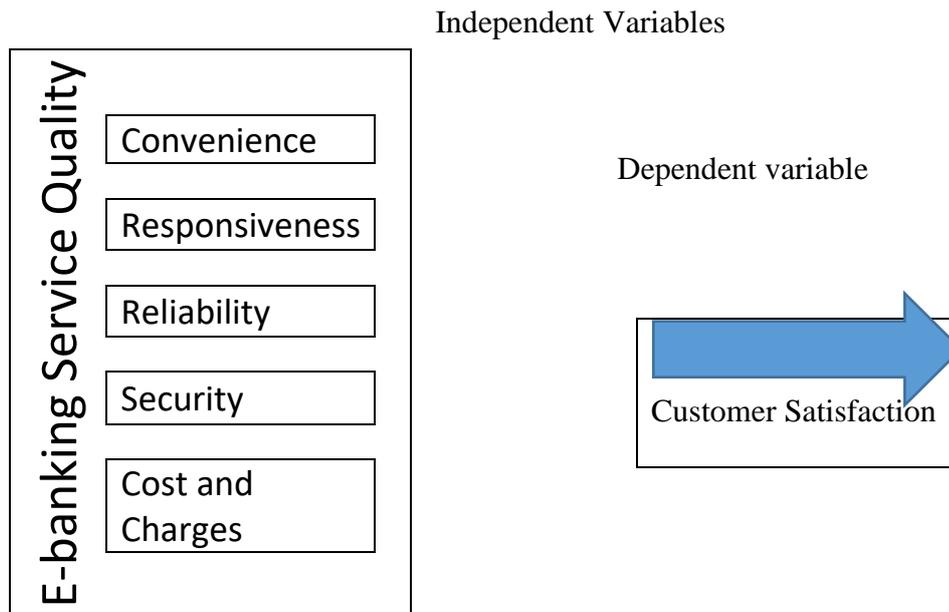


Figure 1: Influence of E-banking service quality on Customer Satisfaction

Source: Sarbeng (2019)

### Gaps Analysis

This research seeks to close the unfinished gaps created by Kwarteng (2016). In Kwarteng's study, he revealed that the study was conducted on some selected bank in Kumasi which does not include GCB Bank Ltd and their findings did not conclude whether the outcome can be generalized for all banks.

In view of this, this research wants to address the problem that left GCB Bank Ltd out of the study and also try as much as possible to generalize the findings of this study to reflect on all banks.

Another study conducted by Offei and Nuamah-Gyambrah (2016) centred their studies only on one branch of GCB Bank Ltd in Koforidua, however this study considered more than one branch of GCB bank in Accra.

### **Chapter Summary**

This chapter highlighted the definitions of key concepts, followed by the theories on which this study is based. Additionally, the chapter presented the studies of previous related literature on e-banking service quality and customer satisfaction. It also presented the conceptual framework regarding this study. This chapter however, concluded by looking at the various write up other researchers have made on e-banking, which included literature in the Ghanaian context. The gap analysis was captured from the Ghanaian literature perspective and how this study seeks to address those gaps.

## CHAPTER THREE

### RESEARCH METHODS

#### **Introduction**

The technique used throughout the research was discussed in this chapter. It considers the specification of the research design, population, sampling size and sampling techniques, data source and method of data collection, model, variables interpretation and measurement and data analysis. The quantitative approach was adopted.

#### **Research design**

It is an outline or scheme that serves as a guide to the researcher in his effort to generate data for his study. Research design is categorized into different types depending on the nature of study. This includes case study design, survey design and experimental design. This type of study is an explanatory one. Explanatory research design refers to social research which explores a certain phenomenon with the primary aim of understanding the phenomenon or situation (Bless and Hingson-Smith, 2010). As an explanatory study, the researcher aimed at establishing the relationship between e-banking service quality and customer satisfaction in order to add to the existing literature on the subject matter. The study also made use of a descriptive research design to ascertain and describe the characteristics of the variables of interest (Sekaran, 2013).

This study however, used the quantitative approach because it was a formal objective and a systemic process in which numerical data was utilized to obtain information (Burns and Grove, 2005). The study also made use of qualitative approach in the data analysis as well.

### **Target population**

According to Okoro (2001), a target population is an animate or inanimate thing which the study is focused. The research was targeted at customers from five branches of GCB Bank in the Accra Metropolis. The targeted population of interest for the questionnaires were customers who used e-banking services.

### **Sampling Procedure**

Sampling includes "the utilization of clear strategies in the determination of a section for the express reason for getting from its depiction or appraisals certain properties and attributes of the entire" (Kumekpor, 2002). As indicated by Anthony-Krueger and Sokpe (2006), an example is a delegate of a populace. Purposive sampling procedure was utilized to choose 200 respondents from five (5) branches out of the twenty-nine (29) branches of GCB Bank in the Accra Metropolis. The five (5) branches included Abeka Lapaz branch, Kaneshie Industrial Area branch, Ring Road West branch, Kisseiman branch and Accra New Town branch. The analyst couldn't approach the examining outline (client list) because of the security repercussions for banks as financial related foundations just as the enormous number of clients included. Forty (40) customers were therefore purposively sampled from each of the five (5) branches to adequately represent the whole. Nevertheless, the researcher chose to use a one-month period to collect data for the administration of the questionnaire via personal visits. Nonetheless, the appropriate permission from the respective branches of the bank was obtained.

### **Sources of Data**

The primary source was used mainly in this study. The primary data was obtained from the responses and information from the questionnaires that were administered to customers of GCB bank. The other sources of the information included books, financial reports, internet searches, articles, and journals among others. The other data were used to support or compensate the primary data for credibility and reliability of the data.

### **Research Instrument**

Information, as per Fraenkel and Wallen (2000), is alluded as the exact proof or crude realities that analysts cautiously amass dependent on explicit methodology or rules. Assortment of information, be that as it may, is required by research problems. Tools are the instruments utilized by an analyst to gather data from the objective populace to address a research problem.

The instrument used for the collection of data for the purpose of this study was a self-administered questionnaire. The questionnaire contained relevant questions for the study. Analysis and interpretation of the data obtained from completed questionnaires were discussed. A questionnaire is generally about asking people questions to find out what they feel or know about something (Miles, Snow, Meyer & Coleman, 1978). The questionnaire was administered personally to customers of selected GCB Bank branches.

### **Data Processing and Analysis**

Analysing the data is an important step in any research and must be done according to the aims of the study. William (2005) explains that data are analysed in order to measure, compare, evaluate relationships, predictions, test

hypotheses, construct concepts and theories, explore, monitor and explain. The primary data (questionnaires) that were retrieved from the field were analysed descriptively. With the aid of the Statistical Product for Service Solution (SPSS) version 21.0 software window data was analysed using basic statistical tools such as means, standard deviations, frequencies and percentages. Tables were used to effectively order and summarize the quantitative data.

### **Ethical consideration**

Each research has some ethics to follow. Ethics in research is important as it ensures that the study is not influenced by respondents' thoughts and perception. Ethical considerations were observed in this study by plainly disclosing the goals of the study to the respondents of the survey. All respondents to the survey were also not coerced or forced to answer the research instruments. Hence, the respondents were offered their own choice to respond to the research instrument.

Additionally, all respondents were guaranteed of confined anonymity in answering the research instrument. To guarantee anonymity, the questionnaire did exclude the names, email address and contact number of the respondents.”

### **Reliability and Validity of the Research Instrument**

The validity of this work was ascertained by engaging some experts in e-banking and my supervisor who had an in-depth knowledge in banking also made remarkable suggestions and modifications for the final work. With regards to the reliability of the questionnaire, a standardized e-banking questionnaire was administered.

### **Chapter Summary**

“This chapter discussed the research design for this study. It further highlighted the targeted population, sampling procedure, source of data and the research instrument. Additionally, this chapter clarified the data analysis methods that was used in the study, the ethical consideration and the reliability and validity of the research instrument.”

## **CHAPTER FOUR**

### **RESULTS AND DISCUSSIONS**

#### **Introduction**

This chapter is made up of two sections. The first section takes into account general information on the sample. The second section presents the data presentation and analysis of the research findings. Descriptive statistics were used throughout the study and analyses of the data obtained.

#### **Demographic Information on Sampled Respondents**

This section presents information on the demographic characteristics of the respondents, that is, sex, age, educational level, income level and banking experience. Table 1 presents the results.

**Table 1: Demographic Data of Respondents**

Status	Categories	Number	Percentage
<b>Sex</b>	Male	146	73
	Female	54	27
	<b>Total</b>	<b>200</b>	<b>100</b>
<b>Age</b>	20 – 29 years	31	15.5
	30 – 39 years	122	61
	40 – 49 years	36	18
	50 – 59 years	8	4
	60 years and above	3	1.5
	<b>Total</b>	<b>200</b>	<b>100</b>
<b>Educational Level</b>	Basic Education	2	1
	Secondary	4	2
	Tertiary	194	97
	<b>Total</b>	<b>200</b>	<b>100</b>
<b>Occupation</b>	Public servant	95	47.5
	Civil servant	43	21.5
	Health personnel	23	11.5
	Research assistant	7	3.5
	Tax administrator	12	6
	Student	17	8.5
	Trader	3	1.5
	<b>Total</b>	<b>200</b>	<b>100</b>
<b>Net Monthly Income</b>	GH¢ 100 – GH¢ 500	10	5
	GH¢ 501 – GH¢ 1000	28	14
	Above GH¢ 1000	162	81
	<b>Total</b>	<b>200</b>	<b>100</b>
<b>Banking Experience</b>	1 - 5 year	58	29
	6 – 10 years	44	22
	11 – 15 years	44	22
	More than 15 years	47	27
	<b>Total</b>	<b>200</b>	<b>100</b>

Source: Field survey, Sarbeng (2019)

Results from Table 1 demonstrated that out of a sum of 200 respondents, 146 of the respondents who took an interest in the study were

males as they comprised 73 percent of the all-out respondents. Then again, 54 respondents speaking to 27 percent of the absolute respondents were females.

As for age, larger part of the respondents (122) were inside the ages of 30 – 39 years as they comprised 61 percent of the example. 36 respondents who had accomplished 40 – 49 years established 18 percent while the individuals who had gotten ages between 20 – 29 years framed 15.5 percent of the respondents. Additionally, 8 respondents who established 4 percent of the respondents were between the ages 50 – 59 years lastly just 3 respondents speaking to 1.5 percent were 60 years or more. This finding propose that greater part of the respondents were underneath 40 years which shapes the working and energetic phase of the economy.

On educational level, it could be seen that greater part of the respondents had accomplished tertiary training. Therefore, 97 percent of the respondents (194) showed they had achieved tertiary degree of training, 2 percent of the respondents (4) had additionally finished auxiliary instruction while just 1 percent of the respondents (2) had finished fundamental instruction. It could be concluded that lion's share of the respondents has had their tertiary education and are in this way mindful and acquainted with e-banking administrations. In this way the more taught comprehends the ideas and information on utilizing the administrations of e-banking. This can be identified with the examination by Mchomba (2018) on the effects of electronic relying upon consumer loyalty in Tanzania banking industry. Discoveries of her investigation uncovered that clients of e-banking in Tanzania have diverse degree of instruction and the more taught are probably going to utilize e-banking administrations (along these lines 124 out of 176

respondents had Bachelor qualification). This finding can be credited to the way that financial procedures require some essential education (Kwarteng, 2016)

With regards to occupation, a larger proportion of the respondents were public servants (95, 47.5%), followed by civil servants (43, 21.5%), health personnel (23, 11.5%), students (17, 8.5%), tax officials (12, 6%), research assistants (7, 3.5%) and few of them being traders or self-employed (3, 1.5%).

With regards to average monthly income, majority of the respondents (81%) earned more than GH¢1,000.00 This was followed by 14 percent of the respondents who also earned between GH¢501.00 – GH¢1,000.00 and only 5 percent of the respondents earning amounts between GH¢100.00- GH¢500.00. The results above revealed that majority of the respondents earned more than GH¢1,000.00.

Concerning the number of years' respondents had been banking with GCB Bank (that is, indicating the banking experience of respondents), the findings showed that 58 respondents had been banking with GCB Bank between 1 – 5 years representing 29 percent while 47 respondents had been banking for more than 15 years representing 27 percent and 44 respondents each had been banking with the bank between 6-10 years and 11 – 15 years. This means that on the average majority of the respondents have been doing business with the bank and for that matter they were aware and familiar with the e-banking services provided by the bank.

### Customers' Level of Awareness of E-Banking Services

This objective looked at whether respondents were aware of e-banking services by considering the sources where they heard about e-banking, number of years of using e-banking, benefits and types of e-banking services used. The results are presented in Tables 2, 3, 4 and 5.

**Table 2: Source of E-banking Information**

Source	Frequency	Percentage
Self	86	43
Family and friends	50	25
Co-workers	20	10
Workers of GCB Bank	44	22
Total	200	100

Source: Field survey, Sarbeng (2019)

Table 2 shows that 86 of the respondents representing 43 percent got to know about e-banking services by themselves, followed by 50 respondents who got to know by family and friends (25%), 44 respondents also got to know about e-banking through workers of GCB Bank (22%) and finally 20 respondents heard about e-banking services through their co-workers (10%). This implies that most of the respondents heard about e-banking services without the help of the workers of GCB Bank.

**Table 3: Number of years of using e-banking services**

Item	Frequency	Percentage
Less than a year	26	13
A year to 3 years	78	39
More than 3 years	96	48
Total	200	100

Source: Field survey, Sarbeng (2019)

According to Table 3, almost half of the respondents (96, 48%) have been using e-banking services for more than 3 years, followed by 78 respondents (39%) who have used e-banking services for just a year to 3 years. However, only 26 respondents have used it for less than a year. These findings therefore show that majority of the respondents have used e-banking services for long, hence their awareness will be high.

**Table 4: Benefits of e-banking services**

Item	Frequency	Percentage
24 hours banking	91	45
Lower cost of banking	16	8
Easily accessible	55	28
Timely delivery	38	19
Total	200	100

Source: Field survey, Sarbeng (2019)

Table 4 shows that 91 respondents viewed the service of e-banking as 24 hours banking, followed by 55 respondents who found it to be easily accessible, 38 respondents perceived e-banking as timely delivery while 16

respondents found it to be low cost. This implies greater part of the respondents discovered e-banking as gainful. This affirms the perspectives on Rotchanakitumnuai and Speece (2003) that e-banking gives banks and client’s different advantages. Such advantages included; clients having the option to check accounts, move cash, and access different financial items and services without visiting the financial lobby.

**Table 5: Type of e-banking services mostly used by respondents**

Type	Frequency	Percentage
Internet banking	40	20
SMS mobile banking	44	22
Electronic transfer	8	4
ATM	108	54
Total	200	100

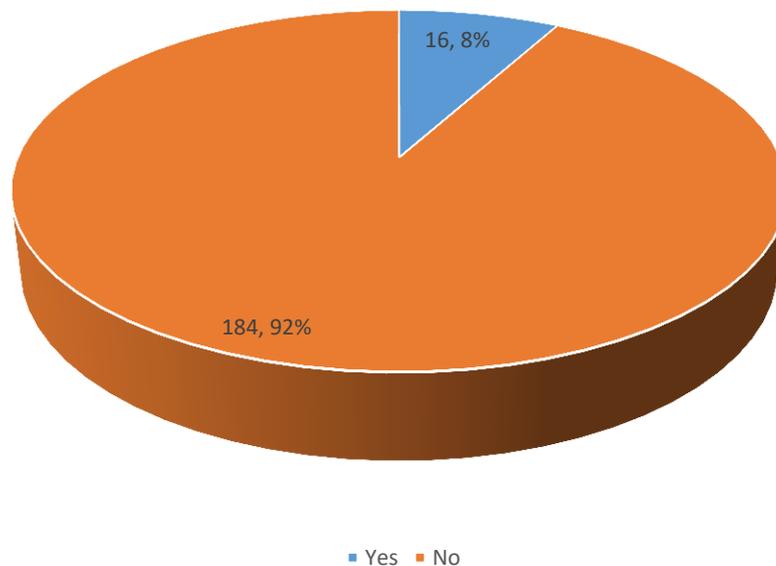
Source: Field survey, Sarbeng (2019)

With regards to the type of e-banking services that respondents mostly used, Table 5 shows that 108 respondents (54 percent) used ATM often, followed by 44 respondents (22 percent) who used SMS mobile banking and 40 respondents (20 percent) used internet banking. However, only 8 respondents representing 4 percent used electronic transfer. The finding suggests that majority of customers preferred using Automated Teller Machines often to other e-banking services.

This finding is in accordance with the discoveries of Abor (2005) and Kwarteng (2016) who indicated that the ATM is the key e-banking service that has seen a ton of support over the previous decade in Ghana. This might be

because of the way that in the financial framework the ATM assumes an indispensable job. It incorporates the way that in any event, when banks close, and particularly on ends of the week, the machines are working. The circumstance might be on the ascent; particularly as certain banks are making a mammoth stride in the execution of ATM machines intended to accept cash deposits. This finding isn't disturbing as the utilization of ATM innovation is profoundly helpful for clients and clients among the vast majority of the creative e-banking items/services embraced throughout the years. Bank clients can helpfully withdraw cash from their banks without being at the bank premises truly.

The ATM innovation is probably the quickest ways for clients to get to their cash, aside from the convenience. The development of ATMs permits more access to banking clients by carrying banking to their doorsteps. Inside financial lobbies, there are practically no lines, no time limits for money withdrawals, and clients can without much of a stretch access their bank adjusts. The discoveries additionally harmonize with Humphery, Willeson, Bergendahl and Lindblom (2006), which saw ATMs as profoundly disparaged in correlation with other e-banking stages.



*Figure 2: Availability of e-banking services*

Source: Field survey, Sarbeng (2019)

According to Figure 1, the finding shows that majority of the respondents (92 percent) agreed that there were e-banking services available in all the GCB Bank branches while only 8 percent of the respondents did not. This means that majority of the respondents were aware of e-banking services and were therefore using them.

### **Respondents' Expectation on E-banking Service Quality**

The respondents were supposed to rate the extent to which they expected the bank to provide services (customer satisfaction) in terms of convenience, reliability, responsiveness, assurance, cost and charges of services. The results are illustrated in Tables 6, 7, 8, 9 and 10 respectively where the mean of agreement of the responses for each item were assessed. A 5 Likert scale points (1-5) covering statements under each of the dimensions: convenience, reliability, responsiveness, assurance, cost and charges of services, were given to the customers (respondents) to rate the extent to which

the statements described their expectation on e-banking. The means and standard deviations of each item were analysed. The higher the mean the greater the level of agreement and vice versa. Also the lower the standard deviation the greater the majority agree to the assertion while the higher the standard deviation the greater the variation in the responses.

**Table 6: Convenience**

Item	Means	Std Dev.
E-banking should be available for customers 24 hours/7days	4.68	0.582
E-banking should be speedier, quicker and dependable services at any location and any time	4.63	0.612
E-banking should be easy to use	4.6	0.65
Customers should access e-banking at any time anywhere	4.41	0.806

Source: Field survey, Sarbeng (2019)

Table 6 shows that average number of the respondents agreed very strongly that e-banking should be available for customers 24 hours/7 days (mean=4.68, sd=0.582), that e-banking should be speedier, quicker and dependable services at any location and any time (mean=4.63, sd=0.612) and that e-banking should be easy to use (mean=4.60, sd=0.650). Moreover, majority of respondents also agreed that customers should access e-banking at any time anywhere with a mean score of 4.41 and standard deviation of 0.806.

**Table 7: Reliability**

Item	Means	Std Dev.
E-banking should keep records correctly	4.66	0.605
E-banking should be reliable at any time anywhere	4.55	0.624
E-banking should provide service at the designated time as promised	4.54	0.641
E-banking should be accurate in billing of customers	4.46	0.742

Source: Field survey, Sarbeng (2019)

With respect to reliability, Table 7 shows that average number of the respondents agreed very strongly that e-banking should keep records correctly (mean=4.66, sd=0.605), followed by being reliable at any time anywhere (mean=4.55, sd=0.624) and then e-banking should provide services at the designated time as promised (mean=4.54, sd=0.641). However, average number of respondents agreed that e-banking should be accurate in billing of customers (mean=4.46, sd=0.742).

**Table 8: Responsiveness**

Item	Means	Std Dev.
E-banking should provide prompt services	4.59	0.603
E-banking should provide quick response to emails, help line or complaints	4.58	0.637
GCB Bank should provide information on new innovations of e-banking	4.55	0.64
E-banking should provide timeliness services	4.4	0.777

Source: Field survey, Sarbeng (2019)

With regards to responsiveness, Table 8 shows that majority of the respondents agreed very strongly that e-banking should provide prompt services (mean=4.59, sd=0.603), followed by e-banking should provide quick response to emails, helpline or complaints (mean=4.58, sd=0.637) and that GCB Bank should provide information on new innovations of e-banking (mean=4.55, sd=0.640). However, respondents agreed that e-banking should provide timeliness services (mean=4.40, sd=0.777).

**Table 9: Security (Assurance)**

Item	Means	Std Dev.
E-banking should ensure that confidential information such as password is not easily acquire by someone	4.78	0.643
E-banking should permit customers to perform a broad range of banking activities without any fear	4.41	0.791
E-banking should ensure that customer's personal information remain safe and private	4.19	1.430

Source: Field survey, Sarbeng (2019)

Table 9 shows that larger part of the respondents concurred unequivocally that e-banking ought to guarantee secret data, for example, secret key isn't effectively obtained by somebody (mean=4.78, sd=0.643), trailed by dominant part of the respondents who concurred that e-banking should allow clients to perform expansive scope of banking exercises with no dread (mean=4.41, sd=0.791). The least proclamation appraised by the respondents was that they concurred that e-banking ought to guarantee that clients' very own data stay safe and private (mean=4.19, sd=1.430). However, the standard deviation of this statement showed that respondents had diverse response to this statement.

**Table 10: Cost and Charges**

Item	Means	Std Dev.
Customers should be aware of fee charged on e-banking	4.7	0.459
E-banking should be less costly	4.63	0.563
GCB Bank should communicate the fees and charges on e-banking to customers	4.62	0.646

Source: Field survey, Sarbeng (2019)

On cost and charges of services, Table 10 shows that almost all the respondents agreed very strongly to all the statement or factors under it. However, they highly rated the statement that customers should be aware of fee charged on e-banking (mean=4.70, sd=0.459). On the other hand, respondents gave least attention to the statement that GCB Bank should communicating the fees and charges on e-banking to the customers (mean=4.62, sd=0.646).

### **Respondents' Perception on E-banking Service Quality**

The respondents were supposed to rate the extent to which they perceive the services provided by the bank (customer satisfaction) in terms of convenience, reliability, responsiveness, assurance, cost and charges of services. The results are illustrated in Tables 11, 12, 13, 14, 15 and 16 respectively where the mean of agreement of the responses for each item were assessed. A 5 Likert scale points (1-5) covering statements under each of the dimensions: convenience, reliability, responsiveness, assurance, cost and charges of services, were given to the customers (respondents) to rate the extent to which the statements described their perception on e-banking. The means and standard deviations of each item were analysed and interpreted.

**Table 11: Convenience**

Item	Means	Std Dev.
E-banking is easy to use	4.09	0.967
E-banking is speedier, quicker and dependable services at any location and any time	3.96	1.06
E-banking is available for customers 24 hours/7days	3.85	1.239
Customers access e-banking at any time anywhere	3.82	1.245

Source: Field survey, Sarbeng (2019)

The higher the mean the greater the level of agreement and vice versa. Also the lower the standard deviation the greater the majority agree to the assertion whiles the higher the standard deviation the greater the variation in the responses.

With respect to perception of respondents on convenience, Table 11 shows that majority of the respondents agreed that e-banking is easy to use (mean=4.09, sd=0.967). Surprisingly, respondents perceived low for statements or items such as: e-banking is available for customers 24 hours/7 days (mean=3.85, sd=1.239) and customers access e-banking at any time anywhere (mean=3.82, sd=1.245). The standard deviations for both statements were rated low indicating that respondents have different perception on it.

**Table 12: Reliability**

Item	Means	Std Dev.
E-banking keep records correctly	3.93	0.931
E-banking is accurate in billing of customers	3.81	1.024
E-banking provide service at the designated time as promised	3.65	1.058
E-banking is reliable at any time anywhere	3.51	1.272

Source: Field survey, Sarbeng (2019)

On reliability, Table 12 shows that majority of the respondents agreed that e-banking keep records correctly (mean=3.93, sd=0.931), followed by a larger proportion of the respondents who agreed that e-banking is accurate in billing of customers (mean=3.81, sd=1.024). That notwithstanding, majority of the respondents rated the statement e-banking is reliable at any time anywhere as low among the rest (mean=3.51, sd=1.272). This means that e-banking was not reliable at any time anywhere and also majority had diverse views.

**Table 13: Responsiveness**

Item	Means	Std Dev.
E-banking provide prompt services	3.71	1.081
E-banking provide timeliness services	3.67	0.995
E-banking provide quick response to emails, help line or complaints	3.53	1.179
GCB Bank provides information on new innovations of e-banking	3.47	1.183

Source: Field survey, Sarbeng (2019)

On the perception of respondents in terms of responsiveness, majority of the respondents agreed that e-banking provide prompt services (mean=3.71, sd=1.081), and e-banking provided timeliness services (mean=3.67, sd=0.995). Respondents least ranked e-banking services to provide quick response to email, help line or complaints (mean=3.53, sd=1.179) and GCB Bank provides information on new innovations of e-banking (mean=3.47, sd=1.183). This means that though the bank provides prompt services to the customers, it was on only services already known to the customers and failed in providing information on new innovations on e-banking to the customers.

**Table 14: Security (Assurance)**

Item	Means	Std Dev.
E-banking ensure that confidential information such as password is not easily acquire by someone	3.94	0.942
E-banking ensure that customer’s personal information remain safe and private	3.84	0.968
E-banking permit customers to perform a broad range of banking activities without any fear	3.64	1.035

Source: Field survey, Sarbeng (2019)

On assurance, the respondents agreed that e-banking ensure that confidential information such as password is not easily acquired by someone and that customers’ personal information remain safe and private. E-banking permit customers to perform a broad range of banking activities without any fear was ranked least by the respondents. This is because of recent on-line fraud activities in the banking industry. Most people do not feel safe in performing broad range of activities through e-banking.

**Table 15: Cost and Charges**

Item	Means	Std Dev.
E-banking is less costly	3.23	1.135
GCB Bank communicate the fees and charges on e-banking to customers	3.17	1.276
Customers are aware of fee charged on e-banking	3.1	1.316

Source: Field survey, Sarbeng (2019)

Table 15 shows that majority of the respondents neither agreed nor disagreed that e-banking is less costly (mean=3.23, sd=1.135), followed by GCB Bank communicate the fees and charges on e-banking to customers

(mean=3.17, sd=1.276) and the least statement was that customers were aware of fee charged on e-banking. The result above revealed that majority of the respondents were not consistent on the cost and charges of e-banking. This is also shown by the standard deviation of the various statements indicating diverse views of the respondents.

**Table 16: Expectation dimensions of e-banking service quality**

Dimension	Means	Std Dev.
Cost and charges	4.649	0.431
Convenience	4.578	0.559
Reliability	4.553	0.549
Responsiveness	4.530	0.553
Security (Assurance)	4.460	0.612

Source: Field survey, Sarbeng (2019)

Table 16 shows at a glance a summary of respondents' responses in respect of expectation on e-banking. Results from above shows that majority of respondents ranked cost and charges (mean=4.649, sd=0.431) as high, followed by convenience (mean=4.578, sd=0.559), reliability (mean=4.553, sd=0.549), responsiveness (mean=4.530, sd=0.553) and assurance (mean=4.460, sd=0.612) being the least. This means that though majority of the respondents strongly agreed to the various statements under the various dimensions. However, respondents' expectation was higher in terms of cost and charges than security or assurance.

**Table 17: Perception dimensions of e-banking services quality**

Dimension	Means	Std Dev.
Convenience	3.941	0.965
Security (Assurance)	3.797	0.895
Reliability	3.750	0.878
Responsiveness	3.591	1.002
Cost and charges	3.184	1.063

Source: Field survey, Sarbeng (2019)

Table 17 shows at a glance the summary of respondent's perception on e-banking. Results above reveal that most respondents perceived convenience (mean=3.941, sd=0.965) as high among the various dimensions, followed by security (mean=3.797, sd=0.895), reliability (mean=3.750, sd=0.878), responsiveness (mean=3.591, sd= 1.002) and cost and charges being the least (mean=3.184, sd=0.1.063). This means that majority of the respondents were contended with the bank's e-banking services which were provided and delivered with the exception of cost and charges which the respondents were not certain on.

### **E-banking Service Quality and Customer Satisfaction**

This objective was to assess the difference or gap between respondents' expectation and perception of e-banking service quality.

The satisfaction of a customer is dependent on the disparity between perception and expectation in relation to the services offered by its bankers. The concept of satisfaction rest on numerous psychological and physical factors. The SERVQUAL model developed by Zeithaml (1988) was used. SERVQUAL model is one of the more widely used instruments for assessing

customer satisfaction. It was used to measure service quality by gathering data on respondents' expectations and perceptions along the five dimensions of service quality: responsiveness, reliability, assurance, convenience and cost and charges. Averages of the various factors under each dimension were calculated and composite variable was created for each dimension.

The SERVQUAL can be conceptualized as a simple equation:  $SQ = P - E$ , where SQ is service quality, P is the individual's perception of given service delivery and E is the individual's expectation of a given service delivery. Where customer expectations are greater than their perceptions of services delivered, customer satisfaction is deemed low. On the other hand, when perceptions exceed expectations then customer satisfaction is high. The result is presented in Table 18.

**Table 18: E-Banking Service Quality Gap**

Dimensions	Perception	Expectation	Gap
Cost and charges	3.184	4.649	-1.465
Responsiveness	3.591	4.530	-0.939
Reliability	3.750	4.553	-0.803
Security (assurance)	3.797	4.460	-0.663
Convenience	3.941	4.578	-0.637

Source: Field survey, Sarbeng (2019)

Cost and charges viewed at the awareness of customers on the cost and charges of using e-banking services. On the analysis indicator score of respondents on the dimension of cost and charges revealed that the score is 3.184. This value gives the sense that the quality of service dimension is not satisfactory. The gap difference of -1.465 shows that the perceived service

quality on cost and charges is lower than the expected service quality score hence customer satisfaction is lower.

Respondents satisfaction level on reliability of services is based on the mean scores level difference or gap between perceived and expected services quality which is -0.803. This means that the achievement level of concordance between perceived service quality is lower than expected service quality score hence customer satisfaction is lower.

With respect to convenience, responsiveness and security, the calculations showed that the perception scores of 3.941, 3.591 and 3.797 respectively were lower than the expectation scores of 4.578, 4.530 and 4.460 which means that the level of satisfaction is unsatisfactory.

The outcomes show that there was a negative gap examination of the service quality of e-banking. This proposes desires for the respondents exceed the impression of the respondents. Subsequently, respondents have lower level of satisfaction as for e-banking service quality. This is in sharp differentiation to an examination by Santouridis et al. (2009) on the examination which explored web access quality and its effect on consumer satisfaction in the financial setting of Greece. The scientists found that the elements of confirmation, responsiveness and unwavering quality had a huge and positive effect on consumer loyalty level and suggested that the measurements which spoke to bring down degree of consumer satisfaction should have been improved by the financial division.

### **Challenges that customers faced in using e-banking**

The respondents were supposed to described the challenges that they face when using e-banking services. They were to respond to both closed and

open-ended questionnaire. Table 19 shows the results of a 5 Likert scale points (1-5) questionnaire and Table 20 shows the result of the open-ended questions. The results are presented Table 19.

The results show that majority of the respondents fairly agreed that e-banking is cumbersome, that it is difficult to transact business electronically and that e-banking is difficult to operate with a mean score of 2.56, 2.57 and 2.48 respectively.

**Table 19: Challenges that customers faced (closed ended)**

Challenges	Mean	Std. Dev
E-banking is cumbersome	2.56	0.878
It is difficult to transact business electronically	2.57	0.900
E-banking is risky	3.10	1.017
There is frequent fault or breakdown of system	3.70	1.037
There is poor networking	3.83	0.908
E-banking is difficult to operate	2.48	0.902

Source: Field survey, Sarbeng (2019)

Also most respondents agreed that there is poor networking and also there is frequent fault or breakdown of system as shown by the mean scores of 3.83 and 3.70 respectively. However, their standard deviation shows that respondents had diverse views, that there is frequent fault or breakdown of system.

**Table 20: General challenges of e-banking (open ended)**

Challenge	Frequency	Percent
Poor network	111	55.5
Insecurity	21	10.5
Frequent breakdown of system	50	25
Complexity in operation	12	6
Inadequate funds	6	3
Total	200	100

Source: Field survey, Sarbeng (2019)

Table 20 shows that 111 representing 55.5 percent of the sample of respondents perceived poor network as a major challenge to the use of e-banking, followed by frequent breakdown of systems, accounting for 25 percent. However, the least number of respondents identified inadequate funds as another challenge encountered when using e-banking services.

This means that even though majority of the respondents found e-banking useful, however, poor network services, frequent breakdown of systems, especially, ATM and insecurity restricted them from successfully using e-banking.

This affirms the investigation by Earl (2000) which discovered that e-banking is influenced by poor system and frailty or hazard. Likewise, Asante-Gyabaah, Danquah and Tetteh-Wayoe (2015), attested that numerous clients communicated extraordinary enthusiasm for getting to online services however were obliged by access or cost to web availability and there was media transmission organize inability to convey when clients needed to get to their records through SMS or versatile relying upon their telephones.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

In this chapter, the significant findings and the valuable information obtained or achieved by this study have been carefully summarized. The chapter is made up of the summary of the research, and the conclusions drawn from this study. Also, important recommendations for further studies were given from the analysis of the available data in this study.

#### Summary of the study

“The main purpose of the study was to examine the influence of e-banking service quality on the satisfaction of customers of GCB Bank. Specifically, this study aimed to assess the level of customers’ awareness of e-banking services, examine the customers’ perception on e-banking, evaluate the customers’ expectation on e-banking and assess the gaps in e-banking service quality on the satisfaction of customers of GCB Bank. Additionally, the study analysed the challenges that customers faced in using e-banking services.”

The study employed the quantitative approach of a descriptive design of which the targeted population were customers of five branches of GCB Bank in the Accra Metropolis. A total respondent of two hundred (200) were selected with the aid of purposive sampling techniques. Thus, all the targeted respondents were selected based on the objective of the study to include only users of e-banking service. Questionnaires were the principal instruments for collecting data. The data was analysed by using frequencies, percentages,

means and standard deviations. The results were presented with tables and interpreted appropriately.

### **Major Findings**

The study found that the vast majority of the respondents who took an interest in the study were males as they establish 73 percent of the total number of surveyed respondents. On age, majority of the respondents were between the ages of 30 – 39 years, followed by 18 percent of the respondents who had achieved 40 – 49 while the individuals who had acquired ages beneath 30 years represented 15.5 percent of the respondents. Subsequently, greater part of the respondents were underneath 40 years and this structure the working and energetic phase of the economy. Majority of the respondents have had their tertiary training, hence were aware and acquainted with e-banking. A greater number of the respondents were public servants, followed by civil servant, teachers, health personnel with very few being self-employed or traders. On average respondents earned above GH¢1,000 and have been working with the bank for over 10 years.

Majority of the respondents heard about e-banking services without the assistance of the workers of GCB Bank. Most of the respondents heard of e-banking services by themselves and through family and friends as well as their co-workers. Respondents had been using e-banking services for long (more than a year). Majority of the respondents were aware that e-banking services provided 24 hours banking, is easily accessible and provide timely delivery of services though it was costive. ATM was the most widely used e-banking services by the respondents.

### **Respondents' Expectation on e-banking**

On convenience, majority of the respondents agreed very strongly that e-banking should be available for customers 24 hours/7 days, that e-banking should be speedier, quicker and dependable services at any location and any time and e-banking should be easy to use. However, respondents agreed that customers should access e-banking at any time anywhere and rated it least among the statement or factors under convenience.

On reliability, majority of the respondents agreed very strongly that e-banking should keep records correctly, followed by being reliable at any time anywhere and e-banking should provide services at the designated time as promised. However, respondents considered e-banking as being accurate in billing of customers as the least reliability statement or item.

On responsiveness, majority of the respondents agreed very strongly that e-banking should provide prompt services, followed by the statement that e-banking should provide quick response to emails, helpline or complaints. Conversely, respondents agreed that e-banking should provide timeliness services, though it was rated least among the factors of responsiveness.

On assurance, majority of the respondents agreed very strongly that e-banking should ensure that confidential information such as password is not easily acquired by someone, followed by majority of the respondents who agreed that e-banking should permit customers to perform broad range of banking activities without any fear. The least statement rated by the respondents was that e-banking should ensure that personal information from customers stays secure and private.

On cost and charges of services, almost all the respondents agreed very strongly to all the statement or factors under it. However, they highly rated the statement that customers should be aware of fee charged on e-banking. On the other hand, respondents' least agreed to the bank in communicating the fees and charges on e-banking to the customers.

On the whole, expectation of respondents with respect to the various dimensions of customer satisfaction (Table. 16), showed that respondents ranked cost and charges as high, followed by convenience, reliability and assurance being the least. This means that though majority of the respondents strongly agreed to the various statements under expectation, their expectation was higher in terms of cost and charges than security or assurance issues.

### **Respondents' Perception on Customer Satisfaction**

On convenience, majority of the respondents agreed that e-banking is easy to use. Surprisingly, respondents' perception was lower for statements or items such as: e-banking is available for customers 24 hours/7 days and customers access e-banking at any time anywhere.

On reliability, majority of the respondents agreed that e-banking keep records correctly, followed by a larger proportion of the respondents who agreed that e-banking is accurate in billing of customers. That notwithstanding, majority of the respondents rated the statement e-banking is reliable at any time anywhere as low among the rest. This means that e-banking was not reliable at any time anywhere.

With regard to the perception of respondents in terms of responsiveness, majority of the respondents agreed that e-banking provide prompt services and also it provide timeliness services. Respondents least

ranked e-banking services to provide quick response to email, help-line or complaints and GCB Bank provides information on new innovations of e-banking.

On assurance, the respondents agreed that e-banking ensure that confidential information such as password is not easily acquired by someone, e-banking ensure that personal information from customers stays secure and private. E-banking permit customers to perform a broad range of banking activities without any fear was ranked least by the respondents. This is because of on-line fraud activities in the banking industry. Most people do not feel safe in performing broad range of activities through e-banking.

On cost and charges, majority of the respondents fairly agreed that e-banking is less costly, followed by GCB Bank communicate the fees and charges on e-banking to customers and least statement was customers are aware of fee charged on e-banking. This means that majority of the respondents were not consistent on the cost and charges of e-banking.

With regards to the perception of respondents on the dimension of customer satisfaction, respondents perceive convenience as high among the various dimensions, followed by security, reliability, and cost and charges being the least. This means that majority of the respondents agreed that the various dimensions of customer satisfaction were delivered with the exception of cost and charges which the respondents were not certain on.

### **E-banking service quality and customer satisfaction**

This objective was to assess the difference or gap between respondents' expectation and perception of e-banking service quality. Hence the SERVQUAL model was used to assess the gap between perception

dimensions and expectation dimensions of e-banking service quality to determine customer satisfaction.

On cost and charges dimension of e-banking service quality the gap difference of -1.465 shows that the perceived service quality is lower than expected service quality score, hence customers were not satisfied with e-banking in terms of cost and charges.

On respondents' satisfaction level in terms of reliability of e-banking services, the mean scores level difference or gap between perception dimensions and expectation dimensions of e-banking services was -0.803. This means that the achievement level of concordance between perceived service is lower than expected service quality score, hence customers were not satisfied with e-banking in terms of reliability of service.

On convenience (easiness in using e-banking services), the calculations show that perception score of 3.941 is lower than the expectation score of 4.578 which means that the level of customer satisfaction is unsatisfactory.

The above results revealed that there was a negative gap analysis of the e-banking service quality. This therefore suggest that expectations of the respondents outweigh the perceptions of the respondents. Thus, respondents have unsatisfactory level of customer satisfaction.

### **Challenges of using e-banking services**

The highest number of respondents who perceived poor networking as a major challenge to the use of e-banking covered 55.5%, followed by frequent breakdown of system that covered 25.0%. However, least number of respondents representing 3.0% identified inadequate funds as another barrier encountered when using e-banking. This means that majority of the

respondents found e-banking useful, however, poor network services, frequent breakdown of system, especially, ATM and insecurity affected customer satisfaction to a great extent.

### **Conclusion**

From the study, it can be established that respondents were aware, understood e-banking service and therefore used it. However, respondents expected security issues to be low as compared to cost and charges that they wanted to know and be aware of. On the other hand, respondents perceived that it was easy to use e-banking services as compared to its security and cost of using it.

Moreover, by utilizing the SERVQUAL model, there was a negative gap analysis of the e-banking service quality. Thus, expectations of the respondents outweigh the perceptions of the respondents. Therefore, there is low level of customer satisfaction provided by GCB Bank on e-banking. Furthermore, respondents found e-banking useful, however, poor network services, frequent breakdown of system, especially, ATM and insecurity affected customer satisfaction to a great extent.

### **Recommendations**

Based on the results of the study, the following recommendations are made:

1. The GCB Bank should review their charges on e-banking services because respondents expected it to be low.
2. The GCB Bank should improve upon their service quality, especially, on responsiveness, reliability and security issues since there was high service quality deficit on these dimensions.

3. The operations department of GCB Bank should ensure effective and efficient system as well as good network.
4. It is recommended that GCB Bank improves its most widely used e-banking service (that is, the ATM) and make the other types of e-banking more user friendly with high level of security to maintain its loyal customers. This is because respondents identified security and network as a major challenge using e-banking products.

### **Suggestion for Further Research**

The study found out that there was poor quality of e-banking service and unsatisfactory level of customer satisfaction on e-banking service provided by selected GCB Bank branches in Accra Metropolis. Other researchers can therefore, study on the challenges encountered by the GCB bank in the provision of quality service on e-banking to customers. Also, others can also conduct similar study on different Banks or same GCB Bank branches in other Metropolis to verify these findings. Lastly, other researchers can study on the effect of e-banking on traditional banking system.

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**SECTION B: CUSTOMERS' AWARENESS OF E-BANKING SERVICES**

[Tick the most appropriate box, reference to your awareness of e-banking services]

7. Where did you hear e-banking from?

- a. Self
- b. Family and friends
- c. Co-workers
- d. Workers of GCB Bank

8. How long have you been using e-banking services?

- a. Less than a year
- b. A year to 3 years
- c. More than 3 years

9. What are the benefits of e-banking services? (Tick (✓) as many as apply)

- a. 24 hours banking
- b. Lower cost of banking
- c. Easily accessible
- d. Timely delivery
- e. Other specify .....

10. What type of e-banking services do you use often?

- a. Internet banking
- b. Electronic banking
- c. SMS mobile banking
- d. Electronic transfer
- e. ATM

11. In all, are you aware of the availability of electronic banking services?

- a. Yes
- b. No

**SECTION C: CUSTOMERS' EXPECTATION ON E-BANKING**

12. On a scale of **1** to **5** (**1** being Agree to **5** being Strongly Agree), rate the extent to which the following statements describe your **expectation** on e-banking:

Statement	Scale				
	1	2	3	4	5
<b>CONVENIENCE</b>					
Customers should access e-banking at any time anywhere					
E-banking should be available for customers 24 hours/7days					
E-banking should be easy to use					
E-banking should be speedier, quicker and dependable services at any location and any time					
<b>RELIABILITY</b>					
E-banking should be reliable at any time anywhere					
E-banking should be accurate in billing of customers					
E-banking should keep records correctly					
E-banking should provide service at the designated time as promised					
<b>RESPONSIVENESS</b>					
E-banking should provide prompt services					
E-banking should provide timeliness services					
E-banking should provide quick response to emails, help line or complaints					
GCB should provide information on new innovations of e-banking					
<b>SECURITY (assurance)</b>					
E-banking should permit customers to perform a broad range of banking activities without any fear					
E-banking should ensure that customer's personal information remain safe and private					

E-banking should ensure that confidential information such as password is not easily acquired by someone					
<b>COST AND CHARGES</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Before any service customers should be aware of fees charged on e-banking					
E-banking should be less costly					
GCB should communicate the fees and charges on e-banking to customers					

**SECTION D: CUSTOMERS’ PERCEPTION ON E-BANKING**

13. On a scale of **1** to **5** (**1** being Agree to **5** being Strongly Agree), rate the extent to which the following statements describe your **perception** on e-banking:

Statement	Scale				
<b>CONVENIENCE</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Customers have access to e-banking at any time anywhere					
E-banking is available for customers 24 hours/7days					
E-banking is easy to use					
E-banking is speedier, quicker and dependable services at any location and any time					
<b>RELIABILITY</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
E-banking is reliable at any time anywhere					
E-banking is accurate in billing of customers					

E-banking keep records correctly					
E-banking provide service at the designated time as promised					
<b>RESPONSIVENESS</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
E-banking provide prompt services					
E-banking provide timeliness services					
E-banking provide quick response to emails, help line or complaints					
GCB provides information on new innovations of e-banking					
<b>SECURITY (assurance)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
E-banking permit customers to perform a broad range of banking activities without any fear					
E-banking ensure that customer's personal information remain safe and private					
E-banking ensure that confidential information such as password is not easily acquired by someone					
<b>COST AND CHARGES</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Before any service customers are aware of fees charged on e-banking					
E-banking is less costly					
GCB communicates the fees and charges on e-banking to customers					

**SECTION E: CUSTOMERS' SATISFACTION ON E-BANKING**

14. Are you satisfied with e-banking?

a. Yes

b. No

15. Is e-banking good?

a. Yes

b. No

Choose the option that most closely matches your option on the following statement.

16. The advantages of e-banking outweigh the disadvantages

a. Yes

b. No

17. E-banking simplifies your everyday life

a. Yes

b. No

18. Are you satisfied with the security in the use of electronic banking?

a. Yes

b. No

19. Do you prefer electronic banking for your transactions?

a. Yes

b. No

20. Do you see e-banking as convenient?

a. Yes

b. No

**SECTION F: THE CHALLENGES THAT CUSTOMERS FACED IN USING E-BANKING**

21. On a scale of **1** to **5** (**1** being Agree to **5** being Strongly Agree), rate the extent to which the following describe the challenges you faced in using e-banking:

STATEMENT -	1	2	3	4	5
E-banking is cumbersome					
It is difficult to transact business electronically					
E-banking is risky					
There is frequent fault or breakdown of system					
There is poor networking					
E-banking is difficult to operate					

22. In your own view, what are the challenges you faced in accessing or using e-banking?

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THANK YOU