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COLLEGE OF ART AND SOCIAL SCIENCES

SCHOOL OF BUSINESS



THESIS TOPIC

ASSESSMENT OF ELECTRONIC BANKING ON BANKS PERFORMANCE

A STUDY BARCLAYS BANK GHANA LIMITED

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ASSESSMENT OF ELECTRONIC BANKING ON BANKS PERFORMANCE

(A STUDY BARCLAYS BANK GHANA LIMITED)

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**A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES, KWAME NKRUMAH
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CANDIDATE'S DECLARATION

I hereby declare that this submission is the result of my own work towards the MBA in Marketing programme, and that to the best of my knowledge, this study contains no material neither previously published by another person nor submitted for the award of any other degree of the university, except where acknowledgement has been duly made in the text.

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DEDICATION

This dissertation is dedicated to my husband and children and to all who have supported me through this journey. I shall forever remain indebted to you.

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My sincere gratitude goes to the Almighty God for the life and strength He gave me to be able complete this thesis. The utmost thanks goes to my mum and dad who thought it worthwhile, to support me throughout my education. I am indebted to my supervisor Dr. Bylon Bamfo for his time and efforts in guiding me throughout this study. I am also grateful to my husband for his unfailing support and help when I embarked on this painstaking but ultimately fruitful journey into the academic world and finally to my lovely children who encouraged me always.



ABSTRACT

This research sought to assess electronic banking on banks performance; a study Barclays Bank Ghana Limited. The target population for the research comprised all E-banking customers of the study areas which are Barclays Bank branches at Ahodwo and Asafo, all in Kumasi. The study adopted a qualitative research approach, with the research purpose being exploratory and a descriptive research design. A sample of one hundred and ninety-six (196) respondents was selected made up of 30 purposively selected employees of Barclays Bank Staff comprising departmental and unit heads and Tellers and one hundred and sixty-six (166) randomly selected customers of the bank. The customers were selected using accidental sampling. Data was collected through questionnaires. Data was analyzed using description of results. Findings revealed that the bank provides electronic banking services in the form of Automated Teller Machine (ATM) /Debit cards services, SMS (mobile) banking, E-Zwich Card services, Email notification services, Internet banking, Inter Banking Services and Slip free banking services. Among the services provided, an ATM service is the most widely patronized. The study discovered that electronic banking has significantly improved service delivery and majority of customers are satisfied with the significant change. The study also revealed that some benefits of E-banking are reduction in banks cost of operations, increased number of customers, increased banks revenue, public image enhancement, new market opportunities wider market, increased profitability by the bank and increased contribution to Corporate Social Responsibility. The study indicated major challenges facing E-banking as unreliable network, intermittent power supply and cultural reluctance. The intermittent power supply leads to power surges which usually cause the breakdown of ICT equipments resulting in high cost of ICT investment by Barclay's bank. The study therefore recommends that Barclays bank should provide alternative and reliable sources of power particularly solar energy, to ensure reliable connectivity and grants E-banking customers uninterrupted access to E-banking platforms.

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CHAPTER ONE

GENERAL INTRODUCTION

1.1 INTRODUCTION OF THE CHAPTER

Chapter one which is the general introduction gives an overview of the research. It outlines the background of the study topic, the statement of the problem, research objectives and questions, scope, significance of the study, research methodology and limitations faced in conducting this research.

1.2 BACKGROUND OF THE STUDY

Banking evolved from the ledger cards and other manual filing systems to handling daily voluminous task of information processing, storage and retrieval. The rapid developments of Information Technology (IT) in modern industries have culminated banks to rely heavily on conducting banking transactions electronically (Allen & Hamilton 2002). This decision has come to stay particularly at a time when modern businesses are emphasising on cost reduction and growth of businesses because electronic banking has the advantage of increasing productivity, reducing average costs and increasing the accessibility of customers to banking products as well as increasing the number and coverage of customers (Berger, 2003).

This changing environment of banks management has impacted much on the number of services and risks which Ghanaian banks face. According to Bello et al (2005), electronic banking is the dealing with banking transactions by electronic means, which deals with the use of information communication technology to drive banking businesses for immediate and future goals. Daniel

(1999) also described E-banking as the provision of banking services to customers through internet technology.

The revolution in the banking industry in Ghana started with the advent of electronic devices to assist in the discharge of quality services to bank customers. The introduction of these electronic devices has increased competition in the industry which has gone a long way to reduce customers' waiting time for banking transactions. This innovation is brought in by the use of computers and other networking gadgets. In Ghana, the networking started with the LAN (Local Area Network) MAN (Metropolitan Area Network) and subsequently the WAN (Wider Area Network). The Banking Industry is one of the spots of business that has been mostly persuaded by technology (KPMG 1998). Since then, banking procedures have developed from the measly exchange of currencies, cheques and other negotiable instruments to the application of Information and Communications Technology (ICT) to banking transactions. Through technology, banks are now able to offer expedient services to their customers.

1.3 PROBLEM STATEMENT

Ghana's banking industry has experienced incomparable changes, particularly in the mid-1980s and these are evident in product or service delivery, financial liberalisation and business procedure re-engineering. The revolution in the banking industry in Ghana began with the introduction of electronic devices to assist in the discharge of quality services to bank customers. The introduction of electronic devices has increased competition in the industry which has culminated in reducing customers' waiting time for banking transactions as well as improved productivity. Consequently, the usefulness of installing information technology in banks cannot be doubted (Furst, et al, 2000).

According to Lustik, (2004), the reality remains that using IT in banks is dictated by the voluminous information the banks handle on a daily basis. On the customers' part, cash is withdrawn or deposited, cheques are deposited or cleared, statements of accounts are provided, money transfers etc. At the same time, banks need current information on accounts, credit facilities and recovery, interest, deposits, charges, income, profitability indices and other control of financial information.

Generally, the automation of banks makes transaction and data processing very easily accessible for quick management decision making. This led to another level of benefit which ushered in what is today referred to as electronic banking. Electronic banking facilitates banks to speed up their retail and wholesale banking services. The banking industry believes that by adopting the new technology – E-banking, the banks will be able to improve customer service level and tie their customers closer to the Bank (Champy, 2001).

However, researchers have not given much attention to this revolution occasioned by electronic banking with regard to profitability performance of banks. The adoption of electronic banking has compelled Ghanaian banks to invest more in assets to meet up with competitive positioning. Since much earnings have been retained to meet up this obligation, shareholders have been denied dividend with the expectation that future dividends will be fatter. The banking software is regularly improved on short term basis causing huge financial costs to the banks. To the capital providers, they expect that there would be tremendous returns accruing from the project if information driven technology (E-banking) is adopted (KPMG, 2000).

According to Bank of Ghana Annual Report (2013), the annual financial reports of most Ghanaian banks in recent years reveal that dividend returns are dwindling while other performance indicators seem to be fragile contrary to the anticipation of the shareholders or investors. Generally, there seems not to be improvement on banks' returns on equity and assets as speculated. Although there has been vast study on the benefits the banks customers will derive on adoption of electronic banking, there is however less research outputs in the area of returns on assets, returns on equity to investors and satisfaction in customer service delivery. This study therefore investigates the performance of Ghanaian banks in this era of E-banking.

1.4 OBJECTIVES OF THE STUDY

The general purpose of the study is to investigate the impact of E-banking on banks performance in Ghana. The study specifically seeks to:

1. Identify electronic banking services offered by Barclays Bank and their usage by customers
2. Examine the impact of E-banking on service delivery and profitability of Barclays Bank
3. Ascertain customers' level of satisfaction with the introduction and usage of E-banking services provided by Barclays Bank
4. Identify the challenges associated with E-banking services and the measures put in place to circumvent them.

1.5 RESEARCH QUESTIONS

Based on the research objectives, the study will test the following questions:

1. What are the electronic banking services offered by Barclays Bank and their usage by customers?
2. Has the introduction of E-banking significantly affected service delivery and profitability of Barclays Bank?
3. Are customers satisfied with the introduction and usage of Electronic banking services provided by Barclays Bank?
4. What are the challenges associated with electronic banking services of Barclays Bank and how can it be remedied?

1.6 SIGNIFICANCE OF STUDY

The introduction of ICT into the banking industry has affected service delivery. Many banks are shifting gradually from the traditional way of banking and are gradually introducing ICT into their service delivery. The study seeks to examine the impact of electronic banking on banks performance including service delivery to customers and it will be of great significance to all stakeholders in the banking industry particularly banks, the regulatory body and customers. In the first place the study will help banks to identify the perception of customers about electronic banking services they are providing, its usage, challenges and solutions to improve their performance. The satisfaction of the customer is the prime occupation of the bank, thus this study will provide evidence for the improvement of these services. Secondly, the study through the assessment of service quality will provide the needed evidence to the Bank of Ghana, the regulatory body and the Consumer Protection Agency to further strengthen their resolve in ensuring that customers enjoy the best of services. The study seeks to eventually widen the horizon of business executive and employee in the application of electronic banking services in such vital

accounting systems, investment appraisal and a host of others. Finally, the study will add to literature in the area of marketing, customer satisfaction and quality service delivery in the banking industry.

1.7 SCOPE OF THE STUDY

This research concentrates on identifying the impact of E-banking on the performance of Barclays Bank. Barclays Bank was selected because it is the premier bank in Ghana that adopted E-banking. In the study the concept and background to E-banking is been looked at, types of E-banking products, merits and risks associated with E-banking as well as challenges confronting E-banking in Ghana and the way forward by Barclays bank. Due primarily to time constraint, this study is limited to only one bank which is Barclays Bank Ghana Limited but in four (4) branches of Barclays Bank in Kumasi Metropolis, namely Barclays Main Branch, Prempeh II street, Barclays Premier Life Bank at Ahodwo, Barclays Bank Kejetia.

1.8 OVERVIEW OF RESEARCH METHODOLOGY

The research was conducted among Barclays Bank staff at the electronic channels, cards services, marketing and IT departments as well customers of the bank who use one or more of the e-banking services. Data collection instruments used for the study was questionnaires and observation. Questions were close ended and arranged in proper order, in accordance with the relevance. This was done for easy interpretation of data. The questionnaires were designed in a simple manner for easy understanding to elicit the exact and appropriate responses required for the study.

The questionnaires were administered by the researcher to staff and customers of the four (4) branches of Barclays Bank in Kumasi Metropolis, in order to explain to respondents the essence of the research. The researchers used Microsoft Excel 2010 and Statistical Package for Social

Science version 19 for the data analysis. The information gathered were edited, coded, tabulated and then presented in both bar and pie charts for interpretation and analysis.

1.9 ORGANISATION OF THE RESEARCH

Research work is generally goal oriented. This study intends to examine the impact of electronic banking services on banks performance in Ghana. Furthermore, the problems associated with the manual process like delay, inaccuracy, inefficiency which is the bottleneck, the impact of Ebanking will show how it has completely phased stated, the research questions, hypotheses and significance of the study are being stated. Inclusively, the scope and structure of the study and finally, definition of terms and rendered up with references. Chapter two deals basically with the literature review of e- banking services, functions and identify the benefits of E-banking among other things. This chapter also analyses the problems of E-banking and recommendations of the possible E-banking system solutions. Chapter three looks at research methodology. The research design, various methods used in this research to collect data was stated in the chapter. Chapter four discusses data presentations, analysis and interpretations. Finally, chapter five contains the summary of findings, conclusion and suggested recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter presents a review of previous studies related to the present study. The chapter constitutes assessment of E-banking on profitability of banks, service delivery and customer satisfaction and image enhancement in the service industry. It also examines the relationship between service delivery, customer satisfaction, customer retention and profitability of banks. The chapter also outlines the Electronic banking services available in the Barclays Bank of Ghana.

2.2 MEANING OF E-BANKING

According to Boon et al (2003) E-banking is a distance banking that not only handles the flow of information between customers' "living spaces" (e.g. homes, offices, etc) and the physical facilities of the bank, but also deals with solicitation, sales, distribution and access to services, all without requiring the customer and the financial institution representative to be in the same physical place at the same time. According to Bhattacharjee, (2002) electronic banking is the automated delivery of new and traditional banking products and services directly to customers through electronic medium. This system allows customers to access their accounts, transact business, make enquiries and have prompt responses from banks. Daniel and Wilson (2003) described electronic banking as the provision of banking services to customers through Internet technology. Other authors (Bello et al., 2005) indicated that banks have the choice to offer their banking services through various electronic distribution channels technologies such as Internet technology, video banking technology, telephone banking technology, and Wireless Application

Protocol technology (WAP). Karjaluoto et al. (2002) also indicated that Internet technology is the main electronic distribution channel in the banking industry. In more detail the author described E-banking as an online banking that involves the provision of banking services such as accessing accounts, transferring funds between accounts, and offering an online financial service.

2.3 BACKGROUND OF E-BANKING IN GHANA

Most electronic business specialists agree that E-banking ensures 24-hours-a-day, seven-days-a-week accessibility, through any type of advanced information system (Automated Teller Machines, Personal Computers, Internet, mobile phones etc.) and for all types of financial transactions (Bello et al., 2005). In Ghana, the earliest forms of internet, electronic and communications technologies used were mainly office automation devices. Telephones, telex and facsimile were employed to speed up and make more efficient, the process of servicing clients. For decades, they remained the main information and communication technologies used for transacting bank business.

Later in the 1980s, as competition intensified and the Personal Computers got popular, Ghanaian banks began to use them in back-office operations and later tellers used them to service clients. Advancements in computer technology saw the banks networking their branches and operations thereby making the one-branch philosophy a reality. Barclays Bank Ghana Limited and Standard Chartered Bank Ghana Limited pioneered this very important electronic novelty, which changed the banking landscape in the country. Probably, the most revolutionary electronic adoption in Ghana and the world over has been the ATM. In Ghana, banks with ATM offerings have them networked and this has increased their utility to customers. The Trust Bank, Ghana (now a member

of the ECOBANK), in 1995 installed the first ATM. Not long after, most of the major banks began their ATM networks at competitive positions. Ghana Commercial Bank started its ATM offering in 2001 in collaboration with Agricultural Development Bank. Currently, almost all banks in the country operate ATMs. The ATM has been the most successful delivery medium for consumer banking in this country. Customers consider it as important in their choice of banks, and banks that delayed the implementation of their ATM systems, have suffered irreparably (Allen and Hamilton, 2002).

ATMs have been able to embed the one-branch philosophy in this country by being networked, so people do not necessarily have to go to their branch to do banking. Though ATMs have enjoyed great success because of their great utility, it has been recognized that it is possible for banks to improve their competitive stance and profitability by providing their clients with even more convenience. Once again Information Communication Technology (ICT) was what saved the day, making it possible for home and office banking services to become a reality. In Ghana, some banks started to offer Personal Computer PC banking services, mainly to corporate clients. The banks provide the customers with the proprietary software, which they use to access their bank accounts, sometimes the internet via the World Wide Web (www). This is however on a more limited scale though, as it has been targeted largely at corporate clients. Banks have recognised the internet as representing an opportunity to increase profits and their competitiveness. Currently, many banks are offering internet banking (i-banking) in Ghana (Acquah, 2006).

Historically, businesses interested in obtaining high levels of customer satisfaction have focused on using knowledgeable, pleasant servers to deliver high quality products and services to their

target markets. Today's consumer not only demands quality, but also demands that products and services be delivered quickly. Hence, firms must respond to these changes if they wish to remain competitive. As customers experience a greater squeeze on their time, short waits seem longer than ever before. If firms can improve customers' perceptions of time they spend waiting to be served, then customers will experience less frustration and may feel more satisfied with the service encountered. Furthermore, as the service sector of the national economy expands, the structure of the traditional forty hours work week is eroding. Today, weekends are workdays and twenty-four (24) hour service operations are commonplace with the supplement of internet banking on customers (Akoh, 2001).

Over the last decade, the Ghanaian Government has made a serious effort to pursue a 'knowledgebased economy' agenda to make Ghana a preferred ICT destination. The use of the Internet in Ghana has also seen significant increases since the liberalization of the telecommunication industry in 1990s. The country had 18.1 Internet users per 1,000 people in 2005 as compared to 1 Internet user in 1999 (ITU, 2007). The number of PC ownership doubled to 52 owners per 1,000 people between 1999 and 2005. A National ICT for Accelerated Development policy was introduced in 2003 with the objective of engineering an ICT-led socioeconomic development process. The impact of these initiatives is evident in the November 2005 edition of African Business. The article on the Ghana profile page, entitled "Cake is bigger but the slices are smaller", claimed interestingly "Ghana has the most developed IT sector in West Africa". For a country which hitherto could clearly be described as sitting at the disadvantaged end of the global digital divide, it becomes important to ascertain how ICT is affecting the Ghanaian banking

business, which also tends to contribute substantially to Ghana's service sector revenues (ISSER, 2005).

2.4 ADOPTIONS OF ELECTRONIC BANKING IN GHANAIAI BANKING SECTOR

In the Ghanaian banking industry, IT investments and adoption have become a very important component in achieving organizational goals due to competition. In recent past therefore, electronic and communications technologies have been used extensively in banking for many years to advance the agenda of banks. The earliest forms of electronic and communications technologies used by the banks were mainly office automation devices. Telephones, telex and facsimile were employed to speed up and make more efficient, the process of servicing clients (Bawumia, 2007).

However, with coming of new partners in banking industry, as competition intensified and the use of computers got proletarian, Ghanaian banks began to use them in back-office operations and later tellers used them to service clients. The advancements in computer technology have led to application and adoption of new IT investments that have changed the banking landscape in the country. Arguably, the most revolutionary electronic innovation in this country has been the ATM. In Ghana, banks with ATM offerings have them networked and this has increased their utility to customers. Other technological innovations in banking sector include internet banking, telephone banking, Electronic funds transfer, among others (Bank of Ghana Annual Report, 2007).

2.5 FORMS OF E-BANKING SERVICE DELIVERY CHANNELS

The following are the different forms of IT in the banking sector:

2.5.1 Automated Teller Machines (ATMs)

According to Robinson, (2000) “an ATM combines a computer terminal, database system and cash vault in one unit, permitting customers to enter the bank’s book keeping system with a plastic card containing a PIN or by punching a special code number into the computer terminal linked to the bank’s computerized records twenty-four (24) hours a day”. Once access is gained, it offers several retail banking services to customers. They are mostly located outside of banks and are also found at airports, malls, and places far away from the home bank of customers. They were introduced first to function as cash dispensing machines. However, due to advancements in technology, ATMs are able to provide a wide range of services, such as making deposits, funds transfer between two or more accounts and bill payments. Amedu, (2005) stated that, banks tend to utilize this electronic banking device, as all others for competitive advantage. The combined services of both the automated and human tellers imply more productivity for the bank during banking hours. Also, as it saves customers time in service delivery as alternative to queuing in banking halls, customers can invest such time saved into other productive activities. ATMs are a cost-efficient way of yielding higher productivity as they achieve higher productivity per period of time than human tellers (an average of about 6,400 transactions per month for ATMs compared to 4,300 for human tellers. Furthermore, as the ATMs continue when human tellers stop, there is continual productivity for the banks even after banking hours.

2.5.2 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 dialling a touch-tone telephone or mobile communication unit, which is connected to an automated system of the bank by utilizing Automated Voice Response (AVR) technology (Balachandher et al, 2001).

In addition, according to Lee et al (2000), telebanking has numerous benefits for both customers and banks. As far as the customers are concerned, it provides increased convenience, expanded access and significant time saving. On the other hand, from the banks' perspective, the costs of delivering telephone-based services are substantially lower than those of branch based services. It has almost all the impact on productivity of ATMs, except that it lacks the productivity generated from cash dispensing by the ATMs. For, as a delivery conduit that provides retail banking services even after banking hours (24 hours a day) it accrues continual productivity for the bank. It offers retail banking services to customers at their offices/homes as an alternative to going to the bank branch/ATM. This saves customers time, and gives more convenience for higher productivity.

2.5.3 Personal Computer Banking

Personal Computer (PC) Banking is a service which allows the bank's customers to access information about their accounts via a proprietary network, usually with the help of proprietary software installed on their personal computer". Once access is gained, the customer can perform a lot of retail banking functions. The increasing awareness of the importance of computer literacy has resulted in increasing the use of personal computers. This certainly supports the growth of PC

banking which virtually establishes a branch in the customers' home or office, and offers 24-hour service, seven days a week. It also has the benefits of Telephone Banking and ATMs (Abor, 2005).

2.5.4 Internet Banking

The idea of Internet banking according to Essinger (1999) is to give customers access to their bank accounts via a web site and to enable them to enact certain transactions on their account, given compliance with stringent security checks. To the Federal Reserve Board of Chicago's Office of the Controller of the Currency (OCC) Internet Banking Handbook (2001), Internet Banking is described as "the provision of traditional (banking) services over the internet". Internet banking by its nature offers more convenience and flexibility to customers coupled with a virtually absolute control over their banking. Service delivery is informational (informing customers on bank's products, etc) and transactional (conducting retail banking services). As an alternative delivery conduit for retail banking, it has all the impacts on productivity imputed to Telebanking and PCbanking. Besides, it is the most cost-effective technological means of yielding higher productivity. Furthermore, it eliminates the barriers of distance or time and provides continual productivity for the bank to unimaginable distant customers.

2.5.5 Branch Networking

Networking of branches is the automation and inter-connecting of geographically dotted detached bank branches, into one amalgamated system in the form of a Wide Area Network (WAN) or Enterprise Network (EN); for the creating and sharing of consolidated customer information or records Alu, (2000), it offers a quicker rate of inter-branch transactions as the consequence of distance and time are eliminated. Hence, there is more productivity per time period. Also, with the several networked branches serving the customer populace as one system, there is simulated

division of labour among bank branches with its associated positive impact on productivity among the branches. Furthermore, as it curtails customer travel distance to bank branches it offers more time for customers' productive activities.

2.6 BENEFITS OF ELECTRONIC BANKING

The technological innovation has brought about several gains to the banking industry. Some of these can be identified as convenience to banking, enhanced customer access and awareness, speedy or faster process and transmission of information, reduction of fraud levels and improved risk management. Other benefits are global compliance that is, adopting trends to provide seamless and standardized services worldwide and easier marketing of banking services among others (Alu, 2000).

However in a study by Croft et al. (2002), it was found that the most important factors encouraging consumers to use online banking are lower fees followed by reducing paper work and human error, which subsequently minimize disputes. Byers and Lederer, (2001) concluded that it was changing consumer attitudes rather than bank cost structures that determines the changes in distribution channels; they added that virtual banks can only be profitable when the segment that prefers electronic media is approximately twice the size of the segment preferring street banks.

Convenience of conducting banking outside the branch official opening hours has been found significant in cases of adoption of E-banking. Banks provide customers convenient, inexpensive access to the bank 24 hours a day and seven days a week. Eisenhardt and Martin (2000) pointed out that each ATM could carry out the same, essentially routine, transactions as do human tellers

in branch offices, but at half the cost and with a four-to-one advantage in productivity. Given that the ICT is now creeping into the banking industry in Ghana, its functions could not be completely regarded as substitute for tellers in the banking hall. There are a number of times where the ATMs fail to function thus making the customer unable to access the service. Gerrard and Cunningham (2003) found a positive correlation between convenience and online banking and remarked that a primary benefit for the bank is cost saving and for the consumers a primary benefits is convenience. Multi-functionality of an IT based services may be another feature that satisfies customer needs.

A reduction in the percentage of customers visiting banks with an increase in alternative channels of distribution will also minimize the queues in the branches. Increased availability and accessibility of more self-service distribution channels help bank administration in reducing the expensive branch network and its associate staff overheads; bank employees and office space that are released in this way may be used for some other profitable ventures. This ultimately leads towards improved customer satisfaction and the institution's bottom line (Thornton & White, 2001).

Internet banking also increases competition within the banking system and also from non-bank financial institution (ECB, 1999). The Internet increases the power of the customer to make price comparisons across suppliers quickly and easily. As a consequence, this pushes prices and margins downward. Institutional encouragement of the use of IT-based services and IT service fees are another important dimension (Zhu at al., 2002). Cantrell (2001) conducted E-banking survey in the US and found that increases in service fees were one of the main driving forces behind the move of some large bank customers to smaller community banks.

It was pointed out by Yakhlef (2001) that banks are responding to the Internet differently, and that those which see the Internet as a complement and substitute to traditional channels achieved better communication and interactivity with customers. Robinson (2000) argued that the online banking extends the relationship with the customers through providing financial services right into the home or office of customers. The banks may also enjoy the benefits in terms of increased customers loyalty and satisfaction (Williams, 2000).

In addition, Nancy et al. (2001) viewed the same situation differently and argued that customers like to interact with humans rather than machines. They found more possibilities for asking questions and believe that bank clerks are less prone to errors. It is thus essential that any face-to-face transactions are carried out efficiently and courteously. This increases the possibility of selling the customer another service that they need and also promotes a good image and enhances customer loyalty. The findings obtained by Nancy et al. (2001) suggest that, attitude is an important variable which influence the usage of E-banking services such as telephone banking and ATM services. Therefore, customers who have negative attitude towards E-banking services especially individuals who cannot read and write, are less likely to use such services than those with positive attitude. Polatoglu and Ekin (2001) found that low levels of email usage and a preference for doing over-the-counter transactions at bank branches are the main reasons for not using E-banking in Turkey. The opportunity to conduct a trial may help to convince reluctant customers.

Ultimately, Boon and Ming (2003) concluded that banks in Malaysia should concentrate on enhancing their operation and product management through a mixture of branch banking and echannels, like ATMs, phone banking and PC banking.

2.7 RISKS ASSOCIATED WITH ELECTRONIC BANKING

Electronic banking offers a myriad of prospects for the banks but it is often argued that modern banking services offered through Internet are restricted due to security concerns, complexity and technological problems (Shih and Fang, 2004). Singh and Malhotra, (2004) used the terminology “trust” to illustrate a measure of risk. Suganthi et al., (2001) viewed risk in the context of security concerns and risk in the context of trust in one’s bank. Finally, a number of studies found that trust and perceived risks have a significant positive influence on commitment (Bhattacharjee, 2002; Mukherjee & Nath, 2003) and ultimately leads towards overall satisfaction (Rexha et al., 2003). Reputation of a service provider is another important factor affecting trust. Similarly, Wan et al, (2005) described reputation as the degree to which customers deem a broker or service provider as honest and concerned about its customers. Spiros and Sergios (2003) reiterated that banks can build close and long lasting relationships with customers only if trust, commitment, honesty and cooperation is developed between them.

A study conducted by Nancy et al. (2001) found that customers complain about computer login times which are usually longer than making a telephone call. In addition, respondents felt that they have to check and recheck the forms filled in online, as they are worried about making mistakes. Frequent slow response time and delay of service delivery cause customers to be unsure that the transaction has been completed (Jun & Cai, 2001). Vijayan, and Shanmugan (2003) identified the disruption of information access to be a common factor related to unwillingness to use Internet channels for commerce.

Secondly, Liao and Cheung (2002) found that individual expectations regarding accuracy, security, transaction speed, user friendliness, user involvement and convenience are the most important

attributes in the perceived usefulness of Internet-based e-retail banking. Confidentiality of consumer data is another important concern in the adoption of online banking (Gerrard& Cunningham, 2003). Customers fear that someone will have unlimited access to their personal financial information.

Additionally, White and Nteli (2004) conducted a study that focused on why the increase in Internet users in the UK had not been paralleled by increases in Internet usage for banking purposes. Their results showed that customers still have concerns with the security and the safety aspects of the Internet. Lack of specific laws to govern Internet banking is another important concern for both the bankers and the customers. This relates to issues such as unfair and deceptive trade practice by the supplier and unauthorized access by hackers.

Furthermore, Larpsiri et al., (2002) argued that it is not clear whether electronic documents and records are acceptable as sufficient evidence of transactions. They also pointed out that the jurisdiction of the courts and dispute resolution procedures in the case of using the Internet for commercial purposes are important concerns. Disputes can arise from many sources. For instance, websites are not a branch of the bank. It is difficult for the court to define the location of the branch and decide whether they have jurisdiction (Rotchanakitumnuai & Speece, 2003). Other risks associated with electronic banking are job losses, lack of opportunities to socialize and the development of a lazy society (Black at al., 2001).

2.8 THE IMPACT OF E-BANKING ON SERVICE DELIVERY OF BANKS

In Ghana, long queues which used to be the norm in Bank branches appear to have reduced drastically due to E-banking. The advancement in Technology has played an important role in

improving service delivery standards in the Banking industry. In its simplest form, Automated Teller Machines (ATMs) and deposit machines now allow consumers carry out banking transactions beyond banking hours. With online banking, individuals can check their account balances and make payments without having to go to the banking hall. This is gradually creating a cashless society where consumers no longer have to pay for all their purchases with hard cash. For example: bank customers can pay for airline tickets and subscribe to initial public offerings by transferring the money directly from their accounts, or pay for various goods and services by electronic transfers of credit to the sellers account. As most people now own mobile phones, banks have also introduced mobile banking to cater for customers who are always on the move. Mobile banking allows individuals to check their account balances and make fund transfers using their mobile phones (Amedu, 2005).

2.9 THE IMPACT OF E-BANKING ON CUSTOMER SATISFACTION

Customer expectation, in terms of service delivery and other key factors have increased dramatically in recent years, as a result of the promise and delivery of the internet. The growth in the application and acceptance of internet-driven technologies means that delivering an enhanced service is more achievable than ever before. However it is also more complex and fraught with potential costs and risk. The internet introduces customers to a new perception of business time as always “on available 24/7, and demanding an urgent and rapid response. The challenge for managers is to reconcile their business and their own personal perceptions of time with the perceived reality of internet time. The internet has decisively shifted the balance of power to the customer (Sergeant, 2000).

Secondly, Jun (2001) posits that E-banking as a new service delivery channel has provided banks with a clear cut solution to the inherent disadvantages of traditional bank service delivery practices. Specifically, large volumes of transactions are successfully carried out because of E-banking in contemporary times. Further, Daniel and Wilson (2003) intimated that the internet may be exploited as a new delivery channel by the financial services industry to completely reorganize the structure of banks.

Similarly, Agboola (2006) investigated electronic payment systems and tele-banking services in Nigeria. The findings revealed that there has been a very modest move away from cash. Payments are now being automated and absolute volumes of cash transactions have declined. The result of the study revealed that tele-banking is capable of broadening the customer relationship, retain customer's loyalty and enable banks to gain commanding height of market share if their attendant problems such as, ineffectiveness of telecommunications services, epileptic supply of power, high cost, fear of fraudulent practices and lack of facilities necessary for their operation were taken care of. This translates to the fact; tele-banking has change service delivery patterns of banks positively as direct cash transactions have reduced significantly as a result. In the study, many online customers still chose pure internet-based suppliers with basic customer services yet demanded various services available through conventional channels. Various researches have been carried out in order to identify conventional service quality dimensions that may significantly impact upon quality assessments (Pyun et al 2002).

Additionally Pyun et al (2002), indicates that internet banking provides alternatives for faster delivery of banking services to a wider range of customers. The increasing popularity of internet

banking has attracted the attention of both legitimate and illegitimate online banking practices. Criminals focus on stealing user's online banking credentials because the username and password combination is relatively easy to acquire and then relatively easy to use to fraudulently access an internet banking account and commit financial fraud. To alert users, many banking sites are now including Security Indicators (SI) to their sites.

Furthermore, Nteli, et al (2004), conducted an experiment to investigate how users' perception about online banking is affected by the perceived ease of use of website and the privacy policy provided by the online banking website. In this study, it also investigated the relative importance of perceived ease of use, privacy, and security. Perceived ease of use is of less importance than privacy and security. Security is the most important factor influencing user's adoption. Moreover, Oumlil and Williams (2000) also argued that many banks in Bangladesh wanted to invest in ATMs to reduce branch cost since customers prefer to use them instead of a branch to transact business. The financial impact of ATMs is a marginal increase in fee income substantially offset by the cost of significant increases in the number of customer transactions. The value proposition however, is a significant increase in the intangible item „customer satisfaction“. The increase translates into improved customer loyalties that result in higher customer retention and growing organization value. Internet banking is a lower-cost delivery channel and a way to increase sales. Internet banking services has led to the increased retention of highly valued customer segments.

Despite the positive effects of E-banking on service delivery and banking services in general, some major setbacks have been noted by researchers. For instance, Chiemeke et al. (2006) conducted an empirical investigation on adoption of E-banking in Nigeria. It was observed that, negative effects

following adoption of internet banking, a component of E-banking are insecurity, inadequate operational facilities including telecommunications facilities and electricity supply, and made recommendations on how Nigeria banks can narrow the digital divide. Also, the report revealed that Internet banking is being offered at the basic level of interactivity with most of the banks having mainly information sites and providing little Internet transactional services.

Within the arena of marketing research, a plethora of literature on customer satisfaction exists. Customer satisfaction is referred to as an evaluative judgment a customer makes before making a choice on purchase decision. Following from the above definition, customer satisfaction is perceived to be an attitude customer form by making comparison in their pre-purchase expectation to their subjective perceptions of actual performance (Maholtra, & Singh, 2007). Central to the satisfaction literature is the theory of disconfirmation which has been used extensively in marketing research to explain the subject matter of satisfaction. The theory posits that, satisfaction is established when the customer evaluates the gap between suppose performance and his/her cognitive standards such as wishes and expectation of the product or service delivered (McKinney et al., 2002; Liu & Khalifa, 2003).

According to Robinson (2000), online banking ensures customer satisfaction as it extends financial services to customers outside the banking hall. Similarly, E-banking has provided banks with a large customer base as it has resulted in increased customer loyalty and satisfaction (Oumlil & Williams, 2000).

Iranian based study investigated the impact of E-banking. Chi-square analysis from the customer's perspective showed that, E-banking contributed positively to Iranians. Further, the result revealed that, Iran banks provided services that the customers are deriving satisfaction from with particular reference to E-banking (Mahdi & Mehrdad, 2010).

2.10 THE IMPACT OF E-BANKING ON PROFITABILITY OF BANKS

The benefit which is driving most of the banks towards E-banking is the reduction of overall costs in two ways: cost of processing transactions is minimised and the numbers of branches that are required to serve an equivalent number of customers are reduced (Saatcioglu et al, 2001). Ebanking creates unprecedented opportunities for the banks in the ways they organise financial product development, delivery, and marketing via the Internet. While it offers new opportunities to banks, it also poses many challenges such as the innovation of IT applications, the blurring of market boundaries, the breaching of industrial barriers, the entrance of new competitors, and the emergence of new business models (Saatcioglu et al. 2001, Liao and Cheung 2003).

Now, the speed and scale of the challenge are rapidly increasing with the pervasiveness of the internet and the extension of information economy (Holland and Westwood 2001). Khrawish and Al-sa'di (2011) made an attempt to assess the impact of E-banking on banks profitability for the banking sector in Jordan during the period (2000-2009). Their study found that for banks that do not apply the E-banking services through the internet, have no significant effect on the Return on Equity (ROE) and the margin of the sample, but significant in terms of Return on Assets (ROA). For banks that apply the electronic banking services for less than (2) years, there is no significant effect of these services on the return on assets and the return on equity but was founded to be significant on margin. For banks that apply the electronic banking services, there is no significant

effect of these services on banks profitability after 2 years of applying it for the tested sample during the period 2000-2009.

2.11 E-BAKING IN BARCLAYS BANK GHANA

E-banking has been defined differently by researchers partly because E-banking services vary (Santos, 2003). For instance, Khrawish and Al-sa'di (2011) indicated that E-banking involves an electronic correlation between bank and customer in order to prepare, manage and control financial transactions of the customer by the bank. This type of banking has been found to be driven through the following channels:

- Internet banking (or online banking),
- E-statement banking
- Pingit
- Cash send
- Cash deposit
- Mobile phone banking (or offline banking).

Applications of ICT within the banking sector are the development of products and service such as: networked branches, ATM's, internet banking, SMS and Telephone Banking, Electronic Bill Payment among others. The Barclays Bank has under their electronic banking models the following: Internet banking, Mobile banking and Cards and ATM's (Master Card, E-Switch and Ready Cash). These developments have enabled the bank to provide more diversified, secured and convenient financial services.

1. Barclays Bank Internet Banking

It allows customers to make financial transactions on the internet using one of the most secured systems which guarantees the safety of your funds and transaction details. It is a straightforward online tool that gives you access to your Barclays Bank accounts.

2. Barclays Bank Mobile Banking

This is an innovative service that allows the customer to perform banking transactions via the mobile phone. The service offers the customer the opportunities such as: transaction alert (informing customers of account activity), account enquires, mini statement, requesting for cheque books or savings withdrawal books, account to account transfer and even top – ups of mobile phone credits.

The Barclays Bank Mobile Banking is secured. The bank has ensured that adequate security through the issuing of Personal Identification Number (PIN) which the customer is admonished not to share with a third party.

3. Barclays Bank Ready cash Send

The Barclays Bank ready cash card like the others allows the customer to withdraw cash from their accounts anytime and anywhere that the service is available. The customer can conveniently transact banking business around the clock. Service such as: cash withdrawal, checking account balance, printing of last five transactions, statement request is some of the services under this service.

4. Barclays Bank E-statements

Receive your account statement via your email inbox. All you need to do is to register your email address at any Barclay's branch countrywide. Your statement will be delivered to you in a secure manner.

5. Barclays Pingit

Barclays Pingit lets you send money instantly using a mobile number. You don't need to bank with Barclays to use it and there is no need to set up recipients as a payee. Barclays Mobile Banking users don't need to register. Just download and confirm your details to start using it.

6. Barclays Bank Cash Deposit

Is a new and convenient way of making deposit through any Barclays ATM any time of the day at your own convenience?

2.12 IMPACT OF E-BAKING ON PERFORMANCE OF BARCLAYS BANK GHANA

The impact of Electronic Banking on Barclays bank performance, electronic banking services have provided numerous benefits for our banks and customers. The first benefit for Barclay's banks offering electronic banking service is better branding and better response to the market. Barclays Banks perceived leaders in technology implementation. As a result, Barclay's Banks enjoy a better brand image. The main goal of Barclays is to maximise profits for its owner and other stakeholders. According to Allen and Hamilton (2002), an estimated cost of providing the routine business of a full service branch in USA is \$1.07 per transaction, as compared to 54 cents for telephone banking,

27 cents for ATM banking and 1.5 cent for internet banking. On the other hand, the advantages for the customers are significant time saving and reduced costs in accessing and using the various banking products and service, increased comfort and convenience (Pyun, Scruggs and Nam, 2002).

Internet Banking provides clear advantages to both the financial institutions and the customers. From the bank perspective, Internet Banking has very low cost transactions, compared to human teller banking. Barclays Bank E-banking reduces the following expenses (Wright & Ralson, 2002):

- i. There is less cheque processing costs due to an increase in electronic payments.
- ii. Costs of paper and mail distribution are reduced as bank statements and disclosures are presented online.
- iii. There is less data entry as applications are completed and processed online by customers.

On the other hand, according to KPMG (1998), bank's revenue increases from Internet Banking due to:

- a. Increased account sales;
- b. Wider market reach;
- c. New fee-based income;
- d. New market opportunities;
- e. Improved customer satisfaction.

For consumers, Internet banking provides convenience, lower service charges, more accessible information about bank accounts, and an attractive option for busy people since it saves time to go to the bank branches and gives 24 hours access (Lee & Lee, 2000). All the benefits of B2C

ecommerce such as 24/7 bank service, convenience, access from anywhere, one stop shop and easy access to information also apply to internet banking Singh (2004).

The benefits of E-banking are manifold and are to be seen from the point of view of the banks themselves, customers and even the regulators Sergeant (2000). Sergeant is of the view that for banks, E-banking brings different and arguably lower barriers to entry; opportunities for significant cost reduction; the capacity to rapidly reengineer business processes; and greater opportunities to sell cross border.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter outlines the methodology used in gathering the relevant data for the research. The chapter involves a detailed discussion of the data sources, population, sampling technique, sample size, research instruments and data analysis. The chapter also looks at how data is analysed, the research instruments used, their validity and reliability and the profile of the study area.

3.2 RESEARCH PARADIGM

Research Paradigm According to Taylor, Kermode, and Roberts (2007, p. 5), a paradigm is “a broad view or perspective of something”. Additionally, Weaver and Olson’s (2006) definition of paradigm reveals how research could be affected and guided by a certain paradigm by stating, “paradigms are patterns of beliefs and practices that regulate inquiry within a discipline by providing lenses, frames and processes through which investigation is accomplished”. Therefore, to clarify the researcher’s structure of inquiry and methodological choices, an exploration of the paradigm adopted for this study will be discussed prior to any discussion about the specific methodologies utilized in this study.

Social science research falls within two broad views, the positivist and the naturalistic paradigms. These two views have contrasting assumptions about reality of the world. The positivist philosophy argues that there is one objective reality. Therefore, as a consequence, valid research is demonstrated only by the degree of proof that can be corresponded to the phenomena that study results stand for (Hope and Waterman, 2003). The qualitative methodology shares its

philosophical foundation with the interpretive paradigm which supports the view that there are many truths and multiple realities (Neumann 2006).

The two main types of research methods are quantitative and qualitative. Quantitative research side with the positivist paradigm, whereas qualitative research most closely aligns itself with the naturalistic paradigm. Quantitative research is a formal, objective, deductive approach to problem solving. In contrast, qualitative research is a more informal, subjective, inductive approach to problem solving. qualitative researches are “more concerned about revealing knowledge about how people feel and think in the circumstances in which they find themselves, than making judgements about whether those thoughts and feelings are valid” (Cole, 2006).

The study relied on qualitative approaches to research. Qualitative research approach was chosen to gain understanding of impact of electronic banking on banks performance and to expose prevalent trends and opinions on electronic banking decision making. It was also chosen to develop an initial understanding and sound base for improving performance of the banking industry.

3.3PURPOSE OF THE RESEARCH

According to Stebbins, (2001) there are two major research purposes namely Exploratory and Explanatory. Exploratory research is a procedural approach that is mainly concerned with unearthing or building a theory in presenting social inquiry. Explanatory research is done when there is already a hypothesis as to why something is happening. Questions and tests are designed to support that hypotheses, and prove if it is correct or not. It is usually performed in relation to marketing or when studying a social phenomenon. As the term would imply, the purpose of explanatory research is to explain or answer the question of why something occurs. It also goes

further than exploratory research in that its goal is to find the reasons behind a theory or phenomenon (Zikimund et al 2000). Explanatory research was used for this study.

The purpose of this research is exploratory. In exploratory research, the researcher examines a new area to devise accurate questions that can be addressed in future research (Saunders et al, 2003). Exploratory research was chosen because the researcher has to embark on an enquiry as to what, why, how and when change is occurring in Barclays Bank Ghana Limited, with the introduction of electronic banking. Based on the principles of exploratory research, the researcher explored available literature on electronic banking and its impact as detailed in chapter two and captioned literature review, talked to experts in the banking industry and conducted interviews with responses as detailed in chapter four under analyses.

The study also relied on descriptive research because it focuses on vital facts about people and their opinions and provides information on which to base sound decisions on the impact of electronic banking in Ghana. Descriptive surveys interpret, synthesise and point to integrations and interrelationships among the various factors under study. However, it is limited in its generalisation of findings to the general populace compared to other methods. Descriptive research also presents a pictorial view of the specific details of a situation, social setting or relationship, it focuses on “how?” and “who?” questions: “How did it happen?” “Who are involved?” descriptive researchers use most data gathering techniques including surveys, field research, content analysis and historical-comparative research (Neuman, 2006).

Consequently, the methodology used for this research is both exploratory and descriptive since the research area is comparatively new to this environment and information is inadequate with respect to literature review on electronic banking in Ghana.

3.4 SAMPLING PROCEDURES

This section discusses the population and sample techniques for the study.

3.4.1 The Population and sample

According to Burns and Grove, (2000), the population of a study is the aggregation of all elements including individuals, objects and events that meet the criteria for inclusion in the research. The study population comprises customers of Barclays Bank. The Ahodwo and Asafo, branches were chosen because of proximity and convenience in terms of data accessibility to the researcher. The branches have more than 2000 customers who operate the traditional accounts such as Current Account, Savings Account, Corporate Accounts and customised accounts such as Kid star Account, ATM services, SMS (Mobile) Banking, E-Zwich card among others.

3.4.2 Sampling technique

Sampling is the process of selecting a subset of the entire population chosen for the purpose of study (Malhotra, 2006). The rationale is to make generalisations or draw inferences based on the study of samples about the parameters of the population from which the samples are taken (Yin, 2003). There are two major sampling techniques in research namely probability and nonprobability sampling. A probability sampling is any method of sampling that utilizes some form of random selection. In order to have a random selection method, you must set up some process or procedure that assures that the different units in your population have equal probabilities of being chosen. Probability samples are selected in such a way as to be representative of the population. They provide the most valid or credible results because they reflect the characteristics of the population

from which they are selected (e.g., residents of a particular community, students at an elementary school, etc.) (Neuman, 2006).

In view of the peculiar nature of the research topic, purposive and simple random sampling techniques were employed in selecting the sample. A purposive sampling, also commonly called a judgmental sampling, is a form of non-probability sampling in which decisions concerning the individuals to be included in the sample are taken by the researcher, based upon a variety of criteria which may include specialist knowledge of the research issue, or capacity and willingness to participate in the research (Yin, 2002).

On the account of the purposive sampling, the researcher had specific groups within which to select the sample; managers, departmental heads and e-bank customers. That led to the selection of all the managers and departmental heads within the study areas as well as customers who have patronised E-banking products for a minimum of one (1) year. In addition, simple random sampling techniques were employed to ensure that the various characteristics of the study (all staff and customers of Barclays Bank Ghana) are well represented in the study.

A total of one hundred and ninety-six (196) respondents were selected consisting of thirty (30) purposively selected employees of Barclays Bank Staff comprising departmental and unit heads and Tellers. A total of one hundred and sixty-six (166) customers of Barclays Bank of the study areas were randomly selected to participate in the study. These customers were selected using accidental sampling technique, a non-probability sampling method. This strategy was chosen

because sampling participants using the list of customers of the bank was a challenge. The accidental sampling (sometimes known as convenience sampling) used is a type of nonprobability sampling which involves the samples being drawn from that part of the population which is close to hand. That is, a participant is selected because it is readily available and was convenient to be selected. It may be through meeting the person or including a person in the sample when one meets him / her. In this study, the participants were approached as they enter the banking hall for E-banking business and they agreed to participate in answering the questions on the questionnaire.

3.5 DATA COLLECTION METHODS

This section looks at various methods used in collecting data for this study.

3.5.1 Sources of data

There are two sources of data collection techniques. Primary and Secondary data collection techniques, Primary data collection uses surveys, experiments or direct observations. Secondary data collection may be conducted by collecting information from a diverse source of documents or electronically stored information, census and market studies are examples of a common sources of secondary data (Neuman, 2006).

Data for this study was obtained from both primary and secondary sources. The primary source was obtained from the interviews, questionnaires and observations. The questionnaires were duly structured in relation to the research objectives to elicit responses from the respondent to subsequently achieve the research aim. Interview guide were also used to control the information

revealed after the administration of the questionnaires. The secondary source of data was obtained from books, journals, reports and the internet as indicated in the references. It can be observed that, all the material sources for the secondary data are generally recommended by many researchers across the world as reliable and efficient tools for obtaining information for writing of dissertation.

3.5.2 Data collection Tools

The study adopted questionnaires administration and interview guide in the collection of data from the sample population. A questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents (Yin, 2002). Although they are often designed for statistical analysis of the responses, this is not always the case. The reason was to create convenience and privacy for the respondents; ensuring quick coverage of large respondents and above all provides greatest anonymity in order to reduce the chance of any prejudice.

Despite the fact that several authors including (Saunders et al, 2003) have raised concerns about the accuracy and validity of using questionnaire approach in data collection, many studies such as this have produce accurate and valid results through the administration of the questionnaire by respondents. They continue to argue that some reliable information may not be received from respondents since they might not express their true opinion on the subject matter. However, the researcher has an assertion that interview guide and checklist may be used to check and control the validity and accuracy of the information received from respondents.

For the purpose of this study interviews were conducted on one on one basis with banking staff.

An interview is a face-to-face conversation in which one person (the interviewer) elicits information from another person (the subject or interviewee) (Yin, 2002). This helped to ascertain some vital information which was not touched in the questionnaires. The responses from the interview conducted were generally accepted and enhanced the validity of data for the research.

3.6 DATA ANALYSIS

Data analysis is explained as the computation of certain measures along with searching for patterns of relationships that exist among data groups. It is closely related to activities performed with the intention of summarizing the data collected and organizing them in a way that they answer research questions (Kama 1996). All responses gathered from the study were first examined to secure accuracy and consistency. The main trends of the responses were recorded. This was followed by tabulation, coding and processing. Statistical tools such as percentages and tables were used to analyze data.

Quantitative and qualitative methods of analyzing statistical data were employed in the data analysis. The data analysis was done in relation to the research problem and the objectives. The researcher used the Statistical Package for Social Sciences (SPSS) to summarize the quantitative data whereas Microsoft Excel was used to analyse qualitative data and create appropriate tables, charts and graphs to examine the relationships among the variables.

3.7 QUALITY OF THE RESEARCH

The quality of the research was justified by the depth and accuracy of information used in conducting the study. As a result, the questionnaires and interview schedules were pretested on

selected persons outside those to be sampled for the study. This was done to confirm the appropriateness of the test items. This provided an opportunity for the necessary corrections to be made on questions that were not clear and ambiguous, and also added items that were not captured in the first instance (Yin, 2002).

3.8 RESEARCH ETHICS AND LIMITATIONS

According to (Cohen et al. 2007), research participants experience inconvenience in terms of time taken to complete the instrument, the level of threat or sensitivity of the questions, or the possible invasion of privacy and confidentiality. With regards to this study, no significant ethical challenges were confronted. However, customers were sceptical to release information about their banking products and this was validated by the information from departmental heads.

Critical notice was taken of the relevant electronic banks facilities and where they were omitted but deemed necessary. This was done to facilitate and enhance the data collection process. Pictures that deem necessary to help the course of the study were taken. This enhanced the process of illustrations and explanations.

3.9 THE STUDY AREA - BARCLAYS BANK GHANA LIMITED

The research focused on Barclays Bank Ghana Limited, established some decades ago has remained one of the greatest pillars in the banking sector of Ghana. The bank has a large customer base and branches in the country. The services of the bank continue to be felt in every community in the country.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 INTRODUCTION

The study examined the impact of electronic banking on banks performance of Barclays Bank. In accordance with the general purpose, the study sought to find out E-banking services offered by Barclays Bank and their usage, examined the effect of E-banking on service delivery; ascertained whether customers were satisfied with service delivery following introduction of E-banking services; determined how E-banking has changed customers perception about the bank, and finally, explore the benefits of E-banking services. This chapter comprises the analyses from staff and customers responses, results of all that have been discovered from the study and the discussions that follow.

4.2 DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

The demographic characteristics of respondents used in the study are presented below;

4.2.1 Sex of respondents

Table 4.1 A table indicating sex of respondents

Sex	Number of customers responses	Per cent (%)	Number of staff responses	Per cent (%)
Males	87	52.4	18	60

Females	79	47.6	12	40
Total	166	100.0	30	100.0

Source: Author's Field Study, August 2015.

The analysis revealed that most of the customer's respondents were men. The data indicated that eighty-seven (87) responses representing 52.4 per cent were males while a total of seventy-nine (79) responses representing 47.6 per cent were females as shown in Table 5.1. This implies that the banks customers had more males than females. The study also revealed that majority of staff interviewed were males. The data indicated that eighteen (18) responses representing 60 per cent were males while a total of twelve (12) responses representing 40 per cent were females as shown in Table 4.1

4.2.2 Age of Respondents

The next demographic variable of the respondents examined was their age. The results showed that, majority of customers respondents were in the age bracket of 26–33 years by one hundred and twelve respondents (112) representing 67.5 percent. This was followed by 34 – 41 year group by forty-four (44) respondents representing 26.5 per cent, and (8) respondents representing 4.8 per cent were between the ages of 18- 26 years. Interestingly, customers aged 42 years plus were only two (2) representing 1.2 per cent of the respondents. This could be as a result of the banks inability to communicate effectively to the understanding of customers aged forty-two (42) years and above. This implies that, majority of Barclays Bank customers who patronise electronic banking services are aged between 26 to 33 years. This is shown in Table 4.2.

Table 4.2: A Table indicating Age of Respondents

Age	Customers Responses	Staff Responses
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	Number of responses	Per cent (%)	Number of responses	Per cent (%)
18 – 25 years	44	26.5	1	3.3
26 – 33 years	112	67.5	7	22.5
34 – 41 years	8	4.8	20	68
42 years plus	2	1.2	2	6.6
Total	166	100.0	30	100.0

Source: Author's Field Study, August 2015

The analyses also showed that, majority twenty (20) of staff interviewed were in the age bracket of 34 - 41 years representing 68 percent. This was followed by 26 – 33 years group with seven (7) respondents representing 22.5 per cent, two (2) respondents representing 6.6 per above 42 plus years and one (1) respondent representing 3.3 per cent was between the age of 18- 26 years as shown in table 4.2. It can be said from table that the bank has a more youthful and energetic staff between thirty-four (34) to forty-one (41) years which is very good for the banks sustainability if they are retained.

4.2.3 Educational level of respondents

With the educational level of customers respondents analysis showed that, there were one hundred and thirty-two (132) respondents who were Diploma /HND/DBS graduates representing 79.5 per cent while eighteen (18) respondents representing 10.8 per cent were First Degree holders. In addition, nine (9) respondents representing 5.4 per cent were Senior High graduates, (3) respondents representing 1.8 per cent were Master's Degree Holders and four (4) responses

representing 2.4 percent had apprenticeship vocation background. The analysis indicated that, majority of Barclays Banks customers who patronise electronic banking services are either Diploma, Higher National Diploma graduates whilst the least patronised customers are graduates with Master's Degree. This implies that the sensitisation of electronic banking has not gone down well with Master's degree graduates for them to patronise it.

Table 4.3: A table indicating educational level of respondents

Educational Level	Customers Responses		Staff Responses	
	Number of responses	Per cent (%)	Number of responses	Per cent (%)
Senior High School	9	5.4	0	0
Diploma/HND/DBS	132	79.5	2	6.6
Degree	18	10.8	25	83.4
Master's Degree	3	1.8	3	10
Others	4	2.4	0	0
Total	166	100.0	30	100.0

Source: Author's Field Study, August 2015

The educational level of staff showed that, there were two (2) respondents who were Diploma /HND/DBS graduates representing 6.6 per cent while twenty-five (25) respondents representing 83.4 per cent were First Degree holders and three (3) respondents representing 10 per cent were Master's Degree Holders. This is very good to enhance the image of the bank for competitive advantage in the banking industry.

4.2.4 Respondents' duration of relationship with Barclays Bank

The last sample characteristic examined was the number of years that the respondents have been with the bank as customers and staff. The results showed that, one hundred and fifteen (115) respondents representing 69.3 per cent have been customers of the bank for the period between four (4) and seven (7) years while a total of thirty-seven (37) respondents representing 22.3 per cent have been with the bank for the period ranging from six (6) months to ten (10) years. It was also found that, 14 respondents representing 8.4 per cent have been customers of the bank for the past eight (8) years and beyond as shown in table 4.4.

Table 4.4: A table indicating respondents' duration of relationship with Barclays Bank

Duration of relationship	Customers responses		Staff responses	
	Number of responses	Per cent (%)	Number of responses	Per cent (%)
0 - 3years	37	22.3	4	13.3
4 - 7years	115	69.3	2	6.7
8 years plus	14	8.4	24	80
Total	166	100.0	30	100.0

Source: Author's Field Study, August 2015

In addition, the number of years that staff have been working with the bank was examined in order to identify if staff interviewed had in-depth information and knowledge about the study. The results indicated that, only four (4) respondents representing 13.3 per cent have been staff for the period between six (6) months and (3) three years while a total of twenty-four (24) respondents

representing 80 per cent have been with the bank for the period of eight (8) years and above and only two (2) respondents representing 6.7 per cent.

4.3 ANALYSIS AND DISCUSSIONS OF RESPONSES

This section deals with the analyses and discussions of survey results based on customers and staff responses. In this section, research objectives are stated and the responses from the study are analysed.

4.3.1 Barclays bank and adoption of E-banking

The researcher explored from staff about how long E-banking has been adopted and implemented by Barclays Bank. It was realised by twenty-three (23) respondents representing 77 per cent that E-banking was adopted fully about five (5) years ago whilst 7 respondents representing 33 per cent stated it was adopted about four (4) years ago.

4.3.2 Electronic banking services offered by Barclays Bank

The researcher in this section assessed the types of electronic banking services provided by Barclays Bank and how they are patronised by customers. Regarding the usage of these services, the results revealed that the bank provides electronic banking services in the form of Automated Teller Machine (ATM) /Debit cards services, SMS (mobile) banking, E-Zwich Card services, Email notification services, Internet banking, Inter Banking Services and Slip free banking services as indicated in table 4.5.

Table 4.5: A table indicating electronic banking services provided by Barclays Bank

Type of E-banking services	Number of customer responses	Per cent (%)
ATM Services		
Yes	146	86
No	20	14
TOTAL	166	100
Internet Banking		
Yes	143	84
No	23	16
TOTAL	166	100
E-zwich Card		
Yes	37	22
No	129	78
TOTAL	166	100
SMS banking		
Yes	100	60
No	66	40
TOTAL	166	100
Email notification services		
Yes	116	70
No	50	30
TOTAL	166	100
Inter Banking Services		
Yes	78	47
No	88	53
TOTAL	166	166
Slip Free Services		
Yes	53	32
No	113	68
TOTAL	166	100

Source: Author's Field Study, August 2015

The survey revealed that out of one hundred and sixty-six (166) respondents interviewed, one hundred and forty-six (146) respondents, representing 86 per cent use the ATM services while twenty-six (20) respondents, representing 14 per cent do not use ATM services. Further, it was observed that the use of internet banking, SMS (mobile) banking and E-zwich services, are equally highly patronise by customers.

From the study, while twenty-three (23) respondents, representing 14 per cent do not use internet banking services, one hundred and forty-three (143) respondents representing 86 per cent use it. Also, while sixty-six (66) respondents representing 40 per cent do not use SMS banking services, one hundred (100) respondents representing 60 per cent indicated they patronise the service. Survey results also showed that one hundred and sixteen (116) respondents representing 70 per cent use email notification services whilst fifty (50) respondents representing 30 per cent do not use it. Fifty-three (53) respondents representing 32 per cent use slip free services whereas one hundred and thirteen (113) respondents representing 68 per cent do not use it.

It was also revealed that very few customers patronise E- Zwich services. The data showed that thirty-seven (37) respondents representing 22 per cent use the service whilst one hundred and twenty- nine (129) respondents representing 78 per cent do not use the service. Lastly, a total of one hundred and forty-three (143) respondents representing 84 per cent use Internet Banking services while the rest 26 representing 16 per cent do not use the service.

From the analysis, it clear that the most widely patronised E-banking services by Barclays bank in order, as shown in table 4.6 and Fig 4A.

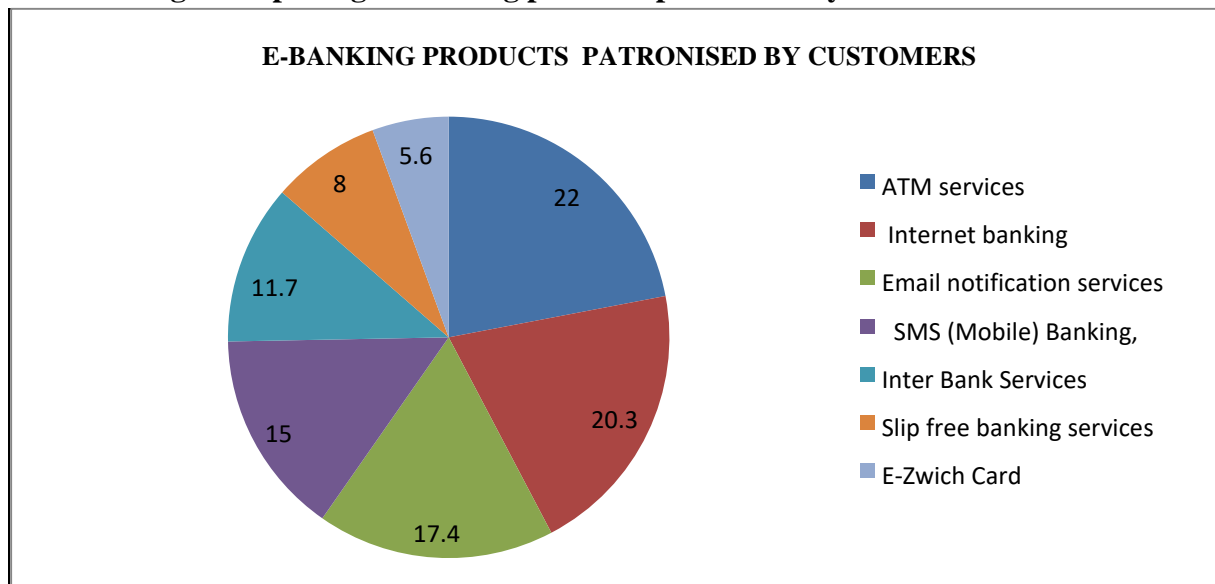
Table 4.6: A table indicating E-banking products used by customers

E-BANKING PRODUCTS USED	CUSTOMERS RESPONSES		STAFF RESPONSES	
	RESPONSES	PERCENTAGE	RESPONSES	PERCENTAGE
1. ATM services	37	22	9	30
2. Internet banking	34	20.3	1	3.3
3. Email notification services	29	17.4	6	20
4. SMS (Mobile) Banking,	25	15	4	13.3
5. Inter Bank Services	19	11.7	3	10
6. Slip free banking services	13	8	2	6.7
7. E-Zwich Card	9	5.6	2	6.7
8. Hello money	-	-	1	3.3
9. Pingit	-	-	1	3.3
10. ATM cash deposit	-	-	1	3.3
TOTAL	166	100	30	100.0

Source: Author's Field Study, August 2015

According to Barclays staff responses, ATM services is the product with the highest patronage represented by 30 per cent responses as confirmed by customers, followed by email notification services represented by 20 per cent of staff responses, SMS banking represented by 13.3 per cent responses interbank services represented by 10 per cent. Slip free and E-Zwich services are represented by 6.7 per cent each. The least patronised services are Hello money, BIR (Internet Banking), Pingit and ATM cash deposit. All represented by 3.3 per cent each.

FIG. 4A A figure depicting E-banking products patronised by customers



Source: Author's Field Study, August 2015

From fig 4A, it can be concluded that majority of the customers highly patronize the electronic banking products offered by Barclays Bank. Among the services provided, ATM services is the most widely patronised electronic banking service followed by internet banking, email notification services, SMS banking, interbank services, slip free and E-Zwich been the least patronised. The survey agrees with Pyun et al (2002), assertion that E-banking provides a wider range of alternative products for faster delivery of banking services.

4.4 E-BANKING AND SERVICE DELIVERY OF BARCLAYS BANK

The researcher explored whether E-banking has any impact on service delivery of Barclays Bank. Indicators that were used to measure the impact of E-banking on service delivery by customers as shown in table 4.7.

Table 4.7A table depicting the impact of E-banking on service delivery

INDICATORS	NUMBER OF RESPONSES	PERCENTAGE (%)
Length of time to access Barclays services before e- banking		
Less than 15 minutes	1	0.6
15 -30 minutes	2	1.2
31- 45 minutes	8	4.8
1 hour	19	11.4
More than 1 hour	136	82
TOTAL	166	100
Length of time to access Barclays services after e- banking		
Less than 15 minutes	161	97
15 -30 minutes	4	2.4
31- 45 minutes	1	0.6
1 hour	0	0
More than 1 hour	0	0
TOTAL	166	100
Speed of E-banking service delivery over manual service		
Fastest	129	77.7
Faster	24	14.5
Fast	13	7.8
Slow	0	0

Very Slow	0	166	0	100
TOTAL				
Confidence over security aspects of using electronic banking services				
Yes	125		75.3	
No	41		24.7	
TOTAL	166		100	
Ability of bank staff to provide assistance to E-banking customers				
Yes	122		73.5	
No	44		26.5	
TOTAL	166		100	
Customers' recommendation of Barclays e -banking services				
Yes	146		88	
No	10		12	
TOTAL	166		100	

Source: Author's Field Study, August 2015

Table 4.7 depicts the impact of E-banking on service delivery considering indicators such as how long it takes customers to access Barclays services before and after the introduction of e- banking,

speed of E-banking service delivery over manual service, confidence over security aspects of using electronic banking services and ability of bank staff to provide assistance to E-banking customers.

4.4.1 Length of time to access Barclays services before the introduction of E- banking On the length of time to access Barclays services before the introduction of e- banking, one hundred and thirty-six customers respondents (136) representing 82 per cent indicated it took them more than one (1) hour to access Barclays Bank services, nineteen (19) respondents representing 11.4 per cent indicated they spend one (1) hour, eight (8) respondents representing 4.8 per cent stated it takes them between thirty-one (31) to forty-five (45) minutes whilst two (2) respondents representing 1.2 per cent stated it takes (15) fifteen to thirty minutes. Only one (1) respondent representing 0.6 per cent indicated they spend less than 15 minutes to access the bank's services as shown in table 4.7.

4.4.2 Length of time to access Barclays services after the introduction of e- banking On the contrary, when customers were asked about the length of time to access Barclays services after the introduction of e- banking, one hundred and sixty-one (161) respondents representing 97 per cent indicated that they spend less than fifteen (15) minutes to access E-banking services, whilst four (4) respondents representing 2.4 per cent indicated they spend between fifteen (15) to (30) thirty minutes and only one (1) respondent representing 0.6 per cent stated it takes between thirty-one (31) to forty-five (45) minutes to access E-banking services. This result confirms with Amedu (2005) that e-banking has drastically reduced the time for banking services as indicated in the literature review.

4.4.3 Speed of E-banking service delivery over manual banking service

Another indicator used in assessing the impact of electronic banking services on service delivery was the speed of E-banking service delivery over manual service. From the analyses, one hundred and twenty-nine (129) respondents representing 77.7 per cent indicated that E-banking has the fastest speed in service delivery over manual service, whereas twenty-four (24) respondents representing 14.5 per cent indicated fast speed in delivery. However, none of the respondents indicated either slow or very slow speed of E-banking service delivery. This confirms with Liao and Cheung (2002) assertion that transaction speed and convenience are the most important attributes of e-banking as indicated in the literature review.

4.4.4 Customers confidence over security aspects of using Barclay's E-banking services

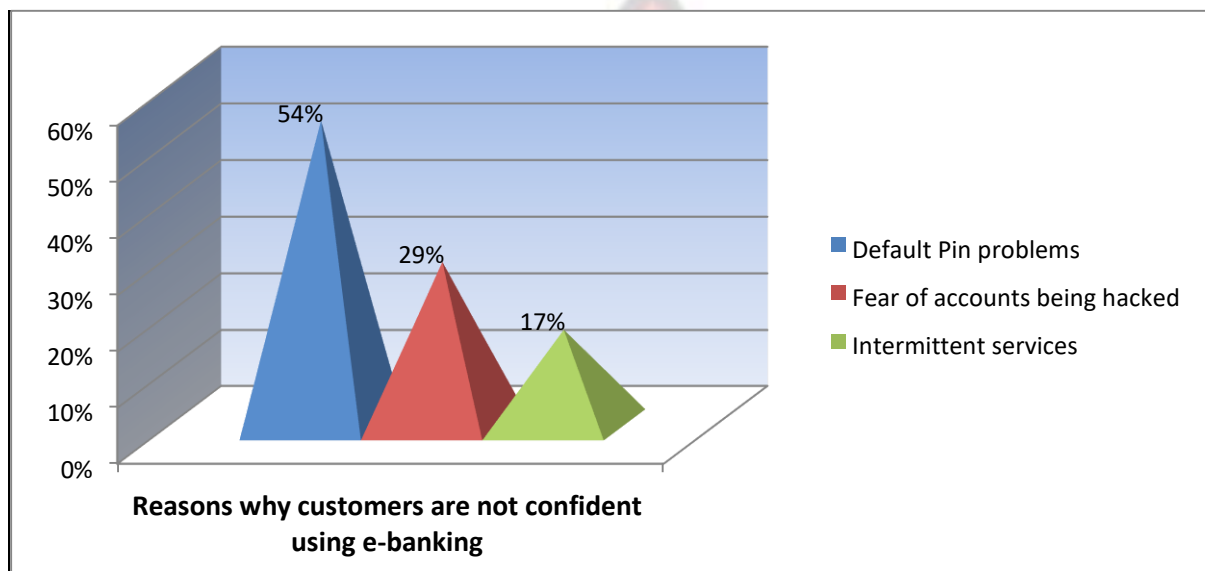
In addition on the issue of whether customers have confidence over security aspects of using electronic banking services, one hundred and twenty-five (125) respondents representing 75.3 per cent indicated that they are confident whilst forty-one (41) respondents representing 24.7 per cent stated they are not confident.

4.4.5 Customers uncertainty over security aspects of using Barclay's E-banking services

Out of this figure, twenty-two (22) respondents representing 54 percent stated they usually have challenges with their passwords which calls for changes very often (problems with default Pin numbers) , twelve (12) respondents representing 29 per cent stated they are not confident because they are afraid their accounts will be hacked based on global reports, whilst the rest seven (7) respondents representing 17 per cent of those who are not confident, indicated they normally have intermittent E-banking service delivery which does not make them to be confident over security

aspects of using Barclays E-banking service as depicted in fig 4.B. This corroborate Agboola (2006) statement that epileptic power supply and fear of fraudulent practices by the banks make customers uncertain about the security aspects of E-banking.

Fig. 4.B A Figure depicting reasons why customers are not confident using E-banking services



Source: Author's Field Study, August 2015

4.4.6 Ability of Barclay's staff to provide assistance to E-banking customers

Customers were also asked whether bank staffs are able to provide assistance to E-banking customers when the need arises and one hundred and twenty-two (122) respondents representing 73.5 per cent indicated yes whilst forty-four (44) respondents representing 26.5 per cent stated they are not able to provide assistance when the need arises. It is glaring from the analyses that, the inability of bank staff to provide assistance to E-banking customers when the need arises, have culminated in some customers losing confidence over the security aspects of Barclays E-banking

service as explained by 17 per cent of customers who are not confident that they normally have intermittent E-banking service delivery and bank staff have not been able to resolve it.

4.4.7 Customers Perception of Barclays banking services before the introduction of Ebanking

Customers were asked about their perception of service delivery before E-banking introduction.

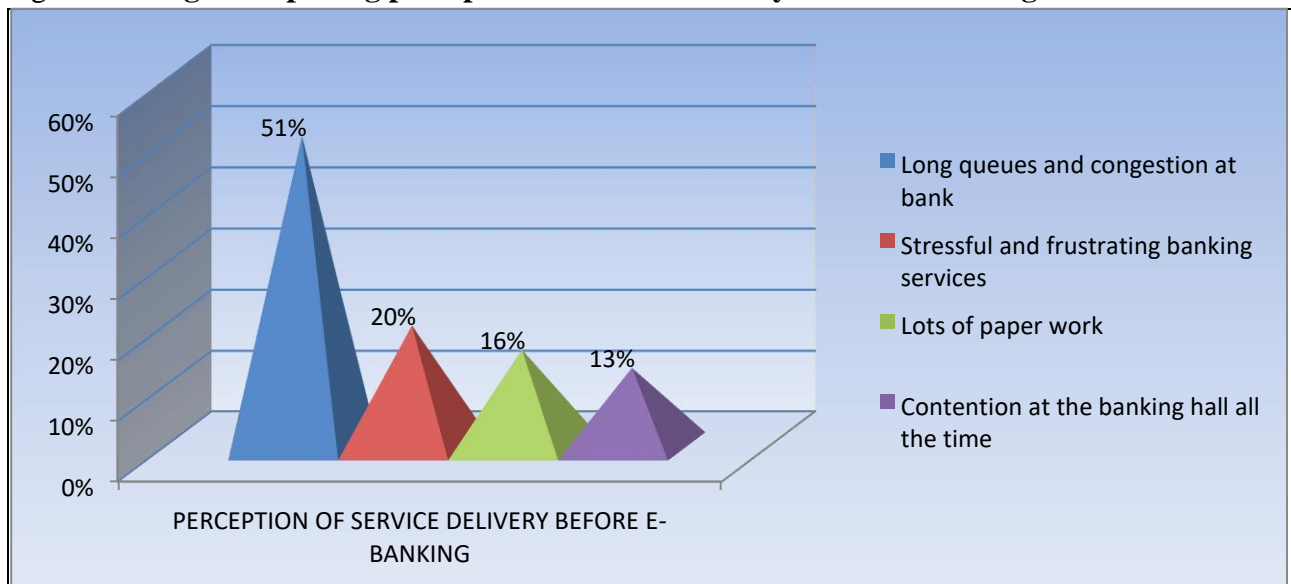
Out of the one hundred and sixty-six respondents (166), Eighty-five (85) respondents representing 51 percent indicated that Barclays bank service was characterised with long queues and congestion at bank, thirty-three respondents representing 20 percent perceived it stressful and frustrating banking services twenty-six respondents representing 16 percent stated Lots of paper work whilst twenty-two respondents representing 13 percent stated contention at the banking hall all the time as depicted in fig 4C.

Table 4.8 A Table showing perception of service delivery before E-banking

PERCEPTION OF SERVICE DELIVERY BEFORE E-BANKING	NUMBER OF RESPONSES	PERCENTAGE %
1. Long queues and congestion at bank	85	51
2. Stressful and frustrating banking services	33	20
3. Lots of paper work	26	16
4. Contention at the banking hall all the time	22	13
TOTAL	166	100

Source: Author's Field Study, August 2015

Fig. 4C A Figure depicting perception of service delivery before E-banking services



Source: Author's Field Study, August 2015

4.4.8 Customer perception of Barclays bank services after the introduction of E-banking services

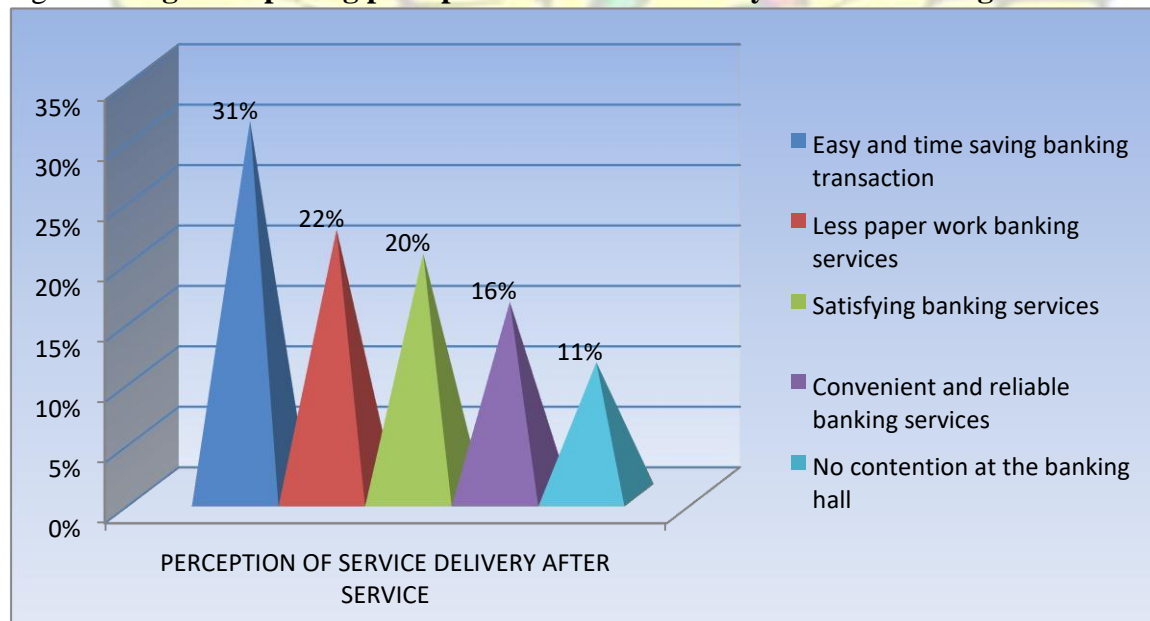
Customers were also asked whether the introduction of e-banking by Barclays Bank has changed their perception about service delivery. All the one hundred and sixty-six respondents (166) indicated yes to the question which implies that introduction of e – banking by Barclays Bank has changed their perception about service delivery. This positive perception is remarkable since is the bedrock for trust and eventually customer satisfaction as indicated by Rexha et al, (2003) in the literature review.

Table 4.9 A Table showing customers perception of service delivery after introduction of Ebanking

PERCEPTION OF SERVICE DELIVERY AFTER E-BANKING	NUMBER OF RESPONSES	PERCENTAGE %
1. Easy and time saving banking transaction	52	31
2. Less paper work banking services	36	22
3. Satisfying banking services	32	20
4. Convenient and reliable banking services	27	16
5. No contention at the banking hall	19	11
TOTAL	166	100

Source: Author's Field Study, August 2015

Fig. 4DA Figure depicting perception of service delivery after E-banking services



Source: Author's Field Study, August 2015

From the analysis, customers indicated their perception of service delivery after the introduction of E-banking as follows; fifty-two respondents representing 31 per cent stated Barclays service

delivery is easy and time saving, thirty-six respondents representing 22 per cent stated Less paper work banking services, thirty-two respondents representing 20 per cent indicated satisfying banking services, twenty-seven respondents representing 16 per cent stated convenient and reliable banking services whilst nineteen respondents representing 11 per cent stated no contention at the banking hall (as depicted in fig 4D) confirming Thornton and White (2001) assertion that Ebanking reduces the percentage of customers visiting banks with an increase in alternative channels of distribution which also minimizes the queues in the banks as indicated in the literature review.

4.4.9 Staff perception of Barclays bank services after the introduction of E-banking

Responses of staff indicated that E-banking has positively affected the delivery of service in the bank as shown in table 4.10

Table 4.10 A table indicating E-banking and service delivery of Barclays bank staff

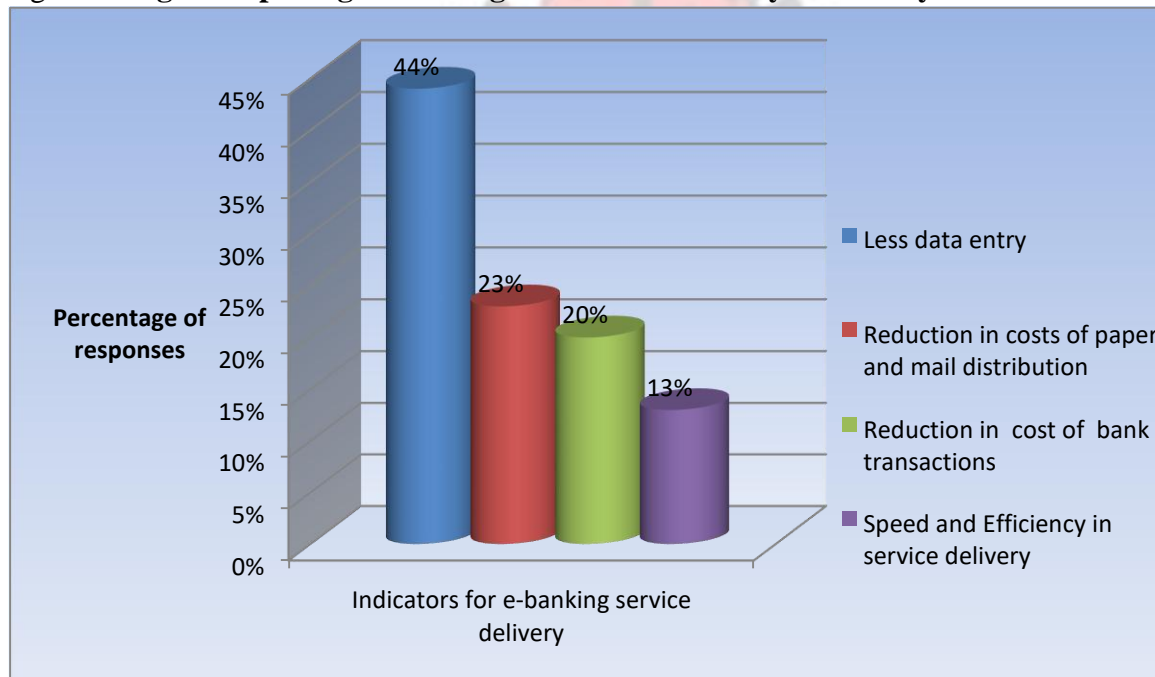
INDICATOR	RESPONSES	PERCENTAGE
i. Less data entry	13	44
ii. Reduction in costs of paper and mail distribution	7	23
iii. Reduction in cost of bank transactions	6	20
iv. Speed and Efficiency in service delivery	4	13
Total	30	100.0

Source: Author's Field Study, August 2015

From table 4.10, it can be deduced that E-banking has culminated in less data entry which is indicated by thirteen (13) respondents representing 44 per cent and as a result costs of paper and mail distribution which hitherto might be the case has been drastically reduced as stated by seven

(7) respondents representing 23 percent, which has eventually led to a reduction in total cost of banking transaction stated by six (6) respondents representing 20 percent and finally speed and efficiency in service delivery indicated by four (4) respondents representing 13 per cent. This is depicted in fig 4E. This confirms Croft et al., (2002) assertion that the most important factors encouraging consumers to use E-banking are lower fees followed by reducing paper work and human error, which subsequently minimize dispute as indicated in the literature review.

Fig. 4E A figure depicting E-banking and service delivery of Barclays bank staff



Source: Author's Field Study, August 2015

4.5 BARCLAYS BANK ELECTRONIC BANKING SERVICES AND CUSTOMER SATISFACTION

4.5.1 Barclays E-banking services and customer satisfaction

One of the objectives of the study was to identify whether customers are satisfied with E-banking services provided by Barclays Bank as shown in table 4.13. Out of the one hundred and sixty-six

(166) customers' respondents, one hundred and forty-six (146) respondents representing 88 per cent stated they are satisfied whilst twenty (20) respondents representing 12 per cent stated they are not satisfied with the services.

Table 4.13 A Table showing Barclays E-banking services and customer satisfaction

CUSTOMER SATISFACTION WITH E-BANKING	CUSTOMERS RESPONSES		STAFF RESPONSES	
	NUMBER OF RESPONSES	PERCENTAGE %	NUMBER OF RESPONSES	PERCENTAGE %
1. Yes	146	88	21	70
2. No	20	12	9	30
TOTAL	166	100	30	100

Source: Author's Field Study, August 2015

Also staff responses on customer satisfaction with E-banking services indicated twenty-one responses representing 70 per cent as Yes, whilst seven (9) responses representing 30 percent as no. This confirms customers' responses whereby majority (88 percent) of respondents were satisfied.

4.5.2 Level of customer satisfaction with E-banking service

Customers were then requested to grade their satisfaction as either excellent, very good or good. Out of the respondents who were satisfied with the electronic banking services rendered by the bank, thirty –five customers (35) representing 24 per cent expressed excellent satisfaction with the service, while one hundred and two (102) customers representing 70 per cent stated the

service is very good and nine (9) representing 6 per cent graded their satisfaction as good with twenty (20) customers being Dissatisfied.

Table 4.14 A Table indicating level of customer satisfaction with E-banking Service

LEVEL OF CUSTOMER SATISFACTION WITH E-BANKING	CUSTOMERS RESPONSES		STAFF RESPONSES	
	NUMBER OF RESPONSES	PERCENTAGE %	NUMBER OF RESPONSES	PERCENTAGE %
Excellent	35	24	4	19
Very good	102	70	10	48
Good	9	6	7	33
Dissatisfied	20	12	9	30
TOTAL	146	100	21	100

Source: Author's Field Study, August 2015

The staff were requested to categorise their level of satisfaction as excellent, very good or good and dissatisfied. Out of the twenty-one (21) respondents who were satisfied with the electronic banking services rendered by the bank, four (4) respondents representing 19 per cent expressed excellent satisfaction with the service, while ten (10) customers representing 48 per cent stated the service is very good and seven (7) representing 33 per cent graded their satisfaction as good whilst nine (9) staff representing 30 percent were dissatisfied as shown in table 4.14.

4.5.3 Reasons for customer dissatisfaction with E-banking service by staff

From table 4.14 on the level of customer satisfaction by staff, out of the nine (9) respondents representing 30 percent who indicated customers were dissatisfied with Barclays' E-banking services, three (3) respondents representing 43 percent indicated customers are dissatisfied due to insecurity with E-banking service, two (2) respondents representing 28.5 per cent stated unreliable network whilst two (2) respondents representing 28.5 per cent also indicated customers are dissatisfied because they have limited customer knowledge on E-banking as shown in table 4.15.

Table 4.15 A Table indicating reasons for customer dissatisfaction with E-banking service by staff

REASONS FOR DISSATISFACTION	NUMBER OF RESPONSES	PERCENTAGE %
1. Insecurity	4	44.5
2. Unreliable network	3	33.3
3. Limited customer knowledge on E-banking	2	22.2
TOTAL	9	100

Source: Author's Field Study, August 2015

On the issue of insecurity of using Barclays E-banking service, staff indicated that most customers do not feel secured with E-banking services particularly with default Pin numbers because it is a secret code that gives customers access into their accounts. They explained that when customers are given their account Pin numbers to access banking services on E-banking platforms, they have a maximum of seventy-two (72) hours to change their default Pins without which they cannot access the platform so they have to contact the bank for Pin regeneration. Staff indicated default

pin numbers are regenerated based on certain vital information given customers of which often times they feel reluctant to provide. This confirms customers' reasons for not been confident using Barclays E-banking as indicated by fifty-four (54) percent of respondents stating frequent problems with default pin numbers.

4.5.4 Customers' recommendation of Barclays e -banking services

From the study, one hundred and forty-six (146) respondents representing 88 per cent indicated that they have and will continue to recommend Barclays e -banking services to customers whereas ten (10) respondents representing 12 per cent stated they will not recommend the bank to others as depicted in table 4.15. This confirms customers' responses on satisfaction of Barclays e banking services as depicted in table 4.13 that one hundred and forty-six (146) respondents representing 88 per cent stated they will recommend Barclays bank to others whilst twenty (20) respondents representing 12 per cent stated they will not. It can be explained from the analysis that, customers who are satisfied with Barclays E-banking services indicated they will recommend the bank to others as depicted by one hundred and forty-six (146) respondents representing 88 per cent whilst customers who are dissatisfied stated they will not as indicated by twenty (20) respondents representing 12 per cent. It must be emphasised here that even though 88 percent of the customers interviewed indicated they are satisfied and will recommend the bank to others, management will have to resolve the reasons why customers are dissatisfied so that they can recommend the bank to others. Recommending the bank will position the bank for competitive advantage in the banking industry.

Table 4.16 A Table depicting customers' recommendation of Barclays e –banking services

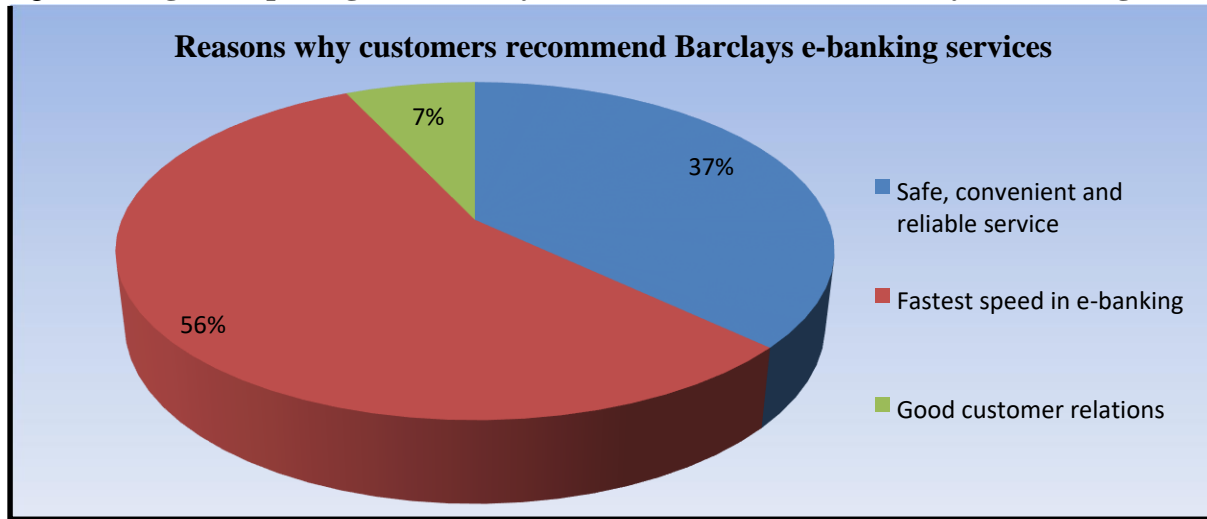
CUSTOMERS RECOMMENDATION OF BARCLAYS E-BANKING	NUMBER OF RESPONSES	PERCENTAGE %
1. Yes	146	88
2. No	20	12
TOTAL	166	100

Source: Author's Field Study, August 2015

4.5.5 Reasons why customers will recommend Barclays E-banking services

Out of the one hundred and forty-six (146) respondents representing 88 per cent stated 88 per cent who indicated they will recommend the bank, the following are the reasons; fifty-three (53) respondents representing 37 per cent indicated Barclays E-banking service is safe, convenient and reliable, eighty-two (82) respondents representing 56 per cent stated it has the fastest speed in Ebanking services and the rest eleven (11) respondents representing 7 per cent stated the staff have good customer relationships as depicted in fig 4F.

Fig. 4F A Figure depicting reasons why customers recommend Barclays E-banking services



Source: Author's Field Study, August 2015

4.6 BENEFITS OF E-BANKING

4.6.1 Benefits of E-banking by customers

Lastly, the study investigated the benefits of electronic banking to customers. Based on customers' responses, E-banking services have been found to contribute significantly to service delivery of Barclays Bank. This is evident in the areas of its usefulness, convenience, time saving and quick service among other benefits as asserted by Gerrard and Cunningham (2003).

i. **Electronic Banking Saves Time**

In the first place it was revealed that E-banking service saves time. It drastically reduces time that would have been spent in the banking hall to transact business. Specifically seventy-nine (79) respondents representing 47.6 per cent strongly agree with the statement that electronic Banking services saves time while fifty-seven (57) representing 34.3 per cent of respondents agree to the statement. In sum 81.9 per cent of the respondents accepted that electronic banking saves time much more than manual banking. On the other hand, fourteen (14) respondents representing 8.4

per cent disagreed with the statement with sixteen (16) respondents representing 9.6 per cent remaining neutral.

Table 4.17A table showing customers responses on E-banking saves time

LIKERT SCALE	NUMBER OF RESPONSES	PERCENTAGE %
Strongly Agree	79	47.6
Agree	57	34.4
Neutral	16	9.6
Disagree	10	6.0
Strongly disagree	4	2.4
Total	166	100.0

Source: Author's Field Study, August 2015 ii.

E-banking services are valuable

In examining the benefits of electronic banking to customers, the research also sought to find out whether the services have been valuable to customers as shown in table 4.17

Table 4.18A table showing customers responses on E-banking services are valuable

LIKERT SCALE	NUMBER OF RESPONSES	PERCENTAGE %
Strongly Agree	59	35.5
Agree	79	47.0
Neutral	17	10.3
Disagree	8	4.8
Strongly disagree	4	2.4
Total	166	100.0

Source: Author's Field Study, August 2015

From the responses, it was observed that the introduction of E-banking services have been very useful to customers who patronize the service. The results showed that a total of one hundred and twenty-seven (127) respondents representing 82.5 per cent agreed and strongly agreed that Ebanking services offered by Barclays Bank have been useful to them. On the other hand, a total of 12 respondents representing 7.2 per cent disagreed and strongly disagreed while 10.3 per cent remained neutral. Given the results, it is evident that E-banking services have been useful to customers of Barclays Bank.

iii. **E-banking services are safe, convenient and reliable**

Furthermore, it was found out that, E-banking make banking service very convenient to customers. This view was expressed by majority of respondents. The results showed that one hundred and twenty-seven (127) respondents representing 76 per cent agreed that electronic banking have been convenient while 15 respondents representing 9 per cent disagree that the services have been useful and 15 per cent could not tell whether the services have been convenient or not. It is evident that electronic banking services have been convenient to customers as shown in table 4.18.

Table 4.19A table showing customers responses on E-banking services are safe, convenient and reliable

LIKERT SCALE	NUMBER OF RESPONSES	PERCENTAGE %
Strongly Agree	90	54
Agree	37	22
Neutral	24	15
Disagree	13	7.8
Strongly disagree	2	1.2
Total	166	100.0

Source: Author's Field Study, August 2015

This confirms Gerrard and Cunningham (2003) study which found a positive correlation between convenience and online banking and remarked that a primary benefit for the bank is cost saving and for the consumers a primary benefit is convenience as indicated in the literature review in chapter two.

4.6.2 Benefits of E-banking by staff

Staff responses from the study on the benefits of E-banking indicated speed and efficiency in service delivery as the major benefit shown by seven (7) respondents representing 23 per cent, followed by reduction in banks cost of operations stated by five (5) respondents representing 17 percent, increased number of customers stated by four (4) respondents representing 13 percent and increased banks revenue indicated by four (4) respondents representing 13 percent. In addition other benefits as stated by staff are: public image enhancement three (3) respondents representing 10 percent, new market opportunities by two (2) respondents representing 7 percent, wider market reach by two (2) respondents representing 7 percent, increased profitability by two (2) respondents representing 7 percent, and increased contribution to Corporate Social Responsibility by one (1) respondent representing 3 per cent.

Table 4.20 A table depicting the benefits of E-banking by staff of Barclays Bank

BENEFITS OF E-BANKING	RESPONSES	PERCENT
1. Speed and Efficiency in service delivery	7	23
2. Reduction in banks cost of operations	5	17
3. Increased number of customers	4	13
4. Increased bank's revenue	4	13
5. Public Image Enhancement	3	10
6. New market opportunities	2	7
7. Wider market reach	2	7
8. Increased profitability	2	7
9. Increased contribution to Corporate Social Responsibility	1	3
TOTAL	30	100

Source: Author's Field Study, August 2015

4.6.3 Challenges of E-banking by staff

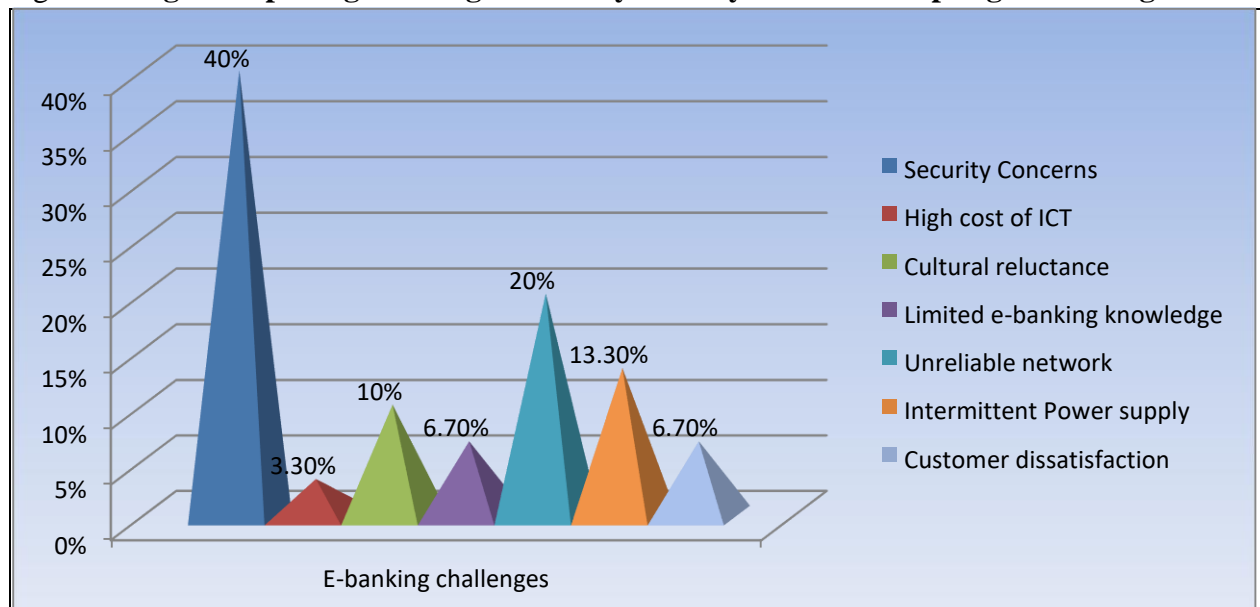
The challenges facing E-banking services of Barclays bank are outlined in table 4.20 and depicted in fig 4G.

Table 4.21A table showing challenges faced by Barclays Bank in adopting E-banking

E-BANKING CHALLENGES	RESPONSES	PER CENT
1. Security Concerns	12	40
2. Unreliable network	6	20
3. Intermittent power supply	4	13.3
4. Cultural Reluctance	3	10
5. Customer dissatisfaction	2	6.7
6. Limited customer knowledge on E-banking	2	6.7
7. High cost of ICT investment	1	3.3
TOTAL	30	100

Source: Author's Field Study, August 2015

Fig. 4G A figure depicting challenges faced by Barclays Bank in adopting E-banking



Source: Author's Field Study, August 2015

From fig 4G responses from staff interviewed presented security concerns of E-banking as the major challenge indicated by twelve responses representing 40 per cent. This is confirmed by customers responses on the issue of whether customers have confidence over security aspects of using electronic banking services, one hundred and twenty-five (125) respondents representing 75.3 per cent indicated that they are confident whilst forty-one (41) respondents representing 24.7 per cent stated they are not confident as depicted in fig 4.B. Out of those who are not confident, twenty-two (22) respondents representing 54 percent stated they usually problems with default Pin numbers, twelve (12) respondents representing 29 per cent stated they are not confident for fear that their accounts will be hacked. In all 83% of customers who are not confident with Barclays E-banking services do so as a result of insecurity.

On the issue of confidence over the security aspects of using Barclays E-banking service, staff explained that, when customers are given their account Pin numbers to access banking services on E-banking platforms, they have a maximum of seventy-two (72) hours to change their default Pins without which they cannot access the platform so they have to contact the bank for Pin regeneration. Staff indicated default pin numbers are regenerated based on certain vital information of customers. This agrees with Shih and Fang, (2004) assertion that although, electronic banking provides many opportunities for the banks, it is also the case that the current banking services provided through Internet are limited due to security concerns, complexity and technological problems. In addition, Singh and Malhotra, (2004) used the term trust to describe the measure of risk. Suganthi et al., (2001) viewed risk in the context of security concerns and risk in the context of trust in one's bank.

The second challenge facing Barclays E-banking as stated by staff is unreliable network stated by six (6) responses representing 20 per cent. This happens when staff and customers cannot have access to stable and continuous internet connectivity but fluctuating service, making it difficult if not impossible to access E-banking service. The unreliable network is further exacerbated by intermittent power supply which is the third challenge by staff indicated by four (4) respondents representing 13.3 percent and the third reason why customers are not confident using E-banking. This is confirmed by seven (7) respondents representing 17 per cent of customers who are not confident using E-banking as a result of intermittent service delivery as depicted in fig 4B. Staff responses indicated that the intermittent power supply is caused by the nationwide load shedding and intermittent power programme and as a result organisations have to switch from hydroelectric power generated by the nation's power distributor Electricity Company of Ghana to thermal energy

procured and run by organisations including Barclays Bank at an expensive cost. The intermittent power supply has led to power surges which usually cause the breakdown of ICT equipments which are used for E-banking thus resulting in high ICT cost of ICT investment indicated by 3.3 per cent of staff responses.

From the analysis it is evident that intermittent power supply leads to power surges which have resulted in the breakdown of ICT equipments for the bank which leads to high cost of ICT investment. Intermittent power supply has also resulted in unreliable network which makes it difficult for customers to access E-banking service thus losing confidence in the banking service.

Cultural reluctance is another challenge which place fourth on the list of challenges indicated by three (3) respondents representing 10 per cent. The culture of the people of Kumasi does not encourage savings due to a long history of governments arresting, detaining, torturing and killing some clients who had deposits beyond the military governments ceiling. Even though Ghana is now in a democratic era, the memory of those actions by military governments still lingers on particularly with families of victims. This makes some E-banking customers feel reluctant using the service very often for fear that their accounts will be hacked by state officials.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter looks at the summary of findings from the study, conclusion drawn by the researcher based on the findings and the recommendations that have been proposed for consideration by stakeholders in the banking industry.

5.2. SUMMARY OF FINDINGS

The study examined the impact of electronic banking on banks performance of Barclays Bank. In accordance with the general purpose, the study sought to find out E-banking services offered by Barclays Bank and their usage, examined the effect of E-banking on service delivery; ascertained whether customers were satisfied with service delivery following introduction of E-banking services; determined how E-banking has changed customers perception about the bank, and finally, explore the benefits of E-banking services. This section comprises a summary of all that have been discovered and the findings from the study based on research questions asked and objectives stated in chapter one.

Based on the research questions, a number of research objectives were proposed. To begin with, the researcher identified electronic banking services offered by Barclays Bank and their usage by customers. The analysis revealed that the bank provides electronic banking services in the form of Automated Teller Machine (ATM) /Debit cards services, SMS (mobile) banking, E-Zwich

Card services, Email notification services, Internet banking, Inter Banking Services and Slip free banking services. Among the services provided, ATM services is the most widely patronised electronic banking service followed by internet banking, email notification services, SMS banking, interbank services, slip free and E-Zwich been the least patronised. It was also found out that Barclays E-banking customers are not aware of Pingit and ATM cash deposit and as such have not used it.

Secondly the researcher also examined the impact of E-banking on service delivery of Barclays Bank. The impact of E-banking on service delivery was examined using indicators such as how long it takes customers to access Barclays services before and after the introduction of e- banking, speed of E-banking service delivery over manual service, confidence over security aspects of using electronic banking services and ability of bank staff to provide assistance to E-banking customers. The impact of E-banking on service delivery considering indicators such as how long it takes customers to access Barclays services before and after the introduction of e- banking, speed of Ebanking service delivery over manual service, confidence over security aspects of using electronic banking services and ability of bank staff to provide assistance to E-banking customers.

On the length of time to access Barclays services the analyses revealed that it took customers more than one (1) hour to access Barclays Bank services before the introduction of e- banking, whilst it takes them less than fifteen (15) minutes to access the same service after the introduction of e-banking,

Another indicator used in assessing the impact of electronic banking services on service delivery was the speed of E-banking service delivery over manual service. From the analyses, it was found out that E-banking has the fastest speed over manual banking

In addition majority of customers indicated they have confidence over security aspects of using electronic banking services whilst only a few stated they are not confident. Customers stated the reasons why they are not confident as a result of frequent problems with default Pin numbers, fear of their accounts been hacked whilst and intermittent service delivery caused by unreliable network.

Also, majority of customers indicated bank staff are able to provide assistance to E-banking customers in times of need, whilst a few stated staff are unable to assist them when the need arises. It was realised from the analyses that, the inability of some bank staff to provide assistance to Ebanking customers when the need arises, have culminated in some customers losing confidence over the security aspects of Barclays E-banking service.

It was revealed in the analyses that customers perception of Barclays bank service delivery before the introduction of E-banking was characterised with long queues and congestion at bank, stressful and frustrating banking services with lots of paper work resulting in delays and contention at the banking halls at all times. On the contrary, all customers indicated that the introduction of E-banking has changed their perception of service delivery by Barclays Bank. They state Barclays Ebanking services is easy and time saving, involves less paper work, satisfying, convenient and reliable banking services. The study discovered that electronic banking has significantly improved

service delivery which majority of customers are satisfied with significant change. Many customers now see the Barclays Bank as a corporate business entity which values time.

In addition, the objective of the study was to ascertain customers' level of satisfaction with the introduction and usage of E-banking services provided by Barclays Bank. It was realised from the analyses that majority of customers indicated they have excellent and good satisfaction with Barclays E-banking service whilst a few stated they are not. It can be explained from the analysis that, customers who are satisfied with Barclays E-banking service indicated they will recommend the bank to others whilst customers who are dissatisfied stated they will not. Among the reasons why customers will recommend Barclays E-banking service to others are Barclays E-banking service is safe, convenient and reliable, it has the fastest speed in E-banking services and the staff have good customer relationships. Among the reasons for customer dissatisfaction are insecurity with default Pin numbers, unreliable network and limited customer knowledge on E-banking.

On the benefits of E-banking, it was found out that E-banking saves time. From the analyses, it was revealed that the length of time spent to access Barclays banking service before the introduction of E-banking was more than one (1) hour and after its introduction has reduced to less than fifteen (15) minutes, which has saved more 75 percent of time. This implies that E-banking is more than 75 percent (or 3 times) faster than manual banking service of Barclays bank. In addition the study realised from analyses that E-banking services have been very useful to customers who patronize the service and E-banking services are safe, convenient and reliable. In addition, reduction in banks cost of operations, increased number of customers, increased banks revenue public image enhancement, new market opportunities wider market, increased

profitability by and increased contribution to Corporate Social Responsibility are other benefits of E-banking for Barclays Bank.

Finally, the study identified the challenges associated with E-banking services and the measures put in place to circumvent them. The analyses presented challenges facing E-banking as insecurity regarding default pin numbers, fear of accounts been hacked, unreliable network, intermittent power supply and cultural reluctance. The intermittent power supply leads to power surges which usually cause the breakdown of ICT equipments resulting in high cost of ICT investment by banks.

5.3 CONCLUSION

This study sought to realise the objectives outlined in chapter one based on the research questions posed. These research questions have been answered and verified by the results from the analyses of the survey responses through the data collected. The findings extensively indicate that electronic banking has impacted positively on service delivery of Barclays bank and that customer perception has significantly been transformed. Undoubtedly, all the objectives stated for the study have been achieved. The significance of service delivery and its effect on the level of customer satisfaction, customer retention, bank revenue, market share, profit and corporate image of the bank cannot be neglected. As a result, the researcher expects that Barclays Bank should implement the recommendations made based on the findings in order to position the bank for competitive advantage in the Ghanaian banking industry.

5.4 RECOMMENDATIONS

Based on the findings of this study, the researcher recommends the following to all stakeholders in the banking industry including banks, policy makers and the government for deliberation.

To begin with, Barclays Bank should educate its customers and the general public on its products particularly the newly introduced ones through exhibitions and Television advertisements which showcases how the products are used. Bank products must also be accessible to all customers. Customers need be educated at length on the use of E-banking services such as internet banking, Pingit, ATM Cash deposit and E-zwich banking services which are not well patronized.

The education should also encompass programs that showcase the values, ethics and credibility of the banks in order to prevent customers from been reluctant to deposit their monies at the banks. E-banking customers should also be guided in changing default Pin numbers to avoid Pin regeneration. In addition Barclays bank should develop simple banking products that guarantees that the illiterates, aged and the physically challenged are not deprived.

Secondly, Barclays Bank should work hard to win customer confidence by providing sufficient and tolerable security of E-banking customers' vital data. The Ministry of Finance and Economic Planning and the Bank of Ghana should provide a regulatory framework that will warrant customer safety and security of E-banking transactions. Staff should also be trained frequently to offer assistance to customers at all times to improve service delivery and retain customers.

In addition, Barclays Bank should invest extremely in IT in order to further promote wellorganized and smooth service delivery for E-banking services. The bank should also create a monitoring unit to oversee report and deal with E-banking challenges.

Finally, the bank should provide alternative and reliable sources of power particularly solar energy, to ensure reliable connectivity and grants E-banking customers uninterrupted access to E-banking platforms.



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