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ELECTRONIC BANKING ADOPTION AMONG SMES BANKING WITH

 GCB BANK LIMITED: EVIDENCE FROM ACCRA METROPOLIS

 BY

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 Management, School of Business, College of Humanities and Legal Studies,

 University of Cape Coast, in partial fulfilment of the requirements for the award of Master of Business Administration in Marketing

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## DECLARATION

# **Candidate's Declaration**

I hereby declare that this dissertation is the result of my original research and that no part of it has been presented for another degree at this university or elsewhere.

Candidates signature......

# Supervisor's Declaration

I hereby declare that the preparation and presentation of this dissertation were supervised according to the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's signature...... Date...... Date......

Name: Dr. Daniel Ofori

OBI

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# DEDICATION

To my family



## ABSTRACT

Small and medium-sized businesses (SMEs) in Ghana are adopting e-banking due to its ability to significantly reduce information search and transaction expenses, making business operations more efficient with payment, credit processing, and other tasks taking less time. Dwelling on the technology acceptance model, and the institutional theory, this study adopted the quantitative research approach and the explanatory research design to assess the adoption of electronic banking and its effects among small and medium-sized enterprises within the Accra Metropolis that transact banking businesses with GCB Bank limited. The study sought to examine the adoption of e-banking among SMEs concerning the awareness level of SMEs on e-banking, SMEs' level of knowledge and usage of e-banking, benefits derived from e-banking adoption, and the challenges firms encounter when adopting ebanking. The study used a quantitative method and questionnaires as a means of data collection. The result of the study indicated that SMEs of the selected branches of GCB are generally aware of the various e-banking platforms available at their respective branches. The study revealed that an average of 65.9% of SMEs stated that difficulty in assessing e-banking services informs their decision to use ebanking products in their businesses. Finally, ignorance of SMEs regarding the security of e-banking services was identified as one of the main challenges affecting the smooth adoption of e-banking services among SMEs. The study recommended that SMEs should consider their weakness before adopting e-banking.

# **ABBREVIATIONS**

	ATMs	Automated Teller Machines
	AVR	Automated Voice Response
	B2B	Business to business
	B2C	Business to Consumer
	EDI	Electronic Data Interchange
	EFTPoS	Electronic Funds Transfer at Point of Sale
	EN	Enterprise Network
	ERP	Enterprise Resource Planning
	ICT	Information and Communication Technology
	ICTs	Information and Communication Technologies
	IT	Information Technology
	KMS	Knowledge Management Systems
	PC	Personal Computer
	PIN	Personal Identification Number
	SMEs	Small and Medium Enterprises
	ТАМ	Technology Adoption Model
	TOE	Technology-Organization-Environment
	TRA	Theory of Reasoned Action
	WAN	Wide Area Network
	WAP	Wireless Application Protocol technology
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## **CHAPTER ONE**

## **INTRODUCTION**

The emergence and adoption of information technology have increased business efficiency over the years. However, unlike large organisations, small and medium-scale enterprises lag in adopting some of these technologies due to financial constraints, and resistance to change, among others. Dwelling on the technology acceptance model, and the institutional theory, this study adopted the quantitative research approach and the explanatory research design to assess the adoption of electronic banking and its effects among small and medium-sized enterprises within the Accra Metropolis that transact banking businesses with GCB Bank limited.

## **Background to the Study**

The banking industry is one of the most technologically influenced sectors of the economy (Zhang, Weng, & Zhu, 2018). Over the years, banking transactions have progressed beyond the simple exchange of cash, checks, and other negotiable instruments to the use of information and communication technology (ICT) (Anum, 2020). The use of modern ICT-based solutions has resulted in substantial changes in the traditional banking business by incorporating innovative ways in the process of distributing banking products and services to small and medium-sized enterprises (SMEs) (Boshkoska & Sotiroski, 2018). According to Attah-Botchwey (2014), electronic banking (e-banking) allows simple access to money and account information 24 hours a day, seven days a week, and saves time for other tasks. Banks are now able to provide convenient services to their consumers because of

technological advancements. Information and communication technologies (ICTs) have revolutionized the way businesses conduct business and are addressing the demands of SMEs (Molla & Licker, 2019).

The use of modern ICT-based solutions has resulted in substantial changes in the traditional banking business, thanks to the introduction of brand-new ways to distribute banking products and services to small and medium-sized businesses (Boshkoska & Sotiroski, 2018). E-banking, according to AttahBotchwey (2014), enables simple access to money and account information 24 hours a day, allowing clients to focus on other tasks. The author goes on to say that e-banking helps to eliminate the huge queue that comes with traditional banking. According to Boshkoska and Sotiroski (2018), e-banking solutions are easy to use and have sufficient security safeguards to avoid theft.

Electronic banking (e-banking) lowers the cost of financial transactions for both SMEs and banks. SMEs do not need to go to banks for banking transactions because services are available 24 hours a day, seven days a week (Cheng et al., 2016; Yang, Ma, & Chen, 2018). SMEs can use the internet to apply for loans and other financial services (Smith & Rupp, 2013; Yang, Xie, & Shen, 2019). Despite these advantages, little study on the impact of e-banking usage among SMEs has been done. Although e-banking has been considered from a retail perspective (B2C) (Wan, Luk & Chow, 2019; Celik, 2018), financial services to SMEs have gotten little attention (Gehling et al., 2017).

Online financial services, on the other hand, are a significant concern for SMEs' sustainability (Wright & Ralston, 2012). Financial services are data-heavy and do not require physical delivery, hence e-banking is growing faster than other e-commerce sectors (Zekos, 2014). In the age of electronic commerce, it is critical for banks to offer electronic banking services in order to ensure their long-term viability (Burnham, 2013). As a result, most banks in developed and developing countries today provide electronic banking services of varying degrees of sophistication.

Electronic banking refers to the automated delivery of both innovative and classic banking products and services over the internet. SMEs can use this technology to access their accounts, conduct business, submit inquiries, and receive rapid responses from banks (Parisa, 2016). ATMs, telephone banking, internet banking, mobile banking, debit cards, credit cards, online bill payment, and a variety of other technologies are all instances of how technology is transforming traditional banking. Simpson (2012) goes on to say that electronic banking has thrived in a number of countries and businesses because of its capacity to enhance bank market share and facilitate commercial transactions. As a result, more emphasis is placed on the relevance of electronic banking in improving any economy's business environment. Electronic banking considers awareness, information, client protection, reaction time, reliability, security, and technical preparedness to be significant components (Yang, Xie, & Shen, 2019).

Because the banking systems in developing nations differ greatly from those in developed countries such as the United States, the United Kingdom, and South Africa, SMEs in developed countries can readily embrace the electronic banking system (World Bank, 2020). For some years, Ghana, like most developing countries, has been undertaking financial sector reorganisation and transformation as part of a comprehensive strategy (Acquah, 2016). SMEs who use electronic banking, according to Bawumia (2017), will need to reinvest in this new, favorable, yet challenging environment. This is significant because electronic transactions will continue to rise, and only countries that take steps to embrace electronic commerce will be able to benefit from this revenue stream (Akoh, 2011).

Harold and Jeff (2015) argue that to survive in the 1990s and subsequent decades, financial service providers must change their traditional operating practices. Woherem (2020) also claimed that only banks that overhaul the whole of their payment and delivery systems and apply ICT to their operations are likely to survive and prosper in the new millennium. The author advises banks to re-examine their service and delivery systems in order to properly position them within the framework of the dictates of the dynamism of Information and Communication Technology.

In these circumstances, banks must make the shift to E-banking since it provides significant competitive advantages and helps banks to enhance efficiency and operational effectiveness while also developing a stronger and more durable commercial relationship with their clients. However, the acceptance of innovation inside an organisation in general, and the adoption of E-banking in particular, is not

always simple, as it can be complicated and costly to implement. Previous studies on the adoption of electronic banking have yielded a variety of results. According to Jamieson and Lui's (2013) research, risk perception determines the intensity with which SME entrepreneurs conduct transactions using electronic banking.

According to a study conducted in India by Kesharwani and Bisht (2012), trust and risk perceptions influence the use of electronic banking. According to Kesharwani and Bisht (2012), Sulastini and Warmika (2014) research reveal that electronic banking has a considerable positive impact on trust. However, according to Panggalih and Baridwan (2013), trust and risk perceptions have little bearing on the desire to use electronic banking services. Because of possible variances in sample, period, and place of the research, the results of one researcher may differ from those of another. This study dwelt on the technology acceptance model, institutional intervention theory, and institutional theory to examine the influence of e-banking on SMEs within the Accra Metropolis.

### **Statement of the Problem**

Small and medium-sized businesses (SMEs) in Ghana are adopting ebanking because it reduces information search and transaction expenses, making business operations more efficient with payment, credit processing, and other tasks taking less time (Anum, 2020). To name a few features, it provides for the automatic packaging and distribution of information (including customized content) to certain target groups (Catherine et. al., 2020). Electronic banking, according to existing literature, such as Yang, Xie, and Shen (2019) and Anum (2020), provides banks with a competitive edge by lowering operational costs and

providing the best client satisfaction. Burnham (2019), for example, stated that in the age of electronic commerce, it is critical for banks to provide electronic banking services to thrive.

Despite the fact that banks embraced electronic banking to relieve strain in the banking hall and provide space, this does not appear to have happened. Some banks in Ghana have implemented efforts to discourage customers from using traditional face-to-face banking by charging transactional fees, while making internet transactions essentially free or with little fees. Despite all of these efforts, little has changed in the behaviour of many SMEs, resulting in long queues and traffic jams at Ghana's banking halls, particularly in Accra. The question that comes from the preceding logic is why customers still choose to stand in queues and spend more time in banking transactions over banking electronically and being in their own homes.

There has been very little research or work done on e-banking uptake by SMEs in Ghana, particularly in Accra Metropolis. The study's goal was therefore to determine whether or not SMEs were aware of e-banking products and also to analyse their understanding and use of e-banking. Benefits and obstacles of ebanking adoption, as well as solutions for practical adoption, would all be considered.

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

The study seeks to analyse the impact of electronic banking adoption among SMEs at GCB Bank Limited in Accra Metropolis.

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## **Research Objectives**

products.

The general objective of this study is to find out the impact of electronic banking among SMEs in Accra Metropolis. Specifically, the study seeks to:

- 1. investigate whether or not SMEs are aware of electronic banking service
- assess the level of knowledge and usage of electronic banking adoption among SMEs.
- 3. examine the benefits associated with electronic banking adoption among SMEs
- 4. identify challenges affecting electronic banking adoption by SMEs.

#### **Research Questions**

The following are the research questions that guided the study.

- 1. Are SMEs aware of the existence of various electronic banking products?
- 2. What is the level of knowledge and usage of electronic banking adoption among SMEs?
- . What are the benefits of adopting e-banking by SMEs in Accra Metropolis?
- 4. What are the challenges affecting e-banking adoption by SMEs?

## Significance of the Study

The study aims to help SMEs in Accra Metropolis who bank with GCB Bank limited to expand their market by giving them the option to trade directly with foreign or overseas clients. This is especially true for small tourism-related service providers. Furthermore, the findings of the study will equip SMEs lagging in ebanking adoption to adopt the practice. This will enable them to provide a quick, easy, reliable, and affordable means of obtaining online technical support, e-

banking applications, lodging technical inquiries, requesting repairs, and invoicing. In practice, SMEs would save time and money by utilising the internet. This is especially useful for entrepreneurs who are geographically separated from their counterparts in the same industry.

SMEs are increasingly using the Internet for communication and research. Although SMEs are the least that utilise the internet for e-bankings, e-mail is still regarded a vital mode of communication. It is usually the initial step in e-banking because it allows a company to access information and communicate with its suppliers and customers. This can lead to more sophisticated e-banking activity. Furthermore, once completed, this study will serve as a roadmap for SMEs and stakeholders to adopt a practical framework for e-banking and design an adoption and growth strategy.

# Delimitations of the Study

The research is limited to GCB Bank Limited SMEs in the Accra Metropolitan Area. This is based on the fact that the GCB has been operating in Accra for long enough to provide the kind of scholarly knowledge that the study attempts to provide. The planned study ran for eight (8) months, beginning in September 2019 and ending in May 2020. In addition, there were forty (40) GCB branches in the Accra Metropolis that offer e-banking to SMEs, but only four (4) will be studied.

## **Organization of the Study**

This research is divided into five sections. The background to the study, problem statement, goal of the investigation, research objectives, research question, significance of the study, delimitations of the study, and organisation of the study are all presented in the first chapter. Chapter two reviews numerous literature pertinent to this study, while Chapter three discusses the study's research methods. The results and discussions are detailed in Chapter Four. The study's summary, results, and recommendations are presented in Chapter Five, which brings the report to a close.



#### **CHAPTER TWO**

## LITERATURE REVIEW

This section examines the study's literature review. The literature review is a collection of arguments relating to the research topic at hand. The theoretical review, conceptual issues, empirical review, and conceptual framework are the four primary areas covered.

### **Theoretical Review**

The literature on technology adoption and dissemination suggests that we should be open to a variety of technology adoption methodologies in order to uncover significant aspects in any technology adoption (Khalifa & Davison, 2016). In addition, Abrahamson (2021) promotes the use of different perspectives in innovation research. In the face of uncertainty, the author claims that the 'fad' or 'fashion' model, based on institutional theory of innovation, is better suited to innovation research than the 'rationalistic goal-oriented' model. Individuals make decisions about whether or not to accept an invention based on goals and technical considerations, which is the core concept of rationalistic goal-oriented or efficient theory.

The depth and breadth of innovation research is enhanced by the inclusion of multiple theoretical perspectives (Wolfe, 1994). This study employed four main technology adoption theories in this study, and two of them, the Technology Adoption Model (TAM) (Davis, 1985) and the Technology-Organization-Environment (TOE) framework (Tornatzky & Fleischer, 1990), are known as rationalistic goal-oriented models. Two main institutional theories in technology

adoption are King et al. (1994) Institutional Intervention Theory and DiMaggio and Powell's (1983) Institutional Theory.

#### The Technology-Organization-Environment (TOE) Framework

Tornatzky and Fleischer (1990) established the technology-organization environment (TOE) framework to investigate the adoption of general technology improvements. The TOE framework, as illustrated below, found three factors that influence technology adoption by businesses: technological context, organisational context, and environmental context (Tornatzky & Fleischer, 1990). The TOE framework can be utilised to analyse any type of information systems (IS) innovation research (Zhu et al., 2013), including e-banking (Liao et al.2019) as a generic theory of technology dissemination. The TOE framework has been utilised widely in many empirical studies on information technology adoption. It, therefore, enabled this study to assess the level and impact of e-banking adoption of SME banking with GCB Bank limited.

## The Technology Acceptance Model (TAM)

The Technology Adoption Model (Davis, 1985, 1989) is based on the Theory of Reasoned Action (TRA) and has formed the cornerstone of numerous technology adoption and dissemination studies. The two most important independent variables of actual technology use, according to TAM, are:

*Perceived ease of use*, is defined as 'the degree to which a person believes that using a particular system would be free of effort.

*Perceived usefulness*, is defined as 'the degree to which a person believes that using a particular system would enhance his or her performance' The presentation of TAM (Davis, 1985) is shown in Figure 1.



Figure 1: TAM Model

The TAM was created to describe and forecast specific IT usages. Many scholars, however, have used this paradigm to investigate the adoption and dissemination of various IS technologies.

# **Institutional Intervention Theory**

Influence and regulatory actions are vital in the adoption and diffusion of innovation (King et al., 1994). In their seminal study, King et al. (1994) gives a list of institutions, assert that possible institutional action can take two dimensions, and design a model to support this claim. Institutions can apply pressure through their influence and regulatory power, and the forces of 'supply push' and 'demand pull' set the stage for those activities (King et al., 1994). Innovation adoption necessitates

Source: Davis, 1985

both 'supply push' and 'demand-pull.' The supply push innovation comes from the innovator, while the demand-pull innovation comes from the users who want to enjoy the innovation. Many technology adoption studies have employed this approach, such as e-commerce adoption (Scupola, 2013); EDI adoption (Scupola,

2013).

#### **Institutional Theory**

Institutional theory claims that in cultures where organisations are led by both rational rules and actions as originations are considered as a system, institutions work (Waber, 1946). According to DiMaggio and Powell (1983) and Scott (2011), three sorts of institutional pressures—coercive, normative, and mimetic—determine individual and company technology adoption. Organizations or other bodies put coercive pressure on social actors to adopt specified attitudes, behaviours, and practices because the latter are resource dependent on the former (DiMaggio & Powell, 1983). Coercive pressure may emanate from resource dominant organisations and regulatory authorities at the organisational level (Teo et al., 2013). According to Shi et al. (2018), coercive pressure has a considerable impact on people's attitudes and intentions to use Internet banking.

When an organisation voluntarily, but unintentionally, imitates the attitude, behaviours, and practises of other organisations, this is known as normative pressure. Even though large actors are not pushing for imitation, social actors who have not adopted innovation may feel uncomfortable when peers they like have done so (DiMaggio & Powell, 1983). Shi et al. (2018) discovered that normative pressure has a major impact on Internet banking uptake. Mimetic pressures are linked to both voluntary and conscious imitation or copying of competitors' or successful and high-status actors' techniques and behaviours (DiMaggio & Powell, 1983).

## **Theoretical Model for E-Banking Adoption among SMEs**

Because the TOE framework, TAM, Institutional Theory, and Institutional Intervention Theory have strong theoretical foundations, empirical basis, and application to a wide spectrum of IS innovation, we have chosen all of these theories as the research's underpinning theory. All of the theories stated above, however, are mostly implemented and employed in industrialised countries for technology adoption research. Because the social, cultural, and economic conditions of developed and developing countries differ (Molla & Licker, 2019), the technology adoption model used in developed countries cannot be applied to developing countries without modification.

Yet, in a notable departure from previous research, we separate all factors affecting e-banking into two categories: internal and external, in order to better understand how these factors, influence e-banking adoption. Second, we acknowledge the importance of different institutions' involvement in the adoption and diffusion process (Abrahamson, 2021; Khalifa & Davision, 2016). Finally, we combine two separate research methodologies to create an integrated framework that might better explain SMEs' use of e-banking in developing countries.

## **Internal Organizational Factors**

Based on current literature, this study discovered that three internal factors had a greater impact on SMEs' adoption of e-banking. These are further discussed below.

Organizational Capabilities: Human capital, IT literacy, and spare resources are all examples of organisational capabilities. According to Yap et al. (1992), SMEs are considered "poor" in terms of human, financial, and material resources, which makes it difficult for them to adopt ICTs. As a result, SMEs that have more IT experience and use IT are more inclined to implement IS innovation. SME technological preparedness is critical for e-commerce adoption (Zhu et al., 2016), and it comprises not only physical assets but also human resources, as human resources complement physical assets (Mata et al., 2015).

Iacovou et al. (2015) used financial and technological resources to assess organisational readiness. Organizational readiness, according to Zhu and Kraemer (2019), involves infrastructure, applicable systems, and technical capabilities. Although the research differs in its definition of organisational readiness, all agree that organisational readiness has a significant impact on SMEs' technology adoption (Zhu et al., 2013). We have included organisational capacities as one of the criteria in e-banking adoption by SMEs because of the relevance of human, IT, and capital in deciding technology acceptance and use in any firm.

Perceived Benefits: According to a large body of research, perceived benefit is a major factor in technology adoption. Lower administrative costs (Quayle, 2012), enhanced internal efficiency (MacGregor et al., 2018), improved

relationships with business partners (Poon & Swatman, 2017), improved competitiveness (Fraser et al., 2020), and higher information quality are all advantages of e-commerce for SMEs (Kaplan & Sawhney, 2020). According to Mehrtens et al. (2011), perceived benefits are the most important variables in small businesses using the Internet. SMEs profit from e-banking since it gives them 24/7 access to their bank accounts, as well as the ability to move funds and pay bills. E-banking also expands the range of funding options available to both local and international players. As a result, we may conclude that one of the most important elements influencing small business adoption of e-banking is perceived benefits.

Perceived Risk, Online Security, Trust, and Perceived Credibility: The consumer's subjective expectation of suffering a loss in pursuit of the desired outcome is known as perceived risk (Wang et al., 2013). Perceived risk is multi-dimensional, encompassing performance, physical, financial, psychological, and social losses, as well as time (Greatorex & Mitchell, 1994), making it difficult to quantify objectively (Pavlou, 2011). According to Akinci et al. (2014), internet banking clients' top concerns are a lack of trust, security, reliability, and privacy. Trust, confidence, reliability, risk in online transactions, and the reputation of online financial service providers are all components of online security. Security difficulties can emerge as a result of a malfunctioning operating system or an interruption in internet access (Min & Galle, 2019).

When doing web-based transactions, it is critical to have faith in both the service providers and the system (Lee & Turban, 2011). According to Wang et al. (2013), perceived credibility is one of the most important variables in Internet

banking acceptance. The concept of perceived credibility is impersonal, encompassing reputation, information, and economic reasoning (Ba & Pavlou, 2012). It represents how customers feel about the security and trustworthiness of online transactions (Wang et al., 2013). As a result, perceived trustworthiness is

used in this study as a construct in the adoption of e-banking.

## **External Environmental Factors**

External and internal factors, according to the literature, impact the extent of IS innovation adoption. The following are some of the external aspects that were considered in the conceptual model:

ICT Industries Readiness: Telecommunication networks, Internet connectivity, computers, other hardware, and software availability are all examples of ICT infrastructure. The technological environment in which a company operates, both electronic and telecommunication, has an impact on ICT adoption (Dholakia & Kshetri, 2014). The lack of information technology infrastructures is a hindrance to online commerce's long-term growth (Chircu & Kauffman, 2020). As a result, we argue that SMEs' adoption of e-banking is contingent on the ICT industry's readiness.

Perceived Regulatory Support: According to Rotchanakitumnuai and Speece (2013), the most critical factor in ensuring client security is legal support for internet banking. Customers are hesitant to use e-banking services if the laws are insufficient (Larpsiri et al., 2012). Another problem raised by Thomas et al. (2018) is who would carry the obligation if a financial loss occurs, as it might be difficult to identify the location of online service providers. Banks frequently

transfer risk to users of their services by signing agreements, which may make it more difficult for clients to use these services (Attaran, 2020). The regulatory environment in poor countries is more important than in developed countries when it comes to innovation uptake (Zhu et al., 2016). We incorporate regulatory assistance in the conceptual model because it is so important in e-banking adoption.

Financial Institutions Readiness: Banks and their consumers both gain from e-banking. For both financial institutions and SMEs, e-banking is termed 'wallet sharing' (Sato & Hawkins, 2011). If a bank has an internet channel for offering financial services, and because creating these online channels entails a significant investment, the bank will almost likely encourage its customers to use them. Lack of trading partner readiness, according to Zhu et al. (2013), is a significant adoption hurdle. Small businesses are encouraged to use ICT and electronic commerce when their trading partners are ready (McCole & Ramsey, 2019), and the same is expected to apply to SMEs' adoption of e-banking.

# **Conceptual Review: Concept of E-Banking**

E-banking, according to Vilattes (2017), is a type of distance banking that handles not only the flow of information between customers' "living spaces" (e.g., homes, offices, etc.) and the bank's physical facilities, but also solicitation, sales, distribution, and service access, all without requiring the customer and the financial institution representative to be in the same physical location at the same time. Electronic banking, according to Mols (2018), is the automated delivery of new and traditional banking products and services to customers via electronic medium.

Customers can use this system to access their accounts, conduct business, submit inquiries, and receive prompt responses from banks.

Electronic banking, according to Daniel (2019), is the provision of banking services to customers via the Internet. According to other authors (Mols, 2018; Karjaluoto et al., 2012), banks have the option of offering their financial services through various electronic distribution channels technologies such as the Internet, video banking, telephone banking, and Wireless Application Protocol technology (WAP). According to Karjaluoto et al. (2012), the Internet is the primary electronic distribution route in the banking business. E-banking, as defined by the author, is an online banking service that includes the provision of banking services such as account access, fund transfers between accounts, and the provision of online financial services. Most electronic business experts agree that E-banking provides access to all types of financial transactions 24 hours a day, seven days a week, through any advanced information system (Automated Teller Machines, Personal Computers, Internet, mobile phones, etc.) and for all types of financial transactions (Daniel, 2019; Mols, 2018; Sathye, 2017).

# Adoption

According to Rogers and Shoemaker (1971), adoption is defined as the decision to use and accept a new idea, product, or service, and in our instance, acceptance and continuous use of Internet banking. The adoption process is generally divided into five categories:

Innovators: These are people who enjoy taking risks and trying new things. They want to be the first to learn about new methods of doing things and are always

on the lookout for something new. They do not accept the status quo; they believe that change is a constant process, and that "you cannot step in the same river twice" as Aristotle put it.

Early Adopters: People in this category are well-respected members of society who are usually opinion leaders in their local communities, and they are often among the first to learn about new products or ideas.

Early Majority: These individuals look up to inventors and early adopters for information on how a thing works before purchasing it. They usually base their decisions on suggestions from others who have already used the product or service, and they think about it for a long time before deciding to accept it.

Late Majority: These people are more skeptical, and peer pressure motivates them to adapt. They accept items after the majority of the population has done so. They usually adopt when a product or service becomes popular and widespread.

Laggards: They take a long time to adopt, and they include those who never adopt. They are more traditional, and they are wary of innovators and change agents.

## The Adoption of Electronic Banking

According to Wang et al. (2013), E-banking was underutilised in the 1990s because businesses solely used it to sell their products and services. Thornton and White (2011), who studied customer orientations and financial distribution channel usage in the Australian financial industry, discovered that most financial institutions had recently rethought their strategies to take full advantage of Internet technology, owing to competitive pressures following the introduction of

deregulation in 1983. According to Tan and Teo (2020), the need to develop and maintain banking market share has prompted many banks to spend more on better Internet use.

Many banks have had to reconsider their Information Technology (IT) strategy in competitive marketplaces as a result of the rise of E-banking. They claim that banks that fail to respond to the market's rise of E-banking would lose clients and that the cost of providing E-banking services is cheaper than the cost of maintaining branch banking. This was validated in research by Jasimuddin (2014), who looked into the role of E-banking in Saudi Arabia. According to Jasimuddin, the majority of Saudi banks have established websites using Internet technology, but just a few provide E-banking services. The author said that if the Saudi banking industry wanted to compete in the global economy, it needed to incorporate Internet technology into its strategy.

Despite the fact that Internet technology is becoming more widely accepted around the world, the Ghanaian banking industry has yet to fully embrace it. Information Technology (IT) is described as the current electronic handling of information, including its access, storage, processing, transmission, transfer, and delivery (Ige, 2015). IT has an impact on financial institutions, according to Alu (2012), by making inquiries easier, saving time, and boosting service delivery. Commercial banks' IT expenditures have helped to streamline operations, boost competitiveness, and expand the number and quality of services offered in recent decades.

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Technology has become increasingly important in Ghanaian banks throughout time (Anum 2020). Traditionally, banks have looked for media that would allow them to serve their customers more cost-effectively while also increasing their utility Rehman et al (2022). Their main concern has been to provide more convenient service to clients while also increasing profitability and competition. For many years, internet, electronic, and communications technologies have been extensively exploited in banking to further the agenda of banks (Zhang, Weng, & Zhu, 2018). Due to rapid improvements in technology and highly competitive banking markets, E-banking has become increasingly popular as a route of distribution for financial services in recent years (Abor, 2019).

The first well-known machines to give clients electronic access were Automated Teller Machines (ATMs) (Yang, Xie, & Shen, 2019). Banks can now serve consumers outside of the banking hall thanks to the ATM. The ATM is intended to execute the bank's most critical function. It is controlled by a plastic card with unique features. The plastic card has taken the place of the cheque, the customer's appearance, banking hours restrictions, and paper-based verification. ATMs have made physical cash accessible at all times of the day and in all parts of the world. Customers of the Bank can use ATMs to perform a variety of banking functions, including withdrawing cash from their accounts, checking balances, and transferring money from one account to another, as well as purchase prepaid mobile phone credits using a plastic, chip, or magnetic-stripe card and a PIN issued by the financial institution.

Electronic banking is frequently credited with assisting in the fuelling of high growth in many nations (Coombs et al., 1987). Electronic banking, it appears, influences, not just banking and financial services, but also the direction of an economy and its ability to continue growing. According to Essinger (2019), the goal of Internet banking is to "give customers access to their bank accounts via a website and enable them to enact certain transactions on their account, subject to stringent security checks." Internet Banking is defined as "the provision of traditional (banking) services over the internet," according to the Federal Reserve Board of Chicago's Office of the Comptroller of the Currency's Internet Banking

Handbook (2011).

Customers benefit from the convenience and flexibility of internet banking, as well as practically complete control over their finances. Informational (informing consumers about the bank's goods, for example) and transactional service delivery (conducting retail banking services). It has the same influence on productivity as Tele-banking and PC-banking as an alternate delivery channel for retail banking. Apart from that, it is the most cost-effective technological method of increasing productivity. Furthermore, it solves the challenges of distance and time, allowing the bank to maintain continuous productivity with hitherto imagined far-flung customers.

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### Forms of E-Banking Service Delivery Channels

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

Automated Teller Machines (ATMs): An ATM is defined as a computer terminal, database system, and cash vault in one unit, allowing customers to enter the bank's bookkeeping system with a plastic card containing a PIN or by punching a special code number into the computer terminal linked to the bank's computerised records 24 hours a day, according to Rose (2019), cited by (Abor, 2019). Customers can use a variety of retail banking services after they have earned access. They are generally found outside of banks, although they can also be found at airports, malls, and other locations remote from customers' home banks. They were first introduced to function as cash dispensers.

ATMs, on the other hand, may now perform a wide range of services, such as making deposits, transferring funds between two or more accounts, and paying bills, thanks to technological developments (Yang, Li, Ma, & Chen, 2018). Banks, like all others, use this electronic banking gadget to gain a competitive advantage. The combined services of both automated and human tellers mean that the bank will be more productive during banking hours. Customers can also invest the time saved in other productive activities because it saves them time in service delivery as opposed to queuing in banking halls. ATMs are a cost-effective approach to increasing production because they produce more transactions per hour than human tellers (an average of 6,400 transactions per month for ATMs vs. 4,300 for human tellers) (Rose, 2019). Furthermore, because ATMs continue to operate even when
human tellers are unavailable, banks maintain a high level of productivity even after normal business hours.

**Telephone Banking:** Telephone Banking (Telebanking) is a type of remote or virtual banking is essentially the delivery of branch financial services via telecommunication devices where bank customers can perform retail banking transactions by dialing a touch-tone telephone or mobile communication unit that is connected to an automated system of the bank using Automated Voice Response (AVR) technology" (Balachandher et al., 2011). Telebanking, according to Leow (2019), has various advantages for both customers and banks. Customers will benefit from greater convenience, expanded access, and significant time savings.

However, from the standpoint of the banks, the costs of providing telephone-based services are far cheaper than those of providing branch-based services. It has practically all of the same effects on ATM productivity as ATMs, except the productivity provided by cash dispensing. For the bank, it accrues continuous productivity as a delivery conduit that provides retail banking services even beyond banking hours (24 hours a day). Customers can get retail banking services at their businesses or residences instead of visiting a bank branch or ATM. This saves clients time and provides more convenience, allowing them to work more efficiently.

**Personal Computer Banking:** Personal Computer (PC) Banking is a service that allows bank customers to access account information via a proprietary network, usually using proprietary software installed on their personal computer." Once a consumer has acquired access, he or she can undertake a variety of retail

banking operations. Increased use of personal computers has come from an increased understanding of the need for computer literacy. This surely helps to fuel the rise of PC banking, which effectively sets up a branch in the customer's home or workplace and provides 24-hour, seven-day-a-week service. Telephone Banking

and ATMs are also available (Abor, 2019).

Internet Banking: According to Essinger (2019), the goal of Internet banking is to "give customers access to their bank accounts via a website and enable them to enact certain transactions on their account, subject to stringent security checks." Internet Banking is defined as "the provision of traditional (banking) services over the internet," according to the Federal Reserve Board of Chicago's Office of the Controller of the Currency's Internet Banking Handbook (2011). Customers benefit from the convenience and flexibility of internet banking, as well as practically complete control over their finances.

Informational (informing consumers about the bank's goods, for example) and transactional service delivery (conducting retail banking services). It has all of the efficiency implications associated with Tele-banking and PC-banking as an alternate delivery channel for retail banking. Furthermore, it is the most costeffective technological method for increasing productivity. Furthermore, it eliminates the challenges of distance and time, allowing the bank to maintain constant productivity while serving previously unimaginable distant customers.

**Branch Networking:** The computerization and interconnection of geographically dispersed stand-alone bank branches into a single unified system in the form of a Wide Area Network (WAN) or Enterprise Network (EN) for the

creation and sharing of consolidated customer information or records is known as branch networking (Abor, 2019). It allows for a faster pace of inter-branch transactions because distance and time are no longer factors. As a result, there is increased productivity per unit of time. Furthermore, because numerous networked branches serve the client population as a single system, there is a simulated division of labor among bank branches, which has a good impact on branch productivity. Furthermore, by reducing client travel distance to bank offices, it allows customers to devote more time to productive activities.

# **Types of Electronic Banking Products by GCB Bank**

The following are the types of e-banking products GCB Bank offers to its clients.

### Automated Teller Machines (ATMs)

Rose (2019), describes ATMs as follows: "an ATM combines a computer terminal, record-keeping system and cash vault in one unit, permitting SMEs to enter the bank's bookkeeping system with a plastic card containing a Personal Identification Number (PIN) or by punching a special code number into the computer terminal linked to the bank's computerized records 24 hours a day. However, due to advancements in technology, ATMs can provide a wide range of services, such as making deposits, funds transfer between two or more accounts, and bill payments. Banks tend to utilize this electronic banking device, like all others for competitive advantage.

### Telephone Banking

According to Leow (2019), Tele-banking has numerous benefits for both SMEs and banks. As far as SMEs are concerned, it provides increased convenience, expanded access, and significant time savings. 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 the productivity of ATMs, except that it lacks the productivity generated from cash dispensing by the ATMs.

### Personal Computer Banking

PC-Banking is a service that allows the bank's SMEs to access information about their accounts via a proprietary network, usually with the help of proprietary software installed on their personal computer. 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 offices of SME's SMEs, and offers 24-hour service, seven days a week.

### Internet Banking

The idea of Internet banking according to Essinger (2019) is: to give SMEs access to their bank accounts via a website and to enable them to enact certain transactions on their account, given compliance with stringent security checks. Internet banking by its nature offers more convenience and flexibility to SMEs coupled with virtually absolute control over their banking. Service delivery is

informational (informing SMEs on bank's products, etc) and transactional (conducting retail banking services).

# Branch Networking

Networking of branches is the computerization and inter-connecting of geographically scattered stand-alone bank branches, into one unified system in the form of a Wide Area Network (WAN) or Enterprise Network (EN); for the creating and sharing of consolidated customer information/records. It offers a quicker rate of inter-branch transactions as the consequence of distance and time are eliminated.

# Electronic Funds Transfer at Point of Sale (EFTPoS)

An Electronic Funds Transfer at the Point of Sale is an online system that allows SMEs to transfer funds instantaneously from their bank accounts to merchant accounts when making purchases (at purchase points). A POS uses a debit card to activate an Electronic Fund Transfer Process (Chorafas, 1988).

# **Small and Medium Enterprises in Ghana**

The importance of small and medium businesses (SMEs) in economic development is becoming more widely recognised. They are frequently referred to as growth engines and job creators. Even in established industrial economies, small and medium-sized businesses, rather than multinational corporations, are the biggest employers of workers (Mullineux, 2017). In most nations, policy arguments over the role of SMEs in the development process are still at the forefront. Governments at all levels have made steps to encourage the growth of small businesses (Feeney & Riding, 2017).

In most African countries, SMEs account for more than 90% of private businesses and contribute more than 50% of employment and GDP (UNIDO, 2019). Small businesses are reported to represent a prominent element of Ghana's manufacturing scene, accounting for around 85 percent of the country's manufacturing jobs (Steel & Webster, 2021; Aryeetey, 2011). SMEs are also thought to generate roughly 70% of Ghana's GDP and account for 92 percent of the country's enterprises. Given their economic weight in African countries, SMEs have a critical role to play in driving growth, creating jobs, and contributing to poverty alleviation.

In the literature, the question of what constitutes a small or medium enterprise is a key concern. This type of business has been defined in a variety of ways by various authors. The definition challenge that is normally linked with concepts with many components has not been spared SMEs. The size of a firm is defined differently by different researchers. Some companies try to use capital assets, while others rely on labour expertise and turnover. Others classify SMEs based on their legal position and production approach. Storey (1994) tries to summarise the dangers of using size to define a firm's status by arguing that in some sectors, all firms may be considered small, while in others, there may be no such enterprises. The Bolton Committee (1971) was the first to define a tiny firm in terms of economics and statistics.**S A** company is considered tiny under the 'economic' definition if it fits the following criteria:

- It has a relatively small share of their marketplace

- It is managed by owners or part owners in a personalized way, and not through the medium of a formalized management structure
- It is independent, in the sense of not forming part of a large enterprise.

# **SMEs and E-banking Products**

The evolution of electronic banking in Africa, especially in Ghana, has been hailed by businesses both small and large. Banks are also taking advantage of ebanking to reduce investment in the number of employees and physical structures and branches. However, many SMEs continue to visit the banking hall for services and products they can easily access through electronic banking platforms. Several reasons have theoretically been cited for this phenomenon. One aim of this study is to empirically examine the main reasons behind this phenomenon in Ghana, using Greater Accra Region as a case study.

# **Conceptual Framework**

A conceptual framework gives a pictorial view of the phenomenon under study Cresswell (2018). Out of the theoretical, empirical and conceptual review of literature, the conceptual framework that guided the study was developed and this is shown in Figure 2.

OBI



Figure 2: Conceptual Framework Source: Arthor's Construct (2022)

# **Empirical Review**

The review of empirical literature provides a factual and evidence-based appraisal of similar works done in the country or abroad, in the same or related fields of study. We examine the TOE framework in-depth and provide a comprehensive overview of works that use it. The study looks at the studies that simply used the TOE framework as a theoretical model. Several authors used only the TOE framework to understand various IT adoptions, including electronic data interchange (EDI) (Kuan & Chau, 2011); open systems (Chau & Tam, 2017); web site (Oliveira & Martins, 2018); e-commerce (Liu 2018, Martins & Oliveira, 2009; Oliveira & Martins, 2009); enterprise resource planning (ERP) (Pan & Jang, 2018); business to business (B2B) e-commerce (Knowledge Management Systems (KMS) (Lee et al., 2009). Ankra (2012) conducted a survey in the Greater Accra region using the

Davis (1989) technology acceptance model (TAM) and questionnaires, with a sample size of 6 banks and 360 consumers. He discovers that every bank uses internet banking and has a company website. Customers of banks are often enthusiastic and satisfied with their services. However, the survey discovered that the majority of clients do not visit bank websites and do not use SMS banking, although all banks offer this service (Abor, 2019). Customers have also been found not to use the banks' internet banking platforms. Even though the majority of customers do not use internet products and services, they are satisfied with banks that use cutting-edge technology.

Woldie, Hinson, Iddrisu, and Boateng (2018) conducted a study in Ghana in 2018 to see how online banking can help clients (firms) and banks enhance their relationships. A total of 180 businesses are included in the study. According to the findings, just 68 percent of responding organisations had heard of internet banking at the time, while around 33 percent had never heard of it. Because of security concerns, 55 percent of businesses say they don't utilise internet banking. Even with the adoption of electronic/internet banking, the majority of them claim that they would prefer to bank manually.

In Nepal, Khatri and Upadhyay (2013) evaluate internet banking using data from five banks and 60 consumers. They discovered that, while the majority of the bank's sampled customers use the internet in general and have some awareness of internet banking, they have not fully formed the attitude to use the service. According to Khatri and Upadhyay (2013), the under-use of online banking in the

country is due to a lack of understanding and concern for security. The country's poor internet infrastructure development was also identified as a major impediment for internet banking in the country. Ahmad and Al-Zubi (2011) look at how electronic banking is being used in Jordan and how it affects consumer happiness, loyalty, and positive word-of-mouth. They chose 179 consumers from 24 commercial banks using purposive sampling. The study discovered that internet banking has a beneficial impact on consumer happiness and loyalty.

# Awareness of E-Banking Service Adoption among SMEs

Government and private financial institutions can engage in a campaign to disseminate information to SMEs about e-banking policies, best practices, success stories, and opportunities and obstacles relating to the use of ICTs and e-banking. These awareness campaigns could include free training courses and workshops on e-banking, security and privacy, awards programs, and information centres to assist SMEs. Ultimately, this information campaign should come in the form of an overall e-banking development strategy for the economy, focusing on its various innovative applications for SMEs (Wikipedia, 2017).

### **Benefits of E-Banking Adoption by SMEs**

The service sectors are mostly customer-driven, and the banking industry is one of the most competitive, requiring constant upgrades in skills, goods, and technology to retain and win clients. Mols' (2018) existence and profitability are strongly dependent on the quality of service and efficiency gave the nature of competition. Both banks and customers have reaped various benefits from electronic banking. The first benefit for banks that provide electronic banking

services is improved branding and market response. Those banks that provide such services will be seen as pioneers in technology use. As a result, they would have a more positive brand image. The other advantages are measurable in monetary terms. Every business's principal purpose is to increase profits for its shareholders,

and banks are no exception.

Several reasons have been advanced in support of E-ability banking to replace the existing inefficient and ineffective banking methods. According to Mols (2018), the Internet is a revolution that will wash away the old order, which currently retains a lot of power. E-banking transactions are cheaper thanks to the internet revolution than a branch or even phone transactions. This might turn a huge branch network, which was formerly a competitive advantage, into a comparative disadvantage, allowing e-banks to undercut brick-and-mortar banks.

According to Jen and Michael (2016), E-banking has provided banks and businesses around the world with unprecedented prospects in terms of financial product development, delivery, and marketing over the Internet. While technology provides banks with new opportunities, it also presents them with several obstacles, including the development of new IT applications, the blurring of market borders, the breaching of industrial challenges, the entry of new competitors, and the formation of new business models (Liao & Cheung 2013).

The introduction of internet banking and its prospects, according to studies by Rikya (2017) and Han (2018), has brought about an information revolution in society, and internet technology is appropriately recognised as the third wave of revolution following the agricultural and industrial revolutions. The internet's

introduction and widespread adoption by businesses have removed the constraints of time, geography, and communication, transforming the world into a small village. Small Medium Enterprise (SMEs) owners had to contact their lender an average of 15 times for a single loan, according to Rikta (2017). Han (2018) discovered that the use of information technology had a positive impact on SMEs funding. The author stated that internet SMEs enterprises are more successful and generate larger revenues than traditional SMEs businesses. That is, e-banking reduces the number of times a client must visit a bank for a transaction.

Electronic banking, according to Rotchanakitumnuai and Speece (2013), provides numerous benefits to banks, investors, and individual bank clients, including the ability to check account balances, transfer money, pay bills, and collect receivables, as well as lowering transaction costs and gaining greater control over bank accounts. Customers do not need to visit banks for banking transactions because services are available 24 hours a day, seven days a week (Cheng et al., 2016). Customers can use the internet to apply for loans and other financial services (Smith & Rupp, 2013).

E-banking is important to the economy because it allows sellers and purchasers to produce economic value by exchanging information, goods/services, and payments without having to meet in person (Bakos, 2018). E-banking also allows banks to recruit mobile users, which presents a huge profit opportunity by delivering mobile financial services. Many banks are encouraged to embrace ebanking by forces related to maximising their revenues through a larger market

scope and improved client relationships due to product delivery convenience and service customization, according to Wind (2011).

E-banking is to blame for the rise in credit card usage. A customer can now shop anywhere in the world without having to carry any cash. Banks are open around the clock, seven days a week, and are just a mouse click away. According to a survey conducted by the Cedar Group consulting firm in 2014, the Internet might play a significant role in reforming the workplace to boost efficiency by lowering operational costs and strengthening employee relationships through improved service delivery. The analysts found that as workplace transformations progressed, the level of complex services grew as well.

# **Challenges Associated with E-Banking Adoption among SMEs**

Many of the factors affecting the successful adoption of new technologies such as e-banking, according to Windrum and Berranger (2012), are generic in nature, and the successful adoption of internet technologies in part depends on how they are used in conjunction with the other technologies and management practises that make up a technology cluster. The most significant impediment, however, might be attributed to the very poor information and communication infrastructure present in most African countries (Ben Akoh, 2011). Lack of applicability to the business, preferences for existing business models, and other factors vary greatly among sectors and nations (OECD, 2014).

Unsuitability for the type of business; enabling factors (availability of ICT skills, qualified personnel, network infrastructure); cost factors (ICT equipment and networks, software, and reorganisation); security and trust factors (security and

reliability of e-commerce systems, uncertainty of payment methods, legal frameworks and Intellectual Property Rights); and challenges in areas of management skills, technological capabilities, and productivities (OECD, 2014). E-banking adoption is further hampered by a lack of trustworthy trust and redress procedures, as well as legal and regulatory variances between countries (OECD, 2014). It is crucial to note, however, that the hurdles to e-banking adoption vary depending on the type of company and culture. Training and personnel development are two areas that must be addressed. (Aranda-Mena & Stewart, 2019).

Many of these issues, it is suggested, may be successfully addressed by large organisations because of their resources and expertise. Because SMEs have severe resource constraints, the perceived barriers to e-banking adoption by SMEs may differ significantly from those faced by large corporations. As a result, several researchers look into the problems that SMEs have when it comes to implementing e-banking technologies. According to these experts, SMEs face several issues that have been mentioned in the brooder SME literature. There is, however, a substantial debate concerning some of the problems. For example, in the SME environment, a lack of management willingness to engage in e-banking is a big challenge.

However, Li and McQueen (2018) come to the opposite conclusion. Some academics admit that the barriers to SME customers and suppliers adopting ebanking technologies may differ. Grover and Ramanlal (2019), for example, stated that the barriers to e-banking technology adoption between customers and suppliers have yet to be resolved. Furthermore, it is unclear whether these challenges have a

substantial impact on the decision to use e-banking technologies or the stages of implementation (Tan et el., 2010).

## **Impact of E-Banking on SMEs Adoption**

Without a doubt, e-banking allows a company to change its relationships with the organisations and persons with whom it does business, from trade partners to suppliers, and from internal customers to end customers (Zhang, Weng, & Zhu, 2018). The Internet's collaborative powers may provide the greatest potential for change. The Internet facilitates the transformation from discrete, predictable, serial corporate operations to a more cyclical, dynamic approach. The Internet allows for quick adaptation of technology that allows all parties to work from the same system, with the same data, in a real-time setting (Miller, 2011). Retailers can also become more customer-focused and responsive thanks to the Internet.

External customers can now choose when they shop, what they want to shop for, and how they want to get their purchases (by mail, by truck, or for pickup at the nearest store). Simultaneously, data immediately acquired about customers' purchasing habits helps retailers personalise product offerings and promotions to specific customers. Business to business (B2B) trading, in which organisations trade and exchange information through the World Wide Web, and business to consumer (B2C) commerce, in which companies interact directly with customers through web pages and place orders online, is the fastest expanding means of trading in the world. Books, CDs, vehicles, vacations, and insurance are just a few of the things and services that may be purchased online. Most firms have now put up their own websites in reaction to e-tailing and e-trading (Miller, 2011). Businesses may reach a significantly larger audience with e-banking while saving money over traditional retailing techniques. An e-tailer, for example, does not need to invest as much in a costly High Street presence. Although there is a significant investment in building a decent website, the potential returns might be immense. Specialist sellers of things such as paintings, pictures, sweets, and other items have been particularly successful as a result of the creation of the internet. A person who works from home can now market and sell their products all over the world. The rapid expansion of business-to-consumer (B2C) e-commerce, as well as the high rate of dot-com failures, have received a lot of media attention. However, the business-to-business (B2B) sector accounts for more than 80% of e-commerce revenue.

Furthermore, e-commerce is transaction-focused and is only one aspect of the e-banking revolution - the use of electronic communication networks to integrate processes, transact (e-commerce), and collaborate in commercial markets - albeit a high-profile one (Berranger, 2013). E-banking has an impact on all connections. Businesses and their suppliers, partners, and customers have easy access to timely, accurate, and focused information, which supports one-to-one rather than one-to-many connections. The resulting personalisation, communication, and usefulness enrich and reinforce relationships in ways that were previously impossible. These ideas will continue to be used and expanded in the future, extending and improving commercial connections.

### **CHAPTER THREE**

### **RESEARCH METHODS**

The research methods outline the approach used to collect data from respondents such as the target population, main variables from the questionnaire administered as well as the limitations of the data used as the basis for inference and interpretation (Panneerselvam, 2017; Kumar, 2013). This chapter discusses the statistical survey method used in carrying out the study as well as the profiling of SMEs in the area of study. The chapter, therefore, presented the research purpose, the research approach or design, the sampling techniques adopted, the data collection instruments employed, and an overview of the methods or techniques used in data analysis have been presented. In addition, some of the SMEs refused to participate in the research. Further, some incomplete questionnaires were also rejected and their names were subsequently excluded from the list. Overall, 80 questionnaires were finally selected for analysis purposes.

### **Research Approach**

The research approach is a vital dimension of any scientific research as it provides the plans, strategies, systems, and procedures for conducting research (Denscombe, 2017). The research approach notably includes qualitative, quantitative, and mixed approaches (Creswell, 2018). Given this, the quantitative methodology was adopted concerning the study's focus. This is because, the quantitative approach uses statistical methods to clarify what is understood and needs to be learned through rigorous statistical analysis (Denscombe, 2017;

Watkins & Gioia, 2015). The quantitative method is cost effective and fast to execute.

This opens up the possibility of statistical analyses ranging from simple averages to complex formulas and mathematical models (Babbie, 2010). This method also allows participants to take part in the research at a time convenient to them(Sekaran & Bougie, 2016). Thus, being able to collect information quickly without any geographic constraints together with the limited resource on hand are some of the factors that contributed to influencing the researcher's preference of selecting the quantitative method over the others. A quantitative approach meant that the results were unbiased and irrelevant to the circumstances under which the research was carried out. A survey, which is considered a quantitative method provides the researcher with a lot of information obtained from a large sample of individuals in a relatively short period (Babbie, 2010).

The quantitative approach emphasizes objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys, or by manipulating pre-existing statistical data using computational techniques (Sekaran & Bougie, 2016). Quantitative research focuses on collecting digital data and generalizing it across groups of people to explain a particular phenomenon. Quantitative study deals in numbers, logic, and an objective stance (Babbie, 2010). The quantitative research focused on numeric and unchanging data and detailed, convergent reasoning rather than different ransoming. The goal of conducting a quantitative research study is to determine the relationship between one thing (an independent variable) and another (a dependent

or outcome variable) in a population. Quantitative research studies are either descriptive (subjects usually covered once) or experimental (subjects measured before and after treatment) (Babbie, 2010).

# **Research Design**

According to Sekaran and Bougie (2016), and Saunders and Lewis (2018), research design can be categorised into three broad categories based on the purpose of the study; namely, exploratory, descriptive, and explanatory designs. The study adopted the descriptive research design to assess the adoption of e-banking among SMEs banking with GCB Bank in the Accra Metropolis. Specifically, this will be in respect of the banking business. According to Yin (1994), descriptive research is designed to allow a researcher to describe some phenomenon, to develop suggestive ideas. Descriptive research is often used when a problem is not well known, or the available knowledge is not absolute (Sekaran & Bougie, 2016). The technique that is best suited for information gathering when performing descriptive research is a questionnaire (Yin, 1994). Descriptive research provides suggestive ideas through reviewing information from the problem area (Saunders & Lewis, 2018).

### **Population of the Study**

A population is made up of all the units of the group that the research emphases on. Malhotra (2013) opines that the members or units of the group should possess material facts relevant to the study and the researcher. According to Rubin and Babbie (2011), the target population is the theoretically specified aggregation of study elements. The target population of the study constitutes the

owners/managers of SMEs banking with GCB Bank in the Accra Metropolis. Statistics from the Registrar General's Department (2021) suggested that about 90 per cent of companies registered in Ghana are micro, small, and medium enterprises. SMEs are also noted as the backbone of every economy. SMEs of GCB Bank Limited (Accra Metropolis) is 103 (GCB Bank Headquarters, 2021). This, therefore, constituted the population size. SMEs are businesses with less than 101 employees (Abor 2019).

# Sample and Sampling Procedure

Polit and Beck (2016) describe sampling as a process of selecting a portion that represents the entire study population. The simple random sampling technique was employed for this study. With this probability sampling technique, every unit in the population had a chance greater than zero of being selected in the sample, and this probability can be accurately determined (Sekaran & Bougie, 2016). This sampling technique was applied because it aims to achieve a homogeneous sample size where the respondents, (that is, the SMEs banking with GCB Bank) have the same characteristics (Creswell, 2018). To obtain the sample size, the researcher employed Krejcie and Morgan's (1970) sample size determination table which indicated 80 SMEs as the ideal sample size for a population size of 103 SMEs. 80 SMEs, therefore, constituted the sample size for this study.

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# **Source of Data**

Both primary and secondary sources were employed. The primary data was obtained from the responses and information from the questionnaires that were administered to the SMEs. The secondary data included documents, receipts, and a

database of SMEs at Ghana Commercial Bank.

### **Data Collection Instrument**

The study was quantitative and descriptive hence the main data collection instrument used was the questionnaire. The questionnaire was used because it is more precise, concise, and gives the respondents options to choose from, and also answer at their free will (Sekaran & Bougie, 2016). It serves the following purposes: to collect the appropriate data comparable and amenable to analysis, to minimize bias in formulating and asking the question, and to make the question engaging and varied (Creswell, 2018). The questionnaire started with the purpose of the research and assurance of confidentiality and anonymity. All the question items were adopted from researchers such as Anum (2020), and Zhang et al (2018).

# **Data Collection Procedure**

Permission was sought from the management of GCB at various branches. The research spelled out the purpose of the study, the need for individual participation, and how anonymity, as well as the confidentiality of respondents' responses, will be assured. After establishing the necessary contact with the SMEs and staff of the various branches of GCB, permission was granted for the administration of the instrument. The researcher administered questionnaires to the selected respondents at their various retail business premises. The presence of the researcher is necessary as it enabled the establishment of rapport between the

researcher and the respondents, which facilitated a complete understanding of the questionnaire by explaining areas respondents did not understand.

The questionnaire was completed and given back to the researcher on the same day. The question items were read to illiterate respondents. The questionnaire was administered from 12:30 pm to 1:30 pm for two weeks. This time was favourable since it was lunchtime for the workers in the GCB and many SMEs which permitted the researcher to administer the instrument to the respondents without interference with their busy schedules. There was a 100 percent returning rate, thus, 80 questionnaires were retrieved from the respondents. The interviews were also conducted within three days.

# **Data Processing and Analysis**

Analysing the data is an important step in any research and be done according to the aims of the study. Williman (2019) states that data is analysed to measure, make companions, examine relationships, and forecasts, test hypotheses, construct concepts and theories explore, control, and explain. The primary data (questionnaire) that were retrieved from the field was analyzed through the use of quantitative tools. With the open-ended questions in the questionnaires, the opinion of respondents was carefully examined, grouped into themes, and then coded. The Statistical Product for Service Solution version 26 (SPSS v26) was used to organize; analysed and interpreted using descriptive statistics such as frequencies, percentages, standard deviations as well as means.

# **Chapter Summary**



# **CHAPTER FOUR**

### **RESULTS AND DISCUSSION**

# Introduction

This study sought to examine the adoption of electronic banking among SMEs banking with GCB Bank Limited. This chapter covers the analysis and interpretation of data collected through a questionnaire administered to the SMEs that bank with GCB Bank. The chapter has been grouped broadly under five major headings. This includes socio-demographic characteristics of respondents, SMEs' awareness of electronic banking services, knowledge and usage of Electronic Banking Services by SMEs, challenges they face as well as the benefits of using ebanking.

Data was collected through questionnaires and all eighty (80) questionnaires were administered to the respondents. It must be noted, however, that the analysis of data was solely a numerical summary and as such interpretation and inferences have been drawn based on the analysis. These inferences are done from the literature review for comparisons and contractions. The technique used for the presentation of the findings was a statistical description of the respondents.

# Social Demographic and Economic Characteristics of Respondents

This section presents the demographic characteristics of the respondents who took part in the study. Specifically, this section presents the results of the respondents according to their gender, age, educational level, marital status, and religious affiliation. Table 1 presents the results of the demographic respondents.

	Variable	Classification	Frequency	Percentage
	Gender	Male	37	46.3
		Female	43	53.8
		Total	80	100.0
	Age	20-39	18	22.5
		30-39	39	48.8
		40-49	22	27.5
	· · · · · · · · · · · · · · · · · · ·	50-59	1	1.3
		Total	80	100.0
	Education	Basic	9	
		Secondary	35	11.3 43.8
0		Tertiary	36	45.0
0		Total	80	100.0
2	Marital Status	Single	16	20.0
		Married	61	76.3
	20	Widowed	3	3.8
		Total	80	100.0
	Religious Affiliation	OBIS	46	57.5
		Muslim	34	42.5
		Total	80	100.0
	Source: Field Survey (2019	))		

# Table 1: Socio-demographic characteristics of Respondents (SME's)

From Table 1, it is revealed that the majority 43 (53.8%) of the respondents were females while 37 (46.3%) of them were males. Though the number of females sampled is more than the males signifying that the respondents were female-dominated yet it did not affect the result of the study. This is because the gender of the respondents did not have any direct bearing on the responses provided. Again, concerning respondent's age, it came to light that the majority of respondents (n=39, representing 48.8%) fell within the "30-39 years" age category, followed by the "40-49 years" age category (n=22, representing 27.5%), also "20 - 29 years" age category (n=18, representing 22.5%) and "50-59" years age category (n=1, representing 1.3%). This indicates that the majority of the respondents were adults hence their responses can be seen as a true reflection concerning the research questions.

More so, the educational level of the respondents as shown in Table 1 suggests that the majority of respondents (n=36, representing 45.0%) have attained tertiary education. Only 43.8 percent had secondary education and 11.3 percent had basic education. This presupposes that all of the respondents have had some form of formal education which facilitated their understanding of the questions upon which they were able to make informed contributions to the study since banking processes require some basic literacy.

The marital status of the respondents was also an important factor, out of 80 collected questionnaires, the results were as follows; (76.3 %) married, (20 %) single and (3.8%) widow, and the results were presented in Table 1. The findings show that the highest percent of e-banking users are married, followed by single

people. Concerning the religious affiliation of respondents, it was found from the study that many of the respondents constituting 57.5% indicated Christianity as their religious affiliation. This is consistent with religious distribution in Ghana and the remaining respondents constitute Muslims, 42.5%. The 2021 Population and Housing Census agreed to the fact that Christians dominate within Accra Metropolis and the nation as a whole.

# Awareness of E-banking Service Adoption among SMEs

This section analyses data about the first objective of the study which sought to examine whether or not SMEs are aware of electronic banking services. To answer this research objective, section 'B' of the questionnaire was used. Respondents were to indicate whether or not they are aware of electronic banking and for how long have they been aware. The results are indicated in table 3.

STATEMENTS	SA	A	N	D	SD
highly aware of the availability of electronic banking	39(48.8%)	36(45%)	3(3.8%)	2(2.5%)	-
figure out new electronic banking products and service without help	2(2.5%)	8(10%)	36(45%)	34(42.5%)	-
Guidance and specialized instruction concerning e-banking service are available	30(37.5%)	28(35%)	16(20%)	6(7.5%)	-

## Table 2: Awareness of E-banking Service Adoption among SME's

Key: SA = Strongly Agree A = Agree N = Neutral D = Disagree SD=Strongly Disagree

Source: Field Survey (2019)

The results from Table 2 reveal that majority of the respondents (48.8%) strongly agree and (45%) agreed that they are highly aware of the availability of electronic banking. Only 2.5% of the respondents did not agree and (3.8%) remained neutral. The ability to figure out new electronic banking products and services without help from others, 12.5% of the respondents agreed with that statement while 42.5% of the respondents disagreed with the fact that they do not need help from others to figure out new e-banking services and the 45% remained neutral. Concerning the availability of guidance and specialized instruction concerning e-banking service at GCB Bank, the majority of the respondents also agreed on the availability of guidance. This shows that GCB Bank make gives guidance to its customers. However, 20% were neutral and only a few constituting 7.5% did not agree that there is guidance and instructions concerning e-banking services.

Awareness	Response	Likert scale	Frequency	Percentage
	Very long	1	25	31.25
12	Long	2	38	47.5
How long have you been Aware	Do not know	3	3	3.75
	Recently	4	1	1.25
	Very recently	5	13	16.25
	Total		80	100

### Table 3: Length of Awareness of E-banking Service

Source: Field Survey (2019)

The respondents also stated how long they have been aware of the e-banking services. In Table 3, it can be observed that the majority of the respondents are long aware of the e-banking products and services and hence has 47.5% on the Likert scale and 31.25% indicating very along. Respectfully, 1.25% and 16.25% of the respondents said they became aware of electronic banking recently and very recently. Also, 3.75% of the respondents indicated that they do not know about e-banking products and services. Therefore, these responses indicate that the banks through advertisements and notices within their premises are putting much effort into promoting awareness of e-banking services among SMEs.

Assessing the Knowledge and Usage of Electronic Banking Services by SMEs This section analyses data about the second objective of the study which seeks to find out whether SMEs have sufficient knowledge of E-banking facilities and usage of e-banking. Many SMEs have identified their lack of knowledge of technology as one of the main challenges to using E-banking. Respondents were to indicate their level of knowledge and usage of electronic banking through a Likert scale (SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, and SD=Strongly Disagree). The results are indicated in Table 4 below.

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STATEMENTS	SA	Α	Ν	D	SD
Easy to find information that I needed regarding e-banking transactions.	2(2.5%)	43(53.5%)	29 (36.5%)	6 (7.5%)	-
E-banking technical support lines are helpful because they explain	7(8.8%)	33(41.3%)	39 (48.8%)	1 (1.3%)	-
things to my understanding.			21		
e-banking services are designed for use by ordinary people.	3(3.8%)	12(15%)	41 (51.3%)	24 (30%)	-
E-banking enhances my effectiveness in doing business	6(7.5%)	62(77.5%)	9(11.2%)	3(3.8%)	-
E-banking enhances my effectiveness in information seeking regarding various schemes	9(11.2%)	57(71.3%)	14(17.5%)	-	-
using e-banking facilities useful	9(11.3%)	44(55%)	20 (25%)	7 (8.8%)	-
quick transactions using e-banking facilities.	11(13.8%)	43(53.8%)	22 (27.5%)	4 (5%)	-
E-banking is advantageous for me.	7(8.8%)	22(27.5%)	36 (45%)	12 (15%)	7(8.8%)
E-banking saves me time.	15(18%)	34(42.5%)	24 (30%)	15(18%)	34(42.5%)
Using e-banking service in my job would enable me to accomplish tasks more quickly.	17(21.2%)	<mark>42(</mark> 52.5%)	13 (16.3%)	17(21.2%)	42(52.5%)
Using e-banking service would improve my job performance.	16(20%)	28(35%)	24 (30%)	16(20%)	28(35%)
Using e-banking service would enhance my effectiveness on	6(7.5%)	28(35%)	27 (33.7%)	6(7.5%)	28(35%)
G (D'11) G (2010)	_				

# Table 4: Knowledge and Usage of Electronic Banking Services by SMEs

Source: Field Survey (2019)

The result presented above presents respondents who get it easy to find information that is needful regarding e-banking transactions. Out of the total number of 80 SMEs sampled, 45 (56%) agreed that it was easy to find information that is needful regarding e-banking transactions, 29 (36.5%) were neutral to the assertion and 6 (7.5%) disagree that they find it easy to access information on e-

banking transaction. 40 (50.1%) of the respondents agreed that e-banking technical support lines are helpful because they explain things to their understanding, 39 (48.8%) were neutral and 1 (1.3%) of the respondents disagree with the assertion. Also, 68 (85%) of the respondents agreed that e-banking enhances their effectiveness in doing business, 9 (11.2%) were neutral and 3 (3.8%) disagree with the fact that e-banking enhances their effectiveness in doing business. Also, 66 (82.5%) respondents agreed that e-banking enhances their effectiveness in information seeking regarding various schemes and 14 (17.5%) were neutral, neither in agreement with the assertion nor disagreement with the assertion.

However, in terms of using e-banking facilities usefully 53 (66.32%) of the respondents agreed with that assertion, 20 (25%) were neutral to that statement whiles 7 (8.8%) of the respondents disagree with such statement. 54 (67.6%) SMEs of GCB also stated that they can make quick transactions using e-banking facilities, 22 (27.5%) respondents were neutral and 4 (5%) respondents disagree to the statement. SMEs of GCB were also asked to indicate whether e-banking facilities were to their advantage and saved time. 29 (36.3%) and 49 (60.5%) respectively agreed that e-banking facility is advantageous to them and saves time for them. 36 (45%) and 24 (30%) respectively were neutral whiles 15 (18.8%) and 7(9.1%) respectively disagree to the statement.

Using e-banking service in my job would enable me to accomplish tasks more quickly. Per this statement, 59 (73.7%) agreed to the statement, 13 (16.3%) respondents were neutral while 8(10%) of the respondents disagreed with the statement. Also, 44 (55%) of the respondents agreed that using e-banking services

improves their job performance, 24 (30%) of the respondents were neutral and 12 (15%) of the respondents disagreed with the assertion. Another area where respondents agreed was that e-banking service enhances their effectiveness on the job. 42.5% of the respondents agreed with the assertion that e-banking service enhances their effectiveness on the job. Only 27 (33.7%) of the respondents however were neutral and 23.8% of the respondents disagreed to the assertion that e-banking service enhances their effectiveness on the job.

# Benefits of E-Banking Adoption among SMEs

The third objective was to identify the benefits of adopting e-banking among SMEs in GCB in Accra Metropolis. In view of this, the researcher intended to find the perception of respondents on the benefits of the adoption of E-banking by SMEs by rating whether they strongly Agree, Agree, Neutral, Disagree and Strongly Disagree. Table 5 shows the frequency distribution for rating the benefits of e-banking adoption.

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BENEFITS	SA	Α	Ν	D	SD
Improve customer service	-	44(55%)	12(15%)	24(30%)	-
Providing more satisfying banking experience	-	40(50%)	10(12.5%)	30(37.5%)	-
Easy and fast exchange of documents and information	-	65(81.25%)	15(18.75%)	-	-
Reduced cost of banking operations	-	64(80%)	5(6.25%)	11(13.75%)	-
Control over using e-banking services	17(21.3%)	49(61.2%)	10(12.5%)	4(5%)	-
Resources necessary to use e- banking services	6(7.4%)	39(48.8%)	24 (30%)	11 (13.8%)	-
Easy for me to use the system and saves time	15(18.75%)	49(61.25%)	13(16.25%)	3 (3.75%)	-
E-banking service will be compatible with other systems I use	9(11.3%)	34(42.5%)	27(33.75%)	10 (12.5%)	-
E-banking service will fit well with the way I like to work.	5(6.25%)	38(47.5%)	29(36.25%)	8(10%)	-
Increase the availability of e- banking products/services to SMEs.	5))	58(72.5%)	14 (17.5%)	8(10%)	-

# Table 5: Summaries of E-Banking Adoption Benefits

Key: SA = Strongly Agree A = Agree N = Neutral D = Disagree SD=Strongly Disagree

Source: Field Survey (2019)

Improve Customer Service: 44(55%) of the respondents agreed with the benefit, 12 (15%) remained neutral, and 24 (30%) disagree with improving customer services as a benefit of e-banking. E-banking, for instance, has reduced the long-time SMEs spend at the bank. Easy and fast exchange of documents and information: From the table above the majority of the respondents 65 (81.25%) interviewed agreed that E-banking adoption facilitates easy and fast exchange of documents and information such as invoices, orders, statements, and other vital documents whiles 15 (18.75%) of the respondents remained neutral.

Reduced Cost of Banking Operations: The researcher intended to find out whether SMEs agree or disagree on the benefit of reducing the cost of banking operations, out of 80 respondents, 11 (13.75%) said they disagree, 5 (5.25)% remained neutral and 64 (80%) agreed to the assertion that e-banking reduces the cost of banking operation. Adopters of e-banking tend to reduce transaction costs, increase transaction speed and reliability, and extract maximum value from transactions in their value chains (OECD, 2014). Control over using E-Banking Service: 4 (5%) of the respondents disagreed with this statement, 10 (12.5%) remained neutral and 66 (82.5%) agreed. This indicated that because most of the SMEs were fully engaged in E-banking they have control over using e-banking services.

Resources Necessary to use E-banking Service: 45 (56.2%) of the respondents agreed with this statement, 24 (30%) remained neutral and 11 (13.8%) disagreed. This indicated that most SMEs have the resources necessary to engage in E-banking. They could easily check inventory and advice on an order. Easy for me to use the System and Saves Time: 64 (80%) said they agreed and 13 (16.25%) remained neutral whiles 3 (3.75%) of the respondents disagreed. This indicated that e-banking adoption enables both the banks and their SMEs to save time in almost all transactions.

E-banking service will be compatible with other systems I use: Out of the 80 respondents, 43 (53.8%) said they agreed, 27 (33.75%) remained neutral and 10 (12.5%) said they disagreed with the statement. This indicated the compatibility of e-banking with other systems used by SMEs. As the world is moving online, SMEs

in emerging markets are gaining greater bargaining power in the global economy despite their limited capital and mobility. Links are being established among businesses to expand their industry hence competitive advantage in the global business. E-banking service will fit well with the way I like to work: Out of the 80 respondents, 43 (53.75%) said they agreed, 29 (36.25%) remained neutral and 8 (10%) said they disagreed with the statement. This indicates that e-banking services will fit well with the way SMEs like to work.

Increase the Availability of E-Banking Products/Services to SMEs: The researcher intended to find out the rate at which the availability of products/services to SMEs was a benefit of e-banking adoption, out of 80 respondents, 58 (72.5%) agreed to the statement, 14 (17.5%) remained neutral and 8 (10%) disagreed to the statement. They agreed that e-banking facilitates work and makes it easier. Given that, new products can easily be added hence increasing market share and profit maximization.

# **Challenges Associated with Adoption of E-banking among SMEs**

Though e-banking is seen by many SMEs as a convenient way of banking, it is fraught with several challenges. Challenges such as insecurities of e-banking, for example, fraud committed by internet hackers, and difficulties in transacting electronic banking such as network and system errors have affected the level of patronage of these products. The study sought to examine the key challenges associated with e-banking from the perspective of SMEs. The result of the challenges affecting the use of e-banking products from the perspective of SMEs is captured in Table 6.

CHALLENGES	SA	Α	Ν	D	SD
Using e-banking has high operational or transactional cost	5(6.3%)	45(56.2%)	19(23.7%)	10(12.5%)	1(1.3%)
E-banking has less start-up cost	3(3.7%)	20(25%)	42(52.5%)	13(16.3%)	2(2.5%)
E-banking is prone to security breaches	28(35%)	44(55%)	5(6.3%)	3(3.7%)	-
Ignorance is a challenge associated to e-banking	23(28.7%)	38(47.5%)	14(17.5%)	4(5%)	1(1.3%)
Difficulty in transacting electronic business	12(15%)	25(31.25%)	18(22.5%)	20(25%)	5(6.25%)
Instability in power supply	13(16.25%)	26(32.5%)	16 (20%)	18(22.5%)	7(8.75%)
Low level of literacy among SME owners		64(80%)	•	16 (20%)	-
Lack of online payment process	-	45(56.25%)	-	35(43.75%)	-

# Table 6: Challenges Associated with Adoption of E-banking among SMEs

Key: SA = Strongly Agree A = Agree N = Neutral D = DisagreeSD=Strongly Disagree

Source: Field Survey (2019)

The result presented above indicates that transactional cost is a challenge affecting the usage of e-banking products. Out of the total number of 80 SMEs sampled, 50 (62.5%) indicated that transactional cost is a major challenge hindering their patronage of e-banking services, 19(23.7%) of the respondents remained neutral and 11(13.8%) of the remaining respondents disagree that transactional cost is a challenge to the use of e-banking facility. This implies that the implementation of e-banking is costly. Thus, introducing new products and services undoubtedly requires substantial financial resources.

This notwithstanding authenticates the writings of other authors. For example, Duffie and Rahi (2015) found that the high cost of implementing innovations such as e-banking in the banking industry is a major challenge
hindering e-banking implementation in the industry. The initial cost of implementing e-banking and some technology systems can be expensive and in most cases, banks without a strong capital base cannot afford to undertake it. Introducing new products and services undoubtedly requires substantial financial resources. Huge sums of money must be pumped into research and development before such innovations become a reality.

Start-up cost was also a challenge to SMEs in adopting e-banking services, 23 (28.7%) of the respondents agreed that start-up cost was a challenge and 15 (18.8%) disagree that start-up cost was a challenge to patronize e-banking whiles the remaining 42 (52.5%) were neutral to the assertion. This may be a result of the economic turmoil countries globally are experiencing in recent times and specifically Ghana. High inflation rates, depreciation of the local currency, and freeze on employment just to mention but a few. Organizations are generally complaining of difficult times and this may have accounted for the citing high startup cost as the main challenge confronting the adoption of e-banking among SMEs. The result also indicated that security breach is a challenge affecting the usage of e-banking services by SMEs. 72 (90%) of the respondents agreed that security breach is a challenge while 5 (6.3%) remained neutral and 3 (3.7%) of the respondents disagreed with the notation that security breach is not a challenge to the adoption of e-banking by SMEs. This notwithstanding is not surprising since ebanking such as fraud by internet hackers and also most of the insecurities are caused by SMEs. Some SMEs may have their password leaked as a result of carelessness and also not conforming to the operational regulations of the bank.

Ignorance on the part of SMEs towards the use of e-banking products was also identified as one of the major challenges affecting e-banking. Respondents that agreed were 61 (76.2%) while those that disagreed were 5 (6.3%) and 14 (17.5%) of the respondents remained neutral. This was surprising to the researcher because the analysis revealed that almost all the respondents were literate and as such could read and write. Also, the majority of the respondents 37 (46.25%) agreed with the notion that difficulty in transacting electronic business is also a major challenge while 18 (22.5%) remained neutral and 25 (31.25%) of the respondents disagreed with the notion.

Some of the difficulties that respondents said they face are system and network failures. The finding agrees with Earl (2020) who identified the challenges that SMEs face in using electronic banking services which include, risk arising from fraud, network, and system errors, and other unanticipated events resulting in the firm's inability to convey banking products and services. Again 39 (48,75%) of the respondents agreed that the instability in electricity power supply is a major challenge hindering their patronage of e-banking services while 16 (20%) of the respondents remained neutral and 25 (31.25%) disagreed with the notion.

This may be the case, especially with the internet and mobile banking platforms where constant electricity is a prerequisite. If the power supply is erratic powering computers and mobile phones become highly impossible thereby rendering electronic banking virtually impossible. With the statement of literacy among SMEs owners 64 (80%) of the respondents agreed with the statement whiles 16 (20%) disagreed with the notion. Further clarification was that they were not

illiterate in reading and writing or academics but their illiteracy was in connection with Technology. They were not knowledgeable in the use of ICT and most of them had the fundamentals yet would not be able to support business transactions.

Out of the 80 respondents, 45 (56.25%) agreed with the lack of an online payment system whilst 35 (43.75%) disagreed with the statement. This was an indication that though some forms of online payment have been introduced, their security and applicability cannot be guaranteed. According to OECD (2014), the uncertainty of payment methods, legal framework, intellectual property, and challenges in areas of management skills, technology capabilities, productivity, and competitiveness hinders the smooth operation of the online payment system.

## **Chapter Summary**

The result of the study indicated that SMEs of the selected branches of GCB are generally aware of the various e-banking platforms available at their respective branches. Also, an average of 65.9% of SMEs revealed that difficulty in assessing e-banking services informs their decision to use e-banking products in their businesses. Finally, ignorance of SMEs regarding the security of e-banking services was identified as one of the main challenges affecting the smooth adoption of ebanking services among SMEs.

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#### **CHAPTER FIVE**

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### Introduction

This chapter constitutes the overall summary of the study and outlines the conclusion derived from the data analysis and also informed recommendations based on the study. The recommendations, however, consisted of two parts. It is made up of the main recommendation as well as recommendations for future research. It is important to also mention that the recommendations provided emanated from the findings of the study.

#### Summary

The adoption of e-banking among SMEs and other firms is worth considering in the trend of doing business in this 21<sup>st</sup> century. The study was a descriptive study that aimed at understanding the impact of electronic banking adoption among SMEs banking with GCB in the Accra metropolis. This was to determine the awareness of e-banking service adoption among SMEs, assess the knowledge and usage of electronic banking services by SMEs, identify the benefits of e-banking adoption among SMEs and identify the challenges associated with the adoption of e-banking among SMEs. A simple random sampling technique was adopted to select 80 SMEs with the help of Krejcie and Morgan's (1970) sample size determination table.

Spherically, the study sought to:

SMEs

- 1. investigate whether or not SMEs are aware of electronic banking service products
- 2. assess the level of knowledge and usage of electronic banking adoption among

# examine the benefits associated with electronic banking adoption among SMEs identify challenges affecting electronic banking adoption.

The study examined the various theories as well as specific empirical studies to form the background of the study. Among other things, the literature review captured the definition of electronic banking, forms of electronic banking, and benefits and challenges of electronic banking to mention a few. Questionnaires were used as the principal tool for the data collection. Questionnaires were administered to selected members. The data were analyzed using basic statistical tools such as frequencies and percentages. Most of the questions were framed in a closed-ended manner. The SPSS v26 software was used in processing and analyzing the data.

The data study revealed SMEs of the selected branches of GCB are generally aware of the various e-banking platforms available at their respective branches. Analysis of the SMEs' responses indicates that 78.75% of the respondents were much informed of e-banking products and 17.5% of the respondents stated they became aware of e-banking recently. Only 3.75% of the respondents stated that they are unaware of the e-banking products offered by their branch. The findings were corroborated by the responses offered by bank officials. The

overwhelming response in favour of e-banking awareness indicated that the banks have done much to create awareness of their e-banking products.

The study uncovered some findings in the objective that sought to assess the knowledge and usage of electronic banking services by SMEs. This was revealed when an average of 65.9% stated that difficulty in assessing e-banking services informs their decision to use e-banking products in their businesses. Ignorance of SMEs regarding the security of e-banking services was identified as one of the main challenges affecting the smooth adoption of e-banking services among SMEs. The findings further revealed the majority of the bank officials agreed that high start-up cost is a major challenge.

## Conclusion

The study brought to the fore that SMEs banking was highly aware of the existence of electronic banking services and products. This claim was overwhelmingly confirmed by the respondents from the bank. The majority of the respondents rated their knowledge and usage of electronic banking services as high and very high, and they access the services on a daily, weekly, and monthly basis. It was obvious from the study that the benefits of e-banking were well known to SMEs and represent a formidable force in the growth of e-banking. The general recognition of the positive impact of e-banking is; improve customer service, reduced cost of banking operations, easy and fast exchange of documents and information, compatibility of e-banking services to SMEs. Given the enumerated benefits, SMEs have come to accept e-banking as a novelty that has a very great

potential of improving their businesses, it became obvious that if well adopted would produce positive changes in SMEs' and staff attitudes as well as maximize profit.

The study acknowledged that insecurity, erratic power supplies, as well as difficulty in transacting business electronically were the main challenges associated with electronic banking. Most SMEs have a keen interest in adopting e-banking but they fear that they may be deceived through internet fraud, hacking, and encryption among others. However, there is an increasing growth of online business in the private sector indicating a promising future for online business in Ghana and among SMEs. As such amelioration of these obstacles especially allaying the fears of insecurity will boost SMEs' confidence and eventually lead to high patronage.

## **Recommendations**

The study revealed that the majority of the SMEs were females. This is fair, especially in a country where feminist groups are fighting for women's empowerment. It is recommended that SMEs strategize on their strengths which indicate what they have to enable them to get enrolled. Social networks such as Facebook, Twitter, Zoom, Skype, Google Meet, YouTube, and the like could be used as a starter in exchanging information and advertising platform for SMEs. SMEs should consider their weakness before adopting e-banking. Most SMEs would not want to invest huge sums of money into an ICT solution and would have to consider other opportunities to adopt e-banking. It is also recommended that SMEs should always try to avoid a threat.

## **Suggestions for future research**

Recommendations for Future Research studies should be done on the following:

• There is the need for a study involving a larger sample size drawn from a

broader spectrum of firms to see if the findings reported in this study hold in other cases.

- Again, due to limited resources and time, this study could only sample three branches of GCB even though the study could have covered a wide setting.
- Research consideration would be a comparative study of the determinants of e-banking adoption among the types of SMEs.
- Investigate the role of government in promoting e-banking in Ghana.
- Investigate how the internet can be used effectively and efficiently to open new distribution and retailing channels in foreign markets.

What are the trends and prospects for e-banking in the urban and rural areas

in Ghana?

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## APPENDIX

## QUESTIONNAIRE

## UNIVERSITY OF CAPE COAST COLLEGE OF HUMANITIES AND LEGAL STUDIES SCHOOL OF BUSINESS DEPARTMENT OF MARKETING AND SUPPLY CHAIN MANAGEMENT

DEPARTMENT OF MARKETING AND SUPPLY CHAIN MANAGEMENT

Questionnaire on "Impact of electronic banking adoption among SME's evidence from Accra Metropolis."

Dear Sir/Madam,

I am a master student from the Department of Marketing and Supply Chain Management, University of Cape Coast Business School. I am carrying out a study on the topic, "Impact of electronic banking adoption among SME's evidence from Accra Metropolis". Your views are very relevant to the study and every information you provide would remain highly confidential. Thank you so much for accepting to participate in the study.

# SECTION A: DEMOGRAPHICS INFORMATION



# **SECTION B**

Please on a scale of 1 to 5, indicate the extent to which you agree to each of the statements below, where 1=Strongly Agree, 2=Agree, 3=Neutral, 4=Disagree and 5=Strongly Disagree

		Statements	RESPONSES				
			1	2	3	4	5
	TRS1	Electronic Banking will contribute to a better quality of work.					
	TRS2	Electronic Banking will give me more freedom of mobility.					
	TRS3	E-Banking will give me more control over transacting business electronically.					
	TRS4	E-banking will enhance more productivity in my work.					
	TRS5	Other people come to me for advice on e-banking.					
	TRS6	I feel confident while using e-banking method to access money					
	TRS7	The practices that harm SME's self-esteem or destroy trust are not associated with E-banking					
	AWR1	In all I am highly aware of the availability of electronic banking.					
	AWR2	I can usually figure out new electronic banking products and services without help from others.					
	AWR3	I am aware and keep up with the latest e-banking service in my areas of interest.					
	AWR4	I have the knowledge necessary to use e-banking service					
	AWR5	Guidance and specialized instruction concerning e-banking service will be available to me.					
	PEU1	It was easy to find information that I needed regarding e-banking transactions.	6				
	PEU2	E-banking technical support lines are helpful because they explain things to my understanding.		1			
	PEU3	Sometimes, I think that e-banking services are designed for use by ordinary people.	X				
	PEU4	E-banking enhances my effectiveness in doing banking transactions	>	1			
	PEU5	E-banking enhances my effectiveness in information seeking regarding various schemes					
	PEU6	I find using e-banking facilities useful					
	PEU7	I make quick transactions using e-banking facilities.					
	PEU8	E-banking is advantageous for me.					
	PEU9	E-banking saves me time.					
	PUF1	Learning to operate e-banking service would be easy for me.					
	PUF2	I would find it easy to get e-banking service to do what I want it to do.					
	PUF3	My interaction with e-banking service would be clear and understandable.					
	PUF4	I would find e-banking service to be flexible to interact with.					

PUF5	It would be easy for me to become skillful at using e-banking			
	service.			I
PUF6	I would find e-banking service easy to use.			
PUF7	Using e-banking service in my job would enable me to			
	accomplish tasks more quickly.			I
PUF8	Using e-banking service would improve my job performance.			
PUF9	Using e-banking service would enhance my effectiveness on the			
-	job.			1
BFT1	I would have control over using e-banking service			
BFT2	I have the resources necessary to use e-banking service.			
BFT3	Given the resources, opportunities and knowledge it takes to use			1
	e-banking service, it would be easy for me to use the system.			
BFT4	E-banking service will be compatible with other systems I use.			
BFT5	I think that using e-banking service will fit well with the way I			1
	like to work.			
BFT6	Using e-banking service will fit into my work style.			1
CH1	Using e-banking has high operational or transactional cost			
CH2	E-banking has less start-up cost			
CH3	E-banking is not prone to security breaches			
CH4	Ignorance is a challenge associated to e-banking			

Thank you so much.

NOBIS