UNIVERSITY OF CAPE COAST

MOBILE BANKING AND REVENUE MOBILISATION OF SMALL AND MEDIUM-SIZED BUSINESSES (SMBs) IN THE NEW JUABEN SOUTH MUNICIPALITY

DAVID ODUM ABUENYI

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BY

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DECLARATION

Candidate's Declaration

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

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

Name: David Odum Abuenyi

Supervisor's Declaration

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

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

Name: Rev. Dr. George Tackie

ABSTRACT

The main objective of this research is to assess mobile banking and its role in enhancing revenue mobilisation of small and medium-sized businesses in the New Juaben South Municipality. The study employed quantitative approach of collecting data where questionnaires were used as the main research instruments. A sample of one hundred and eighty (180) respondents including owners/managers was considered by the study. The convenient sampling technique was used to sample the owners/managers of selected small and medium-sized businesses in the municipality. The quantitative data obtained was analysed using the Statistical Package for Social Science. The main findings of the study showed that mobile banking contributes positively and significantly to revenue mobilization since small and medium-sized businesses can make proper financial projections based on data and proper records of payments of goods and services. It was further revealed that unstable network, high costs of banking transactions, taxes on mobile money transactions are the main challenges adversely affecting the adoption of mobile banking. The study recommends that management of telecom firms, banking institutions and government should collaborate to educate owners and managers of small and medium-sized businesses about security steps and policies that exist to minimize mobile money fraud. Again, government should collaborate with telecommunication firms and National Communication Authority to improve the internet connectivity to help improve mobile money transactions among small and medium-sized businesses and customers.

KEY WORDS

Financial Inclusion

Mobile banking

Revenue

Revenue mobilization

Small and medium-sized businesses

Sources of Revenue

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I am very grateful to the respondents of the selected SMBs in the New South Juaben Municipality who helped me answer the questionnaires. I want to say thank you to all of you who responded to my questionnaires.

DEDICATION

To my wife and kids

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

ATMs- Automated Teller Machines

DOI- Diffusion of Innovation

ETPB- Extended Theory of Planned Behaviour

GEA- Ghana Employment Agency

GSS- Ghana Statistical Service (GSS)

IFC- International Finance Corporation

MDGs- Millennium Development Goals

MM- Mobile Money

MPAY- Merchant Payment

NJSM- New Juaben South Municipality

PSM- Propensity Score matching Methodology

P2G- Person to Government

SDGs- Sustainable Development Goals

SMB- Small and Medium Sized Businesses

TAM- Technology Acceptance Model

TPB- Theory of Planned Behaviour

TTF-Task Technology Fit

UTAUT- Unified Theory of Acceptance and Use of Technology

VAT- Value Added Tax

CHAPTER ONE

INTRODUCTION

This study presents the difficulties small and medium-sized businesses (SMBs) in emerging economies go through to raise revenue from their daily business activities. It is essential to highlight these challenges due to the significant role SMBs play in the economic development of countries. SMBs contribution to employment is very huge in emerging economies like Ghana according to the Ghana Statistical Service, creating more jobs than firms in the public sector (GSS, 2020). It is therefore important to assess how SMBs can take advantage of technologies to maximize revenue or regular incomes. Past studies such as Bagudu, Khan and Roslan (2017) have affirmed the fact that the number of people using and registering for financial inclusion technologies like mobile banking and related platforms has increased among emerging economies. Such statistics is supported by Bille, Buri, Crenn, Denyes, Hassam and Heitmann who noted that as of 2018, there had been a heartening increase in financial involvement since unreached individuals and small businesses had been properly incorporated into the financial jurisdiction on the African contingent due to enhanced accessibility of financial inclusion devices. This study seeks to establish the contribution of financial inclusion technologies like mobile banking to the financial growth of SMBs. According to Munoz-Leiva, Climent-Climent and Liébana-Cabanillas (2017) and Sharma (2019), to better understand the drivers affecting the uptake of mobile banking, experts have largely focused on theories such as Technology Acceptance Model (TAM) which practically explain the variation in users' intents focusing on two key issues: perceived usefulness and perceived ease of use.

Background to the Study

Across the world, technology has become an integral part of operating small and medium-sized businesses (SMBs) and in most instances leading to growth and development. International organisations have focused on financial inclusion on a global scale, particularly the Sustainable Development Goals (SDGs) and Millennium Development Goals (MDGs) agendas (SDGs). The United Nations member nations are made aware of the critical issues related to financial inclusion and their complexities by a few of the MDGs' now-expired targets (Palazzo, Panait, Raimi, & Siano, 2020).

Notably, the informal sector accommodating several SMBs has received some attention in terms of financial inclusion. However, the informal sector is usually considered as a grey economic area or sector that is neither taxed nor monitored in terms of revenue being generated (Madani, Muharremi & Pelari, 2014). This makes it imperative for government to create an enabling environment that promotes revenue generation among SMBs in the informal sector. One of the major means of promoting financial inclusion among such SMBs has been the adoption of mobile banking services.

First adopted in 2002 in Russia, Mobile Money (MM) is a payment service using a cell phone and an associated account. It enables the account holder almost to carry out all the financial transactions offered by a traditional bank, that is, remittances, transactions or payments on e-commerce sites, transfers from or to a bank card, or withdrawals or deposits of funds or remittances to a public institution. In the last two decades, the use of mobile banking services has upended conventional financial services and fixed market flaws in their formal delivery. By enabling savings to be invested in the local

economy, raising SMB productivity, encouraging job creation, and accelerating economic growth, it now plays a significant role in financial intermediation. Mobile money, which has over one billion registered accounts, aids in the achievement of global development goals by promoting the economic empowerment of individuals, communities, and SMBs (GSMA, 2020).

Generating revenue by SMBs and the emergence of mobile phones had made it easier and cheaper to engage customers or clients or suppliers for any financial transactions like mobile banking. It is worth noting that generating tax internally constitutes an important challenge in developing countries because it seems to be a more reliable and sustainable source of revenue collection for financing their development goals (Moore & Prichard, 2020). However, the constant desire to increase revenue made this exercise particularly difficult (De Paepe & Dickinson, 2014). Moore and Prichard argued that information communications technology systems can effectively help developing countries collect more tax revenue through more transparency and centralizing the tax compliance process (Moore & Prichard, 2020). As a consequence of the growth of mobile banking environment created around the world, the expansion of payment platforms for services rendered or products bought had been on the rise. According to studies, integrating technology into revenue collecting can boost revenue mobilization and stop income leaks. (Agbesi, Osei-Owusu & Tahiru, 2014; Okiro, 2015). This implies that SMBs in the New Juaben South Municipality (NJSM) can thereby reduce income leakages by implementing this technology. Moreover, some small and medium-sized businesses (SMBs) in developing nations have benefited from

the adoption of mobile banking to increase their revenue mobilization, and previous research surveys have made an effort to understand user behavioural intentions in the use of technology in various economic sectors (Kamel, Sandhu, & Woods, 2014; Lymer, Hansford, & Pilkington, 2012). This study therefore looks at how mobile banking had affected revenue mobilization of SMBs in the New Juaben South Municipal Assembly.

Statement of the Problem

Many businesses have numerous sources of income like fines, charges, payment of goods and services and others which are usually manually collected. These sources of income are normally collected with no supervision, lack of transparency and responsibility (Agbesi et al., 2014). There had been many incidents where collectors had been accused of engaging in dishonest behaviour, such as conspiring with clients and suppliers to deprive businesses of the most necessary cash (Tahiru & Agbesi, 2019). Again, lack of contemporary methods for tracking revenue collection had adversely impacted on the volume and intensity of revenue raised (Badu, 2014).

In another perspective, GEA (2019) had often reported on inconsistencies in the regular income of SMBs and this could be a reflection of the ineffective strategies to raise income to run SMBs. Additionally, reports from Ghana Statistical Service (GSS) between 2020-2021 further unearthed the financial challenges of SMBs in the informal sector especially post-COVID era. SMBs are struggling to generate enough internal funds to meet increasing demands (GSS, 2020). These findings affirmed the difficulties associated with the usage of manual processes and antiquated methods of internal income mobilization and generation adopted by SMBs. This implies

that majority of SMBs have not put much effort into enhancing their internal funds through the implementation of new technologies. This is due to the overreliance of the ineffective manual approach of collecting income and the inadequate data or information about the opportunities mobile technology offers to revenue increment.

Furthermore, earlier studies by Cernáková (2014), Waiswa, and Okello-Obura (2014) focused more on the use of mobile technologies from a corporate perspective, such as banks, rather than from small businesses. Again, findings from Tahiru and Agbesi (2019) unveiled the positive relationship between adoption of ICT and revenue performance among municipal assemblies but not SMBs in the municipal assemblies. Further, studies on mobile banking and revenue mobilisation among small businesses have received insignificant consideration since most studies mobile banking focused on its impact on financial inclusion, customer service satisfaction and performance. In the body of scholarly writing, this leaves a void. By focusing on organisational analysis of mobile banking usage in revenue mobilization among SMBs in NJSMA, a developing municipal assembly in the Eastern Region of Ghana, this study aims to close this research gap.

Purpose of the Study

The major goal of this study was to evaluate mobile banking and how it had affected SMBs in the New Juaben South Municipality's (NJSM) ability to increase revenue mobilization.

Research Objectives

The study specifically sought to achieve the objectives that have been stated below:

1 Identify the challenges that are associated with the adoption of mobile banking services in the NJSM

2 Examine the factors that can affect the adoption of mobile banking as a revenue mobilization strategy in the NJSM.

3 Determine the effect of mobile banking on revenue mobilization of SMBs in the NJSM.

Research questions

In order to achieve the study's goals, the following research questions were answered:

1 What are the challenges associated with the adoption of mobile banking services in the NJSM?

2 What are the factors that can affect the adoption of mobile banking as a revenue mobilization strategy in the NJSM?

3 What are the possible effects of the adoption of mobile banking on revenue mobilization in the NJSM?

Significance of the Study

The research's conclusions will greatly aid management of small and medium-sized businesses in the New Juaben South Municipality (NJSM) and small and medium-sized businesses in other districts or municipalities in understanding the connection between mobile banking and revenue mobilization. In view of this, the management of SMBs will use the findings and conclusions revealed to review existing revenue mobilization strategies if

necessary, to enhance mobilization of SMBs. Owners, managers, directors, and staff can develop policies that are essentially informed by their unique circumstances with a view to increasing the revenue of SMBs by drawing on the specific case study of SMBs in the municipality and their knowledge of mobile banking and revenue mobilization in particular.

To the workers directly involved in mobilizing revenue, the findings will help identify innovative strategies that can assist SMBs to make their work effective. This will help them appreciate the mobile banking products or services that encourage taxpayers to do payment with ease, thereby improving revenue mobilization of SMBs.

To successive governments, regulating and monitoring bodies and other stakeholders, the study seeks to ascertain the key contribution of mobile banking to revenue mobilization among SMBs. This is likely to provide some assistance to the Ghana Enterprises Agency (GEA) to design regulations and create enabling environment that will stimulate the collection of adequate revenue.

The study also offers academics planning to undertake additional research in the fields of mobile banking and revenue mobilization a viable source of reference material. In other words, the study adds to the body of knowledge on the topics of income mobilization and mobile banking. The study has had reverberating consequences on the Ghanaian economy in the larger environment. This is because the study's conclusions and recommendations could aid the nation in achieving its revenue goal.

Delimitation of the Study

The study aims at assessing how mobile banking influences revenue mobilization among SMBs in Ghana. However, the study focuses on mobile banking being used as a tool to influence revenue mobilization of SMBs in the New Juaben South Municipality. The management of SMBs that are directly involved in the implementation of revenue mobilization methods provided the data. The case study organisation is taken into consideration owing to the ease of access to the data as well as the degree of credibility and dependability of the data because of the involvement of the respondents.

Limitations of the Study

The generalization of the findings was a limitation since organisational settings among SMBs in municipalities in Ghana varies. Moreover, bureaucracy served as a stumbling block to the successful collection of data as accustomed to most government agencies. Again, time constraint was a limitation because the researcher combined regular academic work with duties at as a senior staff of an educational institution. Hence, due to time constraints, the study was limited to only SMBs in the New Juaben South Municipality. Furthermore, the researcher did not complete the project by the deadline without experiencing any major problems, such as participants who refused to fill out the questionnaire because it dealt with such a delicate subject. The researcher developed closer ties with potential responders in order to acquire reliable data, which assisted to decrease the impact of these limitations.

Definitions of Terms

The term "*mobile money* transfer service" refers to a service that enables consumers to send money via text message on their mobile phones (Kamau, Cerstin & Mukwana, 2013).

A peer-to-peer application called *mobile money transfer* (remittance) uses a mobile phone to send money to family or friends, usually across international borders (Davidson & Leishman, 2016).

Mobile banking is defined as the usage of a mobile device to remotely access a bank account, typically for the purposes of checking the balance and making payments (Michaels, 2011).

M-commerce has been characterized as the use of wireless ICT, such as mobile phones and personal digital assistants, for transactional and SMB-related communications between individuals and businesses as well as for the purchase and sale of products and services (Meso et al., 2015).

Revenue is public income as the monies that governments receive from taxes and other sources. According to Akpa (2014), revenue is an important apparatus for the successful working of any administration hardware which ensures endurance of government organisations.

Revenue mobilization is the use of resources to impose incomes that are required by the constitution to be paid by the populace, corporate establishments, and quasi-governmental entities on their operations. Revenue generation is the process of obtaining income through investments that yield returns. In essence, mobilizing resources is a planned action carried out by local governments to demonstrate how to look into and deploy resources that are appropriate for the task at hand in order to meet the objectives of

infrastructure building. *Revenue mobilization strategy* can be referred to array of inventive actions carried out to grow or generate adequate income needed to manage an institution or district or an assembly or a municipality (Kandole, 2015).

Organisation of the Study

This study is divided into five main chapters, each of which has a list of subtopics. The backdrop of the study, the issue statement, the significance of the investigation, the research questions, the study objectives, the scope and restrictions of the study, and the organisation of the chapters are all included in chapter one. Chapter two outlines an explanation of the views of other researchers related to the topic under study. Chapter three states and gives vivid explanation to the methods of gathering data adopted by the study. Chapter four presents the data obtained from the research instruments used. Additionally, the data is reviewed in relation to the research's goals, and Chapter five offers a summary of all the discoveries, judgments, and suggestions for the case study companies.

CHAPTER TWO

LITERATURE REVIEW

Introduction

Accredited academics and researchers evaluate earlier work in this chapter. This chapter also takes into account the theories that serve as the study's framework. The chapter begins with a review of a few ideas and pertinent literature before moving on to a theoretical framework and empirical data. A conceptual framework created by the researcher concludes the chapter.

Theoretical Framework

Every study project is founded on a specific theory. The validation of this study work's assumptions is guided by theories. This fact implies that the theories relating to the adoption of technology are pertinent to this subject.

The technology acceptance model (TAM), the extended technology acceptance model (TAM2), the theory of reasoned action (TRA), the theory of planned behaviour (TPB), and the unified theory of use and acceptance of technology (UTAUT) are among the commonly used theories in mobile banking, according to Bankole et al. (2016). According to Munoz-Leiva et al. (2017) and Sharma (2019), to better understand the drivers affecting the uptake of mobile banking, other experts have concentrated on the task-technology fit (TTF) theory and the diffusion of innovation (DOI).

Technology Acceptance Model

To explain the variation in users' intents, the major prominent approach, the technology acceptance model (TAM), focuses on two key issues: perceived usefulness and perceived ease of use (Luarn & Lin, 2005). Nasri and Charfeddine (2012) claimed that the TPB hypothesizes a third originator to the

theory called perceived behavioural control (PBC), which affects behavioural intents and actual conduct in addition to attitudinal and normative influence. Lu, Wang and Zhou (2010) specifically suggested that TAM and TPB were employed by a number of authors to look into the variables impacting users' behavioural intentions toward mobile banking. According to proponents, mobile banking is an IT offshoot that users adopt for financial transactions because of a number of important factors, including performance expectancy (perceived usefulness), effort expectancy (perceived ease of use), social influence (opinions of friends and relatives), facilitating conditions, trust and privacy, convenience and cost, user satisfaction, and national culture. With regards to this study, the aforementioned theory identifies the essential factors that influence SMBs to consider mobile banking as a tool to generate revenue. This implies that these factors can either help to increase or decrease the number of people to adopt mobile banking.

Extended Theory of Planned Behaviour (ETPB)

The study took into account five elements from the Extended Theory of Planned Behaviour (ETPB), which, according to Lin (2010) and Venkatesh et al. (2013), will help clients adopt mobile deposit. The ETPB is a framework for revenue mobilization through mobile banking and mobile money transfers. In order to get understanding on some factors that will influence users to uptake mobile payment of revenue as an alternative to other methods, the Extended Theory of Planned Behaviour (ETPB) and five elements associated with mobile banking transactions (quality of data, service speed, ease of use, the association's reputation, and security of the mobile network) were

examined. The study also took into account nonworking hours, cost, and time used to travel.

The standard of the information

Many phone users are using their cell phones as an alternative sales channel because to the rising possibilities of financial transactions on mobile phones in SMB circles. Therefore, studies have demonstrated that the perceived quality of goods and services provided by mobile-based services is significantly influenced by the effectiveness of operational procedures that are mobile-based. Users expect to receive clear and accurate information through this technology because mobile phones have grown to be a significant venue in the process of marketing and SMB transactions. Therefore, it will be simple for consumers to embrace mobile deposit as a better way to save money and pay taxes if district and municipal assemblies can ensure the quality and accuracy of financial transaction information in mobile payment (Lin, 2010; Venkatesh et al., 2013).

Transactional speed

New forms of commerce and financial exchange are being brought about by the advent of technology-based electronic services. Taxpayers in this situation are able to carry out a variety of financial activities without involving tax collectors. Taxpayers would be happy to adopt such a payment method if it could save them part of the time they currently spend walking to make payments and occasionally waiting in lines (Lin, 2010; Venkatesh et al., 2013).

Ease of use

Residents will undoubtedly need to get information about their financial transactions through the mobile services networks given the increase of the use of mobile money services. The mobile financial services therefore affect users' behavioural intentions by offering clear and straightforward instructions, extensive menus, and ease of use. Numerous research support the relationship between the variable "easy of use" and the variable "perceived of utility." Results indicate that the level of understanding the utility is definitely influenced by the level of understanding the convenience of use. They discovered that out of 82 research that have been completed, the association was substantial and relevant in 69 cases after conducting a thorough assessment of the works and studies of others. The uptake of mobile deposits by clients will undoubtedly be impacted by this (Lin, 2010; Venkatesh et al., 2013).

Security

Researchers generally agree that a key factor in users' acceptance of technology is the security of electronic banking services. In fact, those who work in high-risk circumstances need to think critically. A user's view of the security of the system may be related with mistrust because transactions in the electronic banking environment are handled remotely and users are unable to see the process, which is a crucial element in the adoption of mobile phones for the payment of taxes (Lin, 2010; Venkatesh et al., 2013).

An institution's reputation

Taxpayer acceptance of the mobile payment will undoubtedly be influenced by the municipal assembly's and revenue collectors' reputations. The

reputation and image of municipal assemblies are typically damaged by several reports of poor revenue responsibility by district and municipal assemblies in Ghana. How can people be sure their money will be used properly after paying taxes to the local assembly via their mobile devices? According to research, the opinions of 50.9% of Ghanaians about mobile banking indicate that the technology may be trusted if it is supported by a bank (Lin, 2010; Venkatesh et al., 2013).

Nonworking Hours

When it comes to public institutions collecting tax money from citizens after business hours on Saturdays and Sundays, when most assemblies are closed with the exception of a few on Saturdays, this phenomenon has been a significant problem. This also applies to locals who, due to the nature of their SMBs, will have to make difficult mobile money payments during nonworking hours. The solution to stopping this appears to be mobile payment (Lin, 2010; Venkatesh et al., 2013).

Costs

Low income individuals and those without bank accounts have been discouraged from using their mobile devices to make payments due to this and other factors. The taxpayers feel that it is worthwhile to deduct a few Ghana Cedis in this case after financial transactions (Lin, 2010; Venkatesh et al., 2013).

Conceptual Review

This section examines a few ideas and pieces of literature that are pertinent to the subject being studied.

Revenue Generation

Olowu and Wunsch (2014) define revenue mobilization as an action that exhibits accumulating, marshaling, and assembling financial commitments from all discernible sources in an economic context. A strong income structure for local governments is a crucial prerequisite for fiscal decentralization to be successful, according to Olowu and Wunsch (2014). Oates (2014) went on to say that by enhancing community capacity, local revenue mobilization may promote political and administrative accountability. The term "to generate revenue" refers to the process of acquiring funds through profitable investments, whereas the term "to mobilize revenue" refers to the process of using readily available resources to access funds that the constitution permits to be paid by citizens, established businesses, and quasi-governmental organisations for their operations. According to Adu-Gyamfi (2014), raising money for district assemblies entails increasing government resources, which have an impact on profits and developmental goals rather than increasing liabilities or recovering expenditures. Charges, levies, taxes, licenses, permits, and a variety of other sources provide this income. Revenue is essentially the income a business receives from its domestic SMBs, typically from the sale of goods and services to consumers.

According to Bahiigwa and Tadesse (2015), the enormous number of income instruments used by local authorities is a widely known characteristic of nearby government income frameworks in Africa. Brosio noted among a few nations where local governance has the purpose to expand incomes, levies and charges that are capable of gathering funds routinely without necessarily causing any adverse effects on the economic activities of the country (Brosio,

2015). Kessey and Gunter (2014) specified that mainly generating revenue internally comprised of two perspectives, which are strategy plan and administration. Concerning strategy detailing, it manages the actual objective assurance and plan of laws and rules for the accomplishment of such objectives. In terms of administration, it manages the executions of the actual arrangements defined. However similarly significant in income assembly, strategy plan and administration do not get equivalent consideration both in principle and practice.

According to Stren (2014), one of the battles that face nations in achieving intended infrastructural projects is the concern of generating funds internally to support the various these projects which are significant to upgrade the expectations for everyday comforts of residents. About as old as local government management itself is the concept of internally mobilized incomes. The beneficiaries are necessary for increasing the internal earnings of an assembly at the point where the lower arm of governance and localized governance has transformed into the platform that provides different forms of aid to recognised beneficiaries. Also, sub-national establishments have gotten exceptionally fundamental taking into account the way that local authorities have the duty to offer types of assistance to their individual topographical regions. Ebel and Vaillancourt indicated that for this situation, effective monetary arranging which requires consistent audit of how the assets of the local assemblies are created, how they are apportioned to administrations and anticipating the advantages acquired from those administrations notwithstanding the fact that productive income mobilization techniques, should be set up (Ebel & Vaillancourt, 2014).

Small and Medium sized businesses

According to Nkuah, Tanyeh and Gaeten (2018), a small business is an organisation that is privately owned and operated with a small number of personnel and a relatively low volume of sales. Related to Ghana, Ghana Statistical Service (2020) views a small business as an enterprise that employs less than 10 persons while those that employ more than 10 people are categorized as medium and large–size enterprises. Nkuah et al. (2019) asserted that a small business is mostly a sole proprietorship or partnership even though on the surface they may be registered as limited liability companies. The definition of a small business differs among organisations in Ghana according to Churchill, Oppong, and Owiredu, (2014). Businesses with fewer than 29 employees are classified as micro and small enterprises by Ghana Employment Agency (GEA) formerly National Board for Small Scale Industries (NBSSI). The NBSSI distinguishes SMEs into the following categories. Microbusinesses employ less than five people, small businesses use six to twenty-nine people, medium businesses employ thirty to ninety people and large businesses employ one hundred or more (Berkoh-Oforiwaa, Dzrobi, Klutse, Nkrumah, Quargraine, Quargraine & Sylla, 2021). SMEs make up 92% of all businesses in Ghana (Amaglo, 2019). Further, SMEs are anticipated to have generated 70% of Ghana's Gross Domestic Product (GDP) in 2018, equating to almost 90% of the country's active enterprises. It is also estimated that the sector employs close to 80% of Ghana's workforce (Anaba, Ma, Li & Li, 2021). SMEs in Ghana contribute to strengthening industrial integration by producing intermediate products for large-scale manufacturing firms to use as raw materials and selling large-scale manufacturing firms' final

products (Amaglo, 2019). The SMEs contribution to Ghana's economy will only be true if and only if the company is open for business, hence adopting technologies like mobile banking can help the survival of these small and medium-sized businesses.

Revenue sources available to SMBs

Coakley, Malikov and Manson (2018) opined that the different avenues via which an SMB receives income from the sale of goods or the rendering of services are known as revenue streams. Depending on the kinds of activities the SMB engages in, the types of revenue that the SMB records on its account will vary. In general, compared to SMBs that offer services, the revenue accounts of retail SMBs are more varied. Operating and non-operating revenues are two broad categories for revenues. The amount made from the business's primary SMB operations is referred to as operating revenues. Operating revenues include, for example, sales of goods or services. Non-operating Revenues, also known as revenue from an SMB's ancillary sources, include interest and dividend income (Coakley et al., 2018). Cosenz and Noto (2018) hinted that SMBs in a variety of industries employ a wide range of revenue accounts. The following are a few typical revenue accounts for most businesses:

income from the selling of goods or service fees for most SMBs, this is the primary source of operating revenue, and it is sometimes referred to by a specific name, like sales revenue or service revenue.

Interest income: This account keeps track of the interest income from holdings like debt securities. In most cases, this is non-operating revenue.

Rent revenue is a type of non-operating revenue that is used to track the money made through renting out property or equipment.

Revenue from dividends is the sum received from owning shares of other companies. This revenue does not support operations.

Revenue streams classify the profits an SMB makes through particular pricing strategies and distribution methods. An income stream may take the shape of one of these revenue models, to put it simply**.**

Transaction-based revenue: the earnings from the sale of items, which are often one-time payments from customers.

Revenue from giving services to consumers is determined based on time, such as the number of hours spent offering consulting services, and is generated by doing so.

Project income is the amount of money made from one-time contracts with either current or potential clients.

Recurring revenue is generated by regular payments made to consumers for ongoing services or post-purchase services. The recurring revenue model is the one that SMBs utilize the most since it is predictable and ensures that the company's revenue source will continue to exist.

Adu-Gyamfi (2014) remarked that the core elements or measures for SMBs to mobilize internal incomes may include fees, investments and grants.

Fees

Fees are costs or charges that clients of a business incur in exchange for services. These services entail offering goods and services, and businesses also provide numerous more services. Accordingly, beneficiaries of these products and services pay for the services used (Adu-Gyamfi, 2014).

Credit facilities

Some firms obtain financial assistance from financial institutions to enable them meet organisational demands. For instance, some banking institutions and microfinance companies as well as savings and loans firms has provided financial assistance to expand to activities or operations of the SMBs (Adu-Gyamfi, 2014).

Donor Support

In order to carry out specific projects or expand, a number of businesses get donor subsidies from development partners including DANIDA, GTZ, and many more. For instance, DANIDA has given SMBs money to buy additional goods and hire more employees. The European Union, World Vision International, and other donors provided help to the Upper Denkyira East Municipal Assembly in 2014, and the state institution made use of this assistance (Adu-Gyamfi, 2014).

Kwarteng (2017) also affirmed that the revenue sources differs significantly from one firm to another but the main sources of revenues are mostly the following:

i. Revenue from services provided to the people (non-tax revenues and user charges/fees).
ii. Taking loans for projects
iii. The central government awards many grants to local governments, both general and specific.
iv. Revenue from local taxes for instance property tax

Service fees

Service charges or fees are an essential source of income. It matters more if businesses are primarily viewed as service providers. This belief naturally fits with the idea of delegating specific responsibilities to the local level and allocating resources based on efficiency standards. Therefore, such services could be paid for through a fee structure (Kwarteng, 2017).

Grants

Grant from developing or external partners is a key factor in the revenue generation concept. Even though post COVID-19, grants are declining, they remain an important revenue source for SMBs. Among emerging economies, 60 percent or more of an internal budget comes from SMBs transactions like payment of goods and services. Grants are considered important given the kind of emerging start-ups and the general inadequate level of internal revenue sources. Grants as a matter of fact must provide only part of internal revenue since firms are usually more responsible for revenues that they generate directly from SMBs transactions (Kwarteng, 2017).

Smoke (2014) stated that generally two major groupings exist in terms of generating revenue among SMBs across the African continents. These included; generating revenue within and generating revenue outside the SMBs space. Some revenues that can be generated in the SMBs space are several fees and charges from services provided. But the internally generated revenues are limited, as asserted by Nkrumah (2014) who argued that these incomes generated go out to the central and local governments through taxes.

Mobile Banking

Mobile banking is the practice of customers using their mobile devices to conduct virtual financial transactions with banks at any time and location that is convenient for them, including savings, cash transfers, and stock market activities (Bankole et al., 2017). The authors went on to say that simple access to banking services and products is becoming increasingly important to financial consumers who want to save money, buy things, or transfer money to loved ones and families. In this regard, information from statistics available to Global Findex (2020) demonstrated that the adoption of banking as a practical method of transacting banking services was influenced by the rise in the percentage of the population, along with the uptake of mobile phone usage and mobile money transactions.

According to Jack and Suri (2014), the development of mobile banking was aided by mobile money (MM) services. MM, a payment service utilizing a cell phone and a linked account, was initially used in Russia in 2002. This enables the account holder almost to carry out all the financial transactions offered by a traditional bank, that is, remittances, transactions or payments on e-commerce sites, transfers from or to a bank card, or withdrawals or deposits of funds or remittances to a public institution. By addressing the issues of inadequate institutional infrastructure and the cost structure of conventional banking, the technology has quickly proliferated throughout the developing world, "leapingfrogging" the provision of formal banking services. Since its launch, the service has grown considerably. Among developing economies like Kenya, there are 13 times more MM agents than ATMs in 2011 (Jack & Suri, 2014). Demirguc-Kunt and Klapper (2012) indicated that before 2012,

31percent of MM account holders in Africa used it at least once a year for bill payment or money transfer. In 2019, there were more than 1 billion MM accounts for 290 MM services deployments, nearly 50 percent of which were in sub-Saharan Africa. In the same year, worldwide, there were 228 MM agents on average per 100,000 inhabitants, compared to 11 bank branches and 33 ATMs (GSMA, 2019). This rapid development has made MM an almost inevitable service in adopting countries. For instance, according to Lashitew, Liasse and van Tulder (2019), MM has become a crucial component of many African economies and is frequently used for a variety of tasks, including point-of-sale transactions, national and international money transfers, the payment of education costs, utility bills, and other bills. According to Donovan (2012), MM services support financial inclusion and financial development, which have an impact on economies. The future of mobile banking from the consumer's perspective hinges on fundamentals like being ubiquitous, instantaneous connection, functioning proactively, ease, service accessibility and location, confidentiality, and time and savings mobilization (Akturan & Tezcan, 2012).

Furthermore, according to Buse, Herstatt and Tiwari (2016), "the younger generations of society tend to be intrigued by current data and telecommunication services." These are now compatible with mobile transactions, such as mobile banking and mobile money. Anyasi and Otubu (2019) pointed out that mobile banking has become a popular way to obtain financial services in various emerging economies, whether or not one has access to conventional banks. It provides a mechanism to increase financial involvement by engaging those who are unreached with the established

financial methods while also lowering the cost of money transfers across locations.

Factors influencing the adoption of Mobile Banking

Using mobile phones to do banking has enhanced every area of financial connections for all banks' clients either in the corporate or non-corporate world (Zins & Weill, 2016; Mothobi & Grzybowski, 2017). Mobile banking is the practice of customers using their mobile devices to conduct virtual financial dealings with banks at any time and location that is convenient for them, including savings, cash transfers, and stock market activities (Bankole et al., 2016). Financial customers are becoming more and more concerned with having quick contact with bank transactions, whether it is efforts to deposit cash, make purchases, or send money to loved ones. In this regard, Global Findex's (2020) statistical data indicated increment in the proportion of the population that sends domestic money payments. The frequency and amount of remittances that migrants send back to their home countries have increased as a result of the deepening of international migration. Mobile banking is a workable option that enables money transfers, but it also advances financial inclusion and financial education in these nations. The cheap costs produced by the escalating competition between banks further enhance the viability of this strategy.

Apart from the fact that the future of mobile banking from the consumer's perspective hinges on fundamentals such as its universality, IT adoption theories and views must be integrated into the analysis of financial inclusion in relation to mobile banking and IT. The technology acceptance model (TAM), the extended technology acceptance model (TAM2), the theory

of reasoned action (TRA), the theory of planned behaviour (TPB), and the unified theory of use and acceptance of technology (UTAUT) are among the commonly used theories in mobile banking, according to Bankole et al. (2016). According to Munoz-Leiva et al. (2017) and Sharma (2019), to better understand the driving elements of mobile banking, other experts have concentrated on the task-technology fit (TTF) theory and the diffusion of innovation (DOI). To explain the variation in users' intents, the major prominent approach, the technology acceptance model (TAM), focuses on two key issues: perceived usefulness and perceived ease of use (Luarn & Lin, 2005). The TPB proposes that in addition to attitudinal and normative impact, a third antecedent to the theory known as perceived behavioural control, or perceived behavioural control (PBC), also influences behavioural intentions and actual behaviour, according to Nasri and Charfeddine (2012)

Several study employed TAM and TPB in particular to look at what elements consumers' behavioural intentions toward mobile banking were influenced by (Lu et al., 2010). According to proponents, mobile banking is an IT offshoot that users adopt for financial transactions because of a number of important factors, including performance expectancy (perceived usefulness), effort expectancy (perceived ease of use), social influence (opinions of friends and relatives), facilitating conditions, trust and privacy, convenience and cost, user satisfaction, and national culture (Min, Ji, & Qu, 2018). As a result of all banks adopting and introducing mobile banking applications, the level of customer acceptance of mobile banking is impressive (the famous existing mobile banking applications among developing countries which included

Ecobank, GT banking apps and many others). Scholars have found a number of elements that affect mobile banking in the nation.

The following are details on the elements driving the adoption of mobile banking, listed in chronological order. According to Anyasi and Otubu (2019), mobile banking has become the preferred method for obtaining financial services among banks, whether one has access to conventional banks or not. According to research conducted ten years ago by Oni and Ayo (2011), customers in Nigeria prefer and use the e-banking system frequently since it is handy, simple in its usage, quick, and suitable for financial dealings. However, customers using e-banking are worried about security concerns, particularly the confidentiality of the financial engagements. Furthermore, behavioural intention to embrace mobile banking in Nigeria is significantly influenced by utility expectancy and effort expectancy (Bankole et al., 2016). Particularly, the simplicity of managing accounts on a mobile phone for individual banking dealings; the security and safety issues with moving funds around in regards to cyber fraud; and the rapid notification of users' fiscal operations like cash deposits and withdrawals via alerts from short message service. However, friends, family, co-workers, and banking institutions do not have a significant impact on Nigerians who use mobile banking (Bankole et al., 2016).

However, Aliyu, Tasmin and Younus (2012) argued that knowledge, usability, security, affordability, decreased resistance to change, and accessibility of mobile devices for conducting financial transactions are the six essential success criteria that affect the uptake of mobile banking in Nigeria. Additionally, according to Balogun et al. (2013), three criteria significantly determined how satisfied Nigerian clients were with various parts of e-

banking, including banking through televisions, banks and telephones as well as POS terminals and visa cards. The variables are access to the possibility of creating a bank account electronically, the caliber of services offered by banks via SMS and email alerts, and the presence of ATMs at convenient places to make cash out monies and not necessarily visiting banking institutions. Adewoyein (2013) noted, however, that a variety of criteria, including transactions that are convenient, have effective turn-around time, prompt transactions alerts, service cost reduction and entire client fulfilment are prerequisites for customers' decision to uptake mobile banking.

The adoption of mobile banking in Nigeria is believed to be favourably influenced by seven elements, according to Njoku and Odumeru's (2013) opinion. The elements the relative benefits that mobile technology offers to users, the simplicity of mobile banking, the suitability of mobile devices for customers' values, beliefs, existing norms, and previous experiences, the perception that the technology can be tried or made simple when customers experiment with it, the perception that results of mobile technology is observable or visible to users, the age-grouping of mobile banking users, and the academic background of customer. Additionally, Agwu and Carter (2014) pointed out that Nigerians' (individuals and SMBs) financial activities have fundamentally changed as a result of the adoption of mobile phones for mobile banking.

Due to its greater scope than banking on the internet, banking through phones is in particular highly robust than ATMs transactions (effort expectancy). According to Masa’Deh, Mgbemena, Tarhini and Trab (2015), there are three main drivers that affect the uptake of mobile banking among

emerging economies: (a) the functionality factor, which includes awareness, usability, and accessibility; (b) the risk factor, which includes trust, security, and privacy; and (c) the context factor, which includes convenience. According to Agu, Onwuka and Simon (2016), mobile banking has gained prominence in the nation's banking operations because it is a useful technology for offering the expanding client base quick, easy access to services, and services that are dependable and of high quality. Second, mobile banking is a cutting-edge option that enables users to conduct financial transactions at anytime and anywhere and offers a simple platform for making purchases. According to Khan and Ejike (2017), accessing technologies which improve knowledge of mobile tools, influences the widespread adoption of mobile banking, although the level of comfort and fulfilment of its use are relatively decline.

Bagudu et al. (2017) added that the availability of functional mobile technology, which enables users to conduct financial services on their mobile devices with little difficulty, is the one and only crucial success element for the country's widespread adoption of mobile banking. The number of people using and registering for financial inclusion technologies like mobile banking and related platforms has increased in SSA. Such statistics is supported by Bille and colleagues who noted that as of 2018, there had been a heartening increase in financial involvement since unreached individuals and small businesses had been properly incorporated into the financial jurisdiction on the Africa contingent due to enhanced accessibility of financial inclusion devices. Bille and colleagues added that these inclusion tools which had been made available by the financial service providers, particularly banking and

microfinance institutions, various mobile carriers, and other mobile networks. More specifically, the World Bank analysis revealed that over seven million additional financial service users had accessed financial inclusion across African countries (Bille et al., 2018).

Mobile banking and Revenue Mobilization

By providing people in developing nations with a variety of services like money transfers, bill payments, and international transactions, mobile banking has dramatically changed the lives of people in both urban and rural areas, improving financial inclusion (Della Peruta, 2018; Hunjra, Locke, Manita, & Wellalage, 2020; Amoah, Asiama, & Korle, 2020; Ahmad, Green, & Jiang 2020; Cariolle & Carroll, 2020). Therefore, considering financial inclusion through mobile financial transactions appears more relevant than considering financial inclusion through the traditional banking system in developing countries. By facilitating financial inclusion, mobile financial transactions can contribute to improving tax revenue in developing countries in several ways. This contribution includes both direct and indirect tax revenue, respectively, through person to government (P2G) and merchant payment (MPAY) services. Arezki, Dama, and Rota-Graziosi (2021) noted that about 88 percent (72 percent) of P2G (MPAY) adopter countries experienced an improvement of their direct (indirect) tax revenue after having adopted P2G (MPAY). Concerning P2G, it allows transactions from people and companies to a public administration through a mobile phone. This procedure is a form of payment dematerialization between individuals and enterprises towards public administrations. By making it possible to pay taxes via P2G, the tax authorities lighten the process of collecting direct tax revenue.

Indeed, in most developing countries, direct tax revenue collection has remained traditional until recent years. It consists of the taxpayers (persons and SMBs) going to the tax authorities to discharge their tax obligations (usually by check or cash). In addition, self-declaration, data entry, and manual collection often take many weeks with high risks of losing declarations and, therefore, losing direct tax revenue. Simplifying the process results in a significant reduction in the taxpayers' compliance costs and collection costs for the tax authorities. Thus, it improves the efficiency and effectiveness of domestic revenue mobilization, which positively influences the collected tax revenue. For countries with a low level of efficiency in domestic revenue mobilization, P2G could thus be an essential factor. Furthermore, the introduction of P2G payment is an effective way to reduce corruption in the tax administration, which mainly affects direct tax revenue. These remote payment methods limit physical interactions so that the high risk of corruption arising from the usage of cash or check payments is eliminated. Moreover, in developing countries, a major obstacle to tax revenue mobilization is the informal sector's strong presence (Besley & Persson, 2014; Joshi, Heady & Prichard, 2014). Indeed, some small enterprises, although interested in formalization, face long and complex procedures.

According to research by Jacolin, Massil and Noah (2019), the adoption of mobile financial services has reduced the informal sector's contribution to GDP by between 2.4 and 4.3 percentage points in 101 emerging and developing nations. Besides, requiring these companies to conduct their transactions with the government even if they are small through P2G may help identify these contributors since informal SMBs widely use

MM payments. MPAY offers the possibility of carrying out exclusively commercial transactions and facilitating and broadening market access for populations rationed from the traditional bank payments system. It provides a facility of payments, thus increasing the customer base (GSMA, 2020) and stimulating trade (Sawadogo & Wandaogo, 2021), which lead to an increase in consumption (Suri & Jack, 2016). Given that indirect tax revenue (VAT and excises duty) are collected on final consumption, it can be expected that MPAY services adoption positively affects indirect tax revenue through trade and consumption. However, if the effect on VAT and excise revenue indicated above appears indirect, it can also be direct. Indeed, it should be noted that the MM services are not free of charge. The operators market it through transaction fees. Hence, as with most SMBs activities in many countries, VAT applies to the turnover resulting from MM services' marketing. Moreover, in some MPAY adopters' countries, tax authorities have introduced an excise duty on transactions' cost or value. For example, Kenya's finance act for 2013 has introduced an excise tax of 10 percent on the transaction cost, which has increased to 12 percent in the 2018 financial act.

In Uganda, the excise duty amendment legislation of 2018 added a tax equal to one percent of the transaction value. Given the significance of transactions completed through MM, the resources mobilized can be significant. Besides the above, it should be added that MM services overall can improve tax revenue in several ways. MM services' introduction has created many new employments in adopting countries, thus increasing individual incomes and improving social inclusion. On the one hand, these incomes are subject to income taxes and, on the other hand, increase

consumption and thus enhance direct and indirect tax revenue. Most MM agencies are also usually registered as small SMBs. As a result, they pay at least a lump-sum tax and patent. Individually, this may seem very low, but given the number of active agencies per country (11 times more than ATMs for Kenya, for example) aggregated, the tax collected may be substantial. Furthermore, selling MM services increases mobile operators' profits, which are subject to corporate income tax (Jacolin et al., 2019).

Empirical Evidence

This section reviews empirical studies that are in line with objectives and the topic under study. Relevant studies have been presented below:

There are numerous studies on the primary revenue sources for state enterprises in Africa. They have been divided into "own revenue" (which includes taxes, user fees, and other licenses) and "transfers from the federal or regional levels," according to a survey by Fjeldstad and Heggstad (2012). (in the form of grants and revenue sharing). For example, the Local Government Act 462 of 1993 and Act 936 of 2016 in Ghana gave the district and municipal assemblies the authority to create and carry out local assembly policies and to identify the main sources of funding for the assemblies. Decentralized transfers, internally generated income, gifts, and grants make up a district assembly's revenue. The District Assemblies Common Fund (DACF), grants-in-aid from the federal government, and any other revenue transferred from the federal government to the district assembly are included in decentralized transfers. Funds from the following sources are referred to as internally generated funds: licenses, taxes, investment income, rates, fees, and other

charges. The act defines grants as gifts or payments made directly to a district assembly by a partner in development.

Salami (2011) discovered that property taxes and ratings, licenses and fees, and trade licenses and fees are the main revenue sources for businesses in Nigeria. According to related studies by Fjeldstad and Heggstad (2012), SMB licenses, market fees, and other user fees are applied to services rendered by or on behalf of the Local Government Authority in various anglophone African nations. Between 5 and 30% of a local government's revenue in Anglophone Africa comes from SMB licensing.

Results of a study conducted ten years ago by Oni and Ayo (2011) showed that the mobile banking system in Nigeria is largely used and favoured by users since it is practical, simple to use, quick, and suitable for financial services. Customers are worried about network security, particularly the confidentiality of transactions. But the societal impact of friends, family, co-workers, and banking firms are not significant factors in determining the adoption of mobile banking among customers in Nigeria. However, Aliyu et al. (2012) argued that knowledge, usability, security, affordability, decreased resistance to change, and accessibility of mobile devices for conducting financial transactions are the six essential success criteria that affect the adoption of mobile banking in Nigeria.

According to Agu et al. (2016), mobile banking has gained prominence in the nation's banking operations because it is a useful technology for offering the expanding client base quick, easy access to services, and services that are dependable and of high quality. Second, mobile banking is a cutting-edge solution that enables customers to conduct financial transactions at anytime

and anyplace and offers a simple platform for making purchases. According to Khan and Ejike (2017), access to technological domains, which improve knowledge of mobile devices, influences the widespread adoption of mobile banking, although the degree of comfort and satisfaction of usage are relatively low. Bagudu et al. (2017) said that having access to functional mobile technology, which enables users to conduct financial transactions on their mobile devices with ease, is the one and only crucial success element for the country's widespread adoption of mobile banking.

Few studies have, however, examined how tax income might be raised via mobile phone financial transactions as a way of financial inclusion. Using the Global Findex database, Maherali (2017) and Oz-Yalaman (2019) discovered that financial inclusion has a favourable influence on tax income in 140 and 137 nations worldwide, respectively. The former estimates the number of people included financially by assuming that 10 percent of those excluded are included each year. This estimate may be biased because, apart from the fact that the method has no theoretical basis in the literature, the inclusion rate is not necessarily linear. The latter uses the percentage of individuals with a bank account and the percentage of individuals with a credit card in the population as measurement variables for financial inclusion. It therefore considers financial inclusion through the traditional banking system, for which the access is still governed by certain conditions that still exclude a large part of developing countries' populations, especially rural ones. In 63 developing countries, Compaore (2020) establishes a positive relationship between financial inclusion and non-resource tax income by using the ratio of ATMs per 100,000 individuals as a proxy for financial inclusion. However,

access to a conventional bank account is necessary in order to use an ATM. Furthermore, the number of ATMs in a country is more an indicator of financial development than financial inclusion. It is thus necessary to find an alternative measure of financial inclusion adapted to developing countries. Financial transactions conducted over the phone, according to Donovan (2012) and the IFC (2018), have been the primary force for financial inclusion in developing nations over the past few years.

An analysis by Oz-Yalaman's (2019) considering a large sample of developing countries (103), with low financial inclusion levels, adopted financial inclusion through mobile money, which is more relevant than financial inclusion through the traditional banking system in developing countries. The study further considered MM P2G and MPAY services. The study found that P2G services are affecting direct tax revenue while MPAY is positively affecting indirect tax revenue. Again, existing studies by (Donovan, 2012; IFC, 2018) on the effect of financial inclusion on tax revenue, made use of the propensity score matching methodology (PSM), which addresses the self-selectivity bias in MM services adoption by correctly identifying control countries through a set of covariates that are determinants of both mobile banking services adoption and tax revenue. The study showed that several heterogeneities exist depending on some structural factors such as income, corruption, socio-economic conditions, and urbanization. The results reveal a positive and significant effect of both P2G and MPAY on direct and indirect tax revenue, respectively. The effect on direct tax revenue is greater than that on indirect tax revenue, for which the significant effect is driven by Value Added Tax (VAT) revenue. Moreover, the results show that the positive and

significant effect is observed for low-income and lower middle-income countries only. Further, it was found that countries with high corruption, bad socio-economic conditions, low bureaucracy quality, and low urbanization exhibit a significant effect on both tax revenue.

Conceptual Framework of the Study

The review above discovered significant impact of mobile banking services on revenue mobilization among SMBs in New Juaben South Municipality. The mobilization of SMBs' revenue in the local assembly was anticipated to be impacted by the factors driving the usage of mobile banking. The reasons for choosing mobile banking services represents the independent variables while revenue mobilization of SMBs represents the dependent variables. This relationship is graphically demonstrated in Figure 2.1 below;

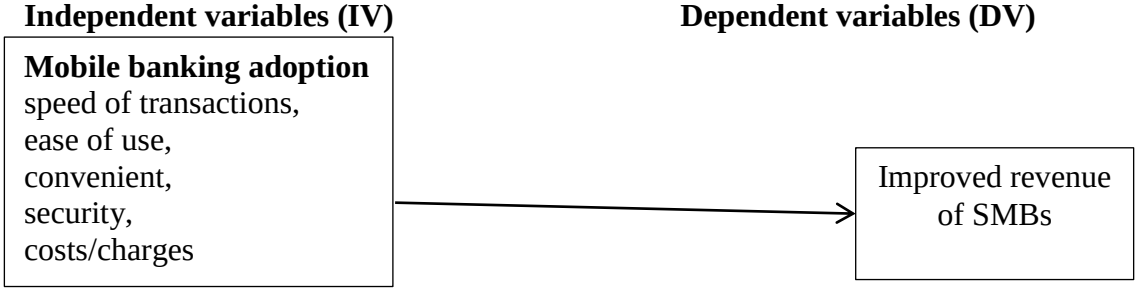

*Figure 1***:** Conceptual Framework of the Study

Source: Author's construct, (2022)

Chapter summary

This chapter employed TAM and TPB as well as ETPB to help deepened the understanding on the relationship between mobile banking and revenue mobilization among firms. While TAM and TPB looked into the variables impacting users' behavioural intentions toward mobile banking, ETPB helped clients adopt mobile deposit or provided a framework for revenue mobilization through mobile banking and mobile money transfers. Again, a firm was considered as small business if it employed less than 10

persons while those that employed more than 10 people are categorized as medium and large–size enterprises. Firms considered as small and medium-sized generate incomes from diverse ways; operating (payments received directly from sales of goods and services) and non-operating revenue (made from auxiliary works). In view of emerging mobile technologies, mobile banking is the practice of customers using their mobile devices to conduct virtual financial dealings with banks at any time and location that is convenient for them. Firms that have adopted mobile banking have experienced their benefits which included improving financial inclusion and revenue mobilization even though some users were worried about the stability of network connectivity. This chapter ends with reviewed empirical related articles and journals and a conceptual framework. The framework was developed to established the relationship between reasons for choosing mobile banking services represents as independent variables and revenue mobilization of SMBs as dependent variables.

CHAPTER THREE

RESEARCH METHOD

Introduction

The procedure the researcher employed to conduct the study is covered in this chapter. It provided an explanation of the research design, study population, sample techniques, and data collection techniques used. It also included the quality of the research, the data analysis methods used to examine the findings of the data gathered, and finally, the ethics and constraints of the research.

Research Approach

To fully comprehend the subject under inquiry, the study also included SMBs in the New Juaben South Municipality (NJSM). The ability to focus on a particular circumstance and recognized the numerous interaction processes at work was one of the benefits of the case study methodology. It was therefore the view of the researcher that the study serves as a precedent to a survey in this vital area or in a related area in the future considering the problems those workers in general and public sector workers in particular face when they proceed on retirement. One obvious drawback to the case study approach was that generalization or reliability became very difficult. This was due to the fact that only an instant of a whole phenomenon was studied. Therefore, data was collected using a quantitative method approach where data was gathered using questionnaires only. In quantitative research, the emphasis was on using standardized techniques (such as questionnaires) to gather data, which was then converted to numbers to allow for some statistical analysis. In order to confirm reliability, quantitative methodologies provided

flexible handling of data through comparative studies, statistical analyses, and repeatable data collecting (Partington, 2012). Adopting quantitative data was necessary to collect, examine, and quantify statistical data from a sample of individuals in order to determine whether there was a relationship between the various factors.

Research Design

Since the objective of the research was to discover a novel idea that leads to a management technique, the study used an exploratory survey. This shows that the study's exploration of the viability and feasibility of mobile banking as a method for revenue mobilization was aided by answers. By doing this, researchers can explore novel phenomena in order to gain a better knowledge of them, assess the viability of a larger study, or choose the most effective techniques for a future investigation. For these reasons, exploratory research tends to have a broad scope and infrequently offers conclusive solutions to particular study questions.

Study Area

The New Juaben South Municipal Assembly was established in 2017 with the legislative instrument (LI) 2301. The assembly covers a land area of 60 square kilometres; sharing boundaries to the north with New Juaben North Municipal Assembly, to the south-East with Akwapim North Municipal and to the East Yilo Krobo Municipal Assembly. The key sectors of the economy were the service sector which constitutes 39.9%, industrial manufacturing and processing 26.7%, agriculture 26.1% and other socio-economic activities constitutes 7.3%. The local economic development in the assembly included gari processing, akpeteshie distilling, cocoa buying enterprises and SMEs. The

enterprises provided employment for the inhabitants and serve as sources for raising financial resources for the development of the municipality. In line with the beneficial outcomes associated with these local based enterprises, the municipality undertook training programmes with the aim of enhancing the technical and financial capacities of the enterprises. Even though the municipal assembly is endowed with diverse forms of small businesses, only 328 of the small and medium-sized business have been captured or documented by the assembly (NJSMA, 2017).

Population of the Study

SMBs operating in the NJSM made up the study's population. There are currently 328 SMBs registered with the NJSM as a whole. Thus, the population of interest for the study was three hundred and twenty-eight (328) SMBs operating in the NJSM.

Sample and Sampling Techniques

Sample size determination

An element of the population was a sample. It consisted of certain individuals chosen from the population, and a subject was one sample member exactly like an element was one population member (Cavana et al., 2015). The sample size was determined using the De-Vaus (2002) formula. The formula is given by equation 1 below:

$$n = \frac{N}{1 + N(\alpha)^2} \quad (1)$$

Where 'N' represents that total population, 'n' was the required sample size and 'α' was the error margin (1%) since a confidence interval of 99% was used. The total sample size used for the study was calculated as shown in equation 2 below. Thus, N=328 and α= 0.05. Therefore;

$$n = \frac{328}{1 + 328(0.05)^2} = 180.22 \equiv 180 \quad (2)$$

Hence, the sample size was 180.22 SMBs since the study adopted the uppermost approximation. The sample size comprises 180 SMBs in the NJSM.

Sampling Techniques

Sampling is the process of choosing a subset of the population to represent the complete population (Ingham-Broomfield, 2015). Both probability and non-probability sampling techniques were used in the study to select the respondents. According to Teddlie and Yu (2014), sampling methods can be divided into probability-based and non-probability-based methods. When a portion of a big population needs to be chosen for a study, a probability technique was applied. A representative sample of the population was to be chosen. Non-probability sampling, in the words of Teddlie and Yu (2014), "consists of selecting units in a particular population for a purpose" (p.174). Non-probability sampling involves choosing certain people, places, or things specifically because they have a particular quality. The SMBs were chosen using a practical sampling technique that allowed the researcher to choose only those respondents who were readily available. As a result, sampling was done based on convenience or simplicity rather than randomly. Therefore, utilizing probability sampling techniques to choose respondents at random would have been unsuitable because it was possible that a respondent could be chosen at random who was unable to answer the questions. In pilot studies or other quick initiatives where there were not enough time to build a probability sample, this was frequently utilized.

Sources of Data

Both primary and secondary sources of data were used in the study. Primary data, as opposed to secondary data, is brand-new information that was gathered especially for the current study topic and for which the researcher was the first consumer (Clark & Qian, 2016). SMBs in the NJSM were given questionnaires, which were used to collect primary data.

According to Clark and Qian (2016), secondary data is information that already exists and was gathered for a reason other than the present researcher's but can be used again for a current project. This study relied heavily on secondary data, which can be regarded as its framework. The secondary data was gathered from information that already existed and can be found in reports and other published materials on the issue under investigation and its associated topics. The information from the secondary sources completed the information from the primary source.

Research Instruments

The quantitative data for this study was gathered using the survey method as a tool. The primary research tool for the survey in this study was a questionnaire. According to Malhotra (2014), the questionnaire method is a systematic, standardized, and widespread way for gathering data from people who reflect the study population. The cost-effectiveness, suitability for this study, the sort of data required for this study, population characteristics, and the availability of resources were the justifications for employing the questionnaire approach. In order to gather information on mobile banking and revenue mobilization among SMBs, a structured questionnaire containing both closed-ended and open-ended questions was created for this study. The

respondents were given options for the closed-ended questions, and they made a choice. Once more, the questionnaire's designed and coding made use of a five-point Likert scale to evaluate the different kinds of questions and answers. The responses were affirmations of agreement, where strongly agree was equal to five and agree to four. Severely disagreed = 1, strongly disagreed = 2, and undecided = 3. The respondents got the chance to express their ideas through the open-ended questions.

Pre-test

The researcher carried out a pretest of the sketchy questionnaire with a review from the supervisor and the consideration of a small group of respondents in an unofficial way. This exercise helped the researcher reviewed the questionnaire in order to ensure consistency across respondents and also focused on the comprehensive nature and relevance of the questions for all the category of staff were included in the study.

Data Collection Procedure

The data gathering process, according to Singh and Tarray (2015), is a randomized response technique that permits researchers to gather sensitive data while ensuring respondents' anonymity. The researcher asked the management of the SMBs involved in the research for approval in order to uphold research ethics. To ensure uniformity, the pre-test of the questionnaire was completed by certain experts and chosen respondents, and the study supervisor reviewed it.

Validity and Reliability

The degree to which the research result matches reality is referred to as validity. As a result, it also explains how the research tool measures the

variables it was supposed to measure. The research tool had undergone internal and external validation. The study's internal validity focused on this connection between the theoretical underpinnings and the empirical studies as well as the study itself. This established whether the experiment had sufficient samples to address the issues and whether the interviews were conducted with pertinent individuals. The repeatability of the same findings in subsequent studies using the exact same methodology as reported by prior researchers, as described by Robson and Neuman (2014), is referred to as the reliability of the research.

The accuracy of the measuring tools or processes affects reliability. The informal usage of a small group of 5 respondents was done to ensure that the questionnaire was able to extract the necessary data for the research. Cronbach's alpha was used to evaluate the measurement set's dependability. The range of the measurement is 0.0 to 1.0. A number of 1.0 indicated absolute reliability, whereas a value of 0.70 is regarded as the lowest acceptable level (Hair, Harrison & Ortinau, 2010). Therefore, when the questions had been pre-tested, a Cronbach's alpha of at least 0.70 was guaranteed. The pre-test eliminated any unclear questions and strengthen the validity of the research.

Data Analysis Procedure

According to Creswell and Hirose (2019), the data analysis process entails making conclusions and summarizing findings concerning a study. The obtained data was thoroughly edited, coded, and tabulated in preparation for analysis. Before being entered into the Statistical Package for Social Science (SPSS) and Microsoft Excel statistical tools, the returned surveys were modified and assessed. The statistical tools of SPSS and Microsoft Excel

displayed data in tabular or graphical formats, and the demographic factors employed were broken down into percentages and frequencies. Further, inferential statistics was adopted where the study conducted correlation and regression analysis.

Ethical Considerations

Palmer, Lyra, Mckensie, and Jenkin et al. (2021) admitted that privacy and confidentiality were the major ethical considerations in any research study. The study observed some ethical issues that were adhered so that this study can be completed and also meet the university's code of ethics. When participants are engaged in scientific research study like this, upholding ethical standards was a major responsibility. As a result, respondents were informed of the study's goals prior to becoming a subject of the study. Again, respondents had the right to decline an invitation to answer questions or take part in the exercise, and they also had the option of stopping if they felt uncomfortable during the course of the research. As a result, it was envisaged that participants gave their consent and were also guaranteed of the confidentiality and anonymity of the information shared. All information sources were properly cited in order to prevent plagiarism.

Chapter summary

This chapter has carefully followed the project implementation guidelines provided by UCC, thus, the study described the research design, study area, population, sampling technique and sampling size, data collection instruments, data collection procedures, analytical tools and ethical consideration. This chapter identified language barriers, incomplete responses and unwillingness to take part in the study were some limitations the study encountered.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

The results, data presentation, analysis, and comments of the findings are all covered in this chapter.

Results

Data obtained from the questionnaires administered to SMBs in New Juaben South Municipality (NJSM). In all, one hundred and eighty (180) SMBs in the municipality participated in the study. SMBs were asked to score their levels of agreement with the revenue mobilization options that were available to them and with revenue mobilization on a scale of one (1) to five (5). Strongly disagree is represented by the lowest rank of 1, while strongly agree is represented by the highest rank of 5, on a scale from 1 to 5. The study used a mean value of 3.00 as the standard by which to compare results.

Demographics variables

This part examines the respondents' biographical information, which includes their gender, age, educational background, SMB type, number of years the SMB has been operating, type of ownership, and current status.

Table 1: Summary statistics of Demographic Variables of Respondents

Category		Frequency	Valid percent %
Gender	Male	95	52.8
	Female	85	47.2
Age	20-29years	63	35.0
	30-39 years	79	43.9
	40-49 years	38	21.1
Educational background	JHS	13	7.2
	SHS	68	37.8
	Tertiary	99	55.0
SMBs type	Service	43	23.9
	Manufacturing	15	8.3
	Agro business	19	10.6
	Wholesale/retail	103	57.2
Years in SMBs	1-5 years	69	38.3
	6-10 years	75	41.7
	11-15 years	23	12.8
	16years and above	13	7.2
Ownership type	Sole proprietorship	106	58.9
	Partnership	74	41.1
Current status	Owner	75	41.7
	Manager	52	28.9
	Manager/owner	13	7.2
	Others	40	22.2

Source: Field data (2022)

From table 1, majority (52.8%) of the respondents were males and the rest were females. This is an indication that most SMBs in the municipality are either owned or managed by males. However, the percentage figure (47.2%) of the female respondents is highly significant and this implies that responses or findings of the study cannot be gender bias.

The table shows that the majority of respondents, or 43.9 percent, fell within the 30- to 39-year age range. This indicates that roughly 4 out of 10 sampled respondents are between the ages of 30 and 40. The age groups of 20-29 years (35 percent) and 40-49 years (40%) are closely behind this (21.1%). It can therefore be established that most SMBs in the municipality are being managed by people within the youthful category according to Ghana Statistical Service (2021).

Considering the educational background of the respondents, it was found from the table that 55% of respondents were graduates from tertiary institutions. Also, 37.8% of the respondents are graduates from senior high schools and 7.2% are JHS graduates. It is widely anticipated that the respondents' comments would accurately reflect the state of the link between SMBs' revenue mobilization and mobile banking.

From the results on the table, the dominant type of SMBs in the municipal assembly is wholesale/retail. This is represented by 57.2% of the respondents. Other type of SMBs engaged by respondents are service (23.9%), agro business (10.6%) and manufacturing (8.3%).

From the results, 4 out of 10 SMBs have been in existence between 6-10 years. Again, 38.3% of the SMBs have been in existence for less than 5 years

while 12.8% of the SMBs have been in existence between 11-15 years and 7.2% of the SMBs have been in existence for more than 16 years.

The results on the table shows that most of the sampled SMBs were sole proprietorship. This is represented about 6 out of 10 respondents. The rest of the SMBs were into partnership.

From the table, 4 out of 10 respondents were owners of their SMBs while 28.9% were managers of their SMBs, 22.2% held other positions like supervisors in their SMBs. The rest (7.2%) of the respondents were managers and owners of their SMBs.

Reliability Analysis

Table 2: Mobile banking and Revenue Mobilization (Reliability Analysis)

Constructs	**Number of items**	**Cronbach's Alpha**
Mobile banking	4	0.940
Revenue mobilization	6	0.960

Source: Field Data, (2022) N=180

To ascertain the reliability of dissimilar variables, Cronbach alpha coefficient values are employed. Cronbach's alpha was used to examine the reliability of the important questionnaire variables (mobile banking and revenue mobilization). We evaluated the variables affecting revenue mobilization and mobile banking. The premise underlying this calculation states that a coefficient of construct reliability greater than or equal to 0.7 is reasonable and a favourable sign (Nunnally, 1978). The lower limit of acceptability for exploratory inquiry, according to Hair, Anderson, Tatham, and Black (1998), is a cut-off point of 0.6.

The Cronbach alpha coefficient values for mobile banking and revenue mobilization strategies combined in this study were 0.940 and 0.960, respectively. The findings from section 4.2 suggest that the concept measures have a high level of internal consistency. Based on the research tools employed, this supports the validity and acceptability of the study.

Descriptive Statistical Results

Table 3: Revenue sources available for SMBs

Sources of revenue	**Frequency**	**Rank**
Increased prices of products/services	49	6th
Acquire more customers	176	1st
Expand markets	174	2nd
Promotions	119	5th
Offering discounts	151	4th
Others (loans)	161	3rd

Source: Field Data (2022), N=180

Table 3 displays the revenue sources available to SMBs in the municipal assembly. From the results it can be realized revenue available to SMBs can be generated from several sources. But from the table, SMBs generate revenue from four main sources. Out of the 180 respondents, most of the respondents indicated that the topmost revenue sources for SMBs are acquiring more customers (97.8%), expanded markets (96.7%), loans (89.4%), discounts (83.3%) and promotions (66.1%).

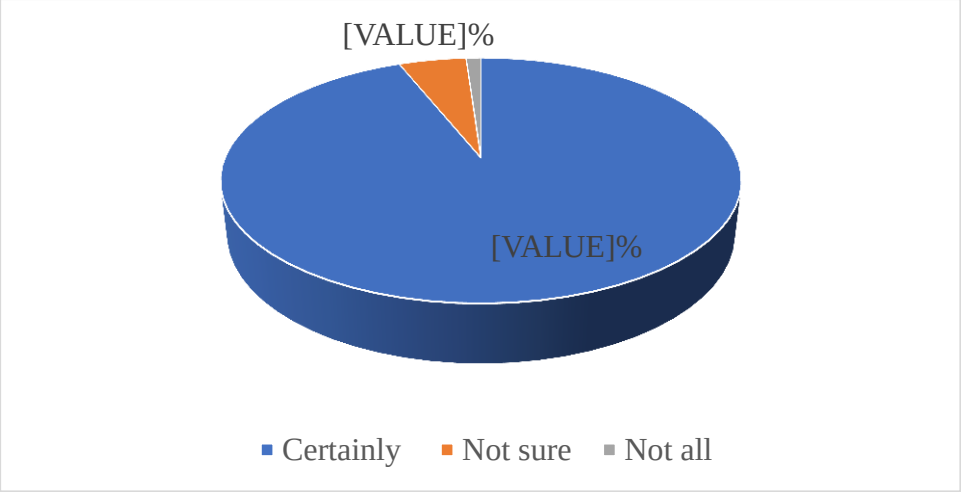

Figure 2: Mobile banking as a revenue mobilization strategy

Field data (2022)

Respondents were asked whether they see mobile banking as a revenue mobilization strategy and in response, an overwhelming majority of 93.9% responded in the affirmative from figure 2. Only 6.1% were not sure and did not know that money transfer through the mobile phones can be used as a revenue mobilization strategy.

Table 4: Factors influencing adoption of mobile banking

Statements	SD	D	I	A	SA	Mean	Std
To comply government policy of digitizing revenue mobilization	0.0	22.8	5.0	44.4	27.8	3.78	1.09
Increased usage of mobile phones	0.0	7.2	0.0	49.4	43.3	4.29	0.80
Highly convenient	1.1	8.9	0.0	80.6	9.4	3.88	0.73
Very reliable	6.1	15.0	42.8	33.3	2.8	3.12	0.91
Cost effective	15.0	24.4	41.1	19.4	0.0	2.65	0.96
Security and safety concerns of moving cash about	8.9	19.4	12.8	49.4	9.4	3.31	1.15
Prompt payment	0.0	0.0	0.0	75.0	25.0	4.25	0.43

Source: Field data (2022)

Respondents were asked to rate seven statements about the factors that influence the adoption of mobile banking. From the percentage and mean results most of the respondents agreed to all the statements listed in table 4 except one. The statement agreed most was the fact that increased usage of mobile phones (4.29) among customers greatly influence businesses to adopt mobile banking. The other factors agreed by most of the respondents are prompt payment of goods and services (4.25), it is highly convenient (3.88), businesses are complying with government policy on digitization (3.78), security and safety concerns of moving cash (3.31) and it is very reliable (3.12). most of the respondents however disagreed that cost effective is a factor that influence the adoption of mobile banking.

Table 5: Effects of mobile banking on revenue mobilization

Statements	SD	D	I	A	SA	Mean	Std
Revenue leakages will be blocked	16.7	33.9	38.9	10.6	0.0	2.43	0.89
There will be proper records of payments of goods and services	0.0	8.3	21.1	51.7	18.9	3.81	0.84
The business will record high efficiency	8.3	17.8	19.4	50.6	3.9	3.24	1.06
The business can make proper financial projections based on data stored	0.0	3.3	6.1	53.9	36.7	4.23	0.71
Consistent record of increased revenue	0.0	6.7	13.9	46.1	33.3	4.06	0.86
Competitive advantage over other businesses	0.0	0.0	16.7	48.9	34.4	4.18	0.69

Source: Field data (2022)

Six assertions about the effect of mobile banking on revenue mobilization were given to staff members to rate. The majority of respondents did not agree with all of the claims in table 5 based on the percentage and mean values. The majority of respondents concurred that firms can use mobile banking to produce accurate financial estimates based on the data stored. The highest mean of 4.23 and 90.6 percent of the respondents both agreed with this assertion. This is followed by the fact that the company has a competitive edge over rivals (4.18), a track record of rising revenue (4.06), accurate records of payments for goods and services (3.81), and high efficiency (4.18). (3.24). It was further realized that mobile banking cannot the leakage of revenue (2.43).

Table 6: Relationship between mobile banking and revenue mobilization

Measurement constructs	**1**	**2**
Mobile banking	1	
Revenue mobilization	0.981**	1

Note: **significant at p<0.01

Source: Field data (2022)

Correlation analysis assesses the association existing among the constructs to be measured without having any control on each other. It can be realised on table 6 that the correlation between mobile banking and revenue mobilization was highly positive and significant (0.981, p<0.01). This implies that as SMBs adopt mobile banking as a priority, the corresponding effects on revenue mobilization will be positive and may improve.

Regression Analysis

Table 7: Significant and Positive Relationship between mobile banking and revenue mobilization

Variable	B	β	S.E	t	Prob.
Constant	0.363		0.132	2.752	0.01**
Complying with government's policy	0.049	0.069	0.014	3.383	0.00**
Increased usage of mobile phones	0.121	0.126	0.024	5.118	0.00**
Highly convenient	0.014	0.014	0.021	0.688	0.49
Very reliable	0.267	0.316	0.028	9.608	0.00**
Cost effective	0.130	0.162	0.029	4.472	0.00**
Security and safety concerns of moving cash about	0.216	0.324	0.023	9.257	0.00**
Prompt payment	0.179	0.101	0.032	5.678	0.00**
S.E of estimate	0.12061				
R-Square	0.976			F-statistic	1016.00
Adj. R-square	0.975			Prob.(F-stats.)	0.00**

Note: **significant at p<0.01; * Significant at p<0.05

Source: Field Data (2022)

By affecting one another in a model, regression analysis evaluates the relationship between independent and dependent variables (composite scores). Regression analysis, in other words, looks at how much the independent factors affect the dependent variables. Revenue mobilization is the dependent variable, and the independent variables taken into account by the study are the elements influencing the adoption of mobile banking. According to Table 7, there is a strong and favourable correlation between income mobilization and mobile banking (F=1016.00, p<0.01). This implies that mobile banking jointly

contributes about 96.3% of the variance in revenue mobilization especially the safety and security of the mobile banking transactions (β-0.324, p<0.00). This is followed by the level of reliability (β-0.316, p<0.00), cost effective (β-0.162, p<0.00), increased usage of phones (β-0.126, p<0.00), prompt payment (β-0.101, p<0.00), comply with government policy (β-0.069, p<0.00) and level of convenient (β-0.014, p<0.00).

Table 8: Relationship between demographics and revenue mobilization

Variable	**B**	**B**	**S.E**	**t**	**Prob.**
Constant	0.874		0.140	6.255	0.01**
Age	0.211	0.202	0.082	2.582	0.11
Education	0.468	0.383	0.060	7.833	0.00**
Business type	0.142	0.236	0.035	4.097	0.00**
Years in business	0.179	0.207	0.057	3.123	0.00**
S.E of estimate	0.246				
R-Square	0.900			F-statistic	394.23
Adj. R-square	0.898			Prob.(F-stats.)	0.00**

Note: **significant at p<0.01; * Significant at p<0.05

Source: Field Data (2022)

The independent variables considered by the study are the demographics of the sampled businesses and the dependent variable is the revenue mobilization. According to Table 8, there is a strong and favourable correlation between demography and revenue mobilization (F=394.23, p<0.01). This implies that demographics (age, education, business types and years in business) jointly contributes about 90% of the variance in revenue

mobilization especially the level of education of the respondents. This is followed by age, years of existence as a business and business type.

Table 9: Challenges associated with adoption of mobile banking

Statements	SD	D	I	A	SA	Mean	Std
Regular reportage of mobile fraud	0.0	0.0	0.0	56.7	43.3	4.43	0.49
High costs of banking transactions	0.0	0.0	5.0	43.9	51.1	4.46	0.59
Bureaucracy associated with steps to do payment	13.9	17.8	34.4	33.9	0.0	2.88	1.03
Lack of support from top management	0.0	9.4	19.4	50.0	21.1	3.83	0.87
Unstable network	0.0	0.0	0.0	31.1	68.9	4.69	0.46

Source: Field data (2022)

Table 9 findings show that not every issue stated there can be connected to the use of mobile banking. The statement agreed most was the fact that unstable network is the major challenge. This statement is agreed by 100% of the respondents and a mean of 4.69 confirmed this. Again, it was realized that high costs of banking transactions (4.46), regular reportage of mobile fraud (4.43) and lack of support from top management (3.83) are other challenges. It was further added 100% of the businesses agreed that taxes on mobile money transactions hugely have negative influence on mobile banking and revenue mobilization.

Table 10: Improving revenue mobilization through mobile banking

Statements	SD	D	I	A	SA	Mean	Std
Education on the relevance of payment through mobile phones	0.0	0.0	30.0	46.1	23.9	3.94	0.73
Stable network	0.0	0.0	0.0	46.7	53.3	4.53	0.50
Significant reduction in charges regarding mobile money transactions	0.0	0.0	0.0	39.4	60.6	4.61	0.49
Regular engagement of customers	0.0	2.2	5.6	35.0	57.2	4.47	0.70
Reducing taxes associated mobile money transactions	0.0	0.0	0.0	22.8	77.2	4.77	0.42

Source: Field data (2022)

The outcomes of Table 10. The responders agreed with each and every one of the statements in the table. The majority of respondents answered that the best strategy to increase revenue mobilization is to lower taxes related with mobile money transactions. This statement is strongly agreed by 77.2% of the respondents and confirmed a mean of 4.77. This is followed by those who indicated that there should be significant reduction in charges regarding mobile money transactions (4.61), stable network (4.61), regular engagement of customers (4.47) and education on the relevance of payment through mobile phones (3.94).

Discussion of Findings

Under this section, the study's key findings are analyzed, discussed, and related to the literature.

Challenges associated with the adoption of Mobile Banking

The first objective sought to identify the problems connected to the use of mobile banking. Even though mobile banking has made financial transactions simpler, users sometimes get worried over confidentiality of financial engagements. From the study, unstable networks are the main issue that might adversely affect revenue mobilization through mobile banking, was to the major problem connected with the use of mobile banking. Apart from that, high costs of banking transactions, regular reportage of mobile fraud and lack of support from top management are other challenges that adversely affect revenue mobilization among SMBs. Almost all the SMBs added that taxes associated with mobile money transactions adversely the adoption of mobile banking and revenue mobilization since the taxes reduce profit margins of SMBs. To agree with the findings. Besley and Persson (2014) expressed that some small enterprises face long and complex procedures in the mobile banking transactions.

Factors Affecting the Adoption of Mobile Banking

The study's second objective was to look at the elements that influence the uptake of mobile banking. Users of mobile banking are increasingly becoming more concern with rapid banking transactions. Thus, users are not quick to adopt any mobile technology tool or service but may consider certain factors before taking up any mobile technology services. According to the report, the prevalence of mobile phone use among consumers and SMB clients

is the main factor driving SMBs to use mobile banking. Other variables identified by the study as influencing the uptake of mobile banking include security and safety concerns regarding the movement of cash, rapid payment, ease, adhering to governmental policy of digitizing revenue mobilization, and degree of dependability. In agreement with the findings, Global Findex (2020) showed the increase in the percentage of population coupled with the uptake of mobile phone usage and mobile money transactions has led to the adoption of banking as a feasible way to transact banking services. Again, the theory called perceived behavioural control (PBC), which affects behavioural intents and actual conduct underpins this finding because of influential factors particularly the safety and security issues with moving cash online due to cybercrime, and the rapid notification of customers' financial operations (savings and withdrawals) through SMS alert.

Effects of Mobile Banking on Revenue Mobilization of SMBs in the New Juaben South Municipality

Examining potential impacts of mobile banking adoption on revenue mobilization was the study's third objective. Financial transactions via mobile phones has contributed to financial inclusion among individuals and firms. This contribution has enabled quick and easy payments of goods and services from individuals to firms and from one firm to the other. The study found that mobile banking can significantly affect how SMBs mobilize their revenue. It was clearly established that mobile banking can help SMBs make proper financial projections based on data stored, enhances competitive advantage, assist in recording increased revenue consistently, provides proper records of payments of goods and services and SMBs can record high efficiency. The

study however revealed that mobile banking cannot block leakage of revenue. There is clearly indication from the study that mobile banking has the direct and positive relationship with revenue mobilization to the extent that mobile banking contributes about 98% to revenue mobilization. In line with the results, Lu et al. (2010) specifically suggested that TAM and TPB were employed by a number of authors to look into the variables impacting users' behavioural intentions toward mobile banking. According to proponents, mobile banking is an IT offshoot that users adopt for financial transactions because of a number of important factors, including performance expectancy. Agu et al. (2016) added that mobile banking has emerged as a cutting-edge choice. Users can conduct banking transactions anywhere, at any time, using mobile banking, which also offers a simple method for making purchases of goods or services. In Uganda, Jacolin et al. (2019) asserted that given the importance of transactions carried out through MM, the mobilized resources can be significant through creating many new employments in adopting countries, thus increasing individual incomes and improving social inclusion.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The findings, conclusions, and recommendations for the owners and management of SMBs in New Juaben South Municipality are summarized in this chapter. The findings of the investigation led to some inferences being drawn. Additionally, suggestions were presented to show how mobile banking could increase revenue for SMBs in the municipality.

Summary of Findings

The study's main objective was to evaluate mobile banking and how it can help SMBs in the New Juaben South Municipality increase their ability to mobilize revenue. The study specifically sought to: identify the revenue sources open to SMBs in the New Juaben South Municipality; examine the variables that can influence the adoption of mobile banking as a revenue mobilization strategy; ascertain the potential effects of the adoption of mobile banking on revenue mobilization and identify the difficulties associated with the adoption of mobile banking services.

A quantitative approach was adopted where questionnaires were administered to owners, managers, and supervisors of SMBs in the municipality participated in the survey. A convenient sampling technique was used to select the SMBs. The statistical program SPSS version 26 was used to analyze the data that was obtained. The study's findings were as follows:

The study revealed that SMBs generate revenue or income by acquiring more customers, expanding their markets, loans, offering discounts on their products and services as well as carrying out promotional activities on

their products and services. It was also revealed that most SMBs were aware of the fact that mobile banking can be used as a revenue mobilization strategy.

The study found that several factors influence SMBs to adopt mobile banking as a revenue mobilization strategy. According to the study, the major factor agreed by most respondents was the fact that many people or many customers of SMBs are using mobile phones. Other factors to influence adoption of mobile banking found by the study included security and safety concerns of moving cash about, prompt payment, convenient, complying with government policy of digitizing revenue mobilization and level of reliability.

The study revealed that to a large extent mobile banking can influence revenue mobilization of SMBs. It was clearly established that mobile banking can help SMBs make proper financial projections based on data stored, enhances competitive advantage, assist in recording increased revenue consistently, provides proper records of payments of goods and services and SMBs can record high efficiency. The study however revealed that mobile banking cannot block leakage of revenue. There was clearly indication from the study that mobile banking has the direct and positive relationship with revenue mobilization to the extent that mobile banking contributes about 98% to revenue mobilization. The study found that security and safety concerns of moving cash about contributing the greatest to revenue mobilization.

The study found unstable network as the major challenge that can negatively affect revenue mobilization through mobile banking. Apart from that, high costs of banking transactions, regular reportage of mobile fraud and lack of support from top management are other challenges that adversely affect revenue mobilization among SMBs. Nearly all of the SMBs noted that

because mobile money transaction charges lower SMB profit margins, they have a negative impact on the adoption of mobile banking and revenue mobilization.

Finally, the study revealed that reducing taxes associated mobile money transactions, significant reduction in charges regarding mobile money transactions, stable network, regular engagement of customers and education on the relevance of payment through mobile phones are some of the effective ways to improve revenue mobilization among SMBs.

Conclusion

In view of the findings, the study concludes that several SMBs in the New Juaben South Municipality were certainly not interested in generating revenue by increasing prices of products and services. However, the SMBs generate revenue when they acquire more customers, expand their markets, loans, offer discounts to customers on their products and services as well as carry out promotional activities. An added way for SMBs to generate revenue is through mobile banking. SMBs are willing to adopt mobile banking because of security and safety concerns of moving cash, many people are using mobile phones and payments of products and services can be made promptly. Also, SMBs will adopt mobile banking because it is convenient, reliable and the fact that the government is rolling out a policy to digitize revenue mobilization. Owners and managers of SMBs admit that mobile banking can help to improve their incomes. Even though mobile banking cannot block revenue leakages, it can help SMBs make proper financial projections based on data stored. Also, SMBs can make proper records of payment of goods and services, record consistent revenue and high efficiency as well as serve as a

competitive advantage. There is little doubt that mobile banking makes a major and positive contribution to revenue mobilization, especially given that it lowers the risk associated with carrying and handling currency transactions. Owners and managers of SMBs want issues like unstable networks, the cost of banking transactions, regular reporting of mobile fraud, and a lack of support from top management to be solved in order to fully leverage the benefits of mobile banking.

Finally, this study had contributed to the understanding of the relationship between the uptake of mobile banking among SMBs and how it had affected income generated by the firms. SMBs are highly committed to increase knowledge in the usage of mobile banking so that they can monitor their daily incomes and explore investment opportunities.

Recommendations

The following suggestions were offered to assist owners and managers of SMBs in increasing their revenue through mobile banking based on the aforementioned findings and conclusion.

Intensive education on security and safety

The study revealed that safety and security concerns on dealing with cash transaction greatly influence revenue mobilization. The study recommends that management of telecom firms, banking institutions and government should collaborate to educate owners and managers of SMBs about the existing security steps to minimize mobile money fraud. Moreover, there should be intensive awareness and relevance on government policies on minimizing mobile fraud like the registration of Ghana card. This will help boost confidence among SMBs in transacting mobile money transactions.

Reducing taxes of mobile money transactions

The study found that lowering taxes on mobile money transactions can significantly boost the uptake of mobile banking and, consequently, increase income. To encourage better money transactions between SMBs and customers, the report suggests that the government lower the current levy on electronic money transfers from 1.5 percent to around 1 percent.

Reducing cost of transactions

The study revealed that cost effectiveness is one the factor that hinder SMBs from adopting mobile banking. It is therefore recommended that management of banking institutions and telecom firms should make effort to reduce charges associated with mobile banking. This will help encourage more SMBs to adopt mobile banking transactions.

Improving network stability

According to the survey, one of the best methods to increase mobile banking revenue is through a reliable network. The study recommends that management of telecom firms should ensure there is consistent stable network. This will help continuous flow of SMBs transactions among other SMBs or customers.

Regular engagement with customers

The management of telecom firms and banking institutions should regularly engage their customers using their networks. This will help management of telecom firms and banking institutions appreciate the challenges facing their customers so that they be addressed.

Area of Further Studies

This study assesses mobile banking and revenue mobilization among SMBs in New Juaben South Municipality. Further studies can be conducted where the adoption of Ghana card as a safety and security measure to reduce mobile money fraud can be examined. Again, the use of technology to improve revenue generation among municipalities in Eastern Region can be assessed as a comparative study.

REFERENCES

Adewoyein, J. O. (2013). Impact of mobile banking on service delivery in the Nigerian commercial banks. *International Review of Management and SMBs Research, 2*(2), 333-344.

Adu-Gyamfi. E. (2014). Effective revenue mobilisation by district assemblies: A case study of Upper Denkyira East Municipal Assembly of Ghana. *Public Policy and Administration Review, 2*(1), 97-122.

Agbesi, S., Osei-Owusu, A. & Tahiru, F. (2014). Investigating the challenges in revenue collection process: The case study of Ghana AMA property rate collection. *International Journal of Innovation and Scientific Research, 11*(2), 566-576.

Agu, B.O., Onwuka, I.O., & Simon, N.P.N. (2016). Mobile banking–adoption and challenges in Nigeria. *International Journal Innovation Society Scientific Humanities Research, 4*, 17–27.

Agwu, P. E. & Carter, A. L. (2014). Mobile phone banking in Nigeria: Benefits, problems and prospects. *Journal Internet Bank Commerce, 3*, 50–70.

Ahmad, A. H., Green, C., & Jiang, F. (2020). Mobile money, financial inclusion and development: A review with reference to African experience. *Journal of Economic Surveys*, *34*(4), 753-792.

Akpa, A. (2014). *Public finance and budgeting: Issues, imperatives and challenges from Nigerian perspectives*. Ibadan: Spectrum Books Limited.

Akturan, U., & Tezcan, N. (2012). Mobile banking adoption of the youth market. *Mark Intelligence. Plan, 30*, 444–459.

Aliyu, A.A., Tasmin, R.B.H.J. & Younus, S. (2012). An exploratory study on adoption of electronic banking: Underlying consumer behaviour and critical success factors: Case of Nigeria. *Business Management Review*, *2*, 1–6.

Amaglo, J. K. (2019). *Strategies for sustainability of small and medium enterprises in Ghana*. Doctoral Dissertation, Walden University.

Amoah, A., Asiama, R. K. & Korle, K. (2020). Mobile money as a financial inclusion instrument: what are the determinants? *International Journal of Social Economics*, *5*, 123-310.

Anaba, O. A., Li, Z., Li, M. & Ma, Z. (2021). Ghanaian SMEs amidst the COVID-19 pandemic: Evaluating the influence of entrepreneurial orientation. *Sustainability*, *13*(3), 1131-1135.

Anyasi, F.I., & Otubu, P.A. (2019). Mobile phone technology in banking system: Its economic effect. *Research Journal Information Technology*, *1*, 1–5

Arezki, R. & Dama, A. A, & Rota-Graziosi, G. (2021). Revisiting the relationship between trade liberalization and taxation. *Financial Inclusion*, *9*, 17-31.

Badu, R. A. (2014). *Mobilisation of Internally Generated Funds (IGF) in district assemblies in Ghana. A case Study of the Shama Ahanta East District Assembly*. Unpublished Document Submitted to the Department of Planning, KNUST.

Bagudu, H.D., Khan, S.J.M., & Roslan, A.H. (2017). The effect of mobile banking on the performance of Commercial Banks in Nigeria. *Int. Res. Journal Management IT Society Science, 4*, 71–76.

Bahiigwa, G. & Tadesse, G. (2015). Mobile phones and farmers' marketing decisions in Ethiopia. *World Development, 68,* 296-307.

Bahiigwa, G., Ellis, F., Fjeldstad, O-H. & Iversen, V. (2015). *Rural taxation in Uganda: Implications for growth, income distribution, local government revenue and poverty reduction*. EPRC Research Series No. 35 (January), Kampala: Economic Policy Research Centre.

Balogun, O.J., Ajiboye, F., & Dunsin, A.T. (2013). An investigative study on factors influencing the customer satisfaction with e-banking in Nigeria. *International Journal Academy Research Economic Management Science, 2,* 64–73.

Bankole, F.O., Bankole, O.O., & Brown, I. (2017). Mobile banking adoption in Nigeria. Electron. *Journal Information System Developing Countries*. *47*, 1–23.

Bankole, F.O., Brown, I. & Muganda, N. O. (2016). *Internet diffusion in Nigeria: Is the 'Giant of Africa' waking up?* In Proceedings of the 10th Annual Conference on World Wide Web Applications, Cape Town, South Africa.

Berkoh-Oforiwaa, R., Dzrobi, J. F., Klutse, N. A. B., Nkrumah, F., Quargraine, K. A., Quargraine, K. T., & Sylla, M. B. (2021). The climatic analysis of summer monsoon extreme precipitation events over West Africa in CMIP6 simulations. *Earth Systems and Environment, 5*, 25-41.

Besley, T., & Persson, T. (2014). Why do developing countries tax so little? *Journal of Economic Perspectives*, *28*(4), 99-120.

Bille, F. S., Buri, S., Crenn, T.A., Denyes, L.S., Hassam, C.V.T., Heitmann, S., & Martinez, M. (2018). *Digital access: The future of financial inclusion in Africa; The World Bank*. Washington, DC, USA.

Brosio, G. (2015). *Decentralization in Africa*. Paper prepared for the Africa Department, International Monetary Fund. Washington DC.

Buse, S., Herstaff, C. & Tiwari, R. (2016). *Customer on the move: Strategic implications of mobile banking for banks and financial enterprises*. In Proceedings of the 8th IEEE International Conference on E-Commerce Technology, San Francisco, CA, USA.

Cariolle, J., & Carroll, D. (2020). *The use of digital for public service provision in Sub-Saharan Africa.* Doctoral dissertation, FERDI.

Cavana, R. Y., Ahimbisibwe, A. R. & Urs, D. (2015). A contingency fit model of critical success factors for software development projects: A comparison of agile and traditional plan-based methodologies. *Journal of Enterprise Information Management, 7*, 10-15.

Černáková, V. (2014). ICT and innovation in the provision of public services: The case of Slovakia. *Information Technology for Development*, *21*(3), 1-16.

Churchill, R. Q., Oppong, M. & Owiredu, A. (2014). Micro and small scale enterprises development in Ghana. *European Journal of Accounting Auditing and Finance Research, 2*(6), 84-97.

Clark, K. R. & Qian, M. (2016). Game-based learning and 21st century skills: A review of recent research. *Computers in Human Behaviour, 63*, 50-58.

Coakley, J., Malikov, K. & Manson, S. (2018). Earnings management using classification shifting of revenues. *The British Accounting Review, 50*(3), 291-305.

Comninos, A., Esselaar, S., Ndiwalana, A. & Stork, C. (2008). M-banking the unbanked. *Policy Paper, 1*, 4-10.

Compaore, A. (2020). Access-for-all to financial services: Non-resources tax revenue-harnessing opportunities in developing countries. *Journal of Financial Review, 5*, 19-31.

Cosenz, F. & Noto, G. (2018). A dynamic business modelling approach to design and experiment new businesses venture strategies. *Long Range Planning, 51*(1), 127-140.

Creswell, J. W. & Hirose, M. (2019). Mixed methods and survey research in family medicine and community health. *Family Medicine and Community Health, 7*(2), 10-32.

Davidson, N., & Leishman, P. (2016). *Building a network of mobile money agents and mobile money for the unbanked*. GSMA: UK.

De Paepe, G. & Dickinson, B. (2014). Tax revenues as a motor for sustainable development. *Organisation of Economic Cooperation and Development Journal, 9*, 119-217.

De Vaus, D. (2002). *Analyzing social science data: 50 key problems in data analysis*. Sage Publishers Inc.

Della Peruta, M. (2018). Adoption of mobile money and financial inclusion: A macroeconomic approach through cluster analysis. *Economics of Innovation and New Technology, 27*(2), 154-173.

Demirguc-Kunt, A., & Klapper, L. (2012). *Measuring financial inclusion: The global findex database*. New York, The World Bank

De-Vaus, D. (2002). *Sample size determination*. St. Lucia: University of Queensland.

Donovan, K., (2012). Mobile money for financial inclusion. *Information and Communications for Development*, *61*(1), 61-73.

Ebel, R. D. & Vaillancourt, F. (2014). Fiscal decentralization and financing urban governments: Framing. *The Challenge of Urban Government: Policies and Practices*, *41181*(4), 155-160.

Fjeldstad, O. H., & Heggstad, K. (2012). *Local government revenue mobilization in Anglophone Africa*. Nairobi, Kenya.

Ghana Audit Service (2020). *Audit Service Report 2020*. Accra, Ghana.

Ghana Employment Agency (GEA). (2019). *Small and medium scale report*. Accra, Ghana: GEA.

Ghana Statistical Service (GSS). (2020). *Population and Housing Report*. Ghana.

Global Findex (2020). *GSMA Mobile money*. GSMA, UK.

GSMA. (2019). *State of the Industry Report on Mobile Money 2019.* Retrieved from: https://www.gsma.com/sotir/wp-content/uploads/2020/03/ GSM A-State-of-the-IndustryReport-on-Mobile-Money-2019-Full-Report. pd.

GSMA. (2020). *Digitalising person-to- government payments Leveraging mobile to improve government revenue and access to public services*. Retrieved from: https://www.gsma.com/publicpolicy/wpcontent/uploads/2020/09/GSMA-Digitalising-person-to-government-payments.pdf.

Hair, J. E., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (5th edn.) New York: Prentice Hall.

Hair, J. F., Harrison, D. E. & Ortinau, D. J. (2010). *Essentials of marketing research* (Vol. 2). New York, NY: McGraw-Hill/Irwin.

Hunjra, A. I., Locke, S. M., Manita, R. & Wellalage, N. H. (2020). Information communication technology and financial inclusion of innovative entrepreneurs. *Technological Forecasting and Social Change*, *19*, 120-416.

Ingham-Broomfield, R. (2015). A nurses' guide to qualitative research. *Australian Journal of Advanced Nursing, 32*(3), 34-40.

International Finance Corporation (IFC) (2018). *Digital access: The future of financial inclusion in Africa*. Retrieved from: https://www.ifc.org/wps/wcm/connect/96a4f610-62b1-4830-8516 .

Jack, W., & Suri, T., (2014). Risk sharing and transactions costs: Evidence from Kenya's mobile money revolution. *American Economic Review*, *104*(1), 183-223.

Jacolin, L., Massil J. K., & Noah, A. (2019). Informal sector and mobile financial services in developing countries: Does Financial Innovation Matter? *Journal of Financial Inclusion*, *5*, 11-41

Joshi, A., Heady, C. & Prichard, W. (2014). Taxing the informal economy: The current state of knowledge and agendas for future research. *The Journal of Development Studies*, *50*(10), 1325-1347.

Kamau, K., Cerstin, S., & Mukwana, P. (2013). *Passing the buck: The practice and potential for products in Kenya*. Nairobi, Kenya: MicroSave.

Kamel Alomari, M., Sandhu, K. & Woods, P. (2014). Exploring citizen perceptions of barriers to e-government adoption in a developing country. *Transforming Government: People, Process and Policy*, *8*(1), 131-150.

Kandole, B. P. (2015). *Local revenue mobilisation in Somaliland, Puntland and Federal government of Somalia*. UNCDF, Final Report, New York.

Kessey, K. D. & Gunter K. (2014). *Local revenue administration in Ghana: Practice and prospects*. SPRING Center, Dortmund, Germany.

Khan, H. U. & Ejike, A.C. (2017). An assessment of the impact of mobile banking on traditional banking in Nigeria. *International Journal Business Excellence*, *11*, 446–463.

Kwarteng, S. O. (2017). *Public financial management and service delivery at the local government level: A case of Ejura Sekyedumase Municipal Assembly in the Ashanti Region*. PhD Thesis, UCC, Cape Coast, Ghana.

Lashitew, A. A., Liasse, Y. & van Tulder, R. (2019). Mobile phones for financial inclusion: What explains the diffusion of mobile money innovations? *Research Policy*, *48*(5), 1201-1215.

Lin, H. F. (March 2010), Applicability of the extended theory of planned behaviour in predicting job seeker intentions to use job-search websites. *International Journal of Selection and Assessment*, *18*(1), 64-74.

Lu, Y., Wang, B. & Zhou, T. (2010). Integrating TTF and UTAUT to explain mobile banking user adoption. *Computer Human Behaviour*. *26*, 760–767.

Luarn, P. & Lin, H. H. (2005). Toward an understanding of the behavioural intention to use mobile banking. *Computers Inhuman Behaviour, 21*(6), 873-891.

Lymer, A., Hansford, A., & Pilkington, K. (2012). Developments in tax e-filing: Practical views from the coalface. *Journal of Applied Accounting Research*, *13*(3), 212-225.

Madani, F., Muharremi, O., & Pelari, E. (2014). Tax evasion and set backs of the shadow economy in Albania. *Mediterranean Journal of Social Sciences, 5*(13), 398-400.

Maherali, A. (2017). *Financial inclusion, digital payments and their impact on income and tax revenue around the world*. Master's thesis, Harvard Extension School.

Malhotra, N. K. (2014). Basic marketing research: Integration of social media. *Research Journal, 1*, 15-29.

Masa'Deh, R., Mgbemena, C., Tarhini, A., & Trab, M.S.A. (2015). User adoption of online banking in Nigeria: A qualitative study. *Journal Internet Bank. Commercial, 20*, 132-139.

Meso, P., Musa, P., & Mbarika, V. (2015). Towards a model of consumer use of mobile information and communication technology in LDCs: The case of sub-Saharan Africa. *Info Systems Journal, 15*, 119-146.

Michaels, L. (2011). *Better than cash: Mobile money market assessment*. USDA, Nairobi, Kenya.

Min, Q., Ji, S. & Qu, G. (2018). Mobile commerce user acceptance study in China: A revised UTAUT model. *Tsinghua Science Technology, 13*, 257–264.

Moore, M. & Prichard, W. (2020). *How can governments of low-income countries collect more tax revenue*? London, Springer International Publishing.

Mothobi, O. & Grzybowski, L. (2017). Infrastructure deficiencies and adoption of mobile money in Sub-Saharan Africa. *Information Economic Policy*, *40*, 71–79.

Munoz-Leiva, F., Climent-Climent, S. & Liébana-Cabanillas, F. (2017). Determinants of intention to use the mobile banking apps: An extension of the classic TAM model. *Spanish Journal Mark. ESIC, 21*, 25–38.

Nasri, W. & Charfeddine, L. (2012). Factors affecting the adoption of internet banking in Tunisia: An integrated theory of acceptance model and theory of acceptance model and theory of planned behaviour. *The Journal of High Technology Management Research, 23*(1), 1-14.

New Juaben South Municipal Assembly (NJSMA) (2017). *Eastern Region NJSMA Medium Term Development Plan, Second Draft*. Republic of Ghana, Koforidua.

Njoku, A. C., & Odumeru, J.A. (2013). Going cashless: Adoption of mobile banking in Nigeria. Niger. Chapter Arab. *Journal of SMBs Management Rev*iew, *62*, 1–9.

Nkrumah, S. A. (2014). Decentralization for good governance and development: The Ghanaian Experience. *Regional Development Dialogue*, *21*(1), 53-67.

Nkuah, J. K., Tanyeh, J. P. & Gaeten, K. (2018). Financing small and medium enterprises in Ghana: Challenges and determinants in accessing bank credit. *International Journal of Research in social Sciences, 2*(3), 2307-2277.

Nunnally, J. C. (1978). An overview of psychological measurement. *Clinical Diagnosis of Mental Disorders: A Handbook, 19*, 97-146

Oates, W. E. (2014). Comments on fostering fiscally responsive and accountable governance: Lessons from decentralization (pp. 97–101), in Picciotto, R &Wiesner, E. J. (1989). *Evaluation and development. The Institutional Dimension*. New Brunswick/London, Transaction Publishers.

Okiro, A. (2015). *The effect of e-payment system on revenue collection by the Nairobi City County Government*. Nairobi, Kenya.

Olowu, S. & Wunsch, E. (2014). *Local governance in Africa: The challenges of democratic decentralization*. London, UK: Lynne Rienner Publishers.

Oni, A. A. & Ayo, C. K. (2011). An empirical investigation of the level of users' acceptance of e-banking in Nigeria. *Journal Internet Banking Commercial*, *15*, 1–13.

Oz-Yalaman, G. (2019). Financial inclusion and tax revenue. *Central Bank Review*, *19*(3), 107-113.

Palazzo, M., Panait, M. C., Raimi, L., & Siano, A. (2020). Mobile banking: An innovative solution for increasing financial inclusion in Sub-Saharan African countries: Evidence from Nigeria. *Sustainability, 12*(23), 10130-10133.

Palmer, S., Lyra, R. L. D. Mckensie, S. K. & Jenkin, G. (2021). Occupational exposure to suicide: A review of research on the experiences of mental health professionals and first responders. *PLoS, 1*(24), 77-91.

Partington, M. (2012). An investigation of the practice activities and coaching behaviours of professional top-level youth soccer coaches. *Scandinavian Journal of Medicine and Science in Sports*, *23*, 374-382.

Robson, K. & Neuman, W, L. (2014). *Basics of social research*. Toronto, Canada: Pearson.

Salami, A. (2011). Taxation, revenue allocation and fiscal federalism in Nigeria: Issues, challenges and policy options. *Economic annals*, *56*(189), 27-50.

Sawadogo, F., & Wandaogo, A. A. (2021). Does mobile money services adoption foster intra-African goods trade? *Economics Letters*, *199*, 109-681.

Sharma, S. K. (2019). Integrating cognitive antecedents into TAM to explain mobile banking behavioural intention: A SEM-neural network modeling. *Information System Frontiers, 21*, 815–827.

Singh, A. B. (2012). Mobile banking based money order for India Post: Feasible model and assessing demand potential. *Procedia Social Behaviour Science, 37*, 466–481.

Singh, H. P. & Tarray, T. A. (2015). Some improved additive randomized response models utilizing higher order moments ratios of scrambling variables. *Model Assisted Statistics and Applications, 10*(4), 361-383.

Smoke, P. (2014). *Fiscal decentralization in developing countries: A review of current concepts and practice*. United Nations, NY.

Stren, R. (2014). *Financial management-revenue raising in the challenge of urban government: Policies and practices*. Cambridge: Cambridge University Press.

Suri, T., & Jack, W. (2016). The long-run poverty and gender impacts of mobile money. *Science, 354*(6317), 1288–1292.

Tahiru, F. & Agbesi, S. (2019). *Driver and barriers of ICT adoption in revenue collection in Ghana: A case of Accra Metropolitan Assembly*. 30th European Conference of the International Telecommunications Society (ITS): Towards a Connected and Automated Society, Helsinki, Finland, International Telecommunications Society (ITS), Calgary.

Teddlie, C., & Yu, F. (2014). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research, 1*(1), 77-100.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2013). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, *27*(3), 4-10.

Waiswa, R., & Okello-Obura, C. (2014). To what extent have ICTs contributed to e- governance in Uganda? *Library Philosophy and Practice, 1*,1-19.

Zins, A. & Weill, L. (2016). The determinants of financial inclusion in Africa. *Review. Development Finance, 6*, 46–57.

APPENDIX

QUESTIONNAIRES FOR SMBS IN THE NEW JUABEN SOUTH MUNICIPALITY

As a requirement to obtain a Master's Degree certificate at University of Cape Coast, this questionnaire is to help the student gather information on the research topic stated above. You are assured that responses are strictly meant for academic purposes and will be treated with utmost confidentiality. You are not required to provide your name.

Please tick [√] the option that best suit your opinion or experience and return questionnaires to researcher. Thank you.

Section A: Demographics of Respondents

1. Sex: Male [ ] Female [ ]

2. Age (in years)

20 – 29 ☐ 30 -39 ☐

40 – 49 ☐ 50 – 59 ☐

3. Educational Background

a. No formal education ☐
b. Primary ☐
c. Junior Secondary ☐
d. Senior Secondary ☐
e. Tertiary ☐
f. Others (please specify)……..

4. What type of SMBs or form of activity you are engaged in?

a. Service ☐
b. Manufacturing ☐

c. Agro-business ☐

d. Wholesale/retailing ☐

e. Others (please specify)……..

5. How long have been in SMBs?

a. 1-5 years ☐

b. 6-10 years ☐

c. 11-15 years ☐

d. 16 years and above ☐

6. Ownership type?

a. Sole proprietorship ☐

b. Partnership ☐

c. others (please specify)……

7. Current status?

a. Owner ☐

b. Manager ☐

c. Manager/Owner ☐

d. Others (please specify) ……

Section B: Revenue sources available to SMBs in NJSM

5. Which of the following are the revenue sources available to SMBs in the assembly?

a. Increase prices of products/services ☐

b. Acquire more customers ☐

c. Expand markets ☐

d. Promotions ☐

e. Offering Discounts ☐

f. Any other (please specify)…….

Section C: Examine the factors that can affect the adoption of mobile banking as a revenue mobilization strategy

6. Do you see the frequent transfer of money through the mobile phones as one of the strategies to mobilize revenue for your SMBs?

a. Certainly ☐

b. Not sure ☐

c. Not at all ☐

7. This section contains the factors that can influence your SMBs to adopt mobile banking as a tool to mobilize revenue. Please read each statement carefully and check the box that most closely reflects your opinion by ticking (√). Where strongly agree (5) is the highest level opinion and strongly disagree (1) is the lowest level.

Strongly Agree=5, Agree=4, Indifferent=3, Disagree=2, Strongly Disagree=1

Statements	1	2	3	4	5
To comply government policy of digitizing revenue mobilization					
Increased usage of mobile phones					
Highly convenient					
Very reliable					
Cost effective					
Security and safety concerns of moving cash about					
Prompt payment					

Please state other factors that influence the adoption of mobile banking as a tool to mobilize revenue for the SMBs ……

SECTION D: Ascertain the possible effects of the adoption of mobile banking on revenue mobilization

8. To what extent do financial transactions on mobile phones influence the improvement of revenue the SMBs mobilized?

Very large extent [ ]

Large extent [ ]

Somewhat extent [ ]

An extent [ ]

Not at all [ ]

9. This section contains question relating to the possible effects mobile banking on the revenue mobilization among SMBs. Please read each statement carefully and check the box that most closely reflects your opinion by ticking (√). Where strongly agree (5) is the highest level opinion and strongly disagree (1) is the lowest level.

Strongly Agree=5, Agree=4, Indifferent=3, Disagree=2, Strongly Disagree=1

Statements	1	2	3	4	5
Revenue leakages will be blocked					
There will be proper records of payments of goods and services					
The SMBs will record high efficiency					
The SMBs can make proper financial projections based on					

data stored					
Consistent record of increased revenue					
Competitive advantage over other SMBs					

Please state other possible effects of the adoption mobile banking on revenue mobilization……

SECTION E: Identify the challenges that are associated with the adoption of mobile banking services.

10. This section contains question relating to the challenges that the SMBs may face after adopting mobile banking as a revenue mobilization tool. Please read each statement carefully and check the box that most closely reflects your opinion by ticking (√). Where strongly agree (5) is the highest level opinion and strongly disagree (1) is the lowest level.

Strongly Agree=5, Agree=4, Indifferent=3, Disagree=2, Strongly Disagree=1

Statements	1	2	3	4	5
Regular reportage of mobile fraud					
High costs of banking transactions					
Bureaucracy associated with steps to do payment					
Lack of support from top management					
Unstable network					

Please state other limitations associated with the adoption of mobile banking as a tool to mobilize revenue …….....

SECTION F: Evaluate the contribution of mobile banking to improve revenue mobilization among SMBs

11. What do you think are the effective ways to assist the SMBs improve revenue through mobile banking? Please read each statement carefully and check the box that most closely reflects your opinion by ticking (√). Where strongly agree (5) is the highest level opinion and strongly disagree (1) is the lowest level.

Strongly Agree=5, Agree=4, Indifferent=3, Disagree=2, Strongly Disagree=1

Statements	1	2	3	4	5
Education on the relevance of payment through mobile phones					
Stable network					
Significant reduction in charges regarding mobile money transactions					
Regular engagement of customers					
Reducing taxes associated mobile money transactions					

Please state other effective ways to assist the SMBs improve revenue through mobile banking

……

……

……