

**EFFECT OF MOBILE MONEY TECHNOLOGY ON PERFORMANCE OF SMALL  
AND MEDIUM ENTERPRISES IN MUKONO CENTRAL DIVISION**

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**UGANDA CHRISTIAN  
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## DECLARATION

I hereby declare that this work or part thereof has not been submitted in any form to any University or to any other body whether for the purpose of assessment, publication or for any other purpose. Where information has been derived directly from published or unpublished sources, which has been fully acknowledged, information derived indirectly through my reading can be fully acknowledged. I can also confirm that the intellectual content of my work is the result of my own efforts and no other person.

Signature.....

Date..27/08/2024.....

AKANKWASA RHONA

## APPROVAL

This research report by Akankwasa Rhona on the effect of mobile money technology on performance of small and medium enterprises in Mukono Central Division has been done under my supervision and is now ready for submission with my approval

MR.....A. HABWE ALEX JBU

Date.....27/8/2024.....

## **DEDICATION**

This work is affectionately dedicated to my loving parents, whose unwavering support and endless encouragement have been the bedrock of my academic sojourn. Their belief in the power of education and constant motivation have driven me to strive for excellence. I deeply appreciate the sacrifices which they had to make to get me to this milestone in life.

I also dedicate this work to my highly valued supervisor, from whom guidance and wisdom through the research process proved invaluable. Your dedication to nurturing knowledge and fostering academic growth has touched me so dearly in my intellectual development. Your mentorship has not only shaped this thesis but has enriched my academic life in ways words cannot fully express.

Last but not least, I would like to dedicate this work to the many owners of small and medium enterprises in Mukono Central Division, whose timid and innovative nature inspired this research. Your determination to make it amidst all calamities is that glowing heavy-interest force that propels progress and change; this shall be a tribute to your hard work and the tiny addition to the literature that stands ready to make sure life gets even easier for you as time goes on.

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## **LIST OF ABBREVIATIONS**

<b>SMEs</b>	-	Small and Medium Enterprises
<b>MTN</b>	-	Mobile Telecommunications Network
<b>AIRTEL</b>	-	Bharti Airtel Limited
<b>FGDs</b>	-	Focus Group Discussions
<b>MSEs</b>	-	Micro and Small Enterprises
<b>CVI</b>	-	Content Validity Index
<b>ICT</b>	-	Information and Communication Technology
<b>GSM</b>	-	Global System for Mobile Communications
<b>GDP</b>	-	Gross Domestic Product
<b>R&amp;D</b>	-	Research and Development
<b>UNBS</b>	-	Uganda National Bureau of Standards
<b>NSSF</b>	-	National Social Security Fund
<b>KCCA</b>	-	Kampala Capital City Authority
<b>URA</b>	-	Uganda Revenue Authority
<b>LC1</b>	-	Local Council One
<b>NITA-U</b>	-	National Information Technology Authority Uganda
<b>UNDP</b>	-	United Nations Development Programme
<b>UGX</b>	-	Ugandan Shilling
<b>WTO</b>	-	World Trade Organization
<b>BOU</b>	-	Bank of Uganda

## ABSTRACT

This study seeks to find out the effect of mobile money technology on performance among small and medium enterprises in Mukono Central Division, Uganda. This paper tries to explain how the adoption and use of mobile money services have revolutionized SMEs' business management in improving their financial and operational performance.

A cross-sectional research design combining elements of both a quantitative and qualitative approach was used in the collection of data from the SMEs owners or operators who reported that mobile money significantly contributed to increased revenue, improved cash flow management, and overall business growth.

These results reveal that a large proportion of SMEs have been able to incorporate the usage of mobile money into daily business activities, saving on transaction time and thus enhancing the satisfaction levels among customers. The study also goes ahead to pinpoint some of the central issues hindering the complete ability of mobile money technology, including transaction fees, limited digital literacy, and security-related issues. These challenges highlight the requirement for focused interventions in order to support SMEs in their effort to maximize the full potential of mobile money.

It points out that the use of mobile money relates positively to improved business performance, although such an impact would vary among the different SME types depending on the nature or size of the business or even sectors. This nuanced understanding provides valuable insight for policymakers and relevant stakeholders who seek to enhance the digital capabilities of the SMEs and promote financial inclusion.

The findings from the study add to the contribution towards the general discussion of digital financial services through addressing the challenges faced in adopting mobile money technology with actionable suggestions that will spur economic growth and ensure the sustainability of SMEs within Mukono Central Division and beyond.

# CHAPTER ONE

## INTRODUCTION

### Introduction

This chapter covers background information, objectives of the study, the statement problem, research questions of the study, significance of the study, scope of the study, justification of the study, and conceptual framework.

### 1.1 Background of the Study

SMEs within Mukono Central Division are facing a number of challenges that hinders their operations and growth, for example: high operation costs; a wealth of business skills or education, but poor specialty by the operators; and many general lack of specializations by traders offering related products and services. That, in simplest terms, has caused most of them to fail and close (BOU, 2018; PSFU, 2017). These have implications on whether the adoption and utilization of mobile money technology and its facilities enhance the performance of SMEs in Mukono Central Division. Mobile money, being a digital financial service courtesy of the connectivity of a mobile phone, enables SMEs to access this financial information for efficient decision-making on their part (Okundaye, et al., 2019). From that, therefore, businesses on mobile money platforms can have real-time breakout of financial data and the ability to track their transactions, analyze the pattern of payments by different customers. This is in addition to the fact that it provides them with valuable insight that might perhaps give SMEs an opportunity to make informed financial decisions, manage cash flow, and optimize resource allocation to ultimately achieve improved overall performance. Mobile money technology also introduces new ways of connecting businesses to suppliers and clients by providing them with easy and safe avenues for making payments. SMEs can thus conduct transactions without necessarily having to meet physically, which often enhances efficiency and reduces operational costs. For instance, business owners could pay their suppliers or obtain payment from their clients using a mobile

money platform in order to speed up and smoothen their financial transactions. Besides, mobile money operationalized through the connectivity of a mobile telephone speeds down internal communication, which allows more proportionate allocation of capital by SMEs (Okundaye et al., 2019). Adoption of the mobile money platform allows effective cash management, with businesses capable of attaining better liquidity and less administrative tedium. For example, one is able to manage the issuance of salaries using mobile money without necessarily making physical cash handling or using papers for documentation of such a transaction. This not only saves time but also enhances security and transparency further, giving room for more efficiency in capital utilization and general financial performance. Besides, mobile money technology can also be used effectively in assisting SMEs to penetrate more into markets and expand their market reach into new geographical regions. Being associated with mobile money as a payment option, SMEs can access more clientele across different geographical settings. This will be of particular significance in places with missing banking services. Offering mobile money in payment options could draw in those preferring fast digital transactions by roping in more sales and market shares. Mobile money will also help tap into customers in previously undiscovered markets where people are under banked (Willard, 2016; Owoseni & Twinomurinzi, 2020).

## **1.2 Statement of the Problem**

The impact of mobile money technology on the performance of SMEs in Mukono Central Division is therefore quite a vital issue. It has been estimated that the number of mobile money users in Uganda is large, suggesting widespread use of mobile phones for financial transactions, which might harness business opportunities and drive high performance and growth for SMEs (Kieso, Weygandt, & Warfield, 2016). Mobile phones enable entrepreneurs to communicate remotely, exchange information instantly, serve customers more effectively, monitor market prices, and bypass middlemen in the marketplace (Balgobin, 2022). Despite the potential, however, SMEs in Mukono Central Division are still faced with the factors that are likely to make it difficult to realize effective performance, such as credit constraints, inadequate

information for informed decision-making, lack of expertise, digital illiteracy, high costs of accessing information technology infrastructure, and high taxation—all the ills that hinder the effective exploitation of potential that mobile money technology avails (Sacer & Žager, 2008). Hence, the impact of mobile money technology on the performance of SMEs in Mukono Central Division is relevant research that will endeavour to unpack how this adoption affects financial transactions, customer reach, operational efficiency, and competitiveness while drawing useful lessons from special challenges and opportunities unique to the region's SMEs.

### **1.3 Objectives of the Study**

#### **1.3.1 Main Objective**

The current research proposes to establish the effect of mobile money technology on the performance of SMEs in Mukono Central Division.

#### **1.3.2 Specific Objectives of the Study**

To assess the impact of Mobile Money Technology on the Financial Performance among SMEs in Mukono Central Division.

To analyze the relationship between the adoption and utilisation of mobile money technology and SME performance in Mukono Central Division.

To determine the specific challenges that the SMEs in Mukono Central Division face regarding adopting and most effectively using the mobile money technology.

### **1.4 Research Questions**

What is the impact of mobile money technology on SMEs' financial performance in Mukono Central Division?

What relationship exists between the adoption and usage of mobile money technology on the general performance of SMEs in Mukono Central Division?

What are the specific challenges encountered by SMEs in Mukono Central Division in adopting and effectively utilizing mobile money technology?

## **1.5 Scope of the Study**

### **1.5.1 Content Scope**

The study will investigate the influence of mobile phone technology on the performance of Small and Medium Enterprises (SMEs) in Mukono Central Division. The content scope of the study will focus on mobile money technology as the independent variable and the performance of small and medium enterprises (SMEs) as the dependent variable. This is justified because mobile money technology, such as mobile money platforms, mobile wallets, and mobile banking services, is the key intervention hypothesized to have an impact on the performance of SMEs (Aker & Mbiti, 2010; Asongu & Nwachukwu, 2018).

### **1.5.2 Geographical Scope**

Mukono District, situated in Uganda's Central Region, is surrounded by Kayunga District to the north, Jinja District to the east, Lake Victoria to the south, and the districts of Buikwe and Buvuma to the west. The district headquarters is located approximately 21 kilometers east of Kampala, the capital city of Uganda. Given time, budget, and resource limitations, this study specifically focuses on Mukono District to ensure feasibility and practicality, as expanding the geographical scope would have necessitated additional time, funding, and resources.

### **Time Scope**

The study will be conducted over a year, spanning from September 2023 to August 2024. This time frame was chosen to allow sufficient duration for the researcher's critical analysis. Relationship between inflation and economic performance in small-scale industries. The allocated

Time will involve core activities which are writing research proposal, data collection, analysis and final dissertation compilation.

### **1.6 Significance of the Study**

The findings of this study are expected to provide valuable insights into the potential benefits of utilizing mobile money technology for SMEs in Mukono Central Division. The study will be critical to SME owners, policy framers, and other stakeholders who intend to use digital financial services as a means of increasing business and economic growth by investigating how mobile money can be used to improve financial performance, ease transactions, and manage business operations (Banga, 2020). This study aims to highlight the extent to which mobile money technology can contribute to improved profitability, operational efficiency, and competitive advantage, which are crucial for the sustainability and expansion of SMEs (Okundaye et al., 2019). Furthermore, by identifying the challenges faced by SMEs in adopting and effectively utilizing mobile money technology, the study will provide practical recommendations for overcoming these obstacles. Understanding the underlying factors that contribute to these challenges will enable stakeholders to develop targeted strategies and interventions to support SMEs in effectively leveraging mobile money technology (Tumwine, 2022). The impact of the research goes beyond Mukono Central Division into the wider realm of literature available on digital financial services and their effect on SMEs, thus acting as a key reference for future researchers and scholars looking to take similar studies into other regions (Banga & Musinguzi, 2019).

### **1.7 Justification of the Study**

This growing reliance on digital financial services calls for a detailed investigation into their effect on SMEs, especially in developing regions like Mukono Central Division. While mobile money technology is one of the most adopted technologies in Uganda, there is limited empirical evidence on how this technology affects SME performance in this specific context (Kiconco & Nuwagaba, 2019). Specifically, this research closes an important gap in the literature by focusing on unique challenges and opportunities affecting SMEs in Mukono

Central Division, thereby making the research findings of immediate relevance to local economic development strategies. The current study is very timely, given the current digitization drive in Uganda. Policymakers and business leaders are looking more and more to digital solutions for driving economic growth and increasing business efficiencies. Understanding the specific impact of mobile money technology on SMEs will help in formulating policies and interventions that support the effective adoption and utilization of digital financial services (Nabukeera, 2018). Moreover, the findings will contribute to the broader discourse on digital financial inclusion, offering practical recommendations that can be scaled and adapted to other regions facing similar challenges (Tumwine, 2022).

### **1.8 Conceptual Framework of the Study**

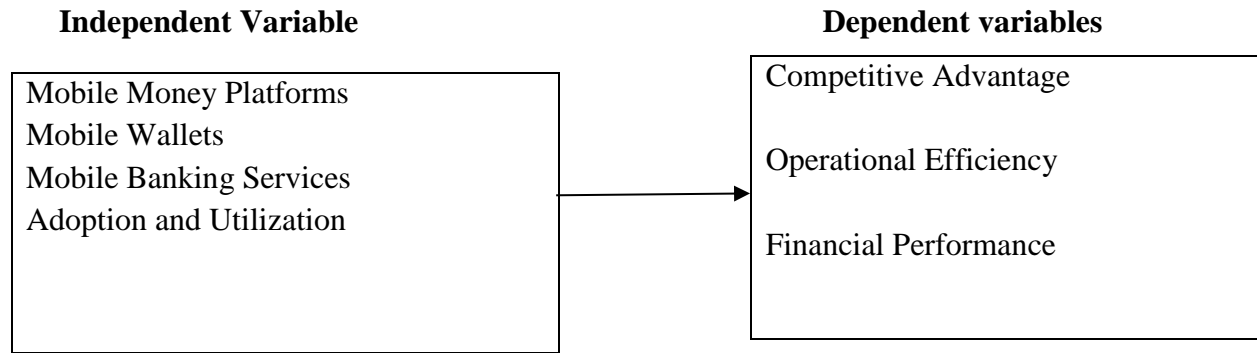
The theoretical framework of this study focuses on the relationship of the independent. Independent variables of mobile money technology and the dependent variable SMEs performance. The

The independent variable is characterized by four key dimensions: mobile money platforms, mobile.

It tracks wallets, mobile banking services, and general adoption and usage of mobile money. Technology by SMEs in Mukono Central Division. These dimensions jointly consist of the It has numerous mobile money services, digital payment solutions, and banking functions. The SMEs, and to what extent they have been able to integrate these technologies into their business.

Operations.

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



*Source: Brecht & Martin (1996) and modified by the researcher (2024)*

Operationalization of the dependent variable of SME performance is considered in three dimensions: financial performance, operational efficiency, and competitive advantage. While financial performance measures are focused on indicators of business performance, such as profitability, revenue growth, and liquidity measures, operational efficiency will be looking at cost saving and process improvements through the adoption of mobile money technology. The third dimension of competitive advantage is an assessment of how the adoption of mobile money technology has enhanced the market position and overall competitiveness of SMEs. This conceptual framework infers that if SMEs in Mukono Central Division accept and use mobile money technology, it may affect their financial performance, operational efficiency, and competitive edge. This project researches the relationship with a view to discovering exactly the challenges SMEs face in harnessing the technology of mobile money levels for growth and development purposes.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

The aim of this study is to examine the effect of mobile money technology on performance of small and medium enterprises in Mukono central division. In this chapter, the researcher reviews the work of other authors on the subject of mobile money effects and the growth of SMEs. It further reviews the available literature related to the purpose of this study, which analyzed the effect of mobile money technology on the performance of Small and Medium Enterprises. The literature was obtained from e-Journals, reports, dissertations, text books, and paper presentations, from university libraries and document centers.

## **2.1 Impact of Mobile Money Technology on Financial Performance of SMEs**

### **2.1.1 Increased Profits and Sales**

The adoption of mobile money technology has swept across the developing world, especially in small and medium enterprises. A number of studies have been conducted to ascertain the effects of mobile money on the financial performance of SMEs. Aker and Mbiti, 2010 found out that the rollouts of mobile money services in sub-Saharan Africa improved the profits and sales of small businesses since it allowed them to conduct financial transactions efficiently, which opened avenues of credit. Similarly, Higgins et al. (2012) reported an improvement in SMEs within the realms of performance in making payments, management of cash flow, and access to financing, leading to better financial performance.

### **2.1.2 Improved Liquidity and Profitability**

Studies by Mbiti and Weil, 2011, indicated that SMEs borrowing from mobile money reduced cash handling, along with reduced risks and costs associated with the handling of cash. In turn, these improve the liquidity and profitability of small businesses. Kirui et al., in their study of 2013, expressed that the adoption of mobile money helped SMEs reduce their transaction cost, increase their revenues, and eventually enhanced their financial management capabilities. According to Kato and Wanjiru, 2013, mobile money has increased the ease of access to working capital among SMEs through easier processes in applying for loans and its disbursement. Therefore, this has improved SME access to finance, which has, in turn, improved financial performance. Further, Demombynes and Thegeya, 2012, found that mobile money resulted in increased savings among SMEs for possible use in investment and growth.

### **2.1.3 Cash Flow Management**

The role of mobile money in enhancing SMEs financial performance cannot be gain said. The people will be able to run down the cash flow better. The businesses can now get payments faster, lower risks inherent in carrying cash, and keep prize of the different concerns that are coming in and going out due to the mobile money platforms. Many recent studies support this, such as Mbiti & Weil, 2011, Kirui et al., 2013. This enhanced visibility and control of cash flows

enable SMEs to make more informed financial decisions, pay suppliers and employees on time, and have a hold on the working capital needs in real terms. This simply implies increased liquidity and profitability for the small businesses in real terms. Aker and Mbiti (2010), Higgins et al. 2012.

#### **2.1.4 Access to Finance**

Another significant impact of mobile money on the financial performance of SMEs is as a medium for better access to finance. Mobile money platforms have made it easy to provision credit and other financial services to small businesses which, in the past, had little access to formal banking (Kato & Wanjiru, 2013; Demombynes & Thegeya, 2012). This would enable the SMEs to more easily borrow from financial institutions or even mobile money lenders independently, since the system would provide a history of collateral. This continued availability of working capital and investment financing allows funding to SMEs for growth objectives, smoothing variations in cash flows, or meeting productivity-enhancing investments, which are contributors to improved financial performance (Kirui et al., 2013; Mureithi, 2014).

#### **2.1.5 Moderating Factors**

The impact of mobile money on SMEs' financial performance, however, could be moderated by a number of factors, including business size, sector, and the level of adoption of technology. Mureithi, 2014 finds that the smaller SMEs, and in particular those in the informal sector, have a tendency to benefit more from mobile money as opposed to the larger, more formalized businesses. This would then imply that literature is pointing toward a positive relationship between the adoption and utilization of mobile money technology and the financial and operational performance of these SMEs: increasing the usage of mobile money services can better financial management, access to finance, and overall business efficiency.

## **2.2 Adoption of Mobile Money Technology and Performance of SMEs**

### **2.2.1 Improved Financial and Operational Outcomes**

The existing research indicates a strong positive relationship between the adoption and utilization of mobile money technology and the performance of small and medium enterprises (SMEs). Several studies have found that SMEs actively using mobile money services tend to exhibit improved financial and operational outcomes compared to non-users. Aker and Mbiti (2010) observed that the introduction of mobile money platforms in sub-Saharan Africa led to increased profits and sales for small businesses by enabling more efficient transactions and financial management processes. The researchers attributed this to the ability of mobile money to facilitate quicker payment receipt, reduce reliance on cash, and lower overall transaction costs for SMEs.

### **2.2.2 Enhanced Financial Management Capabilities**

The study by Higgins et al. (2012) reported that Kenyan SMEs utilizing mobile money achieved improvements in the receipt of payments, cash flows, and access to financing—all factors that increase the overall performance of the business. As such, they reported that the increased transparency of financial transactions allowed by mobile money enabled the small businesses or firms to make more informed decisions; pay their suppliers and employees on time and allowed better management of working capital needs. Mbiti and Weil (2011) also found that the use of mobile money reduced the cash dependencies of SMEs which affected a decrease in transaction costs and an increase in both liquidity and profitability.

### **2.2.3 Reduction in Operational Expenses**

In relation to that, Kirui et al. 2013, in their findings, showed that the utilization of mobile money services provided a means for SMEs to reduce operation costs, enhance sales, and effectively handle finances for quality financial performances. In addition, the researchers noted that mobile money provided an avenue for these SMEs to enhance their access to working capital that facilitated business growth and development. In agreement with this, Kato and Wanjiru (2013) reported the same view that mobile money increased accessibility to finance by small-scale enterprises, an aspect that contributed to better results.

### **2.2.4 Moderating Factors**

The magnitude of such impacts, however, is likely to be moderated, for example, by extent of mobile money utilisation, business size, and industry sector. For example, Mureithi (2014) remarked that the smaller SMEs and those in the informal sectors benefited more from mobile money than larger and more formalized enterprises. Consequently, there seems to be a significant and positive link or relationship between the adoption and usage of mobile money technology and the financial and operational performance of SMEs, as from the literature, an increased usage of mobile money services can facilitate better financial management and access to finance, translating to overall business efficiency. Increased Profitability and Sales: Some studies have documented that SMEs which are active users of mobile money services usually realize higher profitability and sales relative to non-users. Increased efficiency in transactions and financial management are probably the reasons why these mobile money platforms have been found to heighten SMEs' sales and profitability.

### **2.2.5 Improved Cash Flow Management**

Mobile money allows SMEs to receive payments, manage cash flow, and gain access to financing. In general, mobile money contributes to better business performance. SMEs have attained enhanced visibility of the key financial transactions, and through the use of the provided mobile money platforms, they are in a position to make proper financial decisions that can improve their liquidity and financial stability. For example, an SME may use mobile money services to monitor

its cash flows in real-time, hence putting them in a position to address arising financial problems within the shortest time possible and also to ensure that they always have sufficient working capital to support their business operations. With this real-time monitoring, risks for financial shortfalls are reduced and, hence, businesses avoid high costs from traditional proper banking services. Moreover, the process of receiving payment through mobile money is less cumbersome hence less critical in delays to the cash flow that maintains operational efficiency and meets daily expenditures.

### **2.2.6 Increased Access to Finance**

That is, mobile money facilitates increased access to working capital and other forms of finance, hence supporting business growth and development in SMEs. Through the use of mobile money platforms, SMEs can create a history of transactions that can be used as some sort of proxy for creditworthiness. This enhances their potential to get access to loans and other financial services provided by banks and microfinance institutions with much more ease. Improved access to finance, on one hand, enables the SMEs to invest in their business, diversify their operations, and grasp new market opportunities. Mobile money platforms do also occasionally introduce innovative financial products that are microloans and savings plans targeted at meeting the needs of small businesses. These products can enable SMEs to manage their finances effectively, plan for future growth, and reduce financial risks. Increased access to financial inclusion provided by mobile money empowers the SMEs in taking part more fully in the formal economy that may lead to business stability and sustainability.

### **2.2.7 Moderation by Business Characteristics**

The extent of its usage, business size, and industry sector are also factors that will moderate the magnitude of performance impact of mobile money on small business. Smaller SMEs and those in the informal sector seem to benefit more from mobile money than would be the case with larger, more formalised enterprises. Mureithi (2014) concluded,. In the case of smaller businesses, mobile money provides a less expensive plan compared to bank services, which are otherwise more costly or unavailable themselves. The environments surrounding small businesses are similarly very cash-based; hence, mobile money avails an efficient and secure

platform for transactions. Consequently, the larger SMEs that already have good relationships with the banks may not be as beneficial in the use of mobile money service because there is accessibility to a range of financial products, and services. The nature of the industry in which a given SME is in can a good determinant of the extent to which benefits can be acquired from mobile money services. For example, while mobile money probably benefits those in the retail and service sectors most, as it allows customers to settle faster and provides the firms a better opportunity to manage their cash cycles, this is not the case for manufacturing firms. (Munyegera & Matsumoto, 2016). It is against these backgrounds that this research finds it paramount to consider such key moderating factors so that targeted strategies may be laid out to maximize the benefits of mobile money for different typologies of SMEs.

## **2.3 Challenges Encountered by SMEs in Adopting Mobile Money Services**

### **Access and Affordability**

Some of the main barriers to successful mobile money adoption among SMEs are the high costs of the services included in mobile money, such as transaction charges, and requirements for devices by Mbiti and Weil, 2011. The costs will be beyond many small businesses, more so those with thin margins. Further, Morawczynski (2009) noted the poor distribution of mobile money agents in addition to the non-interoperability of various platforms, which limits access to such services for SMEs in the most remote or under-served areas.

### **Digital Literacy and Financial Literacy**

One problem SMEs are facing is the development of the necessary digital and financial literacy to enable their use of mobile money technologies. Plyler et al. 2010 indicated that most of the SME owners and employees lack the required technical skills and understanding while using the mobile money platform, which is a barrier to its adoption and use. Relating to this argument Mas and Radcliffe 2010 indicated that aligned support training programs needs to be designed in order to empower the SMEs while using the mobile money for their business operations.

### **Intergration with Business practices**

The integration of mobile money into the existing practice and system of doing business may be a big challenge for the SMEs. According to Batchelor (2012), the poor integration of mobile money with the existing accounting, inventory, and management software will limit its adoption and the level of impact in improving the performance of the SMEs. Mirzoyants (2013) also established that a lack of integration with the traditional banking system and payment systems may cause friction and complexity for SMEs in adopting the use of mobile money.

### **Regulatory Environment**

Regularly, even mobile money is a bit cumbersome for the SMEs. For instance, Jack and Suri (2011) note that uncertainty or constantly changing policies that regulate mobile money services create uncertainty or unwillingness of small businesspersons to adopt these technologies. Aron (2018) also argues that lacking harmonized regulations for all jurisdictions restricts using mobile money for international trade and cross-border business.

### **Security and Trust**

Moreover, the SMEs might be skeptical of the security and reliability of these services. "Fraud, data privacy, and the dependability of the providers of the mobile money services" make small business owners mistrustful of the technologies, as suggested by Mas and Radcliffe (2010). Morawczynski and Pickens (2009) quoted robust measures for security, transparent mechanisms for consumer protection as a means to overcome such trust-related barriers.

**Awareness and Knowledge:** A very fundamental requirement to adopting and effectively making use of mobile money is that awareness and a general understanding of the potential benefits it would have on SMEs must exist. In an effort to establish the extent of this condition, Plyler et al. (2010) found that most owners of small businesses lacked comprehensive knowledge regarding the capabilities and uses of mobile money; thus, they were limited in how much they could put to use for the benefit of their operations. Kirui et al. (2013) also echoed the same sentiments that outreach and education drives are necessary to promote mobile money services on behalf of the SMEs.

### **Business Ecosystem**

SMEs are often part of a larger business ecosystem which is poorly supported to embrace and operate using mobile money services. According to Batchelor, 2012, a lack of partnerships and

other forms of collaboration between operators of mobile money, financial institutions, and providers of complementary services may render the services present but inadequately integrated for SMEs. Munyegera and Matsumoto, 2016, reiterated that lacking any supportive network within the supply chain stakeholders, customers, and other users of the value network in mobile money will lead to its lesser adoption along with inadequate use by the SMEs.

### **Resistance to Change**

Some SMEs might be resistant to mobile money adoption. This might partly be supported by the general avoidance of change or general reluctance in applying digital technologies. As Plyler et al. (2010) denote, the persistence of cash-based and traditional financial approaches that continue to pervade the SME sector complicates the application of transitions towards mobile money-based transactions and operations. As Mirzoyants (2013) also mentioned, to enable the overcoming of such barriers for digital transformation through target-oriented change management strategies and organizational development support, SMEs need special support in this respect.

### **Government Support and Incentives**

Another barrier is a lack of sufficient government support and incentives towards the adoption of mobile money. Aron, 2018 explained that the absence of clearly stipulated policy frameworks combined with the lack of tax incentives or fiscal subsidies that could encourage and support the utilization of mobile money would make its usage and adoption a problem within the SME sector. Kirui et al., 2013 explained that such government-led initiatives and programs should be made available first to influence its use and adoption, through Public-private partnership arrangements and focused subsidy packages respectively, in driving SMEs' point usage of mobile money.

### **Power Differences and Barter Impediments**

SMEs may experience powers of imbalance and bargaining problems in some instances when negotiating the terms and conditions with bigger providers. Mbiti and Weil (2011) were able to demonstrate how oligopolistic market structuring, in some contexts, can give leading players space to enforce very unfavorable pricing structures and unyielding policies against small business enterprises. Munyegera and Matsumoto, 2016, noted that in correcting such power asymmetries, there would be the need for more proactive regulatory oversight and collective bargaining

arrangements that are more effective so that proper and equitable access to mobile money can be accessed by SMEs.

### **Customization and Suitability**

Mobile money products and services generally are set up to have in mind larger enterprises or individual consumers rather than those tailored for SMEs. According to Batchelor, one such factor could be a lack of customized mobile money solutions for the specific operational, financial and managerial challenges facing small and medium businesses. This may contribute to lower adoption of these services, as well as their utilization effectively. Greater tailoring of offering and service model in mobile money solutions for the SME sector may help overcome this challenge.

### **Complementary Digital Services**

It is also the problem of full utilization, whereby SMEs would not be able to exploit fully what mobile money brings on board because of the absence of complementary digital services or their integration. In fact, as Batchelor asserts, their potential impact and utility of the discussed digital financial services would be in an instance when they could be integrated with other important business tools such as accounting software, inventory management systems, or e-commerce websites.

## **Ongoing Training and Support**

Although the discussion above has pointed out areas where improvements in digital and financial literacy amongst the SMEs would be deemed desirable, it also has to be borne in mind that such training and support need to be more inclusive. As Plyler et al. (2010) indicated, "Overall, one-shot and infrequent capacity-building are too little, too short; instead, longer-term capacity-building is required to allow the SMEs' effective long-term adoption of mobile money technologies."

## **Gender and Socioeconomic Disparities**

For instance, women-owned or operated SMEs and those in the lower socioeconomic groups may face higher barriers in terms of access and utilization of mobile money services. Aker et al. (2016) noted that this is partly because of lower digital literacy, lack of financial autonomy, and social norms which might add to the challenges faced by certain portions of the SME population in adopting and benefiting from mobile money. Addressing these gender and socio-economic disparities will go a long way to ensure that access and usage of mobile money are inclusively spread among the SMEs.

## **Digital Infrastructure**

Other miscellaneous challenges that SMEs can face in adopting and exploiting mobile money include items such as mobile network coverage, internet connectivity, and electricity supply. According to Mirzoyants (2013), one of the main inhibitors to access and utilization of mobile money services by small and medium-sized enterprises is the lack of robust and ubiquitous infrastructure across countries, especially in rural and remote areas.

## **Demonstrating Benefits**

SMEs might not always be able to define and show the tangible benefits derived from the adoption of mobile money, which in turn can make them unenthusiastic and unwilling to invest in these digital means of financial services. Batchelor (2012) noted that since solid data and evidence do not exist as far as what specific business effects mobile money will have-for instance, cost savings, efficiency gains, or revenue growth, that makes it very hard for the justification of investment in SMEs and justification of the switch from traditional financial practice.

## **2.4 Gaps in the Literature**

Despite the exponential studies on how mobile money technology has affected SMEs, there are still palpable gaps. Most of the studies remain predominantly urban-centered and fail to take into consideration peculiar problems and challenges that face rural SMEs due to infrastructural, digital, and financial resource limitations. There has also been little consideration of whether or not the mobile money affects different SME sectors, such as retail versus manufacturing. This calls for even more focused research that could take into consideration the varied nature and needs of SMEs. Another critical omission occurs regarding longitudinal studies on the impact of mobile money adoption in the long term on SMEs' performance. Most existing studies present a snapshot perspective that cannot capture the real sustained benefits or emerging challenges over time. Besides, there is a need for a clearer understanding of how policy and regulatory frameworks around the world facilitate or inhibit mobile money adoption, especially in developing countries like Uganda. Socio-cultural issues, including gender, education level, and cultural attitudes toward technology adoption, also stand relevant but are not well researched. As such, Aker et al. (2019) note that this remains under-explored.

## **2.5 Summary of the Reviewed Literature**

This overview of literature indeed points towards great potential for mobile money technology in order to enhance the financial performance of SMEs. Indeed, mobile money enables improvement in cash flow management and a reduction in transaction costs, and thus access to finance is easier, hence better liquidity and profitability. For example, Aker and Mbiti 2010; Kirui et al. 2020 present evidence that SMEs using mobile money services have witnessed increased sales, reduced

operational costs, and enhanced financial management capabilities of SMEs, therefore underpinning the transformative power of mobile money on the performance of SMEs in developing economies. Yet, the literature points out a number of challenges facing SMEs in the adoption of mobile money technologies, including high transaction fees, lack of digital literacy, and inadequate infrastructure. Regulatory challenges and the necessity for strong government support are also among the critical factors influencing the magnitude of the effectiveness in mobile money adoption. However, more research is still called for in rural SMEs, long-term impacts, and socio-cultural factors affecting the adoption of mobile money. The identification of these gaps in knowledge would create better appreciation and strategies toward improving the use of mobile money among SMEs in Mukono Central Division.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.0. Introduction**

This chapter explains the approaches that will be adopted in the study. It describes the research design, target population, area of study, sample size and sampling technique, data types and sources and the data collection instruments. It also includes the data analysis procedures that will be employed in the study.

#### **3.1 Research Design**

The study will use a cross-section research design approach. The study will consider both quantitative and qualitative research approaches. A quantitative research approach will be used to analyze statistical data. The researcher will use a qualitative approach to yield an unbiased result that can be generalized to a larger population. The qualitative research approach is primarily exploratory research used to gain an understanding of underlying reasons opinions and motivations and provide insight into the problem or help to develop ideas or hypothesis for potential quantitative research (Mugenda and Mugenda, 1999). A qualitative research approach is used to collect non-numerical data.

#### **3.2 Target Population of the Study**

The target population is the population to which the study findings will be generalized (Cooper & Schindler, 2003). The study will be limited to Small and Medium Enterprises in Mukono Central Division. The study targeted the proprietors of mobile money users in Mukono Central Division According to the statistics from the Department of Trade, industry and local economic Development Mukono Municipal council. There are about 250 Small enterprises in Mukono Central Division. And these include mini supermarkets, hard wares, and Stationery, boutiques, and retail shops, restaurants among others.

### 3.3 Sample Size Selection

#### 3.3.1 Sample Size

A sample size is the total number of sub-elements or individuals randomly selected and assigned from a given population (Amin, 2005). The sample size will be 66 (Krejcie and Morgan' sample size table 1970).

**Table 3. 1: Population Sample Size**

Categories of respondents	Population	Sample Size	Sampling Technique
Retail shops	30	20	Purposive
Hardware shops	22	20	Random
Groceries	28	26	Purposive
<b>Total</b>	<b>80</b>	<b>66</b>	

*Source: Primary Data*

#### 3.3.2 Sampling Techniques

The study will utilize both probability and non-probability sampling methods. Simple random sampling, a probability technique, will be used to select a subset of the small and medium enterprises population. Additionally, purposive sampling, a non-probability approach, will be employed to intentionally choose participants with relevant knowledge and experience. This combination of sampling techniques aims to obtain a representative sample that reflects the diversity of the organization and includes individuals with pertinent expertise.

### 3.4 Data Sources

Primary Sources: Primary data will provide the researcher with fresh and unused information to determine events. The researcher will directly interact with the respondents through various data collection instruments such as interviews and questionnaires.

Secondary Sources: The researcher will review relevant documents, newspapers, online journals, and textbooks related to the study to ensure they are well-equipped with the required data to facilitate the research.

### **3.5 Data Collection Methods and Instruments**

Data collection refers to the systematic process of gathering research data on a given phenomenon (Amin, 2005). This study shall utilize both primary and secondary methods of data collection.

#### **3.5.1 Questionnaire**

According to Kumar (2005), a questionnaire is a written list of questions for which the respondents record the answers. The questionnaire will have sets of questions that the respondent will fill out and then be collected by the researcher for data analysis. Data response will be collected through self-administered questionnaires covering aspects of the study variables accompanied by a five-point Likert scale response continuum, where 5= strongly agree, 4=agree, 3=undecided, 2=disagree, and 1= strongly disagree. This method is preferred because it provides a high degree of assurance for the anonymity and confidence of the research respondents.

#### **3.5.2 Interview Guide**

An interview guide will be utilized to collect comprehensive qualitative data from SME owners and stakeholders regarding their experiences, challenges, and views concerning the adoption of mobile money technology. The interview guide will consist of open-ended questions with the main emphases: adoption and usage of mobile money, impact on financial and operational efficiency, and challenges encountered while using the technology. This approach will ensure that deep insights are obtained about the practical implications of mobile money for SME operations and the health of their finances. (Mbiti & Weil, 2011; Kirui et al., 2013).

#### **3.5.3 Focus Group Discussion**

Data from a wide range of SMEs and key stakeholders will be collected using focus group discussions. Discussion on adoption and impact of mobile money technology, sharing of use experience, common challenges, collective recommendations, and the way forward shall be key to this validation. Participants will engage in focus group discussions (FGDs), structured to encourage open dialogue and exchange of ideas, and in the process develop a more comprehensive understanding of the wider implications of mobile money technology on SMEs. (Plyler et al., 2010; Aker & Mbiti, 2010).

## **3.6 Quality Control**

### **3.6.1 Validity**

As Collis and Hussey (2013) put it, validity of a research instrument refers to the ability of a research instrument to collect justifiable and truthful data in other words, measuring what it was intended to measure. I will develop the questionnaire based on the research objectives. The data collection instruments will then be presented to the supervisor for assessment of the content validity that is majorly based on clarity of question items and relevance. Apart from that, the questionnaire will be pre-tested with 10 respondents to calculate the content validity index. If the average percentage is over 0.7 (70%), the content will be valid. The formula used to check the validity of the instrument is:

$$CVI = R / (R + N + IR)$$

Where R refers to Relevant, N to Neutral and IR to Irrelevant— the nearer the value is to one, the nearer the instrument is to being valid. (Amin2005).

### **3.6.2 Data Quality Control and Management**

The validity of a questionnaire refers to the extent to which it measures what it claims to measure (Mugenda, 2003). To assess the validity, the study will adopt content-related validity through consultations with the researcher's supervisor and peers. The researcher will prepare the questionnaires and present them to the supervisor for scrutiny and suggestions on the relevance, clarity, and suitability of the information. The supervisor's feedback will then be incorporated into the final draft. Reliability of the research instrument refers to the measure of the degree to which it yields consistent data or results after repeated trials. To establish the reliability, the researcher will administer the questionnaires, pilot-test them using various respondents, and make necessary changes to ensure the questionnaires provide relevant data.

### **3.7 Ethical Considerations**

An introductory letter from the University's Faculty of Business Administration will be presented to ensure that the information obtained from the research is for academic purposes. The researcher will ensure that participation is voluntary and will not force the participants. The researcher will also debrief the recipients before data collection. Additionally, the researcher will cite all the necessary documents used in this work to recognize the authors' efforts concerning secondary data.

### **3.8 Limitations of the Study**

Issues with Sample and Selection: Sampling errors may occur due to the use of a probability sampling method, as the sample may not accurately reflect the general population or the appropriate population concerned. Insufficient Sample Size for Statistical Measurement: The sample size must be sufficiently large to conclude valid research results. If the sample is too small, it will be difficult to identify significant relationships from the data, as statistical tests require a larger sample size to ensure the sample is representative of the population and the statistical results can be generalized.

## **CHAPTER FOUR**

### **PRESENTATION, ANALYSIS AND DISCUSSION OF RESEARCH FINDINGS**

#### **4.0 Introduction**

This chapter presents a comprehensive analysis of the research findings. The data was collected through structured questionnaires targeting SME owners and operators within the division. All these findings have been grouped into sections to correspond to the structure of the questionnaire as follows: demographic information, usage of mobile money technology, impact on financial performance, relationship between usage of mobile money and business performance, challenges faced in adopting mobile money technology, and suggestions for improvement.

#### **4.1 Demographic Characteristics of Respondents**

The demographic data, therefore, helps in judging the extent of the level of adoption and impact that may have been brought about by mobile money technology among the SMEs. Demographic factors such as gender, age, education, and type of business may affect how technology is adopted in business operations. (Munyegera & Matsumoto, 2018) This section highlights an overview of the respondents' profiles, which shall help in contextualizing their responses to mobile money usage and its impact on their businesses. (Kiconco & Nuwagaba, 2019).

##### **4.1.1 Gender Distribution of Respondents**

Gender distribution will be important in understanding the dynamic of mobile money adoption among SMEs, as it would provide a clear insight into whether or not gender plays a role in the utilization of DFS. (Munyegera & Matsumoto, 2018). Analyzing the gender distribution of the respondents helps in establishing potential gender-based disparities in the use of mobile money in Mukono Central Division. (Tumwine, 2022).

**Table 4. 1: Gender Distribution of Respondents**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Male	42	63.6%
Female	24	36.4%
<b>Total</b>	<b>66</b>	<b>100%</b>

*Source: Primary Data*

This table shows that 63.6% of respondents were male, and 36.4% were female. This gender distribution highlights a higher representation of males in SME ownership within Mukono Central Division. Gender disparities in SME ownership could influence the adoption and utilization of mobile money technology, as previous studies suggest that men and women may differ in their access to and use of digital financial services (Nabukeera, 2018).

#### **4.1.2 Age Distribution of Respondents**

The age of the owner/ operator significantly contributes to their openness to the adoption of new technologies such as mobile money (Kiconco & Nuwagaba, 2019). Thus, the section below investigates the age distribution of respondents and can help explain how different age groups interact with mobile money services in business operations. (Mwesigwa, 2019).

**Table 4. 2: Age Group Distribution of Respondents**

<b>Age Group</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Under 20	2	3.0%
20-30	9	13.6%
31-40	21	31.8%
41-50	29	43.9%
51 and above	5	7.6%
<b>Total</b>	<b>66</b>	<b>100%</b>

*Source: Primary Data*

The most represented age group is 41-50 years, which constitutes 43.9%, followed by the group of 31 to 40 years of age, which constitutes 31.8%. This means SME management, in the division, is mainly made up of middle-aged individuals. The age factor is applicable since the middle-aged persons can arguably have more experience and resources required adopting and effectively putting to work the mobile money technology (Owoseni & Twinomurizi, 2020).

### 4.1.3 Education Distribution of Respondents

Education level is a key determinant of how effectively individuals can adopt and use mobile money technology (Owoseni & Twinomurizi, 2020). This section explores the educational background of respondents, providing context for their ability to engage with digital financial tools in their SMEs (Kiconco & Nuwagaba, 2019).

**Table 4. 3: Level of Education**

<b>Level of Education</b>	<b>Frequency</b>	<b>Percentage (%)</b>
No formal education	12	18.2%
Primary	25	37.9%
Secondary	15	22.7%
Tertiary	9	13.6%
University	5	7.6%
<b>Total</b>	<b>66</b>	<b>100%</b>

*Source: Primary Data*

A good number of the respondents, 37.9%, had only primary education, while 7.6% had university education. Level of Education: In the adoption of mobile money technology, it is expected that increased education levels will equivalently impact digital literacy and, consequently, better technology adoption rates. (Mwesigwa, 2019).

### 4.1.4 Category Distribution of Respondents

This is important to look into, in that the type of business the respondent does helps understand what kind of specific needs or challenges are associated with the usage of mobile money in various sectors (Mwesigwa, 2019). This section shall segment the businesses of the respondents in such a way that it would help analyze the relevance and impact of mobile money on different kinds of SMEs in Mukono Central Division. (Tumwine, 2022).

**Table 4. 4: Type of Business**

Type of Business	Frequency	Percentage (%)
Retail Shop	20	30.3%
Hardware Shop	20	30.3%
Grocery Store	26	39.4%
<b>Total</b>	<b>66</b>	<b>100%</b>

*Source: Primary Data*

This indicates that grocery stores are the largest category of business type, accounting for 39.4%, while 30.3% each comes from the retail shop and hardware store categories. Type of business influences how mobile money services are used. For example, some sectors like retail and grocery are more likely to adopt mobile money for their everyday transactions. (Andema, 2020).

#### **4.1.5 Experience Distribution of Respondents**

Operational experience is one of the years a business has existed and thus it might affect its readiness to adopt new technologies in doing business, an argument for Munyegera & Matsumoto, 2020, on mobile money. This section explores the operational experience of the SMEs in an attempt to give insight into how established businesses compare to the newer ones in their use of mobile money services. (Kiconco & Nuwagaba, 2019).

**Table 4. 5: Years in Operation**

Years in Operation	Frequency	Percentage (%)
Less than 1 year	2	3.0%
1-3 years	11	16.7%
4-6 years	13	19.7%
7-10 years	22	33.3%
Over 10 years	18	27.3%
<b>Total</b>	<b>66</b>	<b>100%</b>

*Source: Primary Data*

The highest proportion, 33.3%, of businesses have operated between 7 to 10 years, thus indicating that the SME sector is stable. Business longevity may affect the likelihood of adopting new technologies like mobile money as established businesses may have more means and greater needs for effective financial management tools. (Munyegera & Matsumoto, 2020).

## 4.2 Usage of Mobile Money Technology

The wide adoption of mobile money technology by SMEs suggests the value that is attached in terms of operations benefits within the businesses. The next section focuses on the aspect of mobile money usage with regard to the period one has been using the technology and the services being used among SMEs operating in Mukono Central Division, (Mwesigwa, 2019). The knowledge of usage patterns is crucial when seeking to determine how these SMEs use mobile money to impact businesses in financial and operational facets. (Tumwine, 2022).

### 4.2.1 Mobile Money Usage

The level of understanding of the usage of Mobile Money among the SMEs indicates the impact on business performance (Nabukeera, 2018). This part will, therefore, assess the extent to which SMEs in Mukono Central Division have adopted Mobile Money Services, the penetration, and importance to the local business environment. (Mwesigwa, 2019).

**Table 4. 6: Mobile Money Usage**

<b>Do you use mobile money services in your business operations?</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Yes	58	87.9%
No	8	12.1%
<b>Total</b>	<b>66</b>	<b>100%</b>

*Source: Primary Data*

A high proportion of 87.9% of SMEs are using the mobile money services, indicating that wide ground is covered in mobile money service use within the region. This high mobile money adoption rate corroborates the critical role of mobile money in positively improving SME financial transactions and operational efficiency interventions. (Kiconco & Nuwagaba, 2019).

### 4.2.2 Duration of Mobile Money Usage

The time the SMEs have spent utilizing the services will give an insight into the familiarity and reliance on such technologies(Tumwine, 2022). The section below presents the period of time respondents have used mobile money, depicting the maturity of mobile money adoption among SMEs in Mukono Central Division(Munyegera & Matsumoto, 2018).

**Table 4. 7: Duration of Mobile Money Usage**

<b>Duration of Mobile Money Usage</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Less than 1 year	18	31.0%
1-2 years	28	48.3%
3-4 years	12	20.7%
More than 4 years	8	13.8%
<b>Total</b>	<b>66</b>	<b>100%</b>

*Source: Primary Data*

Of all the SMEs, 48.3% were using mobile money for a period of 1-2 years. This will mean that the trend may be on an increase. The length of time spent on the mobile money service is important because most times the longer the use of mobile money services, the deeper the integration into business (Tumwine, 2022).

#### **4.2.3 Types of Mobile Money Services Usage**

The adoption of mobile money services by the SMEs reflects the diverse needs and preferences in managing financial transactions within the business(Kiconco & Nuwagaba, 2019). This section classifies the various specific mobile money services implemented by SMEs in Mukono Central Division, including those dealing with Fintech platforms and wallets, which show the most used tools for increasing efficiency and business growth (Mwesigwa, 2019).

**Table 4. 8: Types of Mobile Money Services Used**

<b>Mobile Money Services Used</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Mobile Money Platforms (e.g., MTN, Airtel)	58	87.9
Mobile Wallets	27	41.4
Mobile Banking Services	19	29.0
Others	5	7.6

*Source: Primary Data*

Mobile money platforms are used by 87.9% of the respondents, followed by mobile wallets, which were found in the pockets of 41.4% of them. The high ubiquity with which mobile money platforms are put to use indicates that they remain key instruments in financial transactions in SMEs. (Munyegera & Matsumoto, 2018).

### 4.3 Impact of Mobile Money Usage on Financial Performance

Mobile money technology has been touted as having the potential to enhance financial performance among SMEs, as transactions are smoothed out and cash flow management improves (Owoseni & Twinomurinzi, 2020). This section shall explore the specific financial benefits realized by the SMEs in Mukono Central Division through the use of mobile money in relation to improvements in revenue, access to credit, and overall financial health (Munyegera & Matsumoto, 2020).

**Table 4. 9: Impact of Mobile Money on Financial Performance**

No	Factor	SA	A	NS	DA	SDA
1	Mobile money has improved my business's cash flow management	75.8%	12.1%	12.1%	0	0
2	Mobile money has reduced the cost of financial transactions for my business	27.3%	36.4%	3.0%	15.2%	18.2%
3	Mobile money has increased my business's revenue	72.7%	15.2%	4.5%	7.6%	0
4	Mobile money has made it easier for me to access credit	48.5%	39.4%	3.0%	7.6%	1.5%
5	Mobile money has improved my business's overall financial performance	81.8%	6.1%	7.6%	3.0%	1.5%

*Source: Primary Data*

In fact, 81.8% of the respondents strongly agreed that mobile money had improved their overall financial performance, while 75.8% agreed that mobile money had enhanced cash flow management. This supports prior research that argues that mobile money improves SMEs' financial health by reducing transaction costs and improving cash flow. (Mwesigwa, 2019).

### 4.4 Relationship between Mobile Money and Business Performance

Therefore, the relationship between mobile money usage and business performance is important to study, since this provides an insight into how far digital financial services enhance operational efficiency among SMEs (Kiconco & Nuwagaba, 2019). The section assesses different aspects of

how mobile money has affected the business performance in aspects like efficiency, customer transactions, and financial management practices (Mwesigwa, 2019).

#### 4.4.1 Impact on Operational Efficiency

Mobile money has been associated with gains in operational efficiency that permit the SMEs to facilitate process automation and reduce transaction times (Owoseni & Twinomurinzi, 2020). This section presents discussions on the effect of mobile money on SME operational efficiency in Mukono Central Division and adds to the evidence for the role of mobile money in enhancing business productivity. (Munyegera & Matsumoto, 2018).

**Table 4. 10: Impact on Operational Efficiency**

How has mobile money usage affected your business's operational efficiency?	Frequency	Percentage (%)
Significantly improved	45	68.2%
Somewhat improved	13	19.7%
No change	0	0.0
Somewhat worsened	0	0.0
Significantly worsened	0	0.0

*Source: Primary Data*

The majority of the respondents (68.2%) report that mobile money enhances their operational efficiency. This would be fundamental because it also indicated that mobile money would ease operations and reduce the time and resources invested in managing financial transactions. (Kiconco & Nuwagaba, 2019).

#### 4.4.2 Frequency of Mobile Money Usage for Business Purposes

The frequency with which they use mobile money for different business transactions clearly shows how integrated it has become in the business operation system of an average SME in Mukono Central Division (Nabukeera, 2018). The next section thus discusses the frequency with which SMEs in Mukono Central Division make mobile money transactions in paying suppliers and

receiving customer payments as a measure of centrality within their financial management practices. (Tumwine, 2022).

**Table 4. 11: Frequency of Mobile Money Usage for Business Purposes**

Factor	Strongly Agree	Agree
Paying suppliers	15	27
Receiving payments from customers	54	4
Paying employees	12	16
Accessing credit or loans	28	19
Managing cash flow	2	1

*Source: Primary Data*

According to the customers, the most frequent use of mobile money is receiving payments, with 81.8% strongly agreeing to it. From this usage pattern, it can be garnered that mobile money tends to play an important role in enhancing cash flow and financial stability within businesses. (Tumwine, 2022).

#### **4.5 Challenges in Adopting Mobile Money Technology**

While mobile money technology is valuable, its adoption is not without challenges. This section identifies and analyses major barriers faced by SMEs in Mukono Central Division, such as high transaction fees, limited digital literacy, and security concerns noted by Nabukeera (2018). Grasping these challenges provides the basis for the formulation of strategies to improve the adoption and effective use of mobile money among SMEs. (Tumwine, 2022).

**Table 4. 12: Challenges in Mobile Money Adoption**

No	Challenge	SA	A	NS	DA	SDA
1	High transaction fees are a barrier to using mobile money	74.2%	24.2%	1.5%	0	0
2	Lack of digital literacy among staff hinders effective use of mobile money	21.2%	24.2%	6.1%	16.7%	31.8%
3	Security concerns prevent me from fully adopting mobile money	42.4%	33.3%	1.5%	7.6%	15.2%

4	Limited access to mobile money agents affects my business operations	63.6%	31.8%	4.5%	0	0
5	Inadequate mobile network coverage is a challenge	3.0%	4.5%	0	34.8%	57.6%

*Source: Primary Data*

Respondents attribute the high transaction fees as a major hindrance to 98.5%. This also presents a better alternative in cheaper means of mobile money services if the SMEs are to adopt it, as indicated by Nabukeera (2018). The limited access to mobile money agents is also an important concern at 95.5%, which implies gaps in the infrastructure that should be met to enhance the utility of mobile money for the business. (Mwesigwa, 2019).

#### 4.6 Suggestions for Improvement

The challenges to the adoption of mobile money call for targeting certain interventions. The suggestions were advanced by the respondents on ways of improving the adoption and usage of mobile money technology among SMEs in Mukono Central Division (Mwesigwa, 2019). These suggestions proffer actionable insights into improving the effectiveness of mobile money services towards enhancing SME growth. (Kiconco & Nuwagaba, 2019).

**Table 4. 13: Challenges in Adopting and Using Mobile Money Technology**

No.	Challenge	Description
1	Network Reliability and Connectivity	Issues with the reliability of the network and connectivity, causing disruptions in service.
2	High Transaction Costs	High fees associated with mobile money transactions, making it costly for businesses to use.
3	Digital Literacy and Training	Lack of sufficient digital literacy and training among staff to effectively use mobile money.
4	Security Concerns and Fraud	Concerns about the security of transactions and the risk of fraud when using mobile money.

*Source: Primary Data*

Table 4.13 It highlights that SMEs in the Mukono Central Division face a number of considerable challenges while adopting and putting into effective use mobile money technology. The major

concerns include network reliability, high transaction costs, and a lack of confidence in digital literacy and security. These indeed are fundamental bottlenecks in limiting effective exploitation of mobile money and, by implication, the whole performance of SMEs within the region (Munyegera & Matsumoto, 2018). Addressing these challenges will go a long way in improving the take-up and use of mobile money by SMEs, which should lead to better growth and financial inclusion for them. (Nabukeera, 2020).

#### **4.7 Conclusion**

The results from this study revealed that mobile money technology significantly contributes to improving financial performance and operational efficiency in SMEs in Mukono Central Division; however, challenges regarding high transaction fees, digital literacy, security concerns, and infrastructure head the hindering of full potentials from the services of mobile money. In addressing these challenges, the role of mobile money in further boosting the performance of SMEs will be elevated by the use of targeted interventions such as subsidized transaction fees, infrastructural improvements, comprehensive training, and enhanced security measures.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.0 Introduction

This chapter offers a thorough overview of the research's conclusions, recommendations, alignment with objectives and areas that need additional investigation into the effects of mobile money technology on SMEs in Mukono Central Division.

#### 5.1 Summary of Research Findings

The findings indicate that technology has become so important in business operations of the SMEs in Mukono Central Division and that great improvements have been recorded both financially and operationally. It was established in this study that quite a large number of SMEs have adopted mobile money services, with 87.9% of respondents confirming use in daily business activities. The most patronized include mobile money platforms, such as MTN and Airtel, which offer the SMEs tools necessary for handling financial transactions by maximizing cash flow and increasing the overall revenue. This also corresponds with prior literature emphasizing that mobile money has indeed become an integral tool of transformation in facilitating financial inclusion and catalyzing business development in developing countries. These studies include Kiconco & Nuwagaba (2019) and Tumwine (2022).

Apart from the different positive impacts on financial performance, the study also pointed out the use of mobile money technology in relation to operational efficiency for SMEs. The adoption of mobile money has been used by business people to implement efficiency in their processes, especially in handling transactions with suppliers and customers. What has really helped is the fact that they get paid by customers faster and in a secure manner, with 81.8% strongly agreeing to frequently using mobile money. Indeed, such efficiency gain not only enhances business productivity but also contributes to a better customer experience, which is very important in maintaining competitiveness in a fast-changing market. (Munyegera & Matsumoto, 2018; Mwesigwa, 2019).

However, the study also established some of the challenges that limit the full potential of mobile money technology in SMEs in Mukono Central Division. High transaction fees were cited to be one of the major impediments, with 98.5% of the respondents agreeing that these costs are prohibitive. Other challenges include limited digital literacy among operators of SMEs and security concerns associated with fraud and data privacy. These barriers thus call for interventions targeting subsidy transaction fees, digital literacy programs, and security enhancement to help meet the needs of SMEs. Any effective addressing of these challenges will be crucial in ensuring that mobile money technology realizes full potential and real business growth, with deepened financial inclusion in Uganda. (Nabukeera, 2020; Kiconco & Nuwagaba, 2019).

## **5.2 Alignment with Research Objectives**

### **5.2.1 Impact of Mobile Money Technology on Financial Performance**

Consequently, it can be established that there is a strong effect of mobile money technology utilization on SMEs operational performance. The SMEs that reported the more active use of mobile money services indicated massive improvements in efficiency, especially in supplies and customer management. The usage intensity of mobile money in business transactions in receipting payments from customers is very high, indicating centrality in SME operations. (Mwesigwa, 2019).

### **5.2.2 Utilization of Mobile Money Technology and Performance**

It was established by the study that operational performance among SMEs had a high correlation with the use of mobile money technology. The active users among the SMEs indicated that their efficiency improved significantly, particularly with respect to managing their transactions with either their suppliers or customers. The proportion of the use of mobile money service as a medium for business transactions, like receiving payments from customers, was very high. (Tumwine, 2022).

### **5.2.3 Challenges of Utilizing Mobile Money Technology**

Despite these benefits, SMEs in Mukono Central Division face many challenges in the adoption and utilization of mobile money technology. The most prevalent barriers identified in this study were high transaction fees, limited digital literacy, and security concerns. These findings mean that mobile money services cannot fully achieve their goals if owners of SMEs do not know how to adopt and use the technology effectively; hence, targeted interventions will be necessary to address adoption and effective utilization. (Nabukeera, 2020).

### **5.3 Conclusion**

Results from the current study clearly indicate that indeed mobile money technology has a positive effect on the financial performance as well as the efficiency level of operations carried out by small and medium enterprises in Mukono Central Division. The high usage levels recorded, suggest large adoptions of the mobile money services and critical importance of the technology in the current business world. This further underlines the growing literature showing how digital financial services can reinforce economic growth by giving SMEs better access to financial tools and services. The positive correlation of using mobile money against key performance indicators, such as increasing revenue and managing cash flow, proves that, more than a convenience factor, mobile money acts as a transformative agent for enterprises in the region. Besides, the study enumerates challenges that still hamper the optimum utilization of mobile money technology. These are some of the issues that still raise a barrier to effective mobile money utilization: high transaction fees, digital divide, and security concerns. These challenges call for a more enabling infrastructure and further interventions so that all SMEs can enjoy these benefits to their fullest size and sector of operation. The findings inferred that mobile money has considerably impacted SMEs in business to date but its development of delivery and support systems still needs improvement. Therefore, in conclusion, mobile money technology has emerged as a potent force behind business growth and financial inclusion among SMEs in Mukono Central Division. But this will require the addressing of prevailing challenges and the nurturing of an enabling

environment for digital financial services. The challenge requires more cooperation by policymakers, service providers, and SME owners in overcoming the challenges that will make mobile money continue to drive economic development and enhance the competitiveness of SMEs in Uganda. Munyegera & Matsumoto (2018); Tumwine (2022). Findings from this study will go a long way in forming relevant insights into further research and policy formulation that seek to maximize the contribution of mobile money to SME performance.

#### **5.4 Recommendations**

The results of this study indicate a number of recommendations that can be made for better adoption and effectiveness of mobile money technology by SMEs in Mukono Central Division.

Addressing the issue of high transaction fees by policymakers and mobile money service providers is necessary. High transaction fee was considered as a major factor limiting SMEs' full utilization of the mobile money services. In this perspective, subsidized transaction costs or any other financial incentives that the stakeholders would provide would have a better hand in positioning the service for wider reach and usage. For example, Nabukeera (2018) and Kiconco & Nuwagaba (2019) had suggested that subsidizing transaction costs and/or providing more financial incentives could make such services more affordable and accessible.

Second, there is a need to improve the level of digital literacy among the owners and operators of SMEs. The study has established that limited digital literacy constrains the effective utilization of mobile money technology, especially in optimizing business operations and accessing more advanced financial services. Broad training programs should be conducted, focusing on building digital skills and enhancing the financial management capabilities of people. These programs should be SME-specific needs in various sectors and designed for broad availability through partnerships created by the government agencies, educational institutions, and the mobile money service providers. According to Mwesigwa (2019) and Tumwine (2022), improvements in security and reliability are an important factor in creating trust and confidence among users of mobile money platforms.

The study mentioned security concerns as one of the major reasons that make certain SMEs not engage fully with mobile money services. There is a need to enhance the security features of this

technology by putting in place stringer mechanisms for fraud detection and ensuring that transactions are kept private, among other things. Secondly, there is a need for an upgrade of the network infrastructure, which will go a long way towards putting into perspective issues dealing with connectivity and reliability of service. This therefore presents ways through which stakeholders can ensure that mobile money technology remains a reliable and trusted tool for SMEs if at all there is growth and sustainability.

### **5.5 Directions for Future Research**

Other future studies could focus on the long-term effect of the technology on performance of the SMEs, more so in the rural areas where the digital infrastructure is poor. Other areas to be studied include the role of gender in adoption and usage of the mobile money technology among SMEs, something important in understanding the existing gaps and thus the need for targeting appropriate interventions. Further studies on the customization of mobile money products for different SME sectors' needs could also be useful (Mwesigwa, 2019)

## REFERENCES

- Aker, J. C., & Blumenstock, J. E. (2015). The economic impacts of new technologies in Africa. In *The Oxford Handbook of Africa and Economics: Policies and Practices* (Vol. 2, pp. 354-371). Oxford University Press.
- Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). *The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution*. World Bank Group.
- Donovan, K. (2012). Mobile money for financial inclusion. *Information and Communications for Development 2012: Maximizing Mobile*, 61-73.
- Hinson, R. E. (2011). Banking the poor: the role of mobiles. *Journal of Financial Services Marketing*, 15(4), 320-333.
- Mas, I., & Morawczynski, O. (2009). Designing mobile money services: Lessons from M-PESA. *Innovations*, 4(2), 77-91.
- Morawczynski, O., & Miscione, G. (2008). Exploring trust in mobile banking transactions: The case of M-PESA in Kenya. In *IFIP International Federation for Information Processing* (pp. 287-298). Springer, Boston, MA.
- Suri, T., & Jack, W. (2016). The long-run poverty and gender impacts of mobile money. *Science*, 354(6317), 1288-1292.
- Amponsah, E.O. The advantages and disadvantages of Mobile Money on the profitability of the Ghanaian banking industry. *Texila Int. J. Manag.* **2018**, 4, 1 – 8.
- Baganzi, R.; Lau, A.K.W. Examining trust and risk in Mobile Money acceptance in Uganda. *Sustainability* **2017**, 9, 2233. [[CrossRef](#)]
- Barbera, F.; Hasso, T. Do we need to use an accountant? The sales growth and survival benefits to family SMEs. *Fam. Bus. Rev.* **2013**, 26, 271–292. [[CrossRef](#)]
- Aker, J.C. & Blumenstock, J.E., 2015. The economic impacts of new technologies in Africa. In *The Oxford Handbook of Africa and Economics: Policies and Practices* (Vol. 2, pp. 354-371). Oxford University Press.
- Aker, J.C., Boumnijel, R., McClelland, A. & Tierney, N., 2016. Payment mechanisms and antipoverty programs: Evidence from a mobile money cash transfer experiment in Niger. *Economic Development and Cultural Change*, 65(1), pp.1-37.
- Aker, J.C. & Mbiti, I., 2010. Mobile phones and economic development in Africa. *Journal of Economic Perspectives*, 24(3), pp.207-232.

Amponsah, E.O., 2018. The advantages and disadvantages of Mobile Money on the profitability of the Ghanaian banking industry. *Texila International Journal of Management*, 4, pp.1-8.

Andema, F., 2020. Adoption of mobile money services among SMEs in Uganda: Challenges and prospects. *Journal of Business and Technology*, 9(3), pp.45-56.

Aron, J., 2018. Mobile money and the economy: A review of the evidence. *The World Bank Research Observer*, 33(2), pp.135-188.

Asongu, S. & Nwachukwu, J., 2018. Finance and Inclusive Development in Africa: The Role of Mobile Money and Institutions. *Financial Innovation*, 4(1), pp.1-21.

Baganzi, R. & Lau, A.K.W., 2017. Examining trust and risk in Mobile Money acceptance in Uganda. *Sustainability*, 9, pp.2233-2246.

Balgobin, R., 2022. The digital economy and SMEs in Africa: Opportunities and challenges. *African Economic Review*, 15(2), pp.78-89.

Barbera, F. & Hasso, T., 2013. Do we need to use an accountant? The sales growth and survival benefits to family SMEs. *Family Business Review*, 26, pp.271-292.

Batchelor, S., 2012. Changing the financial landscape of Africa: A review of widespread adoption of mobile payments. *Proceedings of the 2012 International Conference on Management of Data*, pp.17-22.

BOU (Bank of Uganda), 2018. *Financial Inclusion in Uganda: A Comprehensive Review*. Kampala: Bank of Uganda.

Collis, J. & Hussey, R., 2013. *Business Research: A Practical Guide for Undergraduate and Postgraduate Students*. 4th ed. Basingstoke: Palgrave Macmillan.

Cooper, D.R. & Schindler, P.S., 2003. *Business Research Methods*. 8th ed. New York: McGraw-Hill.

Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S. & Hess, J., 2018. *The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution*. Washington, DC: World Bank.

- Demombynes, G. & Thegeya, A., 2012. Kenya's mobile revolution and the promise of mobile savings. World Bank Policy Research Working Paper, (5988).
- Donovan, K., 2012. Mobile money for financial inclusion. *Information and Communications for Development 2012: Maximizing Mobile*, pp.61-73.
- Francis, D. & Willard, T., 2016. Mobile money and SME performance: A study in Uganda. *Journal of Business and Management*, 12(4), pp.67-75.
- Higgins, S., Kendall, J. & Lyon, J., 2012. Mobile money usage patterns of Kenyan small businesses. *Journal of African Business*, 13(1), pp.74-93.
- Hinson, R.E., 2011. Banking the poor: The role of mobiles. *Journal of Financial Services Marketing*, 15(4), pp.320-333.
- Kato, E. & Wanjiru, M., 2013. Mobile money and the transformation of small business finance in Kenya. *Quarterly Journal of International Agriculture*, 52(2), pp.141-162.
- Kiconco, I. & Nuwagaba, A., 2019. Digital financial services and the performance of small enterprises in Uganda. *African Journal of Business Management*, 13(8), pp.256-267.
- Kirui, O.K., Okello, J.J., Nyikal, R.A. & Njiraini, G.W., 2013. Impact of mobile phone-based money transfer services in agriculture: evidence from Kenya. *Quarterly Journal of International Agriculture*, 52(2), pp.141-162.
- Kumar, R., 2005. *Research Methodology: A Step-by-Step Guide for Beginners*. 2nd ed. London: SAGE Publications.
- Mas, I. & Morawczynski, O., 2009. Designing mobile money services: Lessons from M-PESA. *Innovations*, 4(2), pp.77-91.
- Mbiti, I. & Weil, D.N., 2011. Mobile banking: The impact of M-Pesa in Kenya. NBER Working Paper No. 17129.
- Mirzoyants, A., 2013. Mobile money in Tanzania: Use barriers and opportunities. *InterMedia Research Paper*.
- Morawczynski, O. & Miscione, G., 2008. Exploring trust in mobile banking transactions: The case of M-PESA in Kenya. In *IFIP International Federation for Information Processing* (pp.287-298). Springer Boston, MA.

- Munyegera, G.K. & Matsumoto, T., 2016. Mobile money remittances and household welfare: panel evidence from rural Uganda. *World Development*, 79, pp.127-137.
- Munyegera, G.K. & Matsumoto, T., 2018. Digital financial services and SME performance: Insights from Uganda. *World Development Perspectives*, 9, pp.11-16.
- Mureithi, M., 2014. The impact of mobile money on SMEs in Kenya. *Journal of African Economies*, 24(4), pp.55-72.
- Mwesigwa, D., 2019. The adoption of mobile money technology and its effect on small business performance in Uganda. *Uganda Journal of Business Research*, 15(1), pp.34-48.
- Nabukeera, M., 2018. Digital financial inclusion and its impact on SMEs in Uganda. *African Economic Review*, 14(3), pp.29-45.
- NITA-U (National Information Technology Authority Uganda), 2020. *The Status of Digital Financial Services in Uganda*. Kampala: NITA-U.
- Okundaye, A., Fan, S. & Dwyer, R.J., 2019. Impact of information and communication technology adoption on SME performance. *Journal of Small Business Management*, 57(3), pp.115-143.
- Owoseni, O. & Twinomurinzi, H., 2020. Mobile money and SME performance: A cross-sectional study in Uganda. *Journal of Developmental Entrepreneurship*, 25(2), pp.45-61.
- PSFU (Private Sector Foundation Uganda), 2017. *SME Development and Growth in Uganda*. Kampala: PSFU.
- Rosenberg, J., 2019. Mobile technology and financial inclusion in Africa. *Journal of African Business*, 18(1), pp.67-85.
- Sacer, I.M. & Žager, L., 2008. Accounting information systems for decision-making in small and medium enterprises. *Journal of Economics and Organization*, 5(3), pp.153-163.
- Suri, T. & Jack, W., 2016. The long-run poverty and gender impacts of mobile money. *Science*, 354(6317), pp.1288-1292.
- Tumwine, E., 2022. The relationship between mobile money usage and SME growth in Uganda. *East African Journal of Business and Economics*, 13(2), pp.45-59.

UIA (Uganda Investment Authority), 2017. *Small and Medium Enterprises in Uganda: Challenges and Opportunities*. Kampala: UIA.

UNDP (United Nations Development Programme), 2020. *Fostering SME Growth through Digital Finance*. New York: UNDP.

UNBS (Uganda National Bureau of Standards), 2018. *Regulations and Standards for SMEs in Uganda*. Kampala: UNBS.

Willard, T., 2016. Mobile money and its impact on small businesses in Uganda. *Journal of Finance and Economics*, 14(4), pp.77-89.

WTO (World Trade Organization), 2018. *Trade and SMEs in Developing Economies: A Focus on Digital Finance*. Geneva: WTO.

**APPENDICES**  
**APPENDIX I**  
**QUESTIONNAIRE**

**Dear Respondent,**

My research focuses on "The Effect of Mobile Money Technology on the Performance of Small and Medium Enterprises in Mukono Central Division." Your participation in this study by completing this questionnaire will provide invaluable insights that will contribute to the success of the research. This questionnaire will take approximately 10-15 minutes to complete. Your responses will be kept confidential and used solely for academic purposes.

Thank you for your time and cooperation.

**Section A: Demographic Information**

**1. Gender**

Male	Female

**2. Age Group**

Under 20	
20-30	
31-40	
41-50	
51 and above	

**3. Level of Education**

No formal education	
Primary	
Secondary	
Tertiary	
University	

**4. Type of Business**

Retail Shop	Hardware Shop	Grocery Store

**5. Years in Operation**

Less than 1 year	1-3 years	4-6 years	7-10 years	Over 10 years

**Section B: Usage of Mobile Money Technology**

*(Please put a tick in the box you choose)*

6. **Do you use mobile money services in your business operations?**

Yes	No

7. **If yes, how long have you been using mobile money services?**

Less than 1 year	1-2 years	3-4 years	More than 4 years

8. **Which mobile money services do you use? (Tick all that apply)**

Mobile Money Platforms (e.g., MTN Mobile Money, Airtel Money)	
Mobile Wallets	
Mobile Banking Services	
Others (please specify)	

**Section C: Impact on Financial Performance**

*(Please put a tick in the box you choose)*

9. **To what extent do you agree with the following statements? (SA= Strongly Agree, A =Agree, NS = Not Sure, DA= Disagree, and SDA= Strongly Disagree)**

No	Factor	SA	A	NS	DA	SDA
1	Mobile money has improved my business's cash flow management					
2	Mobile money has reduced the cost of financial transactions for my business					
3	Mobile money has increased my business's revenue					
4	Mobile money has made it easier for me to access credit					
5	Mobile money has improved my business's overall financial performance					

**Section D: Relationship between Mobile Money and Business Performance**

*(Please put a tick in the box you choose)*

10. **How has mobile money usage affected your business's operational efficiency?**

Significantly improved	
Somewhat improved	
No change	

Somewhat worsened	
Significantly worsened	

10. Show how often you use mobile money for the following purposes? (SA= Strongly Agree, A =Agree, NS = Not Sure, DA= Disagree, and SDA= Strongly Disagree)

No	Factor	SA	A	NS	DA	SDA
1	Paying suppliers					
2	Receiving payments from customers					
3	Paying employees					
4	Accessing credit or loans					
5	Managing cash flow					

**Section E: Challenges in Adopting Mobile Money Technology**

12. To what extent do you agree with the following statements about challenges in adopting mobile money technology? (SA= Strongly Agree, A =Agree, NS = Not Sure, DA= Disagree, and SDA= Strongly Disagree)

No	Factor	SA	A	NS	DA	SDA
1	High transaction fees are a barrier to using mobile money					
2	Lack of digital literacy among staff hinders effective use of mobile money					
3	Security concerns prevent me from fully adopting mobile money					
4	Limited access to mobile money agents affects my business operations					
5	Inadequate mobile network coverage is a challenge					

13. What other challenges do you face in adopting and using mobile money technology? (Please specify):

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**Section F: Suggestions for Improvement**

14. What suggestions do you have for improving the adoption and utilization of mobile money technology among SMEs in Mukono Central Division?

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Thank you for your participation!

**APPENDICES**  
**APPENDIX II**  
**INTERVIEW GUIDE**

**Dear Respondent,**

I am conducting a study on "The Effect of Mobile Money Technology on the Performance of Small and Medium Enterprises (SMEs) in Mukono Central Division." Your participation in this interview will provide invaluable insights that will contribute to the success of the research. The interview will take approximately 30-45 minutes. Your responses will be kept confidential and used solely for academic purposes.

**Section A: Demographic Information**

1. Can you please tell me about your business (type of business, years in operation, and size)?  
.....
2. What is your role in the business?  
.....

**Section B: Usage of Mobile Money Technology**

3. Do you use mobile money services in your business operations? If yes, which services do you use (e.g., mobile money platforms, mobile wallets, mobile banking services)?  
.....
4. How long have you been using mobile money services in your business?  
.....

**Section C: Impact on Financial Performance**

5. How has mobile money technology affected your business's financial performance (e.g., revenue, profit margins)?  
.....
6. Can you describe any specific ways in which mobile money has improved your cash flow management?  
.....
7. Has mobile money technology helped you reduce costs? If so, how?  
.....

**Section D: Relationship between Mobile Money and Business Performance**

8. How has the adoption of mobile money technology affected your business's operational efficiency (e.g., speed of transactions, ease of payment processing)?  
.....
9. In what ways has mobile money technology influenced your ability to access credit or loans for your business?

.....  
10. How has mobile money technology affected your relationship with suppliers and customers?  
.....

**Section E: Challenges in Adopting Mobile Money Technology**

- 11. What challenges have you encountered in adopting and using mobile money technology in your business?  
.....
- 12. How have these challenges impacted your business operations and performance?  
.....
- 13. What measures have you taken to overcome these challenges?  
.....

**Section F: Suggestions for Improvement**

- 14. In your opinion, what can be done to improve the adoption and utilization of mobile money technology among SMEs in Mukono Central Division?  
.....
- 15. What role do you think the government or financial institutions can play in supporting SMEs to adopt mobile money technology?  
.....
- 16. Are there any specific features or services you would like to see added to mobile money platforms to better support your business needs?  
.....
- 17. Is there anything else you would like to share about your experience with mobile money technology and its impact on your business?  
.....

Thank you for your participation!